

**Ústav anorganickej chémie Slovenskej akadémie vied, verejná
výskumná inštitúcia**



**Výročná správa o činnosti a hospodárení verejnej výskumnej
inštitúcie za rok 2022**

Bratislava
jún 2023

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Správa o činnosti organizácie SAV za rok 2022

1. Základné údaje o verejnej výskumnej inštitúcii

Názov: Ústav anorganickej chémie Slovenskej akadémie vied, verejná výskumná inštitúcia

Riaditeľ: doc. Ing. Miroslav Boča, DrSc.

Zástupca riaditeľa: Ing. Helena Pálková, PhD.

Adresa: Dúbravská cesta 9, 845 36 Bratislava

Tel.: 02/59410 400

E-mail: uachsekr@savba.sk; miroslav.boca@savba.sk

Názvy a adresy organizačných zložiek a detašovaných pracovísk:

Detašované pracovisko:

Centrum kompetencie pre výskum skla VITRUM LAUGARICIO

Trenčianska univerzita Alexandra Dubčeka v Trenčíne

Študentská 2

911 50

Trenčín

Vedúci organizačných zložiek a detašovaných pracovísk:

prof. Ing. Dušan Galusek, DrSc.

2. Zmeny zakladacej listiny, vnútorných predpisov verejnej výskumnej inštitúcie alebo vnútorných predpisov zakladateľa

Dodatok č. 1 zo dňa 11.02.2022 k zakladacej listine Ústavu anorganickej chémie Slovenskej akadémie vied, verejnej výskumnej inštitúcie, č. 06169/2021 zo dňa 15. 11. 2021

Organizačný poriadok ÚACH SAV, v. v. i. schválený dňa 03.03.2022

Pracovný poriadok ÚACH SAV, v. v. i. schválený dňa 03.03.2022

Pravidlá hodnotenia výskumných pracovníkov ÚACH SAV, v. v. i. schválené dňa 03.03.2022

Volebný a nominačný poriadok na funkciu člena správnej rady ÚACH SAV, v. v. i. schválený dňa 03.03.2022

Volebný a nominačný poriadok na funkciu člena vedeckej rady ÚACH SAV, v. v. i. schválený dňa 03.03.2022

3. Zloženie orgánov, zmeny v ich zložení a ich činnosť

Správna rada

predseda: doc. Ing. Miroslav Boča, DrSc.
členovia: Ing. Elena Krippelová
Ing. Blanka Kubíková, PhD.
Ing. Helena Pálková, PhD.
Ing. Peter Tatarko, PhD. (podpredseda)

Správna rada sa na svojich zasadnutiach v roku 2022 stretla dvakrát: 10.02.2022, 03.03.2022 a per rollam zasadala trikrát: 25.03.2022, 13.06.2022 a 25.08.2022. Na každom rokovaní bola uznášaniaschopná.

V rámci výkonu svojej pôsobnosti prijala tieto zásadné rozhodnutia:

- prerokovala a schválila vnútorné predpisy ÚACH SAV, v. v. i.;
- vyjadrila súhlas s predloženým návrhom rozpočtu ÚACH SAV, v. v. i. vo forme tabuľky "Bilancia príjmov a výdavkov na roky 2023-2025;
- vyjadrila súhlas s predloženým návrhom ohľadom vypožičaného majetku, ktorý od 1.1.2022 prešiel na ústav ako jeho prioritný majetok;
- vyjadrila súhlas s predloženým materiálom: „Zmena evidencie drahých kovov“.

Vedecká rada

predsedníčka: Mgr. Monika Tatarková, PhD.
členovia: prof. RNDr. Juraj Bujdák, DrSc.
prof. Ing. Dušan Galusek, DrSc.
Mgr. Stanislav Komorovský, PhD.
doc. Ing. Zoltán Lenčేశ, PhD. (podpredseda)
Ing. František Šimko, PhD.
prof. Ing. Ján Híveš, PhD.
Ing. Marián Kucharík, PhD.
prof. RNDr. Jozef Noga, DrSc.

V priebehu roka 2022 bola zvolená nová VR ÚACH SAV na funkčné obdobie 2022-2027. V roku 2022 Vedecká rada rokovala na siedmich zasadnutiach. Na jednotlivých zasadnutiach:

- odsúhlasila správu o činnosti organizácie;
- schvaľovala témy dizertačných prác;
- vyjadrila sa k návrhu na preradenie do vyššieho vedeckého kvalifikačného stupňa IIa;
- hodnotila publikačnú aktivitu vedeckých pracovníkov, vedeckých oddelení, ako aj výskumnej organizácie ako celku;
- hodnotila doktorandov a kvalitu doktorandského štúdia;
- prerokovala účasť doktorandov a pracovníkov SAV v súťaži „Mladý vedecký pracovník a pracovníčka SAV do 35 rokov“.

Dozorná rada

predseda: prof. MVDr. Juraj Koppel, DrSc.
členovia: JUDr. Glória Gajdošová
prof. Ing. Marián Valko, DrSc.

Dozorná rada v roku 2022 zasadala *per rollam* štyrikrát: 19.01.2022, 22.02.2022, 25.08.2022 a 19.09.2022. Na každom rokovaní bola uznášaniaschopná.

V rámci výkonu svojej pôsobnosti prijala tieto zásadné rozhodnutia:

- zvolila do funkcie predsedu Dozornej rady;
- vyjadrila súhlas s predloženými návrhmi vnútorných predpisov Ústavu anorganickej chémie SAV, v. v. i. v znení pripomienok;
- vyjadrila súhlas s predloženým návrhom zmluvy o vysporiadaní spolumajiteľských podielov k predmetu priemyselného vlastníctva Európska patentová prihláška s názvom: "Method for electrochemical surface treatment of biomedical products made of titanium or Ti-based alloys" pod číslom 22193733.7 (registrácia 2.09.2022);
- vyjadrila súhlas s predloženým návrhom zmluvy o vysporiadaní spolumajiteľských podielov k predmetu priemyselného vlastníctva Európska patentová prihláška s názvom: "A method for electrochemical surface treatment of biomedical products made of titanium or Ti-based alloys" pod číslom 22204696.3 (registrácia 31.10.2022).

4. Prehľad výsledkov dosiahnutých v r. 2022

Výsledky dosiahnuté v r. 2022 sú uvedené v Správe o činnosti organizácie SAV za rok 2022 (príloha).

5. Hodnotenie výsledkov výskumnej činnosti verejnej výskumnej inštitúcie a jej spôsobilosti vykonávať výskumnú činnosť vedeckou radou

Vedecká rada ÚACH SAV v. v. i. sa na svojom zasadnutí, ktoré sa konalo dňa 15.03.2023 podrobne zaoberala výsledkami výskumnej činnosti v roku 2022 a hodnotila publikačnú aktivitu jednotlivých pracovníkov, vedeckých oddelení, ako aj výskumnej organizácie ako celku.

Priemer publikácií zaradených v databázach CCC je 2,0 publikácie na jedného vedeckého pracovníka. Hoci publikačný priemer je veľmi dobrý, slabinou je nerovnomernosť v publikačných výstupoch jednotlivých vedeckých pracovníkov, ako aj oddelení. Vysoká kvalita vedeckých výstupov je potvrdená publikovaním v renomovaných vedeckých časopisoch zaradených v Q1. V roku 2022 bolo 90% publikácií ÚACH SAV, v. v. i. zaradených do kvartilov Q1 a Q2.

ÚACH SAV, v. v. i. je aktívne zapojený do riešenia projektov v rôznych projektových schémach. Počet riešených domácich projektov schémy VEGA je 12 (10 ako hlavný riešiteľ) a počet riešených projektov APVV je 14 – z toho je v siedmich projektoch ÚACH SAV, v. v. i. hlavným riešiteľom projektov. Celkový finančný príspevok z APVV projektov je v priemere 25 800 € ročne na jeden riešený projekt, pričom riešiteľské kapacity väčšiny vedeckých pracovníkov sú naplnené a nie je možné očakávať nárast v počte APVV projektov. VR odporúča efektívnejšie využívanie personálnych kapacít vzhľadom na finančné príspevky z APVV projektov.

Počet a vedecké témy riešených projektov hodnotí VR ako primerané, dostatočne pokrývajúce celé spektrum vedeckých aktivít ústavu.

Rezervy v projektovej činnosti sú podľa VR v zapájaní sa, a hlavne v získavaní medzinárodných projektov. V roku 2022 bol ústav zapojený do 1 projektu Horizont 2020.

Ústav vyvíja snahu smerujúcu k obnove a zabezpečeniu nového prístrojového vybavenia spoluriešením projektu CEMEA, v ktorom okrem prístrojového vybavenia sú naplánované aj nové laboratórne priestory.

ÚACH SAV, v. v. i. bol v roku 2022 aktívny v zapájaní sa do nových projektových výziev; v rámci domácej grantovej schémy APVV bolo podaných 9 projektov, z toho 3 ako hlavní riešitelia (2 projekty v rámci Všeobecnej výzvy, 1 projekt bilaterálny s Francúzskom). V rámci schémy Horizont 2020 boli podané 2 projekty, v jednom z nich je ústav koordinátorom projektu.

VR pozitívne hodnotí zapojenie ústavu do výchovy doktorandov. V roku 2022 bol celkový počet školených doktorandov 14. Dvaja z nich v roku 2022 ukončili doktorandské štúdium úspešnou obhajobou a boli prijatí do pracovného pomeru na ÚACH SAV, v. v. i. Hneď po nástupe na doktorandské štúdium na ústav, sú všetci doktorandi včlenení do riešiteľských kolektívov projektov riešených na ústave.

Kvalita doktorandského štúdia a progres v štúdiu a výskume sú pravidelne monitorované organizovaním osobných stretnutí jednotlivých študentov a školiteľov s garantom študijného programu na ústave. PhD študenti majú možnosť garanta informovať aj o prípadných problémoch, s ktorými sa v rámci štúdia stretli.

Na základe vyššie uvedeného VR konštatuje, že Ústav anorganickej chémie SAV, v. v. i. je spôsobilý vykonávať výskumnú činnosť na vysokej úrovni.

6. Ročná účtovná závierka

Ročná účtovná závierka

- a) bola predložená na prerokovanie správnej rade dňa 31.03.2023 a správna rada sa vyjadrila dňa 12.04.2023
- b) bola predložená na schválenie dozornej rade dňa 12.04.2023 a dozorná rada ju schválila dňa 26.4.2023

Ročná účtovná závierka bola uložená do registra účtovných závierok dňa 27.4.2023.

7. Výrok štatutárneho audítora k ročnej účtovnej závierke, ak sa k ročnej účtovnej závierke za príslušný rok vyhotovuje správa audítora

K ročnej účtovnej závierke za rok 2022 nebola vyhotovená správa audítora.

8. Prehľad príjmov a výdavkov

Prehľad príjmov z hlavnej činnosti

Zdroj	Názov príjmu	Schválený rozpočet	Upravený rozpočet	Skutočnosť k 31.12. bežného účtovného obdobia
111	Inštitucionálna forma podpory	1 460 990,00	1 811 614,94	1 811 614,94
111, program 06K0G	APVV	0,00	459 966,00	459 966,00
35	Zahraničné granty	0,00	92 880,00	92 880,00
1103	Granty programov EÚ	0,00	50 320,81	50 320,81
46	Tuzemské granty a príjmy	0,00	7 179,46	7 179,46
3AA1	Štrukturálne fondy (CEDITEK II)	0,00	15 907,80	15 907,80
3AA2	Štrukturálne fondy (CEDITEK II)	0,00	2 154,30	2 154,30
3AA1	Štrukturálne fondy (CEMEA)	0,00	28 664,23	28 664,23
3AA2	Štrukturálne fondy (CEMEA)	0,00	26 138,67	26 138,67

Hlavným zdrojom financovania ústavu sú finančné prostriedky zo štátneho rozpočtu poskytnuté zakladateľom na hlavnú činnosť ako inštitucionálna forma podpory.

Prehľad bežných výdavkov z hlavnej činnosti

Zdroj	Názov výdavku	Schválený rozpočet	Upravený rozpočet	Skutočnosť k 31.12. bežného účtovného obdobia
111	Bežné výdavky	1 460 990,00	1 793 456,86	1 763 037,39
111, program 06K0G	APVV	0,00	455 272,40	449 377,82
35	Zahraničné granty	0,00	92 880,00	43 857,18
1103	Granty programov EÚ	0,00	50 320,81	41 929,66
46	Tuzemské granty a príjmy	0,00	7 179,46	14 078,94
1AA1	Štrukturálne fondy (CEDITEK II)	0,00	0,00	20 477,46
1AA2	Štrukturálne fondy (CEDITEK II)	0,00	0,00	3 613,35
3AA1	Štrukturálne fondy (CEDITEK II)	0,00	15 908,14	12 747,71
3AA2	Štrukturálne fondy (CEDITEK II)	0,00	2 153,96	1 782,05

3AA1	Štrukturálne fondy (CEMEA)	0,00	28 664,23	22 238,39
3AA2	Štrukturálne fondy (CEMEA)	0,00	26 138,67	20 187,99

Medzi podstatné položky bežných výdavkov z hlavnej činnosti (nezdaňovanej) patrili:

- **mzdové náklady** vo výške 1 293 105,83 EUR (46,89 % z celkových nákladov)
- **zákonné sociálne a zdravotné poistenie** vo výške 445 545,19 EUR (16,15 % z celkových nákladov)
- **odpisy dlhodobého majetku** vo výške 439 991,77 EUR (15,96 % z celkových nákladov)
- **spotreba materiálu** vo výške 140 082,80 EUR (5,08 % z celkových nákladov)
- **vedecká výchova** vo výške 133 072,95 EUR (4,83 % z celkových nákladov)
- **opravy a udržiavanie** vo výške 58 766,54 EUR (2,13 % z celkových nákladov)
- **cestovné** vo výške 57 539,92 EUR (2,07 % z celkových nákladov)
- **zákonné sociálne náklady** vo výške 42 394,99 EUR (1,54 % z celkových nákladov)

Prehľad kapitálových výdavkov z hlavnej činnosti (v EUR)

Zdroj	Názov výdavku	Schválený rozpočet	Upravený rozpočet	Skutočnosť k 31.12. bežného účtovného obdobia
111	Kapitálové výdavky (nákup prístrojov, výpočtovej techniky)	0,00	18 158,08	18 158,08
46	Kapitálové výdavky (výpočtová technika) – doplatok ku kapitálovým výdavkom zo zdroja 111	0,00	0,00	2,79

Prehľad príjmov a výdavkov v EUR z ďalších činností v zmysle § 2 ods. 1 zákona č. 243/2017 o verejnej výskumnej inštitúcii a o zmene a doplnení niektorých zákonov (ďalej „zákon o VVI“)	Príjmy (skutočnosť k 31.12. bežného účtovného obdobia)	Výdavky (skutočnosť k 31.12. bežného účtovného obdobia)
činnosti podľa § 1 ods. 4 písm.a) až c) a e) zákona o VVI na základe požiadaviek orgánov verejnej správy za podmienok podľa osobitných predpisov	0,00	0,00
podnikateľská činnosť v rámci činností podľa § 1 ods. 4 písm.a) až c) zákona o VVI	0,00	0,00
vývoj a inovácie na základe požiadaviek orgánov verejnej správy a za podmienok podľa osobitných predpisov	0,00	0,00
vývoj a inovácie ako podnikateľská činnosť	0,00	0,00
vývoj a inovácie vo forme projektov podľa osobitného predpisu	0,00	0,00

9. Pohyb a konečný stav majetku

	Počiatočný stav majetku k 1.1.2022	Pohyb majetku	Konečný stav majetku k 31.12.2022
Nadobúdacia cena	7 516 498,47	+ 4 185 081,94	11 701 580,41
Oprávky (kumulované odpisy)	k 1.1.2022		k 31.12.2022
	- 6 132 570,84		- 9 667 686,76
Zostatková cena	1 383 927,63		2 033 893,65

10. Opatrenia prijaté na odstránenie nedostatkov v hospodárení a správa o plnení opatrení prijatých na odstránenie nedostatkov

V roku 2022 neboli vykonané žiadne finančné kontroly ani audit.

11. Ďalšie údaje

V roku 2022 sa zapojil do dvoch hodnotiacich procesov, a to akreditáciou ústavov SAV a Periodickým hodnotením výskumnej, vývojovej, umeleckej a ďalšej tvorivej činnosti (Verification of Excellence in Research 2022, skratene VER 2022), ktoré zaviedlo MŠVVaŠ SR po prvýkrát.

V akreditácii ústavov SAV, získal ÚACH SAV, v. v. i. od medzinárodného hodnotiaceho panelu v jednotlivých kategóriách nasledujúce hodnotenie: vedecká kvalita a produktivita (A/B), spoločenský, kultúrny a ekonomický dopad (B), stratégia a potenciál rozvoja (B). Výsledné hodnotenie ústavu bolo **B**.

Vo VER 2022 bol ústav hodnotený v rámci oblasti Chemické vedy. Na základe reprezentatívnych 23 výstupov, panel expertov vytvoril profil kvality, pričom 60 % výstupov ústavu bolo zaradených do kategórie medzinárodnej kvality, 16 % do významnej medzinárodnej kvality, avšak ústav nemal žiadne výstupy v kategórii svetovej kvality aj napriek tomu, že mnohé výstupy sú zaradené do prvého decilu odborných časopisov (Applied Clay Science. Vol. 158 (2018), p. 102-112, Applied Clay Science. Vol. 138 (2017), p. 63-73, Journal of the European Ceramic Society. Vol. 37 (2017), p. 3731-3739) v danom odbore, respektíve v Nature index (Inorganic Chemistry. Vol. 57, no. 21 (2018), p. 13702-13712). Inštitúcie nedostali žiadne vysvetlenie, na základe akých kritérií boli jednotlivé publikácie, a tým aj celkový výskum zaradený do jednotlivých kategórií. Okrem toho zavádzajúce môže byť aj hodnotiace obdobie 2014-2019, pričom hodnotenie bolo v roku 2022. Dynamika zmien vo vede a výskume v prioritných výskumných oblastiach Slovenska, ale aj EÚ, by mala byť zohľadnená a vhodnejšie by bolo posudzovať aktuálnejšie obdobie.

Vzhľadom na skutočnosť, že prevažujúcim zdrojom financovania ÚACH SAV, v. v. i. je dotácia zo štátneho rozpočtu a ústav nevykonáva podnikateľskú činnosť, výsledok hospodárenia v nemalej miere ovplyvnili náklady vynaložené na odpisy dlhodobého majetku.

Hlavným cieľom v oblasti hospodárenia v nasledujúcich obdobiach bude zameranie sa na získavanie finančných prostriedkov z viacerých finančných zdrojov. Osobitná pozornosť bude nasmerovaná na získanie a efektívne využitie viaczdrojového financovania. Samozrejmosťou bude účasť vo výzvach na projekty štrukturálnych fondov EÚ, ktoré budú relevantné vzhľadom na zameranie ústavu, ako aj v projektoch EÚ v rámci schém Horizon Europe. Jedným z plánovaných zdrojov financovania sú vlastné príjmy z hlavnej činnosti, ktoré ústav nadobudne realizovaním odborných aktivít.

**Výročnú správu o činnosti a hospodárení verejnej výskumnej inštitúcie za rok 2022
spracoval(i):**

Ing. Elena Krippelová
JUDr. Bc. Marica Slaná
Mgr. Monika Tatarková, PhD.

Stanovisko správnej rady zo dňa 12.06.2023

Správna rada v zmysle § 27 ods. 1 zákona č. 243/2017 Z. z. o verejnej výskumnej inštitúcii prerokovala Výročnú správu o činnosti a hospodárení ÚACH SAV, v. v. i. za rok 2022 a schválila jej obsah.

Stanovisko vedeckej rady zo dňa 20.06.2023

Vedecká rada ÚACH SAV, v. v. i. súhlasí so znením Výročnej správy o činnosti a hospodárení ÚACH SAV, v. v. i. za rok 2022.

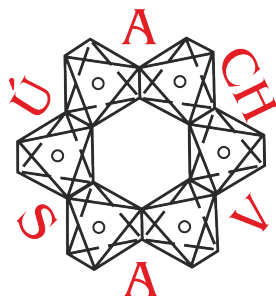
Stanovisko dozornej rady zo dňa 22.06.2023

Dozorná rada Ústavu anorganickej chémie SAV, v. v. i. prerokovala dňa 22. 6. 2023 predložené znenie Výročnej správy organizácie za rok 2022 a nemá zásadné pripomienky.

Bratislava 03.07.2023


.....
doc. Ing. Miroslav Boča, DrSc.
riaditeľ verejnej výskumnej inštitúcie

Ústav anorganickej chémie SAV, v. v. i.



**Správa o činnosti organizácie SAV
za rok 2022**

Bratislava
január 2023

Obsah

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1. Základné údaje o organizácii

1.1. Kontaktné údaje

Názov: Ústav anorganickej chémie SAV, v. v. i.

Riaditeľ: doc. Ing. Miroslav Boča, DrSc.

Zástupca riaditeľa: Ing. Helena Pálková, PhD.

Vedecký tajomník: doc. Ing. Zoltán Lenčoš, PhD.

Predseda vedeckej rady: Mgr. Monika Tatarková, PhD.

Člen Snemu SAV: Ing. Peter Tatarko, PhD.

Adresa: Dúbravská cesta 9, 845 36 Bratislava 45

<http://www.uach.sav.sk/>

Tel.: 02/59410401

E-mail: uachsekr@savba.sk

Názvy a adresy organizačných zložiek a detašovaných pracovísk:

Organizačné zložky: nie sú

Detašované pracoviská:

- **Vitrum Laugaricio - Centrum kompetencie skla, spoločné pracovisko ÚACH SAV, TnU AD, RONA, a.s. a FCHPT STU**
Študentská 2, 911 50 Trenčín
- **VC SAV – Pavilón materiálových vied**
Dúbravská cesta 9/6319, Bratislava
- **Pracovisko pre röntgenovú práškovú difraktopetriu**
Ústav merania SAV, Dúbravská cesta 9, 841 04, Bratislava 4

Vedúci organizačných zložiek a detašovaných pracovísk:

Organizačné zložky: nie sú

Detašované pracoviská:

- **Vitrum Laugaricio - Centrum kompetencie skla, spoločné pracovisko ÚACH SAV, TnU AD, RONA, a.s. a FCHPT STU**
prof. Ing. Dušan Galusek, DrSc.
- **VC SAV – Pavilón materiálových vied**
doc. Ing. Miroslav Boča, DrSc.
- **Pracovisko pre röntgenovú práškovú difraktopetriu**
doc. Ing. Miroslav Boča, DrSc.

Členovia Snemu SAV za organizačné zložky:

nie sú

Typ organizácie: Verejná výskumná inštitúcia od roku 2022

1.2. Údaje o zamestnancoch

Tabuľka 1a Počet a štruktúra zamestnancov

Štruktúra zamestnancov	K	K		K do 35 rokov		F	P	T	O
		M	Ž	M	Ž				
Celkový počet zamestnancov	78	38	40	7	7	75	59.15	43.84	0
Vedeckí pracovníci	49	30	19	5	4	47	38.84	38.84	0
Odborní pracovníci VŠ (výskumní a vývojoví zamestnanci ¹)	8	5	3	2	1	7	5.61	5	0
Odborní pracovníci VŠ (ostatní zamestnanci ²)	6	1	5	0	2	6	3.44	0	0
Odborní pracovníci ÚS	11	2	9	0	0	11	8.8	0	0
Ostatní pracovníci	4	0	4	0	0	4	2.46	0	0

¹ odmeňovaní podľa 553/2003 Z.z., príloha č. 5² odmeňovaní podľa 553/2003 Z.z., príloha č. 3 a č. 4

K – kmeňový stav zamestnancov v pracovnom pomere k 31.12.2022 (uvádzať zamestnancov v pracovnom pomere, vrátane riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí, v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)

F – fyzický stav zamestnancov k 31.12.2022 (bez riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)

P – celoročný priemerný prepočítaný počet zamestnancov

T – celoročný priemerný prepočítaný počet riešiteľov projektov

O – celoročný priemerný prepočítaný počet obslužného personálu podieľajúceho sa na riešení projektov (technikov, laborantov, projektových manažérov a pod.) mimo zamestnancov v administratívne, správe a údržbe budov, upratovačiek, vodičov a pod.

M, Ž – muži, ženy

Tabuľka 1b Štruktúra vedeckých pracovníkov (kmeňový stav k 31.12.2022)

Rodová skladba	Pracovníci s hodnosťou				Vedeckí pracovníci v stupňoch		
	DrSc.	CSc./PhD.	prof.	doc.	I.	II.a.	II.b.
Muži	6	26	4	5	6	12	12
Ženy	2	18	0	2	2	8	9

Tabuľka 1c Štruktúra pracovníkov podľa veku a rodu, ktorí sú riešiteľmi projektov

Veková štruktúra (roky)	< 31		31-35		36-40		41-45		46-50		51-55		56-60		61-65		> 65	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Muži	1	1.0	6	6.0	8	7.2	2	2.0	7	5.8	1	0.6	2	1.5	0	0.0	6	3.5
Ženy	2	2.0	3	2.4	1	0.8	3	3.2	3	3.0	3	2.6	1	1.0	0	0.0	2	1.8

A - Prepočet bez zohľadnenia úväzkov zamestnancov

B - Prepočet so zohľadnením úväzkov zamestnancov

Tabuľka 1d Priemerný vek zamestnancov organizácie k 31.12.2022

	Kmeňoví zamestnanci	Vedeckí pracovníci	Riešitelia projektov
Muži	46.8	46.2	46.4
Ženy	47.3	44.6	45.8
Spolu	47.1	45.6	46.2

1.3. Iné dôležité informácie k základným údajom o organizácii a zmeny za posledné obdobie (v zameraní, v organizačnej štruktúre a pod.)

Zásadnou zmenou platnou od 1.1.2022 bola zmena formy hospodárenia prechodom Ústavu anorganickej chémie z rozpočtovej formy organizácie na verejno-výskumnú inštitúciu v. v. i. S tým súviselo množstvo zmien vyplývajúcich z legislatívy, napr. vytvorenie správnej rady ústavu, dozornej rady, ako aj potreba voľby novej vedeckej rady. Celý rok sa niesol v znamení nastavenia chodu ústavu, ako aj vnútorných predpisov, novým právnym normám, ktoré sú platné pre verejno-výskumné inštitúcie.

Treba pripomenúť, že aj napriek pomerne zásadným zmenám vyplývajúcich z prechodu na novú formu hospodárenia, zameranie výskumu ústavu ostalo zachované, a bude pravidelne dopĺňané o moderné témy a trendy v tých oblastiach výskumu, na ktoré je ústav zameraný.

Zloženie dozornej rady:

- prof. MVDr. Juraj Koppel, DrSc.
- JUDr. Glória Gajdošová
- Prof. Ing. Marián Valko, DrSc.

Zloženie správnej rady:

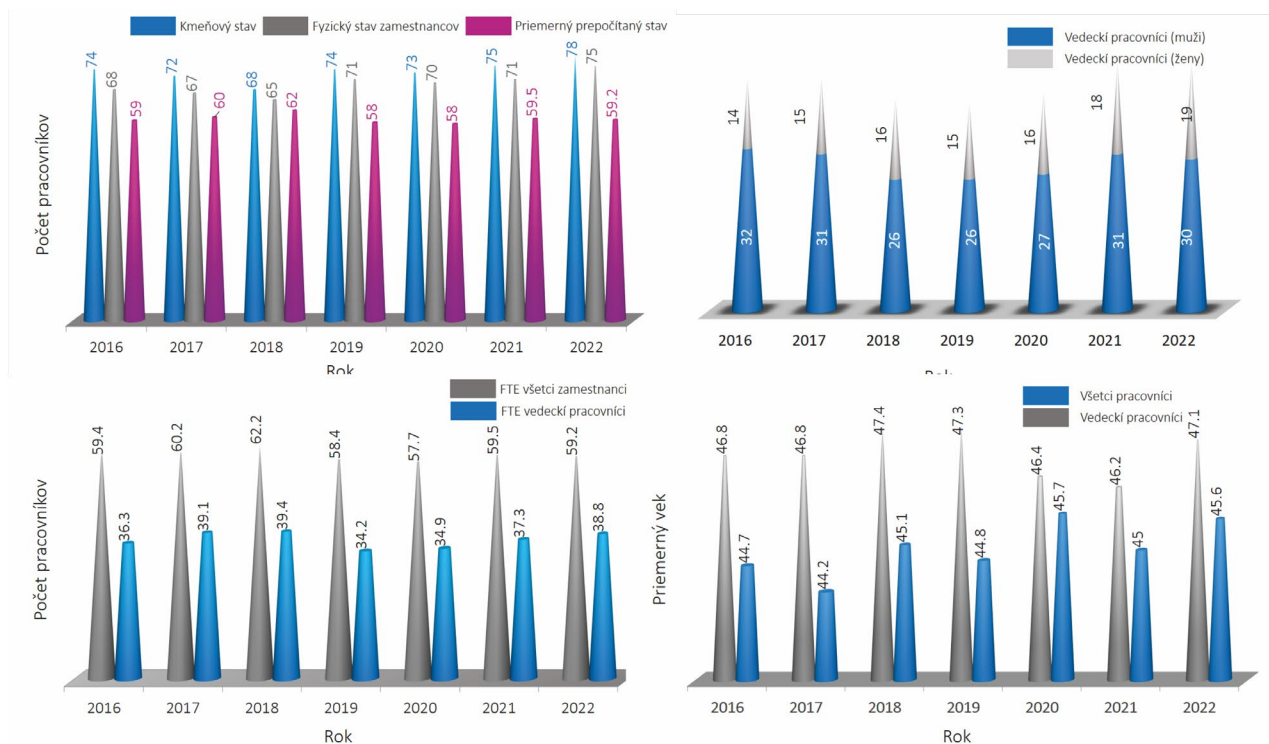
- doc. Ing. Miroslav Boča, DrSc.
- Ing. Elena Kripelová
- Ing. Blanka Kubíková, PhD.
- Ing. Helena Pálková, PhD.
- Ing. Peter Tatarko, PhD.

Zloženie vedeckej rady:

- prof. RNDr. Juraj Bujdák, DrSc.
- prof. Ing. Dušan Galusek, DrSc.
- Mgr. Stanislav Komorovský, PhD.
- doc. Ing. Zoltán Lenčes, PhD.
- Ing. František Šimko, PhD.
- Mgr. Monika Tatarková, PhD.
- prof. Ing. Ján Híveš, PhD (FCHPT STU)
- Ing. Marián Kucharík, PhD. (Slovalco, a.s.)
- prof. RNDr. Jozef Noga, DrSc. (Príf UK)

Personálne zmeny, ktoré nastali v roku 2022 súviseli s prirodzenou obmenou z dôvodu odchodu zamestnancov do dôchodku a obsadením uvoľnených pracovných pozícií končiacimi doktorandami. Stabilitu v oblasti personálneho zabezpečenia chodu ústavu dokumentujú schémy nižšie, popisujúce počty pracovníkov, zastúpenie vedeckých pracovníkov a zastúpenie žien a mužov. Došlo aj k

zvýšeniu priemerného veku ako kmeňových zamestnancov, tak aj vedeckých pracovníkov.



2. Vedecká činnosť

2.1. Domáce projekty

Tabuľka 2a Domáce projekty riešené v roku 2022

ŠTRUKTÚRA PROJEKTOV	Počet		Čerpané financie (€)					
	A	B	A				B	
			Zo zdrojov SAV		Z iných zdrojov		Zo zdrojov SAV	Z iných zdrojov
			Spolu	Pre organizáciu	Spolu	Pre organizáciu		
1. Projekty VEGA	10	2	114184	114184	-	-	-	7893
2. Projekty APVV	7	7	-	-	346490	274392	-	87259
3. Projekty EŠIF/OP ŠF	0	2	-	-	-	-	-	81137
4. Projekty SASPRO, MoRePro, IMPULZ	2	0	5885	5885	-	-	-	-
5. Iné projekty (FM EHP, Vedecko-technické projekty, na objednávku rezortov a pod.)	1	0	2000	2000	-	-	-	-

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

Tabuľka 2b Domáce projekty podané v roku 2022

Štruktúra projektov	Miesto podania	Organizácia je nositeľom projektu	Organizácia sa zmluvne podieľa na riešení projektu
1. Účasť na nových výzvach APVV r. 2022	BA	3	6
2. Projekty výziev EŠIF podané r. 2022	Bratislava		
	Regióny		

Projekty APPV – koordinátor ÚACH SAV, v.v.i

Názov projektu: Fluoridové systémy pre zelenú metalurgiu a elektrochémiu (Fluoride systems for green metallurgy and electrochemistry)

Evidenčné číslo: APVV-22-0385

Akronym: FLUMECHEM

Koordinátor: ÚACH SAV, v.v.i. (Šimko František)

Partneri: FÚ SAV, v.v.i.

Stav: podaný

Názov projektu: Vývoj pokročilých metód určených na presnú predpoveď a analýzu röntgenových spektier molekúl s otvorenou obálkou (Development of advanced methods for accurate prediction and analysis of X-ray spectra of open-shell species)

Evidenčné číslo: APVV-22-0488

Akronym: DCG-XAS

Koordinátor: ÚACh SAV, v.v.i. (Stanislav Komorovsk)

Partneri: Univerzita Komenského v Bratislave - Prírodovedecká fakulta

Stav: podaný

Názov projektu: Adsorpciou indukovaná emisia v systémoch fotofunkcionalizovaných íl-polymérnych nanokompozitoch / Adsorption-induced emission in photofunctionalized clay-polymer nanocomposite systems

Evidenčné číslo: SK-FR-22-0015, bilaterálny

Akronym: FotoNanoKomp

Koordinátor: ÚACh SAV (Peter Boháč)

Partner: Laboratoire de Photochimie et d'Ingénierie Macromoléculaire (LPIM), Université de Haute Alsace (UHA), Francúzsko

Stav: Podaný

Projekty APPV – ÚACh SAV, v.v.i partner

Názov projektu: Vplyv hydrodynamických prúdov na distribúciu dopantu pri kryštalizácii z taveniny ytrito-hlinitého granátu metódou horizontálne usmernenej kryštalizácie / Research on the influence of hydrodynamic flows on the distribution of dopants and on the optical properties of the material in Horizontally Directed Crystallization of an Yttrium-Aluminum garnet single crystal for solid-state lasers

Evidenčné číslo: APVV-20-0522

Akronym: YAGHDC

Koordinátor: AT Crystals, s.r.o.

Partner: ÚACh SAV, v.v.i. (Anna Prnová)

Stav: podaný

Názov projektu: Funkcionalizované 3D sklokeramické membrány na pokročilé fotokatalytické čistenie odpadových vôd / Functionalized 3D glass-ceramic membranes for advanced photocatalytic wastewater treatment

Evidenčné číslo: APVV-22-0109

Akronym: 3DGALACTYC

Koordinátor: Univerzita Alexandra Dubčeka v Trenčíne (Monika Micháľková)

Partneri: ÚACh SAV, v.v.i.; FCHPT STU

Stav: podaný

Názov projektu: Fotofunkčné hybridné materiály organických luminofórov a nanočastíc vrstevnatých silikátov (Photofunctional hybrid materials of organic luminophores and layered silicate nanoparticles)

Evidenčné číslo: APVV-22-0150

Akronym: Fotomat

Koordinátor: PriF UK

Partneri: UACH SAV, v.v.i. (Peter Boháč)

Stav: podaný

Názov projektu: Samoopravná anóda pre lítium-iónové batérie s vysokou hustotou energie / Self-

healing anode for high energy density Li-ion batteries / Self-healing anode for high energy density Li-ion batteries

Evidenčné číslo: APVV-22-0405

Akronym: HEALBAT

Koordinátor: CEMEA SAV, v.v.i

Partneri: ÚACH SAV, v.v.i. (Zoltán Lenčes), ÚPo SAV, v.v.i.

Stav: podaný

Názov projektu: Nízkonákladová syntéza hutného biocementu a lešenia prostredníctvom alkalickéj aktivácie prášku Si_3N_4 / Low-cost synthesis of bulk biocement and scaffolds via alkali-activation of Si_3N_4 powder

Evidenčné číslo: APVV-22-0499

Akronym: BIOSILSN

Koordinátor: CEMEA SAV, v.v.i.

Partneri: ÚACH SAV, v.v.i. (Monika Tatarková)

Stav: podaný

Názov projektu: Ultra-vysokoteplotné karbidy so zvýšenou oxidačnou odolnosťou / Ultra-high temperature carbides with increased oxidation resistance

Evidenčné číslo: APVV-22-0493

Akronym: NEOCAR

Koordinátor: ÚMV SAV, v.v.i.

Partneri: ÚACH SAV, v.v.i. (Peter Tatarko)

Stav: podaný

2.2. Medzinárodné projekty

2.2.1. Medzinárodné projekty riešené v roku 2022

Tabuľka 2c Medzinárodné projekty riešené v roku 2022

ŠTRUKTÚRA PROJEKTOV	Počet		Čerpané financie (€)					
	A	B	A				B	
			Zo zdrojov SAV		Z iných zdrojov		Zo zdrojov SAV	Z iných zdrojov
			Spolu	Pre organizáciu	Spolu	Pre organizáciu		
1. Projekty Horizont 2020 a Horizont Európa	1	1	-	-	-	-	3500	16850
2. Projekty ERA.NET, ESA, JRP	1	0	25000	25000	-	-	-	-
3. Projekty COST	0	0	-	-	-	-	-	-
4. Projekty EUREKA, NATO, UNESCO, CERN, IAEA, IVF, ERDF a iné	0	1	-	-	-	-	25000	-
5. Projekty v rámci medzivládnych dohôd	0	0	-	-	-	-	-	-
6. Bilaterálne projekty MAD, Mobility, Open Mobility	1	0	1500	1000	-	-	-	-
7. Bilaterálne projekty ostatné	2	0	-	-	20322	20322	-	-
8. Podpora MVTs z národných zdrojov (SAV, APVV a iné)	0	0	-	-	-	-	-	-
9. SAS-UPJŠ ERC Visiting Fellowship Grants	0	0	-	-	-	-	-	-
10. Iné projekty	0	0	-	-	-	-	-	-

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

2.2.2. Medzinárodné projekty Horizont Európa podané v roku 2022

Tabuľka 2d Počet projektov Horizont Európa v roku 2022

	A	B
Počet podaných projektov Horizont Európa	1	1

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

Názov projektu: Battery system with the liquid rotor charger based on molten salts

Evidenčné číslo: 101098770

Akronym: THELMA

Koordinátor: ÚACH SAV

Partneri: Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (Taliansko); East Alfa Pipe AB (Švédsko); VUNAR a.s. (Slovensko)

Stav: podaný

Názov projektu: Radiolysis and Plasma reactors To carbon dioxide Reuse

Evidenčné číslo: SEP-210902764

Akronym: RAPTOR

Koordinátor: Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (Taliansko)

Partneri: ÚACH SAV, v.v.i.; EURONOVIA (Francúzsko); Nucleco societa per l'ecoingegneria nucleare societa per azioni (Taliansko), Consiglio nazionale delle ricerche (Taliansko); ESU-SERVICES g.m.b.h. (Švajčiarsko)

Stav: podaný

Názov projektu: New type of cesium fluoro-, oxo-, and oxo-fluoro-aluminate complexes: stability, dynamics and structural characterization.

Evidenčné číslo:

Akronym:

Koordinátor: ÚACH SAV, v.v.i. (František Šimko)

Partneri: CNRS Orleans (Francúzsko)

Stav: schválený

Údaje k domácim a medzinárodným projektom sú uvedené v Prílohe B.

2.2.3. Zámery na čerpanie Európskych štrukturálnych a investičných fondov v ďalších výzvach

2.3. Výber najvýznamnejších výsledkov vedeckej práce organizácie v roku 2022

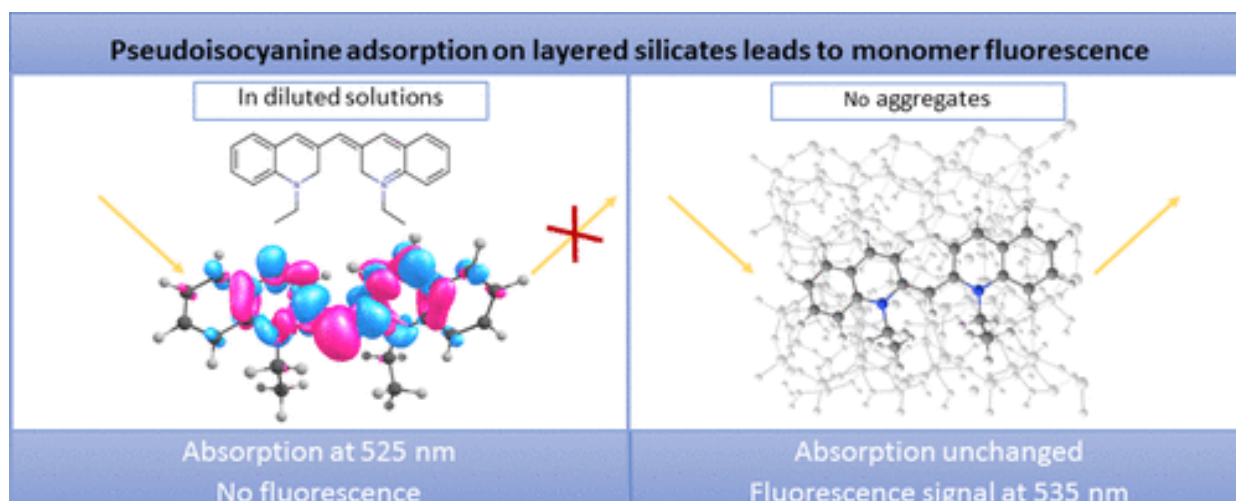
Služi aj na výber výsledkov do výročnej správy SAV. Každý výsledok má byť charakterizovaný stručným, všeobecne zrozumiteľným popisom – maximálne 1000 znakov + 1 obrázok; bibliografický údaj uvádzajte rovnako ako v zozname publikačnej činnosti, vrátane IF. Nadpis by mal vystihnúť prínos a význam výsledku – podľa možnosti by nemal byť zredukovaný na názov/nadpis publikačného výstupu.

2.3.1. Výsledky na báze základného výskumu

ADSORPCIOU INDUKOVANÁ FLUORESCENCIA MONOMÉROV ORGANICKÝCH FARBÍV V HYBRIDNÝCH SYSTÉMOCH VRSTEVNATÝCH KREMIČITANOV

P. Boháč, M. Pribus, T. Šimonová, Ľ. Jankovič, V. Planetová, J. Bujdák

Adsorpciou indukovaná emisia predstavuje jav, kedy interakciou organických farbív s rôznymi povrchmi materiálov dochádza k potlačeniu rotačno-vibračných dezaktivačných procesov excitovaných stavov molekúl. Ich potlačenie umožňuje pozorovať fluorescenciu molekulových monomérov farbív. V našom výskume sme ako prví pozorovali adsorpciou indukovanú emisiu farbiva pseudoisocyanín (PIC), ktoré je zaujímavé z hľadiska jeho unikátnej emisie J-agregátov avšak fluorescencia monomérov tohto farbiva pozorovaná nebola. Adsorpcia molekuly PIC na povrch saponitu spôsobila zmenu dihedrálnych uhlov medzi pyridínovými podskupinami a znížila pravdepodobnosť neradiačnej relaxácie v prospech radiačnej relaxácie formou fluorescencie. Ďalším doteraz neštudovaným systémom, na ktorom sme pozorovali adsorpciou indukovanú fluorescenciu bolo zwiteriónové Reinhardove farbivo adsorbované na povrchu modifikovaného vrstevnatého kremičitanu. Nami aplikovaná špecifická modifikácia povrchu anorganického materiálu vyvolala fluorescenciu, inak nefluorescenčného farbiva



Obr. Schematické znázornenie zmeny geometrie molekuly pseudoisocyanínu po adsorpcii na povrch vrstevnatého kremičitanu Saponit, ktorá vedie k adsorpciou indukovanej fluorescencii monoméru farbiva pri vlnovej dĺžke 535 nm.

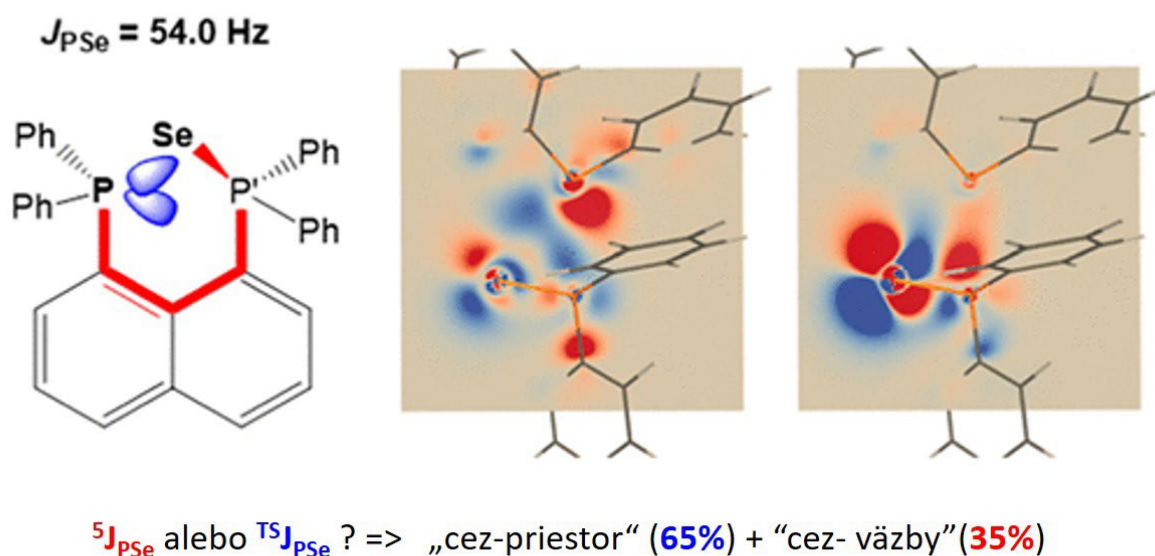
Publikácie:

1. BOHÁČ, Peter** – BUDZÁK, Šimon – PLANETOVÁ, Viktória – KLEMENT, Róbert – BUJDÁK, Juraj. Adsorption-induced fluorescence of pseudoisocyanine monomers in systems with layered silicates. In Journal of Physical Chemistry C, 2022, vol. 126, no. 40, p. 17255-17265. (2021: 4.177 – IF, Q2 – JCR, 1.103 – SJR, Q1 – SJR, karentované – CCC).
2. PRIBUS, Marek** – BUDZÁK, Šimon – PRIBUSOVÁ SLUŠNÁ, Lenka – ŠIMONOVÁ, Tímea – JANKOVIČ, Ľuboš – MÉSZÁROS, R. – BUJDÁK, Juraj. Luminescence of Reichardt's dye in polyelectrolyte-modified saponite colloids. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, vol. 642, p. 128663-1-128663-10. (2021: 5.518 – IF, Q2 – JCR, 0.758 – SJR, Q2 – SJR).

AKO ROZLIŠIŤ MEDZI VÄZBOVÝMI A NEVÄZBOVÝMI DRÁHAMI SPIN-SPINOVEJ INTERAKCIE

O. Malkina, V. Malkin

Nepriamo NMR spin-spinové väzby obsahujú neoceniteľné informácie o štruktúre molekúl a to hlavne v prípade, keď nie sú dostupné iné techniky, ako napríklad RTG analýza. Tieto informácie však nemožno extrahovať bez pochopenia vzťahu medzi štruktúrou molekuly a samotnými spin-spinovými väzbami v skúmanom systéme. Fenomén nepriamych spin-spinových väzieb je pozoruhodne koncepčne zle pochopený v zložitých experimentálnych situáciách, v ktorých sú potenciálne zapojené naraz neväzbové („cez-priestor“), ale aj klasickejšie väzbové („cez-väzby“) dráhy interakcie. V tejto práci sme navrhli výpočtové postupy, ktoré umožňujú vizualizáciu jednotlivých prenosových dráh a odhad ich relatívnej váhy. Tieto metódy sú použiteľné pre veľké systémy s komplexnou interakciou jadrových magnetických momentov. Celkový obraz prenosových dráh v komplexnom systéme možno navyše ďalej spresniť príspevkami jednotlivých molekulových orbitálov alebo ich párov, ktoré súvisia s akýmkoľvek fragmentom molekulovej štruktúry. Navrhované metódy sú tiež použiteľné na analýzu hyperjemných väzbových dráh v EPR spektroskopii. Mohli by napríklad pomôcť vyriešiť problém, ako spinová polarizácia generovaná paramagnetickým centrom (centrami) dosiahne konkrétne aktívne jadro.



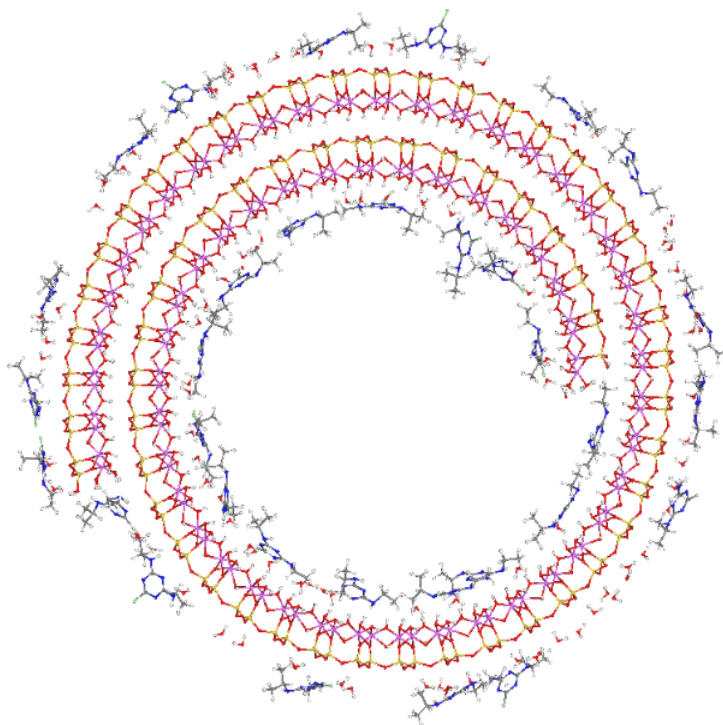
Publikácia:

MALKINA, Oľga** – HIERO, Jean-Cyrille** – MALKIN, Vladimír. Distinguishing "through-space" from "through-bonds" contribution in indirect nuclear spin-spin coupling: General approaches applied to complex JPP and JPSe scalar couplings. In Journal of the American Chemical Society, 2022, vol. 144, no. 24, p. 10768-10784. (2021: 16.383 – IF, Q1 – JCR, 5.728 – SJR, Q1 – SJR). Dostupné na: <https://doi.org/10.1021/jacs.2c01637>

HALLOYZIT - ÚČINNÝ ADSORBENT POLUTANTOV ŠTUDOVANÝ TEORETICKÝMI METÓDAMI.

D. Moreno Rodríguez, Ľ. Jankovič, E. Scholtzová

Minerál halloyzit, bol študovaný *ab initio* DFT a Force field (FF) výpočtovými metódami ako potenciálny adsorbent polutantov. Významným prínosom tohto štúdia je, že neúplná experimentálna planárna štruktúra halloyzitu bola spresnená *ab initio* DFT metódou a následne bol na jej základe v spolupráci s kolegami z Karlovej Univerzity v Prahe navrhnutý model halloyzitovej špirálovej nanorúrkovej štruktúry. Tento model bol ďalej použitý pri štúdiu adsorpcie polutantov (atrazín a diuron) FF metódou, kde sa zistilo, že halloyzit účinne adsorbuje obidva herbicidy, pričom diuron sa viaže silnejšie v dôsledku svojej polárnejšej štruktúry v porovnaní s atrazínom (Obr) [1]. Tento fakt sa potvrdil aj pri sorbovaní týchto herbicidov na ďalšom nanorúrkovom minerále, imogolite a smektitoch [2]. Spresnený model planárnej štruktúry halloyzitu sa využil pri štúdiu sorpcie liečiva irinotekanu, ktoré sa využíva pri liečbe rakoviny. Halloyzit sa môže v tomto prípade použiť nielen ako potenciálny nosič liečiva, ale aj pri účinnej adsorpcii irinotekanu ako polutantu z odpadových vôd [3].



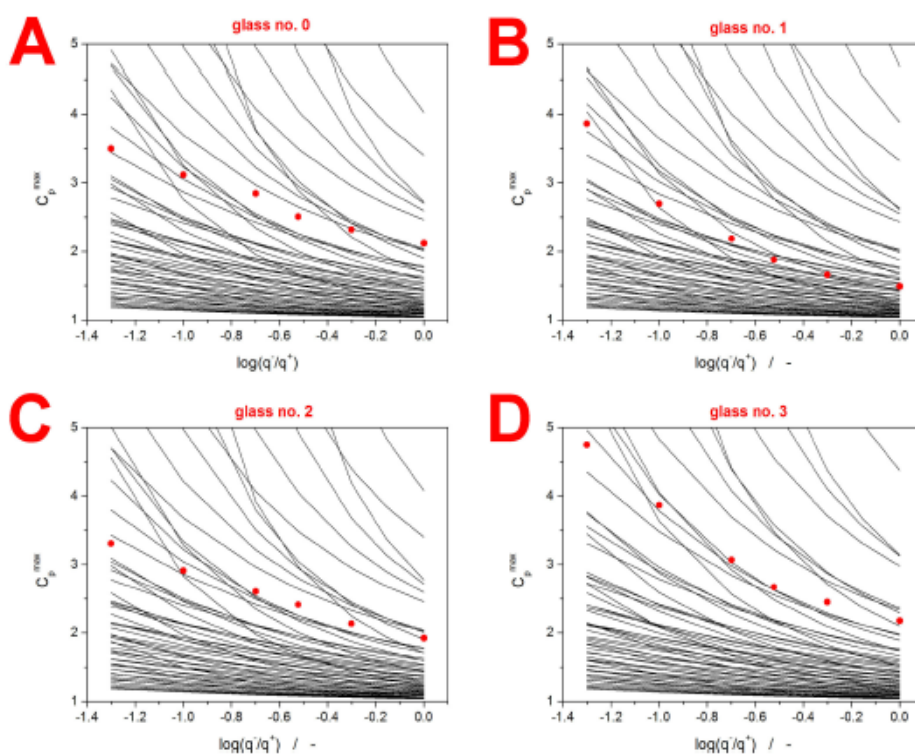
Obr. Optimalizovaný model halloyzitovej špirálovej nanorúrkovej s adsorbovanými molekulami diuronu na jej vonkajšom a vnútornom povrchu.

Publikácie:

1. GIANNI, Eleni** - MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - POSPÍŠIL, Miroslav. How herbicides like atrazine and diuron interact with the spiral halloysite structure. In Journal of Environmental Chemical Engineering, 2022, vol. 10, no. 6, p. 108785-1-108785-10. (2021: 7.968 - IF, Q1 - JCR, 1.042 - SJR, Q1 - SJR). ISSN 2213-3437. Dostupné na: <https://doi.org/10.1016/j.jece.2022.108785>
2. MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva. Immobilisation of diuron herbicide employing smectites. In Materials Today Communications, 2022, vol. 31, p. 103252-1-103252-12. (2021: 3.662 - IF, Q3 - JCR, 0.623 - SJR, Q2 - SJR). ISSN 2352-4928. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2022.103252>
3. GIANNI, Eleni - SCHOLTZOVÁ, Eva **. Theoretical investigation of halloysite as potential sorbent for pharmaceutical wastewaters. SUSTENG 2022, 31 Aug – 04 Sep 2022, Rethymno, Crete, Greece, p. 477-481,

VPLYV DOPANTU LI NA OBLASŤ TRANSFORMÁCIE BIOSKLA 45S5**M. Chromčíková, M. Liška**

Sklený prechod označuje transformáciu medzi podchladeným kvapalným stavom a zmrazeným (tuhým) sklovitým stavom. Kinetika skleného prechodu je poháňaná relaxačnými pohybmi určitých/dominantných štruktúrnych jednotiek. Diferenciálna skenovacia kalorimetria, termomechanická analýza a Ramanova spektroskopia boli použité na štúdium úlohy oxidov Li_2O a P_2O_5 na štruktúrne a relaxačné javy v Li-dopovanom 45S5 Bioskle. Zistilo sa, že správanie skleného prechodu je podobné pre entalpické a objemové prejavy relaxačných pohybov. Použil sa model Tool-Narayanaswamy-Moynihan (TNM). Na stanovenie relaxačných parametrov modelu bola použitá vylepšená simulačno-porovnávacia metodológia. Parametre TNM modelu a vybrané charakteristiky skelného prechodu (teplota skelného prechodu a koeficienty tepelnej rozťažnosti) nevykazovali štatisticky významnú koreláciu s konkrétnymi prvkami prítomnými v syntetizovaných sklách. Preto sa informácie o zložení skiel použili na výpočet teoretických množstiev druhov Q^n_{Si} v skle 45S5 dopovaných Li. Zistilo sa, že prakticky všetky skúmané fyzikálno-chemické veličiny súvisiace s kinetikou skleného prechodu vykazujú koreláciu s obsahom druhov Q^2_{Si} , ktoré sú zodpovedné za štruktúry vytvorenú reťazcami v študovaných sklách.



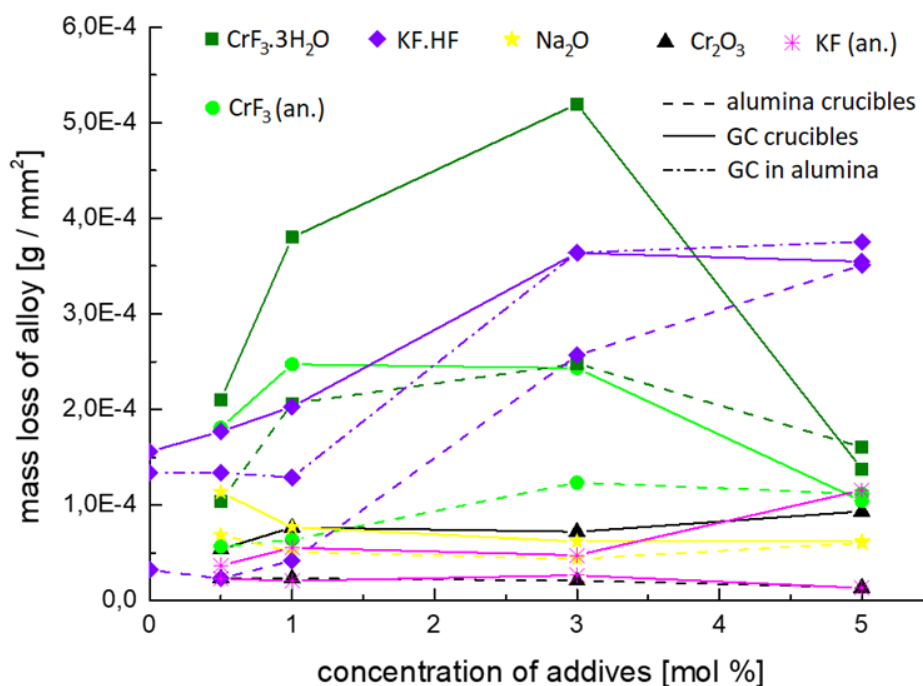
Obr. Vizuálne znázornenie simulačno-porovnávacej metódy použitej v prípade bio skiel 45S5 dopovaných Li. Body ukazujú experimentálne údaje, čiary predstavujú závislosti teoreticky simulované pre rôzne kombinácie β/x .

Publikácia:

CHROMČÍKOVÁ, Mária** - SVOBODA, Roman - PECUŠOVÁ, Beáta - HRUŠKA, Branislav - HUJOVÁ, Miroslava - NOWICKA, Aleksandra - LIŠKA, Marek. Effect of lithium doping on the glass transition behavior of the Bioglass 45S5. In Journal of Non-Crystalline Solids, 2022, vol. 594, p. 121797-1-121797-7. (2021: 4.458 - IF, Q1 - JCR, 0.751 - SJR, Q1 - SJR). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2022.121797>

NOVÝ MODEL KORÓZNYCH PROCESOV SUPERZLIATIN V ROZTAVENÝCH FLUORIDOCH.**V. Pavlík, M. Boča**

Na rozsiahlom systéme korózných experimentov bola zásadným spôsobom modifikovaná dlhoročná predstava o korózných procesoch prebiehajúcich na superzliatinách v interakcii s roztavenými fluoridmi. Dlhodobo preferovaný model bol založený na predstave, že zásadným faktorom, ktorý negatívne ovplyvňuje koróznú odolnosť zliatin, je prítomnosť oxidových aniónov v tavenine. Na systémoch zložených z eutektickej zmesi LiF/NaF/KF v interakcii so superzliatinou Incoloy 800 H/HT a prídavkami $\text{CrF}_3 \cdot 3\text{H}_2\text{O}$, $\text{KF} \cdot \text{HF}$, Na_2O , Cr_2O_3 a CrF_3 však bolo ukázané, že oveľa väčší negatívny vplyv na koróznú odolnosť superzliatin má prítomnosť vodíkového protónu, ktorý sa do systému dostáva ako nečistota hlavne v snahe čistiť vstupnú soľ zmesou F_2/HF (minoritne aj ako vlhkosť vstupných materiálov alebo atmosférická vlhkosť). Okrem odporúčania dôsledného odstránenia a zamedzenia prístupu vodíkových protónov do systému bol tiež preukázaný nezanedbateľný vplyv výberu ostatných materiálov, ktoré vstupujú do vzájomnej interakcie s cieľom vyhnúť sa galvanickej interakcii použitých materiálov.



Obr. Závislosť zmeny hmotností korodovaných vzoriek zliatiny Incoloy 800 H/HT od koncentrácie jednotlivého prídavku do eutektickej zmesi LiF/NaF/KF.

Publikácia:

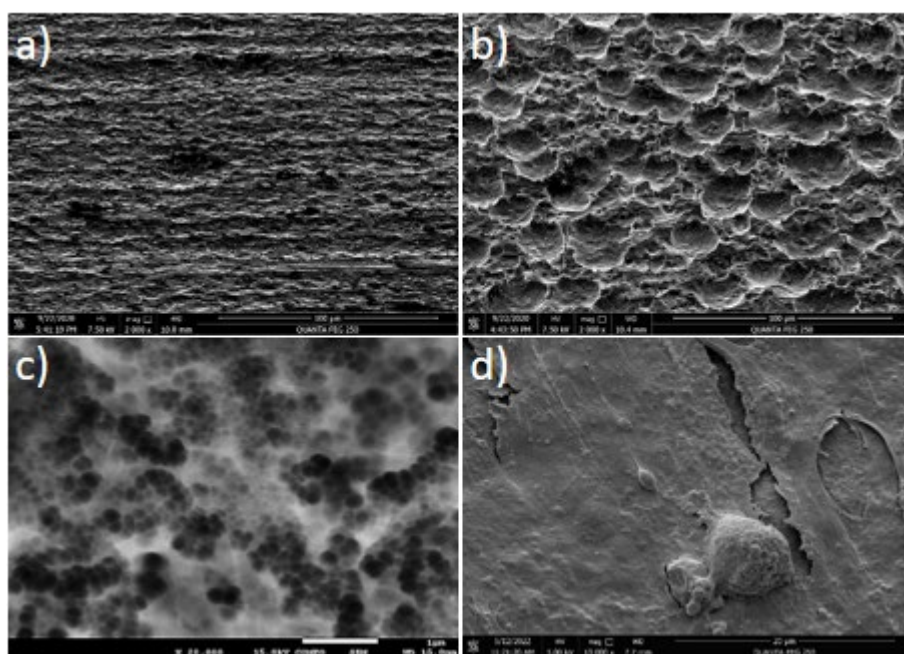
PAVLÍK, Viliam** – BOČA, Miroslav – KITYK, Anna. Accelerated corrosion testing in molten fluoride salts: Effect of additives and the crucible material. In Corrosion Science, 2022, vol. 195, p. 110011-1-110011-15. (2021: 7.720 – IF, Q1 – JCR, 1.694 – SJR, Q1 – SJR). ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.110011>

2.3.2. Výsledky aplikačného typu

EKOLOGICKÁ ELEKTROCHEMICKÁ POVRCHOVÁ ÚPRAVA BIOMEDICÍNSKÝCH ZLIATIN NA BÁZE TI

A Kityk, M. Hnatko

Titán a Ti zliatiny zostávajú najbežnejšími materiálmi na výrobu protéz a implantátov. Titán a jeho zliatiny nespĺňajú všetky klinické požiadavky, a aby sa zlepšili biologické, chemické a fyzikálno-mechanické vlastnosti vykonáva sa často dodatočná povrchová úprava biomedicínskych Ti-zliatin. Počas realizácie projektu APVV-0322 bola navrhnutá a preskúmaná inovatívna metóda povrchovej úpravy Ti zliatin (Ti) na *mikro* a *nano* úrovniach (Obr.), ktorá umožňuje zlepšiť koróznú odolnosť, bio-kompatibilitu a osseointegráciu titánových protéz a implantátov. Najnovšia technológia elektrochemického povrchového leptania a elektro-leštenia v ekologických hlboko eutektických rozpúšťadlách začína byť sľubnou alternatívou ku klasickým metódam povrchovej úpravy titánu. Nízka spotreba energie, primeraná cena, ekologická bezpečnosť zložiek elektrolytu a jednoduchosť implementácie metódy robia navrhovanú metódu konkurenčne lepšou v porovnaní s inými technikami povrchovej úpravy titánu. Získané výsledky sa stali základom dvoch patentových návrhov.



Obr. SEM analýza neošetrených (a) a elektrochemicky textúrovaných povrchov v DES Ti-zliatiny (b) – *mikro* textúra a c – *nano* textúra pri $t=25^{\circ}\text{C}$, (d) – vzorka plne pokrytá bunkami ľudských pľúcnych fibroblastov, čo dokazuje vysokú bio-kompatibilitu povrchov ošetrených navrhovanou metódou.

Patenty:

1. Európska patentová prihláška s názvom: "Method for electrochemical surface treatment of biomedical products made of titanium or Ti-based alloys" pod číslom 22193733.7 (registrácia 2.09.2022).
2. Európska patentová prihláška s názvom: "A method for electrochemical surface treatment of biomedical products made of titanium or Ti-based alloys" pod číslom 22204696.3 (registrácia 31.10.2022).

Publikácie:

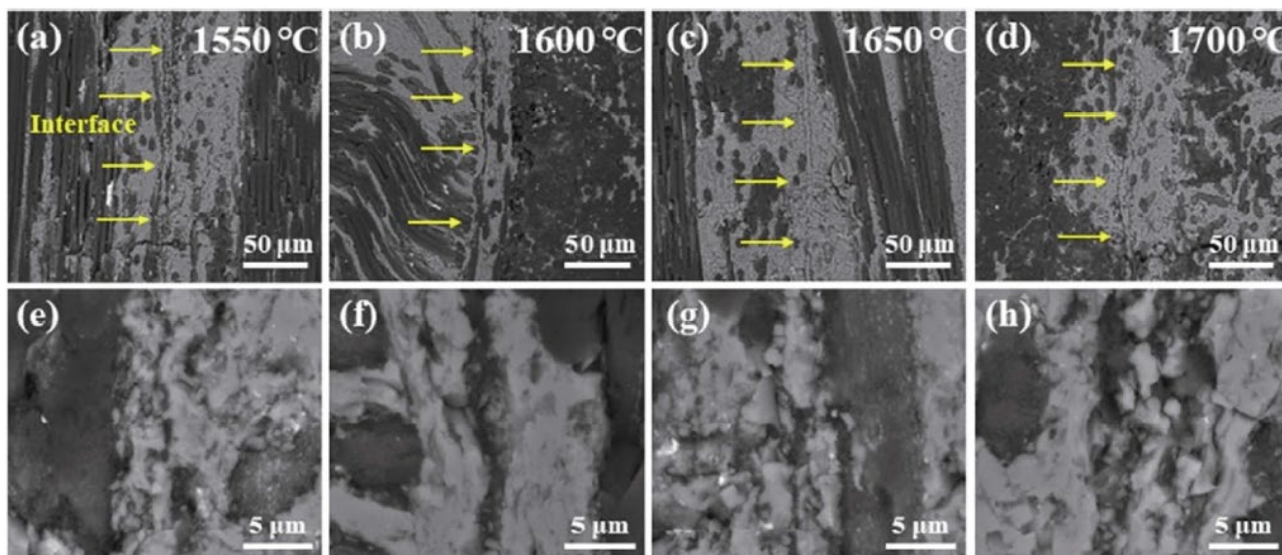
KITYK, Anna** - PROTSENKO, V. - DANILOV, F.I. - BOBROVA, Lina - HNATKO, Miroslav - PAVLÍK, Viliam - ŠOLTÝS, Ján - LABUDOVIČ, Martina - RUSKOVÁ, Magdaléna - PANGALLO, Domenico. Design of Ti-6Al-4V alloy surface properties by galvanostatic electrochemical treatment in a deep eutectic solvent Ethaline. In Surface & Coatings Technology, 2022, vol. 429, art. no. 127936. (2021: 4.865 - IF, Q2 - JCR, 0.922 - SJR, Q1 - SJR). ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2021.127936>

2.3.3. Výsledky na báze medzinárodnej spolupráce

SPÁJANIE KOMPOZITOV C_f/SiC S MEDZIVRSTVOU $Y_3Si_2C_2$ POMOCOU TECHNOLOGIE SPEKANIA V ELEKTRICKOM POLI

P. Tatarko

V tejto práci bol vôbec po prvýkrát pripravený materiál $Y_3Si_2C_2$ syntézou v roztavej soli pri relatívne nízkej teplote (900?). Takto pripravený materiál bol následne použitý ako spojovací materiál pre spájanie kompozitov SiC vystužených uhlíkovými vláknami (C_f/SiC). Počas spájania došlo k eutektickej reakcii medzi $Y_3Si_2C_2$, $\gamma(Y-C)$ fázy a SiC, čo viedlo k tvorbe taveniny a následnej precipitácii častíc SiC. Prítomnosť tekutej fázy podporila spekanie novovyvinutých častíc SiC, pričom došlo k ich úplnému zhutneniu s matricou C_f/SiC . Nadbytok taveniny bol z oblasti spoja vytlačený vplyvom pôsobenia jednoosového tlaku (30 MPa), čo vo finálnej fáze viedlo k tvorbe takmer bezšvového spoja. Spoj, ktorý bol pripravený pri teplote 1600°C a výdrží 10 min, vykázal najvyššiu šmykovú pevnosť s hodnotou 17.2 ± 2.9 MPa.



Obr. Spätne odrazené SEM snímky vzoriek spojených pri rôznych teplotách: (a, e) 1550°C, (b, f) 1600°C, (c, g) 1650°C, (d, h) 1700°C.

Publikácie:

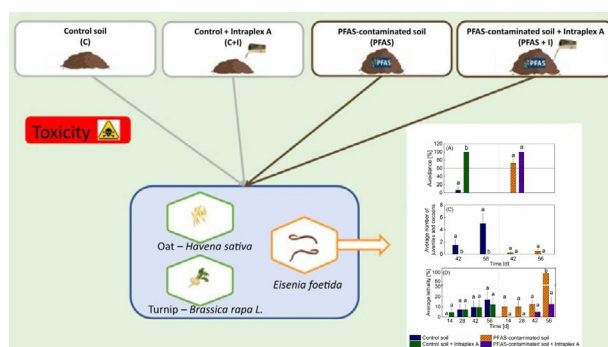
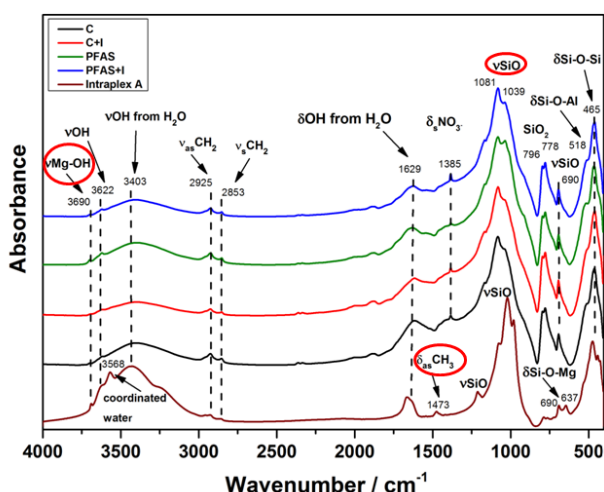
1. <https://www.susteng.eu/p/proceedings>.
2. YU, Teng - XU, Jie* - ZHOU, Xiaobing - **TATARKO, Peter** - LI, Yang - HUANG, Zhengren - HUANG, Qing. Near-seamless joining of C_f/SiC composites using $Y_3Si_2C_2$ via electric field-assisted sintering technique. In Journal of Advanced Ceramics, 2022, vol. 11, no. 8, p. 1196–1207. (2021: 11.534 - IF, Q1 - JCR, 1.558 - SJR, Q1 - SJR). ISSN 2226-4108. Dostupné na: <https://doi.org/10.1007/s40145-022-0593-3>

Výsledky boli získané a publikované v rámci riešenia projektu APVV-17-0328

ORGANICKY MODIFIKOVANÝ ÍLOVÝ MINERÁL A VPLYV JEHO PRÍDAVKU NA: ADSORPCIU POLUTANTOV A ZLEPŠENIE PÔDNEJ BIOTY (KVALITY) KONTAMINOVANÝCH PÔD

M. Slaný

Nový adsorpčný organo-íl (OI) pozostávajúci z ílového minerálu sépiolitu, ktorý bol modifikovaný surfaktantom (polydiallyldimetylammóniový chlorid), sa využil na *in situ* imobilizáciu per- a polyfluóralkylových látok (PFAS), ktoré predstavujú globálny problém, keďže kontaminujú pôdy a ohrozujú pôdne organizmy. Uskutočnila sa detailná charakterizácia samotného OI, ako aj systémov pred a po pridaní OI k referenčnej pôde a PFAS kontaminovanej pôde. FTIR spektroskopia potvrdila prítomnosť adsorpčných skupín Mg-O, Si-O, ako aj metylových skupín, ktoré môžu významne prispieť k odstraňovaniu PFAS z pôdy. OI vykázal dobrú termickú stabilitu, pričom rozklad surfaktantu prebiehal až v teplotnom rozmedzí 250-550°C. Testom na úmrtnosť dážďoviek sa skúmal vplyv prídavku organo-ílu na pôdnú biotu v PFAS-pôdach. Zistilo sa, že úmrtnosť bola 7,6 krát nižšia po prídavku OI do kontaminovanej pôdy v porovnaní s pôdou bez prídania OI. Nižšia úmrtnosť súvisela s adsorpciou polutantu na nový adsorbent a s následným znížením toxicity pôdy. Adsorbent bol teda vysoko efektívny pri znižovaní znečistenia pôdy a jeho využitie môže viesť k zlepšeniu kvality pôdy.



Obr. Detekcia funkčných adsorpčných skupín pomocou FTIR spektroskopie a vplyv organo-ílu na adsorpciu polutantov v kontaminovaných pôdach

Publikácia

MEDEIROS MELO, Tatiane** - SCHAUERTE, Marina - BLUHM, Annika - SLANÝ, Michal - PALLER, Michael - BOLAN, Nanthi - BOSCH, Julian - FRITZSCHE, Andreas - RINKLEBE, Jörg**. Ecotoxicological effects of per- and polyfluoroalkyl substances (PFAS) and of a new PFAS adsorbing organoclay to immobilize PFAS in soils on earthworms and plants. In Journal of Hazardous Materials, 2022, vol. 433, p. [128771-1-128771-11](https://doi.org/10.1016/j.jhazmat.2022.128771). (2021: 14.224 - IF, Q1 - JCR, 1.991 - SJR, Q1 - SJR). ISSN 0304-3894. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2022.128771> Typ: ADCA

2.4. Publikačná činnosť (zoznam je uvedený v prílohe C)

Tabuľka 2e Štatistika vybraných kategórií publikácií

PUBLIKAČNÁ A EDIČNÁ ČINNOSŤ	Počet v r. 2022/ doplňky z r. 2021
1. Vedecké monografie a monografické štúdie vydané v domácich vydavateľstvách (AAB, ABB)	0 / 0
2. Vedecké monografie a monografické štúdie vydané v zahraničných vydavateľstvách (AAA, ABA)	0 / 0
3. Odborné monografie, vysokoškolské učebnice a učebné texty vydané v domácich vydavateľstvách (BAB, ACB, CAB)	2 / 0
4. Odborné monografie a vysokoškolské učebnice a učebné texty vydané v zahraničných vydavateľstvách (BAA, ACA, CAA)	0 / 0
5. Kapitoly vo vedeckých monografiách vydaných v domácich vydavateľstvách (ABD)	0 / 0
6. Kapitoly vo vedeckých monografiách vydaných v zahraničných vydavateľstvách (ABC)	0 / 0
7. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v domácich vydavateľstvách (BBB, ACD)	0 / 0
8. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v zahraničných vydavateľstvách (BBA, ACC)	0 / 0
9. Vedecké práce registrované v Current Contents Connect (ADCA, ADCB, ADDA, ADDB)	77 / 0
10. Vedecké práce registrované vo Web of Science Core Collection alebo Scopus (ADMA, ADMB, ADNA, ADNB)	1 / 0
11. Vedecké práce v ostatných domácich časopisoch (ADFA, ADFB)	0 / 0
12. Vedecké práce v ostatných zahraničných časopisoch (ADEA, ADEB)	0 / 0
13. Vedecké práce v domácich recenzovaných zborníkoch (AEDA)	0 / 0
14. Vedecké práce v zahraničných recenzovaných zborníkoch (AECA)	0 / 0
15. Publikované príspevky na domácich vedeckých konferenciách (AFB, AFD)	11 / 0
16. Publikované príspevky na zahraničných vedeckých konferenciách (AFA, AFC)	9 / 0
17. Vydané periodiká evidované v CCC, WoS Core Collection, SCOPUS	0
18. Ostatné vydané periodiká	0
19. Zostavovateľské práce knižného charakteru (FAI)	1 / 0
20. Preklady vedeckých a odborných textov (EAJ)	0 / 0
21. Heslá v odborných terminologických slovníkoch a encyklopédiách (BDA, BDB)	0 / 0
22. Recenzie v časopisoch a zborníkoch (EDI)	0 / 0

Evidujú sa len tie práce zamestnancov a doktorandov, v ktorých je uvedená afiliácia k organizácii

Tabuľka 2f Štatistika vedeckých prác podľa kvartilu vedeckého časopisu

Kvartil vedeckého časopisu	Q1	Q2	Q3	Q4	Spolu
Podľa IF z r. 2021 (zdroj JCR) <i>Počet článkov / doplnky</i>	51 / 0	20 / 0	6 / 0	1 / 0	78 / 0
Podľa SJR z r. 2021 (zdroj Scimago) <i>Počet článkov / doplnky</i>	53 / 0	20 / 0	5 / 0	0 / 0	78 / 0

Tabuľka 2g Ohlasy

OHLASY	Počet v r. 2021/ doplnky z r. 2020
Citácie vo WOS (1.1, 2.1)	1948 / 95
Citácie v SCOPUS (1.2, 2.2)	170 / 9
Citácie v iných citačných indexoch a databázach (9, 10, 3.2, 4.2)	0 / 0
Citácie v publikáciách neregistrovaných v citačných indexoch (3, 4, 3.1, 4.1)	3 / 3
Recenzie na práce autorov z organizácie (5, 6, 7, 8)	0 / 0

2.5. Aktívna účasť na vedeckých podujatiach

Tabuľka 2h Vedecké podujatia

Prednášky a vývesky na medzinárodných vedeckých podujatiach	54
Prednášky a vývesky na národných vedeckých podujatiach	55

2.6. Vyžiadané prednášky

Ak boli príspevky publikované, sú súčasťou prílohy C, kategória (AFC, AFD, AFE, AFF, AFG, AFH)

2.6.1. Vyžiadané prednášky na medzinárodných vedeckých podujatiach

ASHER, James Richard - HRICOVÍNI, Michal - HRICOVÍNI, Miloš. A study of the photochemical behaviour and relaxation mechanisms of anti-syn isomers around quanzolinone -N-N= bonds. Chemistry towards Biology - 10 Instruct, Bratislava, Slovensko, 11. – 14. 09. 2022

BOČA, Miroslav - KUBÍKOVÁ, Blanka - NETRIOVÁ, Zuzana – MATSELKO - Oksana, and MLYNÁRIKOVÁ, Jarmila; Systematic research on the selected ternary lanthanide fluoride systems. International Conference on the Cooperation and Integration of Industry, Education, Research and Application: Metallurgy and Metal Materials and New Generation of Information Technology; Northeastern University, Čína; 22. 11. 2022

BUČKO, Tomáš. Ab initio free energy calculations at multiple electronic structure levels made affordable: An effective combination of perturbation theory and machine learning, ICTAC 2022, Lyon, Francúzsko, 17. 6. 2022

BUČKO, Tomáš. MLPT - an effective method for determining free energies at multiple electronic structure levels, MLQC4Dyn 2022, Paríž, 14. 9. 2022

BUJDÁK, Juraj. Playing with dye molecules in hybrids with clay minerals to achieve photofunctionality. MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poľsko, 11.–15. 09. 2022

GALUSEK, Dušan. Aluminate glasses: Why are they special? 15th International Ceramics Congress CIMTEC 2022, Perugia, Taliansko, 20. –24. jún 2022

MUTLU, Nursen - KURTULDU, Fatih - NEŠČÁKOVÁ, Zuzana - ZHENG, K. - BOCCACCINI, Aldo R. - GALUSEK, Dušan. Mesoporous nanoparticles doped with ions with potential therapeutic effect: synthesis and characterization, Ceramics in Europe 2022, Krakow, Poľsko, 10.–14. júl 2022

BOCCACCINI, Aldo R. - GALUSEK, Dušan. Bioactive glasses and glass-biopolymer composites

doped with therapeutic ions, 1st ESBI CONFERENCE 2022, Krems, Rakúsko, 18.–20. máj 2022

KRAXNER, Jozef - BERNARDO, Enrico - GALUSEK, Dušan. Novel approaches in additive manufacturing of glass-based structures, 97th DKG Annual Meeting of the German Ceramic Society, March 7-9, 2022, virtual conference

KOMOROVSKÝ, Stanislav. Relativistic theory of pNMR and EPR. Actinides revisited 2022, Dresden, Nemecko, 21.–23. 09. 2022

LEMKEN, Florian - MALKINA, Oľga - MALKIN, Vladimír - KOMOROVSKÝ, Stanislav. Indirect Nuclear Spin-Spin & Hyperfine Coupling pathway visualisation in heavy metal complexes. Chemistry towards Biology - 10 Instruct, Bratislava, Slovensko, 11.–14. 09. 2022

MALKINA, Oľga, A mystery of a through-space indirect NMR spin-spin coupling between two hydrogen atoms, 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Maďarsko, 7.–10. 09. 2022

MALKINA, Oľga, Beyond the Dirac vector model: why one-bond reduced NMR spin-spin coupling can be negative, Chemistry towards Biology - 10 Instruct, Bratislava, Slovensko, 11.–14. 09. 2022

MALKIN, Vladimír - LEMKEN, Florian - KOMOROVSKÝ, Stanislav - MALKINA, Oľga. Visualization of EPR hyperfine structure coupling pathways. 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Maďarsko, 7.–10. 09. 2022

MIŠENKOVÁ, Debora - LEMKEN, Florian - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Oľga - KOMOROVSKÝ, Stanislav. Overcoming the gauge problem for g-tensor calculations in the framework of four-component DFT. 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Maďarsko, 7.–10. 09. 2022

MORENO RODRÍGUEZ, Daniel - SCHOLTZOVA, Eva - NISHIHARA, H. DFT study of defects in graphene, 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, Smolenice, Slovensko, 02.11. – 04.11. 2022.

MORENO RODRÍGUEZ, Daniel, On the search for clay-herbicide interaction, Spring seminar of the Czech National Clay Group, Praha, Česká republika, 08.06. 2022.

TATARKO, Peter – ÜNSAL, Hakan – MATOVIĆ, Branko – CHLUP, Zdeněk – TATARKOVÁ, Monika – KOVALČÍKOVÁ, Alexandra – HIČÁK, Michal – DLOUHÝ, Ivo – ŠAJGALÍK, Pavol. The Effect of Rare-earth based Additives on the Mechanical Properties of ZrB₂-SiC Composites prepared by Reactive and Non-Reactive Sintering Route, 15th International Ceramics Congress, CIMTEC 2022, Perugia, Taliansko, 20-24.06.2022

ÜNSAL, Hakan – GRASSO, Salvatore – KOVALČÍKOVÁ, Alexandra – HANZEL, Ondrej – TATARKOVÁ, Monika – DLOUHÝ, Ivo – TATARKO, Peter. In-situ graphene platelets formation and its suppression during reactive spark plasma sintering of boron carbide/titanium diboride composites, Keramik/Ceramics 2022, virtual conference, 07.-09.03.2022

TATARKO, Peter – ÜNSAL, Hakan – KOVALČÍKOVÁ, Alexandra – MATOVIĆ, Branko – CHLUP, Zdeněk – TATARKOVÁ, Monika – HIČÁK, Michal – DLOUHÝ, Ivo. Ultra-high temperature ceramics with improved ablation resistance, 1st International Conference on Innovative Materials in Extreme Conditions, IMEC 2022, Belehrad, Srbsko, 22–23.03.2022

2.6.2. Vyžiadané prednášky na národných vedeckých podujatiach

2.6.3. Vyžiadané prednášky na významných vedeckých inštitúciách

BUJDÁK, Juraj. Organization of luminophore molecules in hybrids with silicates to achieve photofunctionality. Department of Materials Chemistry & Research, University of Vienna, Rakúsko, 24.11.2022

TATARKO, Peter, New Diboride Ceramics for Extreme Applications, Department of Metallurgical & Materials Engineering, Indian Institute of Technology IIT Madras, Chennai, India, 05.12.2022 (online)

LEMKEN, Florian, Long-range indirect 13C-31P coupling in isostructural nickel, palladium and platinum complexes, University of Oulu, Fínsko, 25.11.2022.

LEMKEN, Florian, Overcoming the gauge problem for g-tensor calculations in the framework of four-component DFT, Technische Universität Berlin, Nemecko, 30. 11.2022.

MALKINA, Oľga, Distinguishing “Through-Space” from “Through-Bonds” Contribution in Indirect Nuclear Spin-Spin Coupling, Technische Universität Berlin, Nemecko, 07.12.2022.

MALKIN, Vladimír, Distinguishing “Transmission of spin-polarization by pi-orbitals”, Technische Universität Berlin, Nemecko, 7.12.2022.

TATARKO, Peter, Development of advanced ceramic materials at Slovak Academy of Sciences, TUBITAK Marmara Research Center, Istanbul, Turecko, 18.10.2022

PRNOVÁ, Anna - VALÚCHOVÁ Jana - MAJEROVÁ Melinda - PARCHOVIANSKÝ Milan - MICHÁLKOVÁ Monika - GALUSEK Dušan. Vplyv prídavku ZrO₂ na mechanické vlastnosti Al₂O₃ - Y₂O₃ Keramiky, Univerzita Pardubice, Pardubice, Česká republika, 22.9.2022

SCHOLTZOVA, Eva, DFT method - a useful tool for characterisation of clay minerals and organoclays, University of Patras, Dept of Geology, Patras, Greece, 12.07.2022.

SLANÝ, Michal - Clay minerals and organoclays-based nanocomposites for environmental applications, Bergische Universität Wuppertal, Nemecko, 30.05.2022

2.7. Patentová a licenčná činnosť na Slovensku a v zahraničí v roku 2022

2.7.1. Vynálezy, na ktoré bol v roku 2022 udelený patent

a) na Slovensku

b) v zahraničí

2.7.2. Vynálezy prihlásené v roku 2022

a) na Slovensku

b) v iných krajinách ako prioritná prihláška

c) PCT

d) EP

Názov vynálezu: Method for electrochemical surface treatment of biomedical products made of titanium or Ti-based alloys

Krajina: Slovensko

Číslo prihlášky: EP22193733.7

Dátum priority: 2.9.2022

Majiteľ / spolumajiteľ: CEMEA SAV, v. v. i.; ÚACH SAV, v. v. i.

Pôvodcovia vynálezu: Hnatko Miroslav, Kityk Anna,

Názov vynálezu: A method for electrochemical surface treatment of biomedical product made of titanium or Ti-based alloys

Krajina: Slovensko

Číslo prihlášky: EP22204696.3

Dátum priority: 31.10.2022

Majiteľ / spolumajiteľ: CEMEA SAV, v. v. i.; ÚACH SAV, v. v. i.

Pôvodcovia vynálezu: Hnatko Miroslav, Kityk Anna,

e) v iných krajinách v rámci tzv. národnej fázy po PCT, resp. po validácii EP

2.7.3. Úžitkové vzory na Slovensku

a) prihlásené v roku 2022

b) udelené v roku 2022

2.7.4. Realizované vynálezy

a) predané patenty resp. prihlášky vynálezov (v prípade úplnej zmeny majiteľa patentu)

b) predané licencie (v prípade že majiteľom ostáva organizácia SAV)

Finančný prínos pre organizáciu SAV v roku 2022 a súčet za predošlé roky sa neuvádzajú, ak je zverejnenie v rozpore so zmluvou súvisiacou s realizáciou patentu.

2.8. Účasť expertov na hodnotení národných projektov (APVV, VEGA a iných)

Tabuľka 2i Experti hodnotiaci národné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
Bujdák Juraj	APVV 2022 (Spravodajca prírodovedných projektov)	10
	VEGA-22	3
Pálková Helena	VEGA-22	1
Prnová Anna	VEGA-22	1
Šimko František	VEGA-22	2

2.9. Účasť na spracovaní hesiel do encyklopédie Beliana

Počet autorov hesiel: 0

2.10. Recenzovanie knižných publikácií a príspevkov vo vedeckých časopisoch

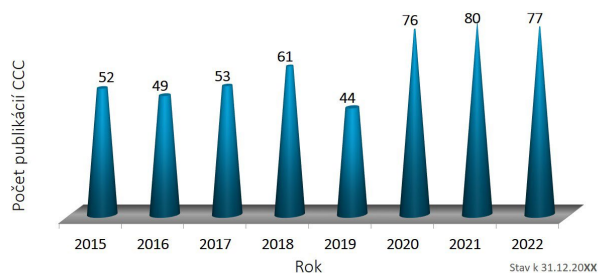
Tabuľka 2j Počet vypracovaných recenzií na vedecké monografie, vedecké štúdie a zborníky

Meno pracovníka	Ved. monografie		Príspevky v časopisoch			Zborníky	
	Domáce	Zahra-ničné	WoS, SCOPUS	Iné databázy	Ostatné	Domáce	Zahra-ničné

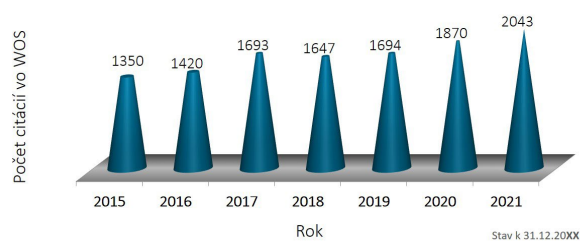
Barlog Martin	0	0	1	0	0	0	0
Boháč Peter	0	0	7	0	0	0	0
Bučko Tomáš	0	0	7	0	0	0	0
Galusek Dušan	0	0	12	0	0	0	0
Hnatko Miroslav	0	0	0	0	0	1	0
Kubíková Blanka	0	0	1	0	0	0	0
Lenčes Zoltán	0	0	5	0	0	0	0
Malkin Oľga	0	0	5	0	0	0	0
Páľková Helena	0	0	2	0	0	0	0
Prnová Anna	0	0	4	2	0	0	0
Scholtzová Eva	0	0	2	0	0	0	0
Slaný Michal	0	0	4	0	0	0	0
Tatarko Peter	0	0	30	0	0	4	0
Spolu	0	0	80	2	0	5	0

2.11. Iné informácie k vedeckej činnosti.

Vývoj počtu časopiseckých karentovaných publikácií registrovaných v databáze WOS ukazuje schéma nižšie. V závislosti na metodike, na ktorú kategóriu sa vzťahuje prepočítaný podiel publikácie, je možné uvažovať o kategóriách: vedeckí pracovníci, ostatní vedeckí pracovníci s VŠ vzdelaním, ostatní pracovníci zapojení do riešenia projektov a doktorandi. Vzhľadom na to, že nie je k dispozícii jednoznačné usmernenie, budeme vychádzať z usmernenia poslednej akreditácie, kedy sa počet publikačných výstupov vzťahoval na počet zamestnancov s univerzitným titulom zapojených do výskumných projektov v danom roku. Cieľom je dosiahnuť a udržiavať dve (prípadne viac) publikácie na počet zamestnancov s univerzitným titulom zapojených do výskumných projektov, čo odpovedá štandardu vyspelých vedeckých pracovísk s podobným zameraním. V roku 2022, pri počte 43,96 pracovníkov zapojených do projektov sa dosiahlo 1,75 publikácie v kategórii karentovaných publikácií. V obrázkoch a tabuľkách uvedených ďalej je možné sledovať trendy v posledných rokoch vo vývoji počtu karentovaných publikácií, ako trendy v počte karentovaných publikácií na vedeckého pracovníka. Ďalším sledovanými parametrami sú ohlasy na práce s afiliáciou ústavu uvedených vo WOS databáze a ich prepočet na jedného vedeckého pracovníka.



Rok	2016	2017	2018	2019	2020	2021	2022
Vedecký pracovník	36,3	39,1	39,4	34,2	34,9	37,3	38,8
Pub/1 VP*	1,4	1,4	1,5	1,3	2,2	2,1	2,0



Rok	2016	2017	2018	2019	2020	2021	2022
Vedeckí pracovníci	36,3	39,1	39,4	34,2	34,9	37,3	38,8
cit/1 ved. prac.	36,3	37,6	41,8	45,3	40,8	42,0	52,6

Tabuľky tiež ukazujú vývoj priemerného impakt faktoru výstupov (podľa JCR). Podstatnou skutočnosťou je, že stabilne rastie počet publikácií v časopisoch s vyšším IF.

Rok	2016	2017	2018	2019	2020	2021	2022
Priemerný IF	2.71	2.83	3.41	3.66	4.17	4.32	5.66
Medián IF	2.74	3.10	3.06	3.45	3.26	3.65	4.88

IF	Počet publikácií (ADC and ADD)					
	2017	2018	2019	2020	2021	2022
< 1	5	3	1	5	1	0
1-2	11	5	8	4	2	3
2-3	8	20	6	23	17	9
3-4	19	19	12	13	21	13
4<	8	14	17	31	39	51
Σ	51	61	44	76	80	76

Významnou časťou vedeckej aktivity je účasť na výzvach v rôznych projektových schémach. Každoročne, jednotlivé vedecké tímy na ústave podávajú niekoľko APVV projektov, ako vo všeobecnej, tak aj v bilaterálnych výzvach. V schéme VEGA projektov je ústav riešiteľom stabilne vysokého počtu projektov (aj spoločných spolu s univerzitnými pracoviskami).

Tiež treba vyzdvihnúť úspešnosť ústavu naprieč všetkými vnútornými výzvami SAV; získané štipendiá v rámci Schwarzovho fondu (v roku 2022 mal ústav dvoch držiteľov štipendia), doktorandských projektov (v roku 2022 jeden projekt), bilaterálne medzinárodné projekty (TUBITAK-1, MOST-1, V4-Japan-1) vrátane projektu SASPRO II (aktuálne dva projekty). V rámci projektu CEMEA, ktorý sa začal riešiť v priebehu roka 2019 nastal výrazný pozitívny posun v obstarávaní a dodaní naplánovaných prístrojov ako aj v iných aktivitách riešených v rámci tohto projektu.

3. Doktorandské štúdium, iná pedagogická činnosť a budovanie ľudských zdrojov pre vedu a techniku

3.1. Údaje o doktorandskom štúdiu

Tabuľka 3a Počet doktorandov v roku 2022

Forma	Počet k 31.12.2022				Počet doktorandov po doktorandskej skúške		Počet ukončených doktorantúr v r. 2022					
							Ukončenie z dôvodov					
	celkový počet		z toho novoprijatí				ukončenie úspešnou obhajobou		predčasné ukončenie		neúspešné ukončenie	
M	Ž	M	Ž	M	Ž	M	Ž	M	Ž	M	Ž	
Denná zo zdrojov SAV	6	6	0	1	4	5	1	1	0	0	0	0
Denná z iných zdrojov	0	0	0	0	0	0	0	0	0	0	0	0
Externá	0	0	0	0	0	0	0	0	0	0	0	0
Spolu	6	6	0	1	4	5	1	1	0	0	0	0
Z toho zahraničných	5	4	0	0	4	3	1	0	0	0	0	0
Súhrn	12		1		9		2		0		0	

Uvádzajte len doktorandov organizácie ako externej vzdelávacej inštitúcie.

Riadok „Spolu“ je súčtom troch riadkov nad ním. Každá bunka v riadku „Súhrn“ vyjadruje celkový počet doktorandov (mužov a žien spolu), čiže je súčtom príslušných dvoch buniek z riadku „Spolu“. V stĺpci „Počet doktorandov po doktorandskej skúške“ sa uvádza počet doktorandov, ktorí počas roku 2022 boli aspoň 1 deň doktorandami po doktorandskej skúške. Sú číselne zahrnutí aj v predchádzajúcich stĺpcoch.

Pod predčasným ukončením rozumieme ukončenie bez obhajoby dizertačnej práce pričom doktorand neabsolvoval celú štandardnú dĺžku štúdia. Pod neúspešným ukončením rozumieme ukončenie bez úspešnej obhajoby dizertačnej práce, pričom študent absolvoval celú štandardnú dĺžku štúdia.

3.2. Zmena formy doktorandského štúdia

Tabuľka 3b Počty preradení z dennej formy na externú a z externej na dennú

Pôvodná forma	Denná z prostriedkov SAV	Denná z prostriedkov SAV	Denná z iných zdrojov	Denná z iných zdrojov	Externá	Externá
Nová forma	Denná z iných zdrojov	Externá	Denná z prostriedkov SAV	Externá	Denná z prostriedkov SAV	Denná z iných zdrojov
Počet	0	0	0	0	0	0

3.3. Zoznam doktorandov, ktorí ukončili doktorandské štúdium úspešnou obhajobou

Tabuľka 3c Menný zoznam ukončených doktorandov v roku 2022 úspešnou obhajobou

Meno doktoranda	Forma DŠ	Mesiac, rok nástupu na DŠ	Mesiac, rok obhajoby	Číslo a názov študijného odboru	Meno a organizácia školiteľa	Fakulta udeľujúca vedeckú hodnotu
Mgr. Patrícia Petrisková	interné štúdium hrazené z prostriedkov SAV	9 / 2018	8 / 2022	4.1.15 anorganická chémia	doc. Ing. Zoltán Lenčéš PhD., Ústav anorganickej chémie SAV, v. v. i.	Prírodovedecká fakulta UK
MSc. Hakan Ünsal	interné štúdium hrazené z prostriedkov SAV	9 / 2018	8 / 2022	4.1.15 anorganická chémia	Ing. Peter Tatarko PhD., Ústav anorganickej chémie SAV, v. v. i.	Prírodovedecká fakulta UK

3.4. Zoznam doktorandov, ktorí ukončili doktorandské štúdium úspešnou obhajobou v nadštandardnej dĺžke štúdia

Tabuľka 3d Menný zoznam ukončených doktorandov v roku 2022 úspešnou obhajobou v nadštandardnej dĺžke štúdia

Meno doktoranda	Forma DŠ	Mesiac, rok nástupu na DŠ	Mesiac, rok obhajoby	Číslo a názov študijného odboru	Meno a organizácia školiteľa	Fakulta udeľujúca vedeckú hodnotu
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3.5. Uplatnenie absolventov doktorandského štúdia

Tabuľka 3e Prehľad uplatnenia absolventov doktorandského štúdia

Počet absolventov PhD. štúdia v roku 2022 (obhajoba leto 2022)	z toho koľkí sa zamestnali vo výskume (SAV, univerzity, rezortné výskumné ústavy)	z toho koľkí sa zamestnali v praxi mimo výskum, kde využívajú svoju kvalifikáciu	z toho koľkí sa zamestnali v praxi, kde nevyužívajú svoju kvalifikáciu	z toho koľkí boli nejaký čas nezamestnaní
2	2	0	0	0

Zoznam interných a externých doktorandov je uvedený v prílohe A.

3.6. Medzinárodné doktorandské štúdium

Tabuľka 3f Počet študentov v medzinárodných programoch doktorandského štúdia

Cotutelle	Co-direction	Iné	Zahraníční doktorandi štátne občianstvo/počet
0	0	0	IND/2, TUR/2, DEU/1, ECU/1, GRC/1, IRN/1, PAK/1, RUS/1

Zahraníční doktorandi sú doktorandi v dennej alebo externej forme štúdia, ktorí sú občanmi iných krajín.

Doktorandi školení v rámci Cotutelle alebo Co-direction sa do posledného stĺpca nezapočítavajú.

3.7. Zoznam študijných odborov, na ktoré má ústav uzatvorenú rámcovú dohodu, s uvedením VŠ

Tabuľka 3g Zoznam študijných odborov, na ktoré má ústav uzatvorenú rámcovú dohodu, s uvedením univerzity/vysokej školy a fakulty, kde sa doktorandský študijný program uskutočňuje

Názov študijného odboru (ŠO)	Číslo ŠO	Názov doktorandského študijného programu	Doktorandské štúdium uskutočňované na (univerzita/vysoká škola a fakulta)
fyzika	1160	chemická fyzika	Prírodovedecká fakulta UK
chémia	1420	anorganická chémia	Prírodovedecká fakulta UK
chemické inžinierstvo a technológie	2820	anorganická technológia a materiály	Fakulta chemickej a potravinárskej technológie STU
anorganická chémia	4.1.15		Prírodovedecká fakulta UK

Názov a číslo študijného odboru vyplňte/vyberte podľa aktuálne platného zoznamu študijných odborov

<https://www.portalvs.sk/sk/studijne-odbory?from=menu1>. Názov doktorandského študijného programu v stĺpci 3 je potrebné vložiť ako voľný text.

Do 31. 8. 2023 študujú študenti doktorandského štúdia zaradení do študijných programov podľa zoznamu MŠVVaŠ, platného do 1. 9. 2019. Pre týchto študentov je potrebné napísať názov programu ako voľný text do stĺpca 3 a nevyplňovať stĺpce 1 a 2.

Tabuľka 3h Účasť na pedagogickom procese

Menný prehľad pracovníkov, ktorí boli menovaní do odborových komisií pre doktorandské štúdium	Menný prehľad pracovníkov, ktorí pôsobili ako členovia vedeckých rád univerzít, správnych rád univerzít a fakúlt	Menný prehľad pracovníkov, ktorí získali vyššiu vedeckú, pedagogickú hodnosť alebo vyšší kvalifikačný stupeň
doc. Ing. Miroslav Boča, DrSc. (anorganická chémia)	doc. Ing. Miroslav Boča, DrSc. (Fakulta chemickej a potravinárskej technológie STU)	
doc. Ing. Miroslav Boča, DrSc. (anorganická technológia a materiály)	doc. Ing. Miroslav Boča, DrSc. (Trenčianska univerzita Alexandra Dubčeka v Trenčíne)	
doc. Ing. Miroslav Boča, DrSc. (odbor v zahraničí)	prof. Ing. Dušan Galusek, DrSc. (Fakulta špeciálnej techniky TnUAD)	
prof. RNDr. Juraj Bujdák, DrSc. (anorganická chémia)	prof. Ing. Dušan Galusek, DrSc. (Fakulta zdravotníctva TnUAD)	
prof. RNDr. Juraj Bujdák, DrSc. (fyzikálna chémia)	prof. Ing. Dušan Galusek, DrSc. (Trenčianska univerzita Alexandra Dubčeka v Trenčíne)	

prof. Ing. Dušan Galusek, DrSc. (anorganická technológia a materiály)	prof. Ing. Marek Liška, DrSc., Dr.h.c. (Fakulta chemické technologie VŠCHT, Praha, ČR)	
prof. Ing. Dušan Galusek, DrSc. (fyzikálna chémia)	prof. Ing. Marek Liška, DrSc., Dr.h.c. (Trenčianska univerzita Alexandra Dubčeka v Trenčíne)	
prof. Ing. Dušan Galusek, DrSc. (materiály)	RNDr. Jana Madejová, DrSc. (Prírodovedecká fakulta UK)	
doc. Ing. Miroslav Hnatko, PhD. (anorganické technológie a nekovové materiály)	prof. RNDr. Pavol Šajgalík, DrSc. (Fakulta metalurgie a materiálového inžinierstva, Vysoká škola báňská TU)	
doc. Ing. Miroslav Hnatko, PhD. (anorganická technológia a materiály)	prof. RNDr. Pavol Šajgalík, DrSc. (Hutnícka fakulta TUKE)	
doc. Ing. Zoltán Lenčoš, PhD. (anorganická technológia a materiály)	prof. RNDr. Pavol Šajgalík, DrSc. (Slovenská technická univerzita v Bratislave)	
doc. Ing. Zoltán Lenčoš, PhD. (anorganická chémia)	prof. RNDr. Pavol Šajgalík, DrSc. (Trenčianska univerzita Alexandra Dubčeka v Trenčíne)	
doc. Ing. Zoltán Lenčoš, PhD. (odbor v zahraničí)	prof. RNDr. Pavol Šajgalík, DrSc. (Univerzita Komenského v Bratislave)	
prof. Ing. Marek Liška, DrSc., Dr.h.c. (anorganická technológia a materiály)	prof. RNDr. Pavol Šajgalík, DrSc. (Univerzita Pavla Jozefa Šafárika v Košiciach)	
prof. Ing. Marek Liška, DrSc., Dr.h.c. (fyzika kondenzovaných látok a akustika)	prof. RNDr. Pavol Šajgalík, DrSc. (Univerzita sv. Cyrila a Metoda v Trnave)	
RNDr. Jana Madejová, DrSc. (anorganická technológia a materiály)	prof. RNDr. Pavol Šajgalík, DrSc. (Vysoké učení technické, Brno)	
Dr. Oľga Malkin, DrSc. (teoretická a počítačová chémia)		
Dr. Vladimír Malkin, DrSc. (chemická fyzika)		
Dr. Vladimír Malkin, DrSc. (teoretická a počítačová chémia)		

3.8. Údaje o pedagogickej činnosti

Tabuľka 3i Prednášky a cvičenia vedené v roku 2022

PEDAGOGICKÁ ČINNOSŤ	Prednášky		Cvičenia a semináre	
	doma	v zahraničí	doma	v zahraničí
Počet prednášateľov alebo vedúcich cvičení	3	0	4	0
Celkový počet hodín v r. 2022	48	0	62	0

Prehľad prednášateľov predmetov a vedúcich cvičení, s uvedením názvu predmetu, úväzku, katedry, fakulty, univerzity/vysokej školy je uvedený v prílohe D.

Tabuľka 3j Aktivity pracovníkov na VŠ

1.	Počet pracovníkov, ktorí pôsobili ako vedúci alebo konzultanti diplomových a bakalárskych prác	0
2.	Počet vedených alebo konzultovaných diplomových a bakalárskych prác	0
3.	Počet pracovníkov, ktorí pôsobili ako školitelia doktorandov (PhD.)	12
4.	Počet školených doktorandov (aj pre iné inštitúcie)	23
5.	Počet oponovaných dizertačných a habilitačných prác	9
6.	Počet pracovníkov, ktorí oponovali dizertačné a habilitačné práce	5
7.	Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby DrSc. prác	2
8.	Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby PhD. prác	5
9.	Počet pracovníkov, ktorí pôsobili ako členovia komisií, resp. oponenti v inauguračnom alebo habilitačnom konaní na vysokých školách	0

3.9. Iné dôležité informácie k pedagogickej činnosti

Ústav anorganickej chémie SAV, v.v.i. sa začiatkom roka 2022 opäť zapojil do pedagogického procesu vypísaním PhD. tém ako externá vzdelávacia inštitúcia dvoch univerzít - PríF UK a FCHPT STU. Celkovo bolo vypísaných 7 tém v 4 študijných programoch (anorganická chémia, fyzikálna chémia a teoretická a počítačová chémia v spolupráci s PríF UK a anorganická technológia a materiály v spolupráci s FCHPT STU). Tieto témy boli zverejnené prostredníctvom AIS na príslušných fakultách, webových stránkach ústavu i SAV, ako aj na ďalších dvoch medzinárodných portáloch, ako vlastná iniciatíva ÚACH SAV, v.v.i. pre získanie nových doktorandov, ktorá sa za posledné roky veľmi osvedčila. Aj napriek intenzívnej komunikácii s viacerými záujemcami, si prihlášky v stanovenom termíne podali len dvaja uchádzači, ktorí sa zároveň zúčastnili aj prijímacích pohovorov. Obaja uchádzači splnili podmienky, ale do prvého ročníka bola zapísaná nakoniec len jedna študentka v programe Anorganická chémia na PríF UK. Okrem PhD. tém sa ÚACH SAV, v.v.i. podieľal na pedagogickom procese vypísaním 3 Mgr. a 2 Bc. tém na PríF UK.

Študenti doktorandského štúdia a mladí vedeckí pracovníci do 35 rokov sa zapojili do Súťaže mladých pracovníkov do 35 rokov na ÚACH SAV, v.v.i. Súťaž sa uskutočnila dňa 19.10.2022 za účasti 13 študentov doktorandského štúdia a mladých vedeckých pracovníkov z ÚACH SAV, v.v.i. Bratislava a TnUAD Trenčín. Úroveň súťažných príspevkov bola vynikajúca, čo ocenili členovia

komisie, ako i ostatní zamestnanci ÚACH SAV, v.v.i., ktorí sa zúčastnili prednášok. Na ocenených miestach sa umiestnili:

1. Florian Lemken
2. Alper Güneren
3. Bruno Wolfrum

Doktorandi ÚACH sa uchádzajú aj o projekty v rámci výziev DOKTOGRANT, v roku 2022 sa o tento projekt úspešne uchádzali dvaja doktorandi – Sanam Bashir a Naser Hosseini.

4. Medzinárodná vedecká spolupráca

4.1. Medzinárodné vedecké podujatia

4.1.1. Medzinárodné vedecké podujatia, ktoré organizácia SAV organizovala v roku 2022 alebo sa na ich organizácii podieľala, s vyhodnotením vedeckého a spoločenského prínosu podujatia

2ND ATOMDEC ANNUAL MEETING - ATOMIC DESIGN OF CARBON-BASED MATERIALS FOR NEW SOCIETY, Smolenice, Slovensko, 18 účastníkov, 02.11.-04.11.2022, (Eva Scholtzová, uacheva@savba.sk)

Počas podujatia odznelo 18 prednášok, účastníci zo Slovenska, Maďarska, Poľska, Českej republiky, Japonska, Španielska, Veľkej Británie, Dánska

4.1.2. Medzinárodné vedecké podujatia, ktoré usporiada organizácia SAV v roku 2023 (anglický a slovenský názov podujatia, miesto a termín konania, meno, telefónne číslo a e-mail zodpovedného pracovníka)

XVTH WORKSHOP ON MODERN METHODS IN QUANTUM CHEMISTRY, Mariapfarr, Rakúsko, 26.02.-03.03.2023, (Vladimír Malkin, 02/59410469, uachmalk@savba.sk)

4.1.3. Počet pracovníkov v programových a organizačných výboroch medzinárodných konferencií

Tabuľka 4a Programové a organizačné výbory medzinárodných konferencií

Meno pracovníka	Programový	Organizačný	Programový i organizačný
Galusek Dušan	3	0	0
Hanzel Ondrej	0	1	0
Hnatko Miroslav	0	1	0
Lenčes Zoltán	0	0	1
Scholtzová Eva	0	0	1
Spolu	3	2	2

4.2. Členstvo a funkcie v medzinárodných orgánoch

4.2.1. Členstvo a funkcie v medzinárodných vedeckých spoločnostiach, úniách a národných komitétach SR

doc. Ing. Miroslav Boča, DrSc.

European Technology Platform for Advanced Engineering Materials and Technologies
(funkcia: člen správnej rady EuMat)

Mgr. Peter Boháč, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

prof. RNDr. Juraj Bujdák, DrSc.

AIPEA - International Association for the study of Clays (funkcia: člen)

prof. Ing. Dušan Galusek, DrSc.

American Ceramic Society (funkcia: člen)

Ceramic in Modern Technologies (funkcia: člen)

European Ceramic Society (funkcia: fellow)
European Society for Bioresorbable Implants (funkcia: zakladajúci člen)
European Society on Glass Science and Technology (funkcia: člen)
International Commission on Glass (funkcia: zástupca SR v ICG council)

doc. Ing. Mária Chromčíková, PhD.

Česká sklárska spoločnosť (funkcia: člen)
TC03 (funkcia: člen)

Mgr. Ľuboš Jankovič, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

Ing. Michal Korenko, PhD.

International Union of Pure and Applied Chemistry (IUPAC) (funkcia: National Representative (NR) of Division I)

Mgr. Valéria Kureková, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

doc. Ing. Zoltán Lenčéš, PhD.

American Ceramic Society (funkcia: člen)
Ceramic Society of Japan (funkcia: člen)
European Ceramic Society (funkcia: člen výboru)
International Ceramic Federation (funkcia: člen)
Materials Research Society (funkcia: člen)

prof. Ing. Marek Liška, DrSc., Dr.h.c.

Česká sklárska spoločnosť (funkcia: člen výboru, čestný člen)
ICG TC03 (funkcia: člen)
Society of Glass Technology (funkcia: čestný člen - FSGT)

RNDr. Jana Madejová, DrSc.

AIPEA - International Association for the study of Clays (funkcia: člen výboru)
The Clay Minerals Society (funkcia: člen)

Dr. Vladimír Malkin, DrSc.

WATOC - World Association of Theoretical and Computational Chemists (funkcia: člen)

MSc. Daniel Moreno, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

Ing. Helena Pálková, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

Mgr. Marek Pribus, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

Ing. Anna Prnová, PhD.

Slovak Fulbright Alumni Association (funkcia: člen)

Ing. Eva Scholtzová, CSc.

AIPEA - International Association for the study of Clays (funkcia: člen)

Ing. Michal Slaný, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

prof. RNDr. Pavol Šajgalík, DrSc.

American Ceramic Society (funkcia: člen)

Ceramic Society of Japan (funkcia: člen)

Council of the European Ceramic Society (funkcia: člen)

European Ceramic Society (funkcia: člen predstavenstva)

International Ceramic Federation (funkcia: člen predstavenstva)

Materials Research Society (funkcia: člen)

Permanent Executive Committee ECerS (funkcia: volený člen)

World Academy of Ceramics (funkcia: volený člen)

Mgr. Tímea Šimonová, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

Ing. Peter Škorňa, PhD.

AIPEA - International Association for the study of Clays (funkcia: člen)

4.3. Účast' expertov na hodnotení medzinárodných projektov (EÚ RP, ESF a iných)

Tabuľka 4b Experti hodnotiaci medzinárodné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
Galusek Dušan	ANR IRIS, France	1
Korenko Michal	01-HORIZON-CL4-2022-TWIN-TRANSITION	7
Tatarko Peter	HORIZON-MSCA-2022-PF-01	5
	Latvian Science Funds, open call for Fundamental and Applied Research 2022	2

4.4. Najvýznamnejšie prínosy MVTs ústavu vyplývajúce z mobility a riešenia medzinárodných projektov a iné informácie k medzinárodnej vedeckej spolupráci

Peter BOHÁČ

- Shimane University, Matsue, Japonsko, 4.4. – 27.5. 2022, JSPS Invitational Fellowships for Research in Japan - FY2022(S22038), predmetom výskumu bola príprava a štúdium funkcionálnych hybridných materiálov na báze vrstevnatých kremičitanov a porfyrínových farbív s fotosenzibilizačnými vlastnosťami s dôrazom na pochopenie vzťahu medzi štruktúrou materiálov a sledovanými vlastnosťami.

Tomáš BUČKO

- University of Lorraine, Saint-Avold a Nancy, Francúzsko, 19. 6. 2022 – 14. 6. 2022, pozvaný pedagogický pracovník (docent). Vývoj metódy MLPT a jej aplikácie na problémy teoretickej katalýzy.

Juraj BUJDÁK

- Department of Materials Chemistry & Research, University of Vienna, Rakúsko, 23.-25.11. 2022, vedecká spolupráca, dokončovanie experimentálneho výskumu a interpretácia výsledkov,

pozvaná prednáška. Cesta sa uskutočnila v rámci APVV projektu.

Oksana MATSELKO

- Inštitútu Maxa Plancka pre chemickú fyziku pevných látok, Drážďany, Nemecko, 13.–26. novembra 2022, počas výskumného pobytu bola vykonaná štruktúrna analýza vzoriek fluorolantanoidov. Pracovná cesta sa uskutočnila v rámci projektu SASPRO 2.

Monika MICHALKOVÁ

- CEITEC, Brno, Česká Republika, 4-7.12.2022, projekt v rámci ktorého sa pracovná cesta uskutočnila APVV 170049, príprava vzoriek v zložení YAG, YSiO_5 , $\text{Y}_2\text{Si}_2\text{O}_7$ v amorfnom stave metódou SPS.
- CEITEC, Brno, Česká Republika, 26-27.10.2022, účasť na záverečnom seminári projektu INTER-TRANSFER, diskusia o výsledkoch a ďalšej príprave vzoriek YAG

Eva SCHOLTZOVÁ

- VŠB Ostrava, Česko, 27.06 - 30.06.2022, AtomDeC, Pracovná cesta sa uskutočnila za účelom spoznania partnerského pracoviska a diskusie získaných výsledkov.

Michal SLANÝ

- Bergische Universität Wuppertal, Nemecko, 28. 05. – 05. 06. 2022, VEGA 2/0166/21 a APVV-18–0075, služobná zahraničná cesta za účelom nadväzovania spolupráce a vykonanie adsorpčných experimentov na ílových mineráloch a organoíloch, počas pobytu bola prednesená pozvaná prednáška „Clay minerals and organoclays-based nanocomposites for environmental applications”.

Peter TATARKO

- Ústav Fyziky Materiálů, Česká akademie věd, Brno, Česká republika, 19-22.09.2022, Mobility SAV-AVČR-21-04, cesta bola realizovaná s cieľom zúčastniť sa stretnutia riešiteľov projektu a realizovať experimentálne práce v zmysle stanovenia tvrdosti a pevnosti SiC materiálov spojených pomocou medzivrstiev ZrSi_2 a ZrSi_2+C .
- Ústav Fyziky Materiálů, Česká akademie věd, Brno, Česká republika, 14-16.12.2022, Mobility SAV-AVČR-21-04; APVV-SK-CZ-RD-21-0089, cesta bola realizovaná s cieľom zúčastniť sa záverečného stretnutia riešiteľov projektu Mobility. Druhým bodom programu bola realizácia experimentálnych prác zameraných na stanovenie mechanických vlastností materiálov vysokoentropických karbidov a vysokoentropických boridov.

Inga Zhukova

- Vinča Institute of Nuclear Science, University of Belgrade, Beograd, Srbsko, 03.10.-05.11.2022, mesačná výskumná stáž bola realizovaná z podpory štipendia JECS trust, ktoré udeľuje Európska keramická spoločnosť. Náplňou pracovnej cesty bola teoretická modelácia nových štruktúr diboridovej keramiky s rôznym molárnym pomerom prechodných kovov. Teoretické výsledky boli potom verifikované pomocou Rietveldovej analýzy RTG difrakčných záznamov jedného vybraného diboridového systému.

Dlhodobé výskumné pobyty (3 a viac mesiacov)

Michal KORENKO

- CEMHTI - Conditions Extrêmes et Matériaux: Haute Température et Irradiation, CNRS - Centre National de la Recherche Scientifique, Orléans, Francúzsko, 01.09. 2022 - 31. 08. 2023, štipendijný pobyt v rámci schémy LE STUDIUM RESEARCH PROFESSOR od Loire Valley Institute for Advanced Studies, ktorá poskytuje rôzne štipendiá vedcom pre ústavy a univerzity

v regióne Centre-Val de Loire vo Francúzsku, výskum v rámci pobytu je zameraný na syntézu a charakterizáciu funkčných materiálov na báze oxo-fluoro-hlinitanov pre elektronické/elektrochemické a fotonické aplikácie pomocou aerodynamickéj levitáčnej techniky (ADL) z tavenín.

Daniel MORENO RODRÍGUEZ

- Univerzita Karlova Matematicko-fyzikální fakulta, Praha, Česká republika, 01.02.2022 – 01.08.2022. Štúdium systému polutant-halloysite pomocou metód silových polí a molekulovej dynamiky. Pobyt sa uskutočnil v rámci národnej grantovej schémy SAIA.

Patrícia PETRISKOVÁ

- UCA - Université Clermont Auvergne, CNRS- Centre National de la Recherche Scientifique, Clermont-Ferrand, Francúzsko, 1.11.2022-31.04.2023 téma práce: MgAlON ceramics doped by lanthanides as innovative supports for photocatalytic layers, pobyt hrađený z Erasmus.

Prednášky zahraničných hostí na ústave

Hirotomo Nishihara, *Advanced Institute for Materials Research, Tohoku University, Japonsko*, 31.10.2022

- Functional carbon materials: new synthesis approaches and analysis method

Paraskevi Lampropoulou, *Geology Department, University of Patras, Grécko*, 30.8.2022

- Geomaterials in Industrial Materials Research

Dimitrios Papoulis, *Geology Department, University of Patras, Grécko*, 30.8.2022

- Environmental Applications of Clays and Clay Minerals

*Prehľad údajov o medzinárodnej mobilite pracovníkov organizácie je uvedený v Prílohe E.
Prehľad a údaje o medzinárodných projektoch sú uvedené v kapitole 2 a Prílohe B.*

5. Koncepcia dlhodobého rozvoja organizácie

Vedná politika ústavu reflektuje dlhodobé zámery a aktuálne trendy súvisiace so spoločenskou objednávkou na domácej a zahraničnej scéne. Je založená na inovatívnosti vedeckého smerovania, ambicióznosti vedeckých osobností, ako aj na autonómnosti vedúcich vedeckých tímov.

5.1. Odporúčania z posledného pravidelného hodnotenia organizácií SAV (akreditácie)

Uvádzame záverečné hodnotenie, ktoré sme dostali od hodnotiaceho panela.

"This Institute has rather focussed research interests, studying dependence of properties of materials upon their microstructure and composition. This obstacle seems to support the development of main study trends in distinct Departments. Besides this general idea, it can be stated that the list of research topics is impressive and has significant potential for development, especially if the researchers participate in international research networks and follow the contemporary trends in methodology advancement. Certainly, the latter aspect needs investments that can come through extensive process of grant application activity, and from large contracts with industry. Therefore, the relatively modest level of grant applications as well as the contract works in general remains the main bottleneck of the development efficacy. The publication output of the Institute has improved in last years, but not very much in terms of publications quality. Situation with patenting is still not good, and this area provides opportunity of significant improvement.

Comments and recommendations for further improvement and development of the institute
The present structure of the Institute seems to be rather optimal, Departments have experienced staff, and are equipped with necessary apparatus. Therefore, there seems to be no immediate need to proceed with some structural reforms. It is more important to create strategy for development of solid research objectives, considering the international trends and achievements. For this process the help of the International Advisory Board members can be used. And moreover, it would be important to include the research staff of the institute. And finally, invite perhaps prominent persons from industry. This planning activity is not the privilege of the Institute leadership.

It would be useful to prepare and publish a full SWOT analysis, where all raised questions have some answer.

Until now the publication of scientific papers has been considered as the main research output of the Institute. For evaluation of these publications a complicated classification system of publications has been created. Due to movement of the scientific publishing policy towards the Open Access publication model, it is timely to reorganize this evaluation system of publications and implement the elements of Plan S. Hopefully this will change the landscape of bibliometrics in coming decade.

At the same time, it is important to motivate scientists to submit patent applications, to valorise their research results. This can be done in cooperation with companies to cover accompanying expenses. Already understanding that this may be possible could lead to several important changes.

It is understandable that all these recommendations cannot be implemented by the Institute alone, without legal and financial support from the SAS.

Proposal of overall institute rating: B"

Poznámka: Treba však poznamenať, že hodnotiaci panel nemal k dispozícii nezávislý posudok.

5.2. Hlavné body Akčného plánu organizácie a stav ich plnenia

Základnými a dominantnými cieľmi, ktorým sú podriadené všetky aspekty chodu ústavu, sú odborný rast, medzinárodná integrácia a spoločenské uplatnenie/úžitok výsledkov výskumu. Napĺňanie uvedených cieľov si vyžaduje komplexný prienik aspektov, ako sú:

- aktívna účasť na domácich a zahraničných projektoch,
- aktívna publikačná činnosť v medzinárodných časopisoch a prezentácia výsledkov výskumu na medzinárodných vedeckých fórach,
- zachovanie vekovej a odbornej kontinuity,
- vytvorenie podmienok pre vzdelávanie a odborný rast nielen PhD študentov a mladých vedeckých pracovníkov, ale aj erudovaných vedeckých pracovníkov,
- aktívna účasť na vzdelávacom procese s dôrazom na druhý a tretí stupeň vysokoškolského vzdelania,
- technické zabezpečenie pre výskum,
- finančné zabezpečenie výskumu,
- personálna politika,
- zabezpečenie kontinuity v oblasti vedenia organizačných štruktúr ústavu, vytvorenie podmienok pre manažérsky rast pracovníkov,
- diseminácia a popularizácia objektov a výsledkov výskumu v odbornej a laickej spoločnosti,
- spolupráca a kooperácia s domácimi a zahraničnými akademickými, ako aj priemyselnými partnermi,
- zabezpečenie fungovania administratívnych požiadaviek.

Projektové tímy

Štruktúra ústavu v sebe inherentne zahŕňa flexibilné projektové tímy, ktoré sú vytvárané s ohľadom na objektové, resp. metodické možnosti a schopnosti jednotlivcov spájajúcich sa účelovo pri príprave a riešení projektov MŠ SR (štátne programy, projekty ŠF), VEGA, APVV, rámcových programov EÚ, NATO a v spolupráci s domácimi a zahraničnými partnermi z priemyslu. Táto flexibilná projektová štruktúra umožňuje pracovníkom resp. odborným skupinám podieľať sa na príprave vnútro-ústavných alebo aj mimo-ústavných vedeckých zoskupení, buď v rámci ústavu a SAV alebo aj mimo nich. Vedúci projektových tímov sú autonómni v rozhodovaní o spôsoboch riešenia projektu, ako aj v nakladaní s finančnými prostriedkami v súlade s projektovými cieľmi a zmluvami.

Personálna politika

V oblasti personálnej politiky sa ústavu dlhodobo darí udržať relatívne nízky priemerný vek zamestnancov pod 47 rokov. Podpora zamestnávania mladých vedeckých pracovníkov patrí medzi prioritné úlohy vedenia ústavu. Pre zvýšenie počtu a motivácie mladých absolventov doktorandského štúdia, aby neodchádzali z oblasti vedy do finančne lukratívnejších zamestnaní, boli prijaté nasledujúce zásady personálnej politiky:

- Získavanie najlepších študentov na doktorandské štúdium vo vedných odboroch, ktoré má ústav akreditované ako externá vzdelávacia inštitúcia.
- Získavanie zahraničných doktorandov prostredníctvom projektov Marie Curie Research Training Network alebo iných schém podpory zahraničných študentov (napr. DAAD), v ktorých je ústav zapojený.
- Vysielanie čerstvých absolventov doktorandského štúdia na dlhodobé (najmenej 3 mesiace) pobyty do zahraničia, aby sa zoznámili s najmodernejšou prístrojovou technikou, laboratórnymi postupmi a metódami práce vo vyspelých pracoviskách v Európe a vo svete (najčastejšie Japonsko a USA).
- Organizovanie medzinárodných podujatí doma, ako aj vysielanie mladých vedeckých pracovníkov a doktorandov na renomované konferencie v zahraničí s cieľom získať skúsenosti s prezentovaním vedeckých výsledkov.
- Pozývanie renomovaných odborníkov zo zahraničia na prednášky pre doktorandov a

zamestnancov ústavu.

Technická infraštruktúra

Neoddeliteľnou súčasťou vednej politiky je aj rozvoj infraštruktúry. Ústav cielene buduje svoju infraštruktúru na rôznych úrovniach - cez laboratóriá na prípravu vzoriek až po laboratória na charakterizáciu pripravených materiálov. Vyžaduje si to dlhodobú aktivitu postupnej rekonštrukcie priestorov, ktorá je pre svoje špecifické požiadavky náročná ako finančne, tak aj časovo, pretože prebieha pri plnej prevádzke ostatných zariadení. Prístrojové vybavenie sleduje vzájomnú komplementaritu techník. Snahou je aj poskytovať voľné časové kapacity na merania pre partnerov na Slovensku, ako aj zapájanie ústavu prostredníctvom technickej infraštruktúry do medzinárodných vzťahov.

5.3. Aktualizácia Akčného plánu organizácie v roku 2022

Diskusie o akčnom pláne ústavu sú viacsmerým problémom. Je to dokument živý, ktorý si vyžaduje konkrétne zmeny v závislosti na okolnostiach (napr. zmeny v grantových agentúrach, legislatívne zmeny, prípadne zmeny a zámery zo strany P SAV). Na jednej strane je snaha naplňovať zadané ciele a ukazovatele zo strany manažmentu ústavu, na strane druhej sú impulzy zo strany vedeckých pracovníkov ako aj nevedeckých pracovníkov. V poslednej rade je nutná aj interakcia smerom k P SAV.

6. Spolupráca s univerzitami/vysokými školami a inými subjektmi v oblasti vedy a techniky, okrem aktivít uvedených v kap. 2, 3, 4

6.1. Spoločné pracoviská organizácie

6.1.1. Spolupráca s univerzitami/VŠ (fakultami)

Názov univerzity/vysokej školy a fakulty: Fakulta chemickej a potravinárskej technológie STU

Oblasť spolupráce: vedecká spolupráca, účasť na PhD. výuke

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 1990

Zhodnotenie: Ústav je zapojený do vzdelávania na III. stupni vysokoškolského štúdia v študijných programoch „Anorganická chémia“, „Fyzikálna chémia“ a „Anorganická technológia a materiály“. Pracovníci ÚACH viedli na FChPT v roku 2022 jedného doktoranda. Doc. Ing. Miroslav Boča, DrSc. je navyše členom odborovej komisie pre študijný program Anorganická technológia a materiály a externým členom VR FCHPT STU a od 1.4.2022-31.12.2026 je členom Rady študijných programov Chemickej sekcie. Ing. František Šimko, PhD. je externým členom Pracovnej skupiny Rady pre vnútorný systém zabezpečovania kvality na STU.

Názov univerzity/vysokej školy a fakulty: Fakulta materiálov, metalurgie a recyklácie TUKE

Oblasť spolupráce: vedecká spolupráca, účasť na Bc. a Mgr. výuke

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2000

Zhodnotenie: V spolupráci s touto fakultou je ústav zapojený do pedagogického procesu. Prof. RNDr. P. Šajgalík, DrSc. je členom vedeckej rady fakulty.

Názov univerzity/vysokej školy a fakulty: Montanuniversitaet Leoben, Rakúsko

Oblasť spolupráce: vedecká spolupráca, výchova doktorandov

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2008

Zhodnotenie: Spolupráca je zameraná na výchovu mladých doktorandov so zameraním na pokročilé žiaruvzdorné keramické materiály. Prof. RNDr. P. Šajgalík, DrSc. a doc. Ing. Z. Lenčák, PhD. sú školiteľmi špecialistami doktorandov.

Názov univerzity/vysokej školy a fakulty: Prírodovedecká fakulta UK

Oblasť spolupráce: vedecká spolupráca, účasť na Bc., Mgr. a PhD. výuke

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 1990

Zhodnotenie: V spolupráci s touto fakultou je ústav zapojený do vzdelávania na III. stupni vysokoškolského štúdia v študijných programoch „Anorganická chémia“, „Fyzikálna chémia“ a „Chemická fyzika“. V roku 2021 bol podpísaný dodatok k rámcovej zmluve o spolupráci na doktorandskom štúdiu, ktorého obsahom bolo rozšírenie študijných programov, na ktorých sa ÚACH SAV môže podieľať o študijných program „Teoretická a počítačová chémia“. Spoločne sa riešia projekty VEGA a APVV. prof. RNDr. J. Bujdák, DrSc. má hlavný úväzok na fakulte a čiastkový na ÚACH SAV. Prof. RNDr. J. Bujdák, DrSc. je interným členom VR ústavu a RNDr. Jana Madejová, DrSc. externým členom VR PriF UK. Doc. Ing. Miroslav Boča, DrSc. je členom Rady študijných programov Chemickej sekcie PRIFUK-UK (od 1.1.2022-1.1.2027). Pracovníci ÚACH viedli na PriF UK v priebehu roka 2022 trinásť doktorandov, pričom dvaja z nich v auguste 2022 štúdium úspešne ukončil obhajobou svojej práce.

Názov univerzity/vysokej školy a fakulty: Přírodovědecká fakulta Univerzity Palackého, Olomouc, Česká republika

Oblasť spolupráce: Účasť na výuke

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2022

Zhodnotenie: Doc. Ing. M. Boča je členom odborovej komisie študijného programu P1417 - Chemie, študijného odboru Anorganická chémia, ako aj odborovej rady doktorandského študijného programu P0531D130029 Anorganická chémia.

Názov univerzity/vysokej školy a fakulty: Tohoku University, Sendai, Japonsko

Oblasť spolupráce: vedecká spolupráca

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2021

Zhodnotenie: vedecká spolupráca Tohoku University a ÚACH v rámci 2. spoločnej výzvy Japan-V4 a projektu AtomDeC, ktorého zodpovednou riešiteľkou za Slovensko je Ing. Eva Scholtzová, CSc.

Názov univerzity/vysokej školy a fakulty: Trenčianska univerzita Alexandra Dubčeka v Trenčíne

Oblasť spolupráce: vedecká spolupráca, účasť na výchove doktorandov

Sídlo spoločného pracoviska (ak je vytvorené): Centrum kompetencie pre výskum skla Vitrum Laugaricio v Trenčíne

Začiatok spolupráce: 1997

Zhodnotenie: Okrem spoločného pracoviska s TnU AD (Centrum kompetencie skla Vitrum Laugaritio) rieši ÚACH SAV v spolupráci s touto univerzitou spoločné projekty VEGA a APVV. Prof. Ing. D. Galusek, DrSc. prorektor pre vedu, výskum a medzinárodné vzťahy TnU AD je aj členom Vedeckej rady TnU AD a dvoch jej fakúlt (Fakulty zdravotníctva a Fakulty špeciálnej techniky). Pracovníci centra, zamestnanci ÚACH, sa podieľajú na pedagogickej činnosti v rámci doktorandského štúdia v odbore "Anorganická technológia". Od roku 2019 má ÚACH SAV s TnU AD rámcovú dohodu o spolupráci pri uskutočňovaní doktorandského študijného programu v odbore 5.2.19 Anorganická technológia a materiály, ktorý je od roku 2021 modifikovaný na Anorganická technológia a nekovové materiály. Viacerí pracovníci UACH SAV majú školiace práva na TnUAD a vedú na nej doktorandov v študijnom programe Anorganické technológie a materiály.

Názov univerzity/vysokej školy a fakulty: Ukrainian State University of Chemical Technology, Dnipro, Ukraine

Oblasť spolupráce: vedecká spolupráca

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2018

Zhodnotenie: Vedecká spolupráca v roku 2022 spočívala v analýzach titánových materiálov upravených elektrochemickým leštením, ktorej výsledkom bola spoločná publikácia.

Názov univerzity/vysokej školy a fakulty: University of Ghent, Belgicko

Oblasť spolupráce: príprava keramických a sklokeramických materiálov v systémoch Al_2O_3 - La_2O_3 , Al_2O_3 - La_2O_3 - ZrO_2 , Al_2O_3 - Y_2O_3

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2010

Zhodnotenie: Vedecká spolupráca pri príprave amorfných a polykryštalických materiálov sol-gel metódami v systémoch Al_2O_3 - RE_2O_3 , Al_2O_3 - RE_2O_3 - ZrO_2 . Skúmanie vlastností pripravených materiálov a spoločné publikácie. Vedecká spolupráca pri príprave amorfných a polykryštalických materiálov sol-gel metódami v systémoch Al_2O_3 - RE_2O_3 , Al_2O_3 - RE_2O_3 - ZrO_2 a Al_2O_3 - Y_2O_3 .

Názov univerzity/vysokej školy a fakulty: University of Szeged, Faculty of Science and Informatics, Szeged, Hungary

Oblasť spolupráce: vedecká spolupráca

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2021

Zhodnotenie: vedecká spolupráca University of Szeged a ÚACH v rámci 2. spoločnej výzvy V4-Japan a projektu AtomDeC, ktorého zodpovednou riešiteľkou za Slovensko je Ing. Eva Scholtzová, CSc.

Názov univerzity/vysokej školy a fakulty: Vysoká škola báňská - TU Ostrava, Česká republika

Oblasť spolupráce: vedecká spolupráca, výchova doktorandov

Sídlo spoločného pracoviska (ak je vytvorené):

Začiatok spolupráce: 2010

Zhodnotenie: Spolupráca VŠB a ÚACH je zameraná na výchovu mladých pracovníkov. Prof. RNDr. P. Šajgalík, DrSc. je členom Vedeckej rady FMMI VŠB; doc. Ing. Z. Lenčes, PhD. je členom odborovej rady doktorandského študijného programu Materiálové vedy a inžinýrství. V roku 2021 sa spolupráca rozšírila aj na projekty, keďže v rámci 2. spoločnej výzvy Japan-V4 sa obidve inštitúcie spolupodieľajú na riešení projektu AtomDeC, ktorého zodpovednou riešiteľkou za Slovensko je Ing. Eva Scholtzová, CSc

Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu

6.1.2. Spoločné pracoviská s inými organizáciami SAV

Názov organizácie: Ústav vied o Zemi SAV, v. v. i.

Oblasť spolupráce: vedecká spolupráca

Sídlo spoločného pracoviska (ak je vytvorené): Banská Bystrica

Začiatok spolupráce: 2018

Zhodnotenie: Medzi ústavom a ÚVZ SAV je uzatvorená zmluva o spolupráci na dobu neurčitú, keďže sa aj v budúcnosti predpokladá podávanie spoločných projektov.

Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu

6.2. Spoločné pracoviská organizácie s inými inštitúciami mimo SAV a VŠ

Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu

6.3. Spoločné projekty s univerzitami a ostatnými inštitúciami mimo SAV

Pozn.: uviesť konkrétne spoločné aj bilaterálne projekty na základe platnej zmluvy o spolupráci

6.4. Iné typy spoločných aktivít s inštitúciami mimo SAV

7. Aplikácia výsledkov výskumu v spoločenskej a hospodárskej praxi

7.1. Výsledky výskumu organizácie aplikované v spoločenskej a hospodárskej praxi

7.2. Kontraktový – zmluvný výskum (vrátane zahraničných kontraktov)

Názov/účel kontraktového výskumu: Consultation service to transfer electrochemical method in lab at Voreppe in France

Zadávatel' výskumného kontraktu: Rio Tinto Aluminium Pechiney, Francúzsko

Začiatok spolupráce: 2021

Ukončenie spolupráce: trvá

Finančný prínos pre organizáciu (€): 4500

Názov/účel kontraktového výskumu: Dissolution rate of 4 different aluminas

Zadávatel' výskumného kontraktu: Rio Tinto Aluminium Pechiney, Francúzsko

Začiatok spolupráce: 2021

Ukončenie spolupráce: trvá

Finančný prínos pre organizáciu (€): 0

7.3. Iné formy aplikácie výsledkov výskumu v spoločenskej a hospodárskej praxi

8. Aktivity pre Národnú radu SR, vládu SR, ústredné orgány štátnej správy SR a iné organizácie

8.1. Členstvo v poradných zboroch vlády SR, Národnej rady SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Tabuľka 8a Členstvo v poradných zboroch Národnej rady SR, vlády SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Meno pracovníka	Názov orgánu	Funkcia
doc. Ing. Miroslav Boča, DrSc.	Komisia pre obhajoby doktorských dizertačných prác v odbore anorganická chémia - 01402	predseda
prof. Ing. Dušan Galusek, DrSc.	Slovenská komisia pre vedecké hodnosti	člen
	Ad hoc komisia pre obhajoby doktorských dizertačných prác v odbore Anorganická technológia a materiály	predseda
Ing. Michal Korenko, PhD.	Komisia pre námietky pri verejnom obstarávaní	externý člen
doc. Ing. Zoltán Lenčes, PhD.	Sektorová rada inovácií, Národná sústava povolaní	člen
prof. RNDr. Pavol Šajgalík, DrSc.	Komisia ministra školstva pre udeľovanie Ceny ministra školstva	člen
	Komisia MŠ pre prioritné oblasti aplikovaného výskumu a experimentálneho vývoja v SR - materiállový výskum a nanotechnológie	člen pracovnej skupiny
	Slovenská komisia pre vedecké hodnosti (SKVH)	podpredseda
	Pandemická komisia MZ SR	člen
	Technologická agentúra SR	člen
	Výskumná agentúra SR	člen
	Rada predsedov pracovných skupín pre prioritné oblasti aplikovaného výskumu a experimentálneho vývoja	predseda
	Rada vlády pre vedu, techniku a inovácie	podpredseda

8.2. Expertízna činnosť a iné služby pre štátnu správu a samosprávy

8.3. Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Tabuľka 8b Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Meno pracovníka	Názov orgánu	Funkcia
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8.4. Prehľad aktuálnych spoločenských problémov, ktoré riešilo pracovisko v spolupráci s Kanceláriou prezidenta SR, s vládnyimi a parlamentnými orgánmi alebo pre ich potrebu

9. Vedecko-organizačné a popularizačné aktivity

9.1. Vedecko-popularizačná činnosť

Tabuľka 9a Súhrnné počty vedecko-popularizačných činností organizácie SAV

Typ	Počet	Typ	Počet	Typ	Počet
prednášky/besedy	2	tlač	0	TV	0
rozhlas	0	internet	0	exkurzie	1
publikácie	0	multimediálne nosiče	0	dokumentárne filmy	0
iné	2				

9.2. Vedecko-organizačná činnosť

Tabuľka 9b Vedecko-organizačná činnosť

Názov podujatia	Domáca/ medzinárodná	Miesto	Dátum konania	Počet účastníkov
Príprava a vlastnosti progresívnych keramických materiálov a skiel	domáca	Mojmírovce, Slovenská republika	28.09.-30.09.2022	48
2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society	medzinárodná	Smolenice, Slovensko	02.11.-04.11.2022	18

9.3. Účasť na výstavách

Názov výstavy: Vedecký veľtrh 2022

Miesto konania: námestie Eurovea, Bratislava

Dátum: 23.9.2022

Zhodnotenie účasti: Prezentácia výskumu a výsledkov oddelenia keramiky, oddelenia hydrosilikátov a oddelenia taveninových sústav (V. Silliková, O. Matselko, S. Bashir, M. Pribus, P. Škorňa, D. Moreno, V. Planetová, D. Krishnan, P. Boháč). Stánok: Anorganické materiály 21. storočia

Názov výstavy: Európska Noc výskumníkov 2022

Miesto konania: Stará tržnica, Bratislava

Dátum: 30.9.2022

Zhodnotenie účasti: Prezentácia výskumu a výsledkov oddelenia keramiky, oddelenia hydrosilikátov a oddelenia taveninových sústav (V. Silliková, O. Matselko, S. Bashir, M. Pribus, M. Slaný, M. Matejdes, V. Planetová, D. Krishnan). Stánok: Anorganické materiály 21. storočia

Názov výstavy: Deň otvorených dverí na ÚACH SAV

Miesto konania: ÚACH SAV, Bratislava

Dátum: 8.11.2022

Zhodnotenie účasti: Dňa 08.11.2022 organizoval Ústav anorganickej chémie SAV v rámci Týždňa vedy a techniky na Slovensku „Deň otvorených dverí ÚACH SAV“. Pozvaní boli študenti hlavne stredných škôl zo Slovenska. Na úvod bola pre mladých návštevníkov pripravená prednáška „Syntéza pokročilej keramiky pre vesmírne technológie“ a prehliadka laboratórií. Nasledovala prehliadka vybraných laboratórií ústavu, v ktorých mladí vedeckí pracovníci prostredníctvom modelových experimentov návštevníkom priblížili svoju každodennú prácu a informovali o praktickom využití zariadení. Tým najviac zvedavým názorne ukázali ich využitie aj nad rámec demonštračných

experimentov. Dňa otvorených dverí sa zúčastnilo približne 130 študentov z bratislavských aj mimobratisklavských stredných škôl (Bratislava, Trnava).

9.4. Účasť v programových a organizačných výboroch národných konferencií

Tabuľka 9c Programové a organizačné výbory národných konferencií

Meno pracovníka	Programový	Organizačný	Programový i organizačný
Galusek Dušan	1	0	0
Spolu	1	0	0

9.5. Členstvo v redakčných radách časopisov

doc. Ing. Miroslav Boča, DrSc.

Chemical Papers (funkcia: Editorial Advisory Board od 9/2013)

prof. RNDr. Juraj Bujdák, DrSc.

Applied Clay Science (funkcia: associate editor)

Chemistry Africa (Springer) (funkcia: associate editor)

prof. Ing. Dušan Galusek, DrSc.

Ceramics-Silikáty (funkcia: člen)

International Journal of Applied Ceramic Technology (funkcia: associate editor)

Journal of the European Ceramic Society (funkcia: editor)

New Journal of Glass and Ceramics (funkcia: člen)

doc. Ing. Zoltán Lenčes, PhD.

International Journal of Applied Ceramic Technology (funkcia: člen)

Journal of the Ceramic Society of Japan (funkcia: associate editor)

prof. Ing. Marek Liška, DrSc., Dr.h.c.

Ceramics - Silikáty (funkcia: člen)

European Journal of Glass Science and Technology (funkcia: regional editor)

International Journal of Applied Glass Science (funkcia: člen)

Sklář a keramik (funkcia: člen)

RNDr. Jana Madejová, DrSc.

Clays and Clay Minerals (funkcia: associate editor)

prof. RNDr. Pavol Šajgalík, DrSc.

Ceramics-Silikáty (funkcia: člen)

Journal of Asian Ceramic Society (funkcia: spolueditor)

Journal of Ceramic Science and Technology (funkcia: člen)

Keramický Zpravodaj (funkcia: člen)

Processing and Application of Ceramics (funkcia: člen)

Ing. Peter Tatarko, PhD.

International Journal of Applied Ceramic Technology (funkcia: associate editor)

Materials (funkcia: editorial board member)

9.6. Činnosť v domácich vedeckých spoločnostiach

Ing. Martin Barlog, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

doc. Ing. Miroslav Boča, DrSc.

Humboldtov klub v SR (funkcia: člen)

Slovenská chemická spoločnosť (funkcia: člen)

Mgr. Peter Boháč, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

prof. RNDr. Juraj Bujdák, DrSc.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská ílová spoločnosť (funkcia: člen výboru)

Mgr. Roman Bystrický, PhD.

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

prof. Ing. Dušan Galusek, DrSc.

Humboldtov klub v SR (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: podpredseda)

Slovenská sklárska spoločnosť (funkcia: predseda (od 11/2021))

doc. Ing. Miroslav Hnatko, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

doc. Ing. Mária Chromčíková, PhD.

Slovenská akreditačná spoločnosť pre vysoké školy (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

Slovenská sklárska spoločnosť (funkcia: člen)

Mgr. Ľuboš Jankovič, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

Ing. Michal Korenko, PhD.

Slovenská chemická spoločnosť (funkcia: predseda revíznej komisie)

Slovenská nukleárna spoločnosť (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

Slovenská spoločnosť pre povrchové úpravy (funkcia: člen)

Ing. Blanka Kubíková, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Mgr. Valéria Kureková, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská ílová spoločnosť (funkcia: člen)

doc. Ing. Zoltán Lenčes, PhD.

Humboldtov klub v SR (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen výboru)

prof. Ing. Marek Liška, DrSc., Dr.h.c.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská sklárska spoločnosť (funkcia: člen)

RNDr. Jana Madejová, DrSc.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská ílová spoločnosť (funkcia: člen)

Učená spoločnosť SAV (funkcia: člen)

Dr. Vladimír Malkin, DrSc.

Humboldtov klub v SR (funkcia: člen)

Ing. Monika Micháľková, PhD.

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

Slovenská sklárska spoločnosť (funkcia: členka predstavenstva, tajomníčka od 22.10.2021)

Ing. Jarmila Mlynáriková, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

MSc. Daniel Moreno, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

Ing. Zuzana Netriová, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Ing. Helena Páľková, PhD.

Slovenská ílová spoločnosť (funkcia: podpredseda)

Ing. Viliam Pavlík, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská nukleárna spoločnosť (funkcia: člen)

Mgr. Marek Pribus, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

Ing. Anna Prnová, PhD.

Slovenská silikátová vedecko-technická spoločnosť (funkcia: člen)

Slovenská sklárska spoločnosť (funkcia: člen)

Ing. Eva Scholtzová, CSc.

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská ílová spoločnosť (funkcia: člen)

RNDr. Veronika Silliková, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Ing. Michal Slaný, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

prof. RNDr. Pavol Šajgalík, DrSc.

Humboldtov klub v SR (funkcia: člen)

Slovenská chemická spoločnosť (funkcia: člen)

Slovenská silikátová vedecko-technická spoločnosť (funkcia: predseda)

Slovenská sklárska spoločnosť (funkcia: člen predstavenstva)

Učená spoločnosť SAV (funkcia: člen)

Ing. František Šimko, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

Mgr. Tímea Šimonová, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

Ing. Peter Škorňa, PhD.

Slovenská ílová spoločnosť (funkcia: člen)

Mgr. Peter Švančárek, PhD.

Slovenská sklárska spoločnosť (funkcia: člen)

Ing. Zuzana Vasková, PhD.

Slovenská chemická spoločnosť (funkcia: člen)

9.7. Iné dôležité informácie o vedecko-organizačných a popularizačných aktivitách

10. Činnosť knižnično-informačného pracoviska

10.1. Knižničný fond

Tabuľka 10a Knižničný fond

Knižničné jednotky spolu		7640
z toho	knihy a zviazané periodiká	7639
	audiovizuálne dokumenty	
	elektronické dokumenty (vrátane digitálnych)	1
	mikroformy	
	iné špeciálne dokumenty - dizertácie, výskumné správy	
	Rukopisy, vzácne tlače	
Počet titulov dochádzajúcich periodík		
z toho zahraničné periodiká		
Ročný prírastok knižničných jednotiek		4
v tom	kúpou	4
	darom	
	výmenou	
	bezodplatným prevodom	
	náhradou	
Úbytky knižničných jednotiek		
Knižničné jednotky spracované automatizovane		

Výraz „**v tom**“ označuje úplné (vyčerpávajúce) údaje, ktorých súčet sa musí rovnať údaju v riadku „spolu“, čiže nadradenému riadku.

Výraz „**z toho**“ označuje neúplné (výberové) údaje, ktorých súčet sa nemusí rovnať údaju v riadku „spolu“.

10.2. Výpožičky a služby

Tabuľka 10b Výpožičky a služby

Výpožičky spolu (riadok 1)		
v tom z r. 1	prezenčné výpožičky	
	absenčné výpožičky	
v tom z r. 1	odborná literatúra pre dospelých	
	výpožičky periodík	
MVS iným knižniciam		
MVS z iných knižníc		
MMVS iným knižniciam		
MMVS z iných knižníc		
Počet vypracovaných bibliografií		

Počet vypracovaných rešerší	50
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10.3. Používatelia

Tabuľka 10c Používatelia

Registrovaní používatelia	
Návštevníci knižnice spolu (bez návštevníkov podujatí)	

10.4. Iné údaje

Tabuľka 10d Iné údaje

On-line katalóg knižnice na internete (1=áno, 0=nie)	
Náklady na nákup knižničného fondu v €	122,07

10.5. Iné informácie o knižničnej činnosti

11. Aktivity v orgánoch SAV

11.1. Členstvo vo Výbore Snemu SAV

11.2. Členstvo v Predsedníctve SAV a vo Vedeckej rade SAV

prof. RNDr. Pavol Šajgalík, DrSc.

- Predseda SAV
- predseda VR SAV

11.3. Členstvo v komisiách SAV

doc. Ing. Miroslav Boča, DrSc.

- Komisia pre posudzovanie vedeckej kvalifikácie (člen)
- Komisia SAV pre informačné a komunikačné technológie (člen)
- Komisia SAV pre vyhodnocovanie medzinárodných projektov (člen)

Ing. Michal Korenko, PhD.

- Komisia pre hodnotenie grantov doktorandov SAV (člen)

11.4. Členstvo v orgánoch VEGA

prof. Ing. Dušan Galusek, DrSc.

- Komisia VEGA č. 7 pre strojárstvo a príbuzné odbory informačných a komunikačných technológií a materiálové inžinierstvo (člen)

doc. Ing. Miroslav Hnatko, PhD.

- Komisia VEGA č. 7 pre strojárstvo a príbuzné odbory informačných a komunikačných technológií a materiálové inžinierstvo (člen)

Mgr. Stanislav Komorovský, PhD.

- Komisia VEGA č. 3 pre chemické vedy, chemické inžinierstvo a biotechnológie (člen)

Ing. Michal Korenko, PhD.

- Komisia VEGA č. 3 pre chemické vedy, chemické inžinierstvo a biotechnológie (člen)

12. Hospodárenie organizácie

12.1. Výdavky organizácie

Tabuľka 12a Výdavky organizácie (skutočnosť k 31. 12. 2022 v €)

Typ organizácie (v. v. i.)		Zdroje, z ktorých sa kryli jednotlivé výdavky			
Výdavky	Spolu	kapitola SAV (111)	iné štátne a verejné zdroje	ostatné zdroje	% krytia z kapitoly SAV
1. Bežné výdavky	2 343 916,47	1 772 468,20	471 585,28	99 862,99	75,6
z toho: mzdy (610)	1 279 035,62	1 053 809,00	181 105,65	44 120,97	82,4
vedecká výchova štipendiá (640)	133 072,95	133 072,95			100,0
poistné a príspevkov do poisťovní (620)	445 604,14	365 967,62	64 769,15	14 867,37	82,1
tovary a služby (630)	486 203,76	219 618,63	225 710,48	40 874,65	45,2
transfery partnerom projektov (640)	75 120,00		75 120,00		
2. Kapitálové výdavky	18 160,87	18 158,08	0	2,79	99,9
z toho: obstarávanie kapitálových aktív	18 160,87	18 158,08		2,79	99,9
kapitálové transfery	0	0	0	0	0

12.2. Zdroje financovania organizácie

Tabuľka 12b Zdroje financovania organizácie (skutočnosť k 31. 12. 2022 v €)

Typ organizácie (v. v. i.)		Z toho kategórie			
Zdroje	Spolu	Kapitálové zdroje	zdroje na mzdy (610)	zdroje na odvody do poisťovní (620)	zdroje na transfery partnerom projektov
1. kapitola SAV (111)	380 496,69	18 158,08	18 326,80	8 435,62	
z toho: VEGA	122 077,00				
MVTS výskumné projekty	50 000,00	18 158,08		1 984,82	
MVTS podpora	3 500,00				
SASPRO/MOREPRO	27 805,11		18 326,80	6 450,80	
Vydávanie časopisov					
Vedecká výchova (štipendiá)	133 072,95				

OTAS (630)	44 041,63				
2. ŠF EÚ vr. fin. zo ŠR	97 327,46		43 022,97	16 219,18	
3. medzinárodné grantové projekty	16 854,96		7 673,57	2 701,11	
z toho: H2020	16 854,96		7 673,57	2 701,11	
4. iné štátne a verejné zdroje (spolu)	452 542,75		138 082,68	49 192,91	75 120,00
z toho: APVV	450 042,81		138 082,68	48 549,97	75 120,00
podpora z kapitoly MŠV VaŠ SR (stimuly)					
5. ostatné zdroje	43 857,08		17 423,00	6 010,75	
z toho: príjmy z prenájmu					
príjmy z podnikateľskej činnosti					
príjmy z expertnej činnosti a služieb	43 857,08		17 423,00	6 010,75	

13. Nadácie a fondy pri organizácii SAV

14. Informácie o aktivitách súvisiacich s uplatňovaním princípov rodovej rovnosti

14.1. Stručné hodnotenie stavu uplatňovania princípov rodovej rovnosti v organizácii, súvisiace aktivity a opatrenia, návrhy na aktualizáciu Plánu rodovej rovnosti SAV

14.2. Rodová skladba hlavných riešiteľov (vedúcich) projektov

Tabuľka 14a Rodová skladba hlavných riešiteľov domácich projektov

ŠTRUKTÚRA PROJEKTOV	Organizácia SAV je nositeľom projektu			Organizácia SAV je zmluvným partnerom		
	Počet	Hlavný riešiteľ		Počet	Hlavný riešiteľ za organizáciu	
		Muž	Žena		Muž	Žena
1. Projekty VEGA	10	5	5	2	1	1
2. Projekty APVV	7	4	3	7	3	4
3. Projekty EŠIF/OP ŠF	0	0	0	2	2	0
4. Projekty SASPRO, MoRePro, IMPULZ	2	2	0	0	0	0
5. Iné projekty (FM EHP, Vedecko-technické projekty, na objednávku rezortov a pod.)	1	0	1	0	0	0

Tabuľka 14b Rodová skladba hlavných riešiteľov medzinárodných projektov

ŠTRUKTÚRA PROJEKTOV	Organizácia SAV je nositeľom projektu			Organizácia SAV je zmluvným partnerom		
	Počet	Hlavný riešiteľ		Počet	Hlavný riešiteľ za organizáciu	
		Muž	Žena		Muž	Žena

1. Projekty Horizont 2020 a Horizont Európa	1	1	0	1	1	0
2. Projekty ERA.NET, ESA, JRP	1	1	0	0	0	0
3. Projekty COST	0	0	0	0	0	0
4. Projekty EUREKA, NATO, UNESCO, CERN, IAEA, IVF, ERDF a iné	0	0	0	1	0	1
5. Projekty v rámci medzivládnych dohôd	0	0	0	0	0	0
6. Bilaterálne projekty MAD, Mobility, Open Mobility	1	1	0	0	0	0
7. Bilaterálne projekty ostatné	2	1	1	0	0	0
8. Podpora MVTS z národných zdrojov (SAV, APVV a iné)	0	0	0	0	0	0
9. SAS-UPJŠ ERC Visiting Fellowship Grants	0	0	0	0	0	0
10. Iné projekty	0	0	0	0	0	0

14.3. Výskum zameraný na rodovú problematiku

Uvedte stručné, základné informácie o projektoch orientovaných na rodovú problematiku, ak organizácia takýto výskum realizuje. Informácie o financovaní a výsledkoch takýchto projektov sa nachádzajú v kapitole 2 a v prílohe C.

ÚACH SAV, v. v. i. sa prihlásil k dokumentu Plán rodovej rovnosti SAV (Gender Equality Plan, PRR) vypracovaný riešiteľmi projektu ATHENA (Ústav výskumu sociálnej komunikácie SAV). Na ÚACH platia všetky pravidlá odmeňovania a prístupu k informáciám ako aj k možnostiam zastávať vedúce pozície (v kolektívnych orgánoch, v projektoch atď.) rovnako pre mužov aj ženy.

15. Iné významné činnosti organizácie SAV

16. Vyznamenania, ocenenia a ceny udelené pracovníkom organizácie v roku 2022

16.1. Domáce ocenenia

16.1.1. Ocenenia SAV

Slaný Michal

Súťaž mladých vedeckých pracovníkov SAV do 35 rokov (1. miesto za II. oddelenie SAV)

Oceňovateľ: Predsedníctvo SAV

Opis: Ílové minerály a nanokompozitné materiály na báze organoílov pre environmentálne aplikácie. 16. jún 2022

16.1.2. Iné domáce ocenenia

Cena za vedu a techniku 2021 - Vedecko-technický tím pod vedením Jána Duszu a Pavla Šajgalíka

Oceňovateľ: Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky

Opis: Ocenenie za vedecké výsledky svetového významu v oblasti výskumu a vývoja keramických kompozitov s grafénom. Ocenení za ÚACh SAV (Pavol Šajgalík,; Zoltán Lenčes,; Miroslav Hnatko; Monika Tatarková; Monika Michalková; Peter Tatarko; Ondrej Hanzel) (16.12.2022)

16.2. Medzinárodné ocenenia

17. Poskytovanie informácií v súlade so zákonom č. 211/2000 Z. z. o slobodnom prístupe k informáciám v znení neskorších predpisov (Zákon o slobode informácií)

18. Problémy a podnety pre činnosť SAV

Zásadný problém, ktorý narastá niekoľko rokov bez náznakov akéhokoľvek zlepšenia, sú administratívne nároky na pracovníkov na všetkých úrovniach. Pre potreby naplnenia legislatívnych povinností ústavu v napríklad v oblasti verejného obstarávania je jeden plný úväzok pre administratívneho pracovníka málo, ale mzdové prostriedky ústavu neumožňujú rozšírenie administratívy bez zásahu do výskumných kapacít. Výsledkom je, že niektoré administratívne výkony vykonávajú aj vedeckí pracovníci, nad rámec alebo na úkor svojich odborných aktivít. Pre mnohé z týchto aktivít by sme privítali centralizovanejší a systematickejší prístup. Situácia sa však skomplikovala prechodom na verejno-výskumné inštitúcie.

Rýchle zmeny v legislatíve (častokrát nekoncepčné), nedostatok financií na samotnú vedu, komplikovaná aktuálna celospoločenská situácia a nedostatok informácií spôsobuje zásadné komplikácie pri plánovaní akýchkoľvek aspektov základného, ako aj rozvojového fungovania organizácie. Preto je viac ako žiaduce výrazne zintenzívniť komunikáciu medzi ústavmi a rovnako aj smerom k P SAV s cieľom výmeny informácií, skúseností s riešením problémov, ako aj s cieľom hľadania perspektív pre ďalší rozvoj.

Správu o činnosti organizácie SAV spracoval(i):

Zdena Kapišinská,
doc. Ing. Zoltán Lenčes, PhD., 02/59410408
Ing. Helena Pálková, PhD., 02/59410485

Schválila vedecká rada organizácie SAV dňa 30.1.2023

Riaditeľ organizácie SAV

Predseda vedeckej rady

.....
doc. Ing. Miroslav Boča, DrSc.

.....
Mgr. Monika Tatarková, PhD.

Prílohy

Príloha A - Zoznam zamestnancov a doktorandov organizácie k 31.12.2022

Zoznam zamestnancov podľa štruktúry

	Meno s titulmi	Úväzok (v %)	Ročný prepočítaný úväzok
Vedúci vedeckí pracovníci DrSc.			
1.	doc. Ing. Miroslav Boča, DrSc.	100	1.00
2.	prof. RNDr. Juraj Bujdák, DrSc.	50	0.50
3.	prof. Ing. Dušan Galusek, DrSc.	55	0.55
4.	prof. Ing. Marek Liška, DrSc., Dr.h.c.	50	0.50
5.	RNDr. Jana Madejová, DrSc.	80	0.86
6.	Dr. Oľga Malkin, DrSc.	100	1.00
7.	Dr. Vladimír Malkin, DrSc.	100	1.00
8.	prof. RNDr. Pavol Šajgalík, DrSc.	50	0.50
Samostatní vedeckí pracovníci			
1.	doc. Ing. Tomáš Bučko, PhD.	25	0.25
2.	Ing. Ondrej Hanzel, PhD.	100	1.00
3.	doc. Ing. Miroslav Hnatko, PhD.	50	0.50
4.	doc. Ing. Mária Chromčíková, PhD.	60	0.60
5.	Mgr. Ľuboš Jankovič, PhD.	100	1.00
6.	Mgr. Stanislav Komorovský, PhD.	100	1.00
7.	Ing. Michal Korenko, PhD.	100	1.00
8.	Ing. Blanka Kubíková, PhD.	100	1.00
9.	doc. Ing. Zoltán Lenčoš, PhD.	100	1.00
10.	Ing. Monika Micháľková, PhD.	75	0.75
11.	Ing. Jarmila Mlynáriková, PhD.	100	1.00
12.	Ing. Helena Pálková, PhD.	100	1.00
13.	Ing. Viliam Pavlík, PhD.	100	0.50
14.	Ing. Anna Prnová, PhD.	100	1.00
15.	Ing. Eva Scholtzová, CSc.	100	1.00
16.	Ing. František Šimko, PhD.	100	1.00
17.	Mgr. Peter Švančárek, PhD.	100	1.00
18.	Ing. Peter Tatarko, PhD.	100	1.00
19.	Mgr. Monika Tatarková, PhD.	100	1.00
20.	Ing. Štefan Varga, CSc.	25	0.25

Vedeckí pracovníci			
1.	James Richard Asher, PhD	100	1.00
2.	Ing. Martin Barlog, PhD.	100	1.00
3.	Mgr. Peter Boháč, PhD.	100	1.00
4.	Mgr. Roman Bystrický, PhD.	20	0.20
5.	doc. RNDr. Edmund Dobročka, CSc.	20	0.20
6.	Ing. Michal Hičák, PhD.	100	1.00
7.	doc. Mgr. Anna Kityk, PhD.	40	0.40
8.	Mgr. Valéria Kureková, PhD.	100	0.83
9.	Mgr. Marián Matejdes, PhD.	100	0.55
10.	Oksana Matselko, PhD.	100	1.00
11.	MSc. Daniel Moreno, PhD.	100	0.83
12.	Ing. Zuzana Netriová, PhD.	125	1.25
13.	Mgr. Patrícia Petrisková, PhD.	100	0.16
14.	Mgr. Marek Pribus, PhD.	100	1.00
15.	RNDr. Veronika Silliková, PhD.	100	1.00
16.	Ing. Michal Slaný, PhD.	100	1.00
17.	Mgr. Tímea Šimonová, PhD.	100	0.00
18.	Ing. Peter Škorňa, PhD.	100	1.00
19.	MSc. Hakan Ünsal, PhD.	100	0.33
20.	Ing. Jana Valúchová, PhD.	100	1.00
21.	Ing. Zuzana Vasková, PhD.	100	1.00
Odborní pracovníci s VŠ vzdelaním (výskumní a vývojoví zamestnanci)			
1.	Ing. Eva Hadzimová	100	1.00
2.	MSc. Naser Hosseini	30	0.10
3.	Ing. Iveta Macková	100	1.00
4.	Dr. Aliasghar Najafzadehkhoe	100	1.00
5.	Mgr. Marek Pribus, PhD.	28	0.28
6.	Ing. Jozef Priščák	100	1.00
7.	Mgr. Pavol Weiner	100	1.00
8.	MSc. Inga Zhukova	30	0.10
Odborní pracovníci s VŠ vzdelaním (ostatní zamestnanci)			
1.	Ing. Ingrid Hierwegová	5	0.05
2.	Ing. Elena Krippelová	100	1.00
3.	Mgr. Martina Pakanová	100	1.00

4.	Ing. Helena Pálková, PhD.	26	0.06
5.	Ing. Jaroslav Rusnák, PhD.	33	0.33
6.	JUDr. Bc. Marica Slaná	100	1.00
Odborní pracovníci ÚSV			
1.	Miroslav Baďura	20	0.20
2.	Iveta Bouadjenak	100	1.00
3.	Iveta Bouadjenak	25	0.25
4.	Slavomír Daniš	100	1.00
5.	Miriam Hnatková	100	1.00
6.	Anna Jurová	100	1.00
7.	Zdena Kapišinská	35	0.35
8.	Anna Kovárová	100	1.00
9.	Mária Strempeková	100	1.00
10.	Alexandra Tonkovičová	100	1.00
11.	Denisa Žilinská	100	1.00
Ostatní pracovníci			
1.	Anna Jurová	30	0.26
2.	Ing. Iveta Macková	20	0.20
3.	Terézia Pírová	100	1.00
4.	Jana Šuliaková	100	0.67

Zoznam zamestnancov, ktorí odišli v priebehu roka

	Meno s titulmi	Dátum odchodu	Ročný prepočítaný úväzok
Samostatní vedeckí pracovníci			
1.	Mgr. Jan Novotný, PhD.	31.8.2022	0.33
2.	Ing. Jaroslav Sedláček, PhD.	31.1.2022	0.00
Odborní pracovníci s VŠ vzdelaním (výskumní a vývojoví zamestnanci)			
1.	MSc. Hakan Ünsal	23.8.2022	0.13
Ostatní pracovníci			
1.	Ingrida Kutašovičová	30.4.2022	0.33

Zoznam doktorandov

	Meno s titulmi	Škola/fakulta	Študijný odbor
Interní doktorandi hradení z prostriedkov SAV			
1.	MSc. Ramu Ambati	Prírodovedecká fakulta UK	1420 chémia

2.	MSc. Sanam Bashir	Prírodovedecká fakulta UK	1420 chémia
3.	Guido Manuel De La Torre Olvera	Prírodovedecká fakulta UK	1420 chémia
4.	MSc. Alper Guneren	Prírodovedecká fakulta UK	1420 chémia
5.	Naser Hosseini	Prírodovedecká fakulta UK	1420 chémia
6.	MSc. Dhiya Krishnan	Prírodovedecká fakulta UK	1420 chémia
7.	Florian Andreas Lemken	Prírodovedecká fakulta UK	1160 fyzika
8.	Mgr. Jakub Michalík	Fakulta chemickej a potravinárskej technológie STU	2820 chemické inžinierstvo a technológie
9.	Mgr. Debora Mišenková	Prírodovedecká fakulta UK	1160 fyzika
10.	Mgr. Viktória Planetová	Prírodovedecká fakulta UK	1420 chémia
11.	Eva Skoura	Prírodovedecká fakulta UK	1420 chémia
12.	Inga Zhukova	Prírodovedecká fakulta UK	1420 chémia
Interní doktorandi hradení z iných zdrojov			
<i>organizácia nemá interných doktorandov hradených z iných zdrojov</i>			
Externí doktorandi			
<i>organizácia nemá externých doktorandov</i>			

Zoznam zamestnancov prijatých do jedného roka od získania PhD.

	Meno s titulmi	Dátum obhajoby	Dátum prijatia	Úväzok (v %)
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Zoznam emeritných vedeckých zamestnancov

	Meno s titulmi
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Príloha B - Projekty riešené v organizácii

Medzinárodné projekty

Programy: Multilaterálne - iné

1.) Atómová koncepcia materiálov na báze uhlíka pre novú normálnu spoločnosť (*Atomic Design of Carbon-Based Materials for New Normal Society*)

Zodpovedný riešiteľ:	Eva Scholtzová
Trvanie projektu:	1.11.2021 / 30.10.2024
Evidenčné číslo projektu:	V4-Japan Joint Research Program
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Advanced Institute for Materials Research (AIMR) Tohoku University Sendai
Počet spoluriešiteľských inštitúcií:	5 - Kanada: 1, Česko: 1, Maďarsko: 1, Japonsko: 1, Poľsko: 1
Čerpané financie:	SAV: 25000 €

Dosiahnuté výsledky:

Naša skupina pokračovala v štúdiu disociačných procesov pri teplotne programovanej desorpcii (TPD) materiálov, konkrétne N dopovaného grafénu ab initio DFT metódou na vybraných periodických modeloch, ktoré potvrdili zistenia na klastrových modeloch a boli v súlade s experimentálnymi meraniami (desorpcia NH₃, HCN a N₂ v rozmedzí 300 °C to 2100 °C) v spolupráci s japonskou stranou. Výsledky sa spracovávajú do publikácie. Ďalej bola zaslaná do tlače spoločná publikácia s japonskými partnermi s našou analýzou Ramanových spektier pripraveného GMS materiálu pomocou DFT metódy. Analýza potvrdila, že bol skutočne pripravený GMS materiál s 5 a 7-člennými kruhmi ako defektami v grafénovej štruktúre. Taktiež sa analyzovali zmeny v elektrónovej štruktúre defektného grafénu (5,7 a 5,8-členných kruhov ako defektov) a v graféne (6-členné kruhy).

V spolupráci s českou stranou sme pomocou počítaných Rtg záznamov jednotlivých reaktantov DFT metódou analyzovali namerané Rtg záznamy syntetizovaného g-C₃N₄. Výsledky sa spracúvajú do publikácie. V druhom roku riešenia projektu pripadla slovenskej strane úloha zorganizovať 2. výročný míting riešiteľov projektu a členov poradného výboru, kde prezentovali dosiahnuté výsledky všetci zúčastnení formou prednášok. Toto stretnutie sa konalo na Smolenickom zámku v dňoch 2.11.-4.11. 2022. Príspevky boli publikované v zborníku (ISBN 978-80-973578-2-5, ISBN 978-80-973578-3-2) a míting sa stretol s pozitívnym ohlasom.

SCHOLTZOVÁ, Eva - NISHIHARA, H. Characterization of the carbon-based material by DFT method. In ICMS XXXI. 31th International Conference on Multidisciplinary Studies "Recent Ideas and Research", 18-19 November 2022, Université du Luxembourg: Book of Proceedings. - Luxembourg: Revistia Publishing, 2022, p. 418. ISBN 978-1-915312-05-1. (ICMS XXXI. International Conference on Multidisciplinary Studies "Recent Ideas and Research") Typ: AFG

SCHOLTZOVÁ, Eva**. Atomically designed carbon based materials studied by DFT method. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia: Book of Abstracts. - Slovakia: Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 16-17. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting) Typ: AFH

MORENO RODRÍGUEZ, Daniel** - SCHOLTZOVÁ, Eva - NISHIHARA, H. DFT study of defects in graphene. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia: Book of Abstracts. - Slovakia: Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 23-24. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting) Typ: AFH

NISHIKAWA, G. - YOSHII, T. - TAKATANI, K. - SCHOLTZOVÁ, Eva - SZILAGYI, R. - NISHIHARA, H. Analysis of nitrogen-doped carbon materials using temperature programed desorption method. In 130th Catalysis Society of Japan Meeting, Toyama University, Toyama, Japan, 20.09.-26.09.2022: Book of abstracts. - Japan: Catalysis Society of Japan, 2022, p. 236. (Catalysis Society of Japan Meeting) Typ: GII

ŠKORŇA, Peter** - SCHOLTZOVÁ, Eva - MICHALSKA, M. Thermal treatment processing of melamine precursor for preparing graphitic carbon nitride materials - theoretical calculations. In 2nd AtomDec Annual Meeting - Atomic Design

of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia: Book of Abstracts. - Slovakia: Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 30-31. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting) Typ: AFH

YOSHII, T.** - NISHIKAWA, G. - TANG, R. - SCHOLTZOVÁ, Eva - SZILAGYI, R. - NISHIHARA, H. Advanced temperature-programmed desorption as a new characterization method for N-doped carbons. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia: Book of Abstracts. - Slovakia: Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 20-21. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting) Typ: AFH

Publikácia zaslaná do tlače:

YU, Wei - YOSHII, Takeharu - NISHIOKA, Kiho - ZHOU, Yi - INOUE, Kazutoshi - TANG, Rui - PAN Zhengze - SCHOLTZOVÁ - Eva - TUNEGA, Daniel - TANAKA, Hideki - KOTANI, Motoko - TERASAKI, Osamu - NAKANISHI, Shuji - NISHIHARA, Hiroto. Edge-Site-Free and Topological-Defect-Rich Carbon Cathode for Li-O₂ Batteries. Zaslané do časopisu Advanced Energy Materials (aenm.202300044).

Programy: Bilaterálne - iné

2.) Percepčia spinovej interakcie na pokročilej úrovni (*Spin Coupling Advanced Level Perception*)

Zodpovedný riešiteľ:	Oľga Malkin
Trvanie projektu:	1.2.2020 / 31.12.2022
Evidenčné číslo projektu:	SK-FR-19-0001
Organizácia je	áno
koordinátorom projektu:	
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	1 - Francúzsko: 1
Čerpané financie:	APVV: 2650 €

Dosiahnuté výsledky:

MALKINA, Oľga** - HIERO, Jean-Cyrille** - MALKIN, Vladimír. Distinguishing "through-space" from "through-bonds" contribution in indirect nuclear spin-spin coupling: General approaches applied to complex JPP and JPSe scalar couplings. In Journal of the American Chemical Society, 2022, vol. 144, no. 24, p. 10768-10784. (2021: 16.383 - IF, Q1 - JCR, 5.728 - SJR, Q1 - SJR). ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.2c01637> Typ: ADCA

MALKINA, Oľga** - LEMKEN, Florian - ASHER, James Richard - HIERO, Jean-Cyrille - BÜHL, Michael - MALKIN, Vladimír**. Transmission of spin-polarization by pi-orbitals: an approach to assessing its effect on NMR spin-spin coupling and EPR hyperfine structure. In Physical Chemistry Chemical Physics, 2022, vol. 24, no. 32, p. 24039-24049. (2021: 3.945 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d2cp03295c> Typ: ADCA

3.) Vývoj nových metód spájania vysoko-entropických keramických materiálov (*Development of new joining methods for high entropy ceramics*)

Zodpovedný riešiteľ:	Peter Tatarko
Trvanie projektu:	1.7.2022 / 30.6.2025
Evidenčné číslo projektu:	APVV-SK-CZ-RD-21-0089
Organizácia je	áno
koordinátorom projektu:	
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	APVV: 17672 €

Dosiahnuté výsledky:

Úvodná fáza riešenia projektu bola zameraná na homogenizáciu vstupných surovín a následného spekania získaných práškových zmesí s cieľom pripraviť vysokoentropické karbidy (Hf-Zr-Ta-Nb-Ti)C a (Mo-W-Ta-Nb-V)C, a boridy (Hf-Zr-Ta-Nb-Ti)B₂. Zatiaľ čo vysokoentropické karbidy boli pripravené syntézou v tuhom stave zo zmesi odpovedajúcich monokarbidov, vysokoentropické boridy boli pripravené boro/karbo-termickou redukciou zmesi oxidov odpovedajúcich prechodných kovov. Tieto materiály budú použité ako základné materiály pre vývoj nových metód spájania vysokoentropických keramických materiálov v ďalších fázach riešenia projektu.

Publikácie:

HOSSEINI, Naser - CHLUP, Zdeněk - HANZEL, Ondrej - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Joining of ceramics for extreme environments using field assisted sintering technology. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic: Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic: Institute of Inorganic Chemistry SAS, 2022, p. 37-41. ISBN 978-80-973578-1-8. Typ: AFD

Programy: Horizont 2020

4.) Sodík-iónové a sodík-kovové batérie novej generácie pre efektívne a udržateľné uskladnenie energie (*Sodium-Ion and sodium Metal Batteries for efficient and sustainable next-generation energy storage*)

Zodpovedný riešiteľ:	Zoltán Lenčoš
Trvanie projektu:	1.1.2021 / 31.12.2024
Evidenčné číslo projektu:	963542
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Technische Universität Darmstadt
Počet spoluriešiteľských inštitúcií:	14 - Nemecko: 2, Francúzsko: 3, Veľká Británia: 3, Holandsko: 1, Nórsko: 2, Švédsko: 2, Ukrajina: 1
Čerpané financie:	SAV: 3500 € EU: 16850 €

Dosiahnuté výsledky:

Vysokoporézne keramické anódy na báze Si-O-C pre sodíkové batérie boli pripravené z pyrolyzovaného polymérneho prekursoru Polyramic, resp. zo zmesi práškov pyrolyzovaného polyméru, kremíka a uhlíka. Boli optimalizované podmienky zosieťovania a pyrolýzy polyméru pri teplotách 250°C/3 h 900°C/3 h a 1200°C/1 h v atmosfére argónu alebo dusíka. Podmienky mletia práškových zmesí v planetovom mlyne boli vypočítané z regresných rovníc o vplyve rýchlosti mletia, obsahu mlecích guľčiek a času mletia na veľkosť častíc mletého prášku a jeho kontamináciu karbidom wolfrámu. Bola stanovená veľmi dobrá zhoda s vypočítanými a experimentálne nameranými hodnotami veľkosti častíc mletých práškov.

Zloženie anód bolo zhodné so zložením, ktoré používajú partneri v TU Darmstadt, tzn. pomer aktívneho materiálu, vodivého uhlíka a spojiva bol 94:2:4. Ako spojivo bol použitý polyvinylidene fluoride (PVDF) v rozpúšťadle N-methyl-2-pyrrolidone (NMP). Elektrochemické merania však ukázali, že dochádza k lámaniu/drobeniu častíc Si počas nabíjajúcich-vybíjajúcich cyklov a výraznému poklesu kapacity. Z toho dôvodu bol zvýšený obsah spojiva na 10% a boli testované ďalšie spojivá: carboxymethyl celulóza (CMC) a styrene-butadiene rubber (SBR) v pomere 1:1 a novovyvinuté spojivá na báze alginátov (dopamín-alginát (d-Alg) a sulfo-alginát (s-Alg)). Anódy s oboma spojivami CMC:SBR a Alg vykazovali vyššiu špecifickú kapacitu v porovnaní s anódami obsahujúcimi PVDF spojivo. Zo všetkých testovaných anód mali najvyššiu špecifickú kapacitu anódy so sulfo-alginátom, cca. 170 mAh/g. Boli testované aj dva elektrolyty, NaPF₆ v ECLDMC (pomer 50:50) a NaFSI v ECLDMC (pomer 50:50). Namerané špecifické vybíjacie kapacity boli porovnateľné (~170 mAh/g), preto bude v budúcnosti používaný lacnejší elektrolyt na báze NaPF₆.

5.) New type of cesium fluoro-, oxo-, and oxo-fluoro-aluminate complexes: stability, dynamics and structural characterization (*New type of cesium fluoro-, oxo-, and oxo-fluoro-aluminate complexes: stability, dynamics and structural characterization*)

Zodpovedný riešiteľ: František Šimko
Trvanie projektu: 1.7.2022 / 30.6.2024
Evidenčné číslo projektu: 101008500
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 1 - Francúzsko: 1
Čerpané financie: -

Dosiahnuté výsledky:

PANACEA - Paneurópska infraštruktúra NMR v pevnej fáze umožňuje prístup k meraniu NMR spektier na inštitúciách podieľajúcich sa na projekte. Projekt získal financovanie z programu Európskej únie pre výskum a inovácie Horizont 2020.

Programy: JRP

6.) Vývoj bioaktívneho funkčne gradientného nitridu kremičitého (*Development of functionally graded silicon nitride with improved bioactivity*)

Zodpovedný riešiteľ: Miroslav Hnatko
Trvanie projektu: 1.1.2021 / 31.12.2023
Evidenčné číslo projektu: JRP SAV – TUBITAK 546676
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 1 - Turecko: 1
Čerpané financie: SAV: 25000 €

Dosiahnuté výsledky:

V spolupráci s partnerskou organizáciou TUBITAK Maramara Research center boli pripravené funkčne gradientné materiály na báze Si₃N₄ kombináciou techník odlievania pások a spekania. Finálne materiály pozostávali z 36 vrstiev (pások) s funkčne gradientným zložením: "hutná časť" pozostávala z 12 pások so zložením Si₃N₄ a Y₂O₃. "Prechodová oblasť" bola tvorená gradientným zložením kde množstvo CaSiO₃ sa zvyšovalo smerom k pórovitej časti, pričom obsah Y₂O₃ sa znižoval až na nulu. "Pórovitá časť" okrem Si₃N₄ a CaSiO₃ tiež obsahovala grafit, ktorý mal funkciu pórtvorného činidla. Bol študovaný vplyv tlaku počas izostatického lisovania za studena, teploty výpalu, ako aj teploty spekania (v rozsahu 1500°C – 1700°C) na mikroštruktúru a potenciálnu deformáciu vzoriek funkčne gradientného materiálu. Podarilo sa identifikovať vhodné podmienky prípravy bez viditeľného porušenia tvaru a štruktúry materiálu. Štúdium mechanických vlastností a biologických vlastností bude realizované v ďalšom kroku riešenia projektu.

Publikácie:

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - TATARKOVÁ, Monika. Effect of oxyacetylene flame to form a porous layer in silicon nitride. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzi: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 31-36. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses) Typ: AFD

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - LABUDOVÁ, Martina - TATARKOVÁ, Monika. Modification of the surface layer of silicon nitride using oxyacetylene flame. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 454. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

DE LA TORRE OLVERA, Guido - ÜNSAL, Hakan - TABAK, Yasemin - VATANSEVER, Bayise Kavakli - KILIC, Aysen - POLAT, Seyda - HNATKO, Miroslav - LENČEŠ, Zoltán - TATARKOVÁ, Monika. Functionally graded silicon

nitride with improved bioactivity prepared by tape casting. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 197. (ISC'22 International Symposium on Characterization) Typ: GII

ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - CHLUP, Zdeněk - DLOUHÝ, Ivo - TATARKO, Peter. Ablation behavior of rare-earth modified ZrB₂-SiC composites prepared by reaction sintering of ZrSi₂, B₄C and C. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 568. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

ÜNSAL, Hakan - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - HANZEL, Ondrej - TATARKOVÁ, Monika - DLOUHÝ, Ivo - TATARKO, Peter. Effect of the electric field on the in-situ formation of graphene nanoplatelets during reactive sintering of B₄C-TiB₂ composites. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 556. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

Programy: Mobility

7.) Reakčné spájanie pokročilých keramických materiálov na báze SiC (*Reaction bonding of advanced SiC-based ceramics*)

Zodpovedný riešiteľ:	Peter Tatarko
Trvanie projektu:	1.1.2021 / 31.12.2022
Evidenčné číslo projektu:	SAV-AVČR-21-04
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	SAV: 1000 €

Dosiahnuté výsledky:

V súlade s plánom projektu sa výskum orientoval na pochopenie vplyvu podmienok spájania (teplota, čas, tlak, atmosféra) na vývoj mikroštruktúry a fáz na rozhraní SiC/ZrSi₂, ako aj odpovedajúce mechanické vlastnosti spojov. Napriek optimalizácii procesu spájania, bolo rozhranie okrem majoritnej fázy ZrC stále tvorené pomerne veľkým množstvom zvyškového ZrSi₂ a voľného Si. Z tohto dôvodu sa pristúpilo k optimalizácii chemického zloženia spoja pomocou prídavku uhlíkových sadzí. Následne sa študoval vplyv podmienok procesu spájania (prevažne vplyv teploty) na tvorbu mikroštruktúry a mechanické vlastnosti spojov. Najlepšie mechanické vlastnosti boli získané pri teplote spájania 1550°C.

Publikácie:

HOSSEINI, Naser - CHLUP, Zdeněk - HANZEL, Ondrej - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Joining of ceramics for extreme environments using field assisted sintering technology. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic: Institute of Inorganic Chemistry SAS, 2022, p. 37-41. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses) Typ: AFD

HOSSEINI, Naser - ÜNSAL, Hakan - VALENZA, Fabrizio - KOMBAMUTHU, Vasanthakumar - ZHUKOVA, Inga - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Wetting, interfacial reaction and joining of monolithic SiC and Cf/SiC composites by ZrSi₂ alloy. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 520. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

HOSSEINI, Naser - CHLUP, Zdeněk - VALENZA, Fabrizio - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Wetting and joining of SiC-based advanced ceramics by ZrSi₂ alloy. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 201. (ISC'22 International Symposium on Characterization) Typ: GII

KOMBAMUTHU, Vasanthakumar - HOSSEINI, Naser - ÜNSAL, Hakan - ZHUKOVA, Inga - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - TATARKO, Peter. Effect of SiC particulates/whiskers

reinforcements on properties of spark plasma sintered high entropy borides (Ti_{0.2}Zr_{0.2}Hf_{0.2}Nb_{0.2}Ta_{0.2})B₂ synthesized using boro/carbothermal reduction. In *Ceramics in Europe 2022 : Abstract book*. Kraków, 10.-14.7.2022. - B.V., 2022, p. 525. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

ÜNSAL, Hakan - HANZEL, Ondrej - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Preparation and characterization of B₄C/TiB₂ composites. In *IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions*, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 28. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions) Typ: GII

Domáce projekty

Programy: VEGA

1.) Fázové premeny oxidov kovov v roztavených fluoridových systémoch (*Phase changes of metal oxides in fluoride melts*)

Zodpovedný riešiteľ: Miroslav Boča
Trvanie projektu: 1.1.2020 / 31.12.2023
Evidenčné číslo projektu: 2/0024/20
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 21695 €

Dosiahnuté výsledky:

Na zliatine Incoloy 800H/HT v prostredí roztavených fluoridov bol študovaný vplyv korózneho napadnutia vplyvom rôznych nečistôt, vrátane oxidov. Cieľom takéhoto štúdia bolo zistenie, aké častice (anióny kyslíka vs. kationy vodíka) sú hnacou silou korózneho procesu. Výsledky ukázali, že na intenzitu kórózneho napadnutia má vplyv predovšetkým prítomnosť a koncentrácia prítomných kationov vodíka, vo výrazne menšej miere je to prítomnosť a koncentrácia aniónov kyslíka. V niektorých prípadoch dokonca nebol pozorovaný korózný účinok na študovaný materiál. Dôležitým faktorom na vplyv korózneho účinku mal i materiál použitého teglika, v ktorom experimenty prebiehali. Výsledky sú publikované v nasledovnom príspevku:

PAVLÍK, Viliam** - BOČA, Miroslav - KITYK, Anna. Accelerated corrosion testing in molten fluoride salts: Effect of additives and the crucible material. In *Corrosion Science*, 2022, vol. 195, p. 110011-1-110011-15. (2021: 7.720 - IF, Q1 - JCR, 1.694 - SJR, Q1 - SJR). ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.110011>

2.) Hlinitano-kremičitanové sklené a sklokeramické materiály spevnené iónovou výmenou a dodatočnými funkčnosťami (*Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities*)

Zodpovedný riešiteľ: Dušan Galusek
Trvanie projektu: 1.1.2021 / 31.12.2024
Evidenčné číslo projektu: VEGA 2/0028/21
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 1 - Slovensko: 1
Čerpané financie: SAV: 7822 €

Dosiahnuté výsledky:

Hlavným cieľom projektu bolo objasniť vplyv nukleačných činidiel na kryštalizačné správanie a tvorbu kryštalických fáz v sklokeramike Na₂O-MgO-Al₂O₃-SiO₂. Sklá obsahujúce rôzne množstvá TiO₂, ZrO₂ a SnO₂ ako nukleačné činidlá sa pripravili bežným tavením; nukleačné činidlá boli vybrané tak, aby vyvolali objemovú kryštalizáciu a zabezpečili prípravu transparentnej sklokeramiky. Študovali sa účinky nukleačných činidiel a procesov tepelného spracovania na tvorbu hliníkokremičitanovej a spinelovej fázy. Získané výstupy umožnili prípravu sklokeramiky s rôznymi kryštalickými fázami pomocou kombinácií nukleačných činidiel. Sklokeramika sa použila na skúmanie vplyvu výmeny iónov Na/K na mechanické vlastnosti sklokeramiky MgO-Al₂O₃-SiO₂. V druhej časti projektu sa skúmal vplyv procesov iónovej výmeny na mechanické vlastnosti borosilikátových a boraluminátových skiel. Alkalické borosilikátové sklo sa získavalo komerčne, zatiaľ čo hliníkoboritanové sklo sa pripravilo na pracovisku. Napriek nižším kompresným napätiam v borosilikátových sklách v porovnaní s komerčnými chemicky spevnenými sklami, napr. Gorilla® Glass, iónová výmena Na/K zvýšila odolnosť voči vzniku trhlin počas indentačných testov (kolmé zaťaženie) ako aj odolnosť voči poškriabaniu. Iónová výmena lítia so sodíkom v borohlinitanovom skle zlepšuje odolnosť proti tvorbe trhlin pri kolmom indentačnom zaťažení z 20N na viac ako 100N (limit merania).

(i) A. Talimian, A., Csanádi, T., Limbach, R., Dusza, J., Wondraczek, L., Galusek, D., Scratch behavior of ion-exchange strengthened soda lime silicate and sodium borosilicate glass, 14th Pacific Rim Conference on Ceramic and Glass Technology with 2021 Glass & Optical Materials Division Annual Meeting, Vancouver (Virtual Conference)

(ii) Talimian, A., Galusek, D., Limbach, R., Rouxel, T., Wondraczek, L.?, Toughening of lithium boroaluminate glass using ion-exchange processes, 26th International Congress on Glass (ICG2022), Berlin

3.) Luminofory s nulovým teplotným zhášaním luminiscencie pre aplikácie v pc-WLED s NUV excitáciou (*Zero-thermal-quenching phosphors for NUV converted pc-WLEDs application*)

Zodpovedný riešiteľ: Dušan Galusek
Trvanie projektu: 1.1.2022 / 31.12.2024
Evidenčné číslo projektu: VEGA 1/0476/22
Organizácia je koordinátorom projektu: nie
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: MŠ: 5520 €

Dosiahnuté výsledky:

R. Klement, K. Mihalďová, I. Parchovianská, A. Prnová, M. Parchovianský PHOTOLUMINESCENCE OF EU³⁺/2+-DOPED YTTRIUM ALUMINATE GLASSES WITH EUTECTIC COMPOSITION Processing and Properties of Advanced Ceramics and Glasses, 28-30.9.2022, Mojmirovce, SR ISBN 978-80-973578-1-8

4.) Elektromagnetické tienenie funkčne gradientných vrstevnatých kompozitov na báze SiC s prídavkom grafénu a uhlíkových nanorúrok (*Electromagnetic shielding properties of functionally graded layered SiC-graphene and SiC-carbon nanotubes composites*)

Zodpovedný riešiteľ: Ondrej Hanzel
Trvanie projektu: 1.1.2021 / 31.12.2024
Evidenčné číslo projektu: 2/0007/21
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 8872 €

Dosiahnuté výsledky:

V rámci riešenia projektu boli pripravené stabilné keramické suspenzie s rôznym prídavkom uhlíkových nanorúrok

(CNTs). Bol optimalizovaný zeta potenciál daných suspenzií s cieľom zabrániť aglomerácií a sedimentácií uhlíkových nanorúrok počas prípravy. Taktiež bol optimalizovaný proces vymrazovacej granulácie. Následne boli z niektorých kompozitných práškov postupným zalisovaním do formy vytvorené vrstevnaté materiály s usporiadaním vrstiev 0-5-15 % CNTs a vrstevnaté materiály s usporiadaním vrstiev 15-5-0-5-15 % CNTs, ktoré boli spekané metódou rapid hot press (RHP) pri teplote 1800°C, vo vákuu po dobu 5 minút a pri tlaku 50 MPa. Relatívna hustota pripravených 3- a 5-vrstvových kompozitov bola vyššia ako 97 %.

Na takto pripravených hutných materiáloch bola vykonaná mikroštruktúrna analýza a boli merané funkčné vlastnosti (konkrétne elektrická vodivosť a tepelná difuzivita). Elektrická vodivosť 3-vrstvových kompozitných materiálov dosahovala 1800 S/m v prípade merania na strane vrstvy s 15 hm. % CNTs, v prípade merania na strane vrstvy SiC bez prídavku grafénu elektrická vodivosť dosahovala 100 S/m. Elektrická vodivosť 5-vrstvových kompozitných materiálov dosahovala 1100 S/m z oboch strán. Tieto výsledky dokazujú, že použitie metód vymrazovacej granulácie a spekania v rapid hot presse umožňuje získať hutné vrstevnaté kompozitné materiály SiC-CNTs s vysokou elektrickou vodivosťou.

Publikácie:

HANZEL, Ondrej** - LENČEŠ, Zoltán - KIM, Young-Wook - ŠAJGALÍK, Pavol. Effect of sintering additives and sintering conditions on electrical and thermal properties of SiC-GNPs and SiC-GO composites. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 292. ISBN 978-83-942760-9-6.

ÜNSAL, Hakan - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - HANZEL, Ondrej - TATARKOVÁ, Monika - DLOUHÝ, Ivo - TATARKO, Peter**. Effect of the electric field on the in-situ formation of graphene nanoplatelets during reactive sintering of B4C-TiB2 composites. In Ceramics in Europe 2022: Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 556. ISBN 978-83-942760-9-6.

HANZEL, Ondrej - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Silicon carbide - graphene composites with high thermal and electrical conductivity. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany: Deutsche Keramische Gesellschaft e.V., 2022, p. 64.

HANZEL, Ondrej - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Silicon carbide - graphene composites with high functional properties. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia: Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 27.

5.) Štruktúra a vlastnosti bio aktívnych skiel dopovaných iónmi s potenciálne terapeutickými a antibakteriálnymi účinkami (*Structure and properties of bioactive glasses doped with ions with potential therapeutic and antibacterial effects*)

Zodpovedný riešiteľ:	Mária Chromčíková
Trvanie projektu:	1.1.2020 / 31.12.2023
Evidenčné číslo projektu:	2/0164/
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	1 - Slovensko: 1
Čerpané financie:	SAV: 533 €

Dosiahnuté výsledky:

Podstatou riešeného projektu v roku 2022 bolo komplexné skúmanie vzťahov medzi zložením, štruktúrou a fyzikálnymi vlastnosťami bio skiel obsahujúcich okrem SiO₂ aj sieťotvorný oxid P₂O₅. Po príprava homogénnych bio skiel bola kvantifikovaná sklotvornosť v skúmaných sústavách a zmerané základných fyzikálnochemických vlastností získaných skiel a sklotvorných tavenín. Procesov entalpickej relaxácie v transformačnej oblasti pomocou Tool-Narayanaswamy-Moynihan modelu bol kvantitatívne opísaný na bio sklách dopovaných Li₂O a úspešne opublikovaný v Journal of Non-Crystalline Solids.

6.) Pórovité keramické anódy pre sodíkové batérie novej generácie (*Porous ceramic anodes for novel sodium-ion batteries*)

Zodpovedný riešiteľ: Zoltán Lenčes
Trvanie projektu: 1.12.2022 / 31.12.2024
Evidenčné číslo projektu: 2/0167/22
Organizácia je
koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských
inštitúcií: 0
Čerpané financie: SAV: 8133 €

Dosiahnuté výsledky:

Vysokoporézne keramické anódy na báze Si-O-C pre sodíkové batérie boli pripravené z pyrolyzovaného polymérneho prekursoru Polyramic, resp. zo zmesi práškov pyrolyzovaného polyméru, kremíka a uhlíka. Podmienky mletia práškových zmesí v planetovom mlyne boli vypočítané z regresných rovníc o vplyve rýchlosti mletia, obsahu mlecích guľčiek a času mletia na veľkosť častíc mletého prášku a jeho kontamináciu karbidom wolfrámu.

Zloženie anód, tzn. pomer aktívneho materiálu, vodivého uhlíka a spojiva bol 94:2:4. Ako spojivo bol použitý polyvinylidén fluorid (PVDF) v rozpúšťadle N-metyl-2-pyrrolidone (NMP). Elektrochemické merania však ukázali, že dochádza k lámaniu/drobeniu častíc Si počas nabíjaciach-vybíjaciach cyklov a výraznému poklesu kapacity. Z toho dôvodu bol zvýšený obsah spojiva na 10% a boli testované ďalšie spojivá: carboxymetyl celulóza (CMC) a styrene-butadién rubber (SBR) v pomere 1:1 a novovyvinuté spojivá na báze alginátov (dopamín-alginát (d-Alg) a sulfo-alginát (s-Alg)). Anódy s oboma spojivami CMC:SBR a Alg vykazovali vyššiu špecifickú kapacitu v porovnaní s anódami obsahujúcimi PVDF spojivo. Zo všetkých testovaných anód mali najvyššiu špecifickú kapacitu anódy so sulfo-alginátom, cca. 170 mAh/g.

GÜNEREN, Alper – LENČEŠ, Zoltán – NADA, Ahmed, Improvement of the performance of Silicon-graphite anodes in Li-ion batteries by application of self-healing binder, Proc. Processing and properties of advanced ceramics and glasses, Mojmirovce, Slovak republic, Sept. 28-30, 2022, pp. 72-75. ISBN 978-80-973578-1-8

KUCHERYAVAYA, Anastasia – LENČEŠ, Zoltán – HARMUTH, Harald – ŠAJGALÍK, Pavol, Zirconium oxycarbides and oxycarbonitrides: a review. Int. J. Appl. Ceram. Technol. 2022;1–22. <https://doi.org/10.1111/ijac.14188>

7.) Pokrok vo výpočte a interpretácii spektroskopických parametrov zlúčenín ťažkých prvkov
(*Advancing in calculation and interpretation of spectroscopic parameters of heavy element compounds*)

Zodpovedný riešiteľ: Oľga Malkin
Trvanie projektu: 1.1.2021 / 31.12.2024
Evidenčné číslo projektu: 2/0135/21
Organizácia je
koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských
inštitúcií: 0
Čerpané financie: SAV: 14038 €

Dosiahnuté výsledky:

HRICOVÍNI, Michal – ASHER, James Richard – HRICOVÍNI, Miloš**. A study of the photochemical behaviour and relaxation mechanisms of anti-syn isomerisation around quinazolinone -N-N=bonds. In RSC Advances, 2022, vol. 12, no. 42, p. 27442-27452. (2021: 4.036 – IF, Q2 – JCR, 0.667 – SJR, Q1 – SJR). ISSN 2046-2069. Dostupné na: <https://doi.org/10.1039/d2ra04529j> Typ: ADCA

MALKINA, Oľga** - LEMKEN, Florian - ASHER, James Richard - HIERSON, Jean-Cyrille - BÜHL, Michael - MALKIN, Vladimír**. Transmission of spin-polarization by pi-orbitals: an approach to assessing its effect on NMR spin-spin coupling and EPR hyperfine structure. In Physical Chemistry Chemical Physics, 2022, vol. 24, no. 32, p. 24039-24049. (2021: 3.945 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d2cp03295c> Typ: ADCA

MALKINA, Olga** - HIERO, Jean-Cyrille** - MALKIN, Vladimír. Distinguishing "through-space" from "through-bonds" contribution in indirect nuclear spin-spin coupling: General approaches applied to complex JPP and JPSe scalar couplings. In *Journal of the American Chemical Society*, 2022, vol. 144, no. 24, p. 10768-10784. (2021: 16.383 - IF, Q1 - JCR, 5.728 - SJR, Q1 - SJR). ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.2c01637> Typ: ADCA

KONEČNÝ, Lukáš** - VÍCHA, Jan - KOMOROVSKÝ, Stanislav - RUUD, Kenneth - REPISKÝ, Michal**. Accurate X-ray absorption spectra near L- and M-edges from relativistic four-component damped response time-dependent density functional theory. In *Inorganic Chemistry*, 2022, vol. 61, no. 2, p. 830-846. (2021: 5.436 - IF, Q1 - JCR, 1.121 - SJR, Q1 - SJR). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c02412> Typ: ADCA

CUYACOT, Ben Joseph R. - NOVOTNÝ, Jan - BERGER, Raphael J. F. - KOMOROVSKÝ, Stanislav** - MAREK, Radek**. Relativistic spin-orbit electronegativity and the chemical bond between a heavy atom and a light atom. In *Chemistry - A European Journal*, 2022, vol. 28, no. 24, art. no. e202200277. (2021: 5.020 - IF, Q2 - JCR, 1.343 - SJR, Q1 - SJR). ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202200277> Typ: ADCA

MIŠENKOVÁ, Debora - LEMKEN, Florian - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Olga - KOMOROVSKÝ, Stanislav**. The four-component DFT method for the calculation of the EPR g-tensor using a restricted magnetically balanced basis and London atomic orbitals. In *Journal of Chemical Physics*, 2022, vol. 157, no. 16, art. no. 164114. (2021: 4.304 - IF, Q1 - JCR, 1.103 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0103928> Typ: ADCA

8.) Vývoj a charakterizácia sférických mikročastíc vhodných na prípravu 3D sklených a sklo-keramických štruktúr (*Development and characterisation of spherical microparticles for preparation of advanced 3D glass and glass-ceramic structures*)

Zodpovedný riešiteľ:	Monika Micháľková
Trvanie projektu:	1.1.2020 / 31.12.2023
Evidenčné číslo projektu:	1/0456/20
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA MŠ: 2373 €

Dosiahnuté výsledky:

DASAN, Arish** - KRAXNER, Jozef - GRIGOLATO, Luca - SAVIO, Gianpaolo - ELSAYED, Hamada - GALUSEK, Dušan - BERNARDO, Enrico**. 3D printing of hierarchically porous lattice structures based on akermanite glass microspheres and reactive silicone binder. In *Journal of Functional Biomaterials*, 2022, vol. 13, no. 1, p. 8-1-8-11. (2021: 4.901 - IF, Q2 - JCR, 0.875 - SJR, Q2 - SJR). ISSN 2079-4983. Dostupné na: <https://doi.org/10.3390/jfb13010008> Typ: ADCA

KRAXNER, Jozef** - ELSAYED, Hamada - DASAN, Arish - HUJOVÁ, Miroslava - MICHÁLKOVÁ, Monika - MICHÁLEK, Martin - BERNARDO, Enrico - GALUSEK, Dušan. Additive manufacturing of Ca-Mg silicate scaffolds supported by flame-synthesized glass microspheres. In *Ceramics International*, 2022, vol. 48, no. 7, p. 9107-9113. (2021: 5.532 - IF, Q1 - JCR, 0.887 - SJR, Q1 - SJR, karentované - CCC).. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.12.095> Typ: ADCA

MAHMOUD, Mokhtar** - KRAXNER, Jozef - KAŇKOVÁ, Hana - HUJOVÁ, Miroslava - CHEN, Si - GALUSEK, Dušan - BERNARDO, Enrico. Porous glass microspheres from alkali-activated fiber glass waste. In *Materials*, 2022, vol. 15, no. 3, p. 1043-1-1043-9. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15031043> Typ: ADCA

9.) Potenciál vrstevnatých aluminosilikátov ako excelentných nosičov polykatiónov: dizajnovanie nových kompozitných nanomateriálov (*Potential of layered aluminosilicates as*

excellent guests to accommodate polymeric cations: design of new composite materials)

Zodpovedný riešiteľ: Helena Pálková
Trvanie projektu: 1.1.2021 / 31.12.2024
Evidenčné číslo projektu: 2/0166/21
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 17229 €

Dosiahnuté výsledky:

V roku 2022 sa dokončili experimentálne práce série organoíllov z Na-Mt Kunipia a neiónového polyméru poly(2-metyl-2-oxazolin) a katiónového polyméru poly(etylénimínu). Okrem toho sa pripravili nové série vzoriek smektitov modifikovaných poly(etyl-oxazolinom) a poly(propyl-oxazolinom), ich charakterizácia je naplánovaná na rok 2023. Ukončili sa práce na vzorkách ílového minerálu modifikovaného polyelektrolytom (PDDA) pričom sa na vzorkách sledoval vplyv modifikácie na luminiscenčné vlastnosti Reichardovho farbiva, ktoré pred modifikáciou nevykazovalo fluorescenčné vlastnosti. Pokračujú experimentálne práce na optimalizácii prípravy a charakterizácii saponitu modifikovaného biopolymérom.

PRIBUS, Marek** - BUDZÁK, Šimon - PRIBUSOVÁ SLUŠNÁ, Lenka - ŠIMONOVÁ, Tímea - JANKOVIČ, Ľuboš - MÉSZÁROS, R. - BUJDÁK, Juraj. Luminescence of Reichardt's dye in polyelectrolyte-modified saponite colloids. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, vol. 642, p. 128663-1-128663-10. (2021: 5.518 - IF, Q2 - JCR, 0.758 - SJR, Q2 - SJR).

BOHÁČ, Peter** - BUDZÁK, Šimon - PLANETOVÁ, Viktória - KLEMENT, Róbert - BUJDÁK, Juraj. Adsorption-induced fluorescence of pseudoisocyanine monomers in systems with layered silicates. In Journal of Physical Chemistry C, 2022, vol. 126, no. 40, p. 17255-17265. (2021: 4.177 - IF, Q2 - JCR, 1.103 - SJR, Q1 - SJR, karentované - CCC).

MEDEIROS MELO, Tatiane** - SCHAUERTE, Marina - BLUHM, Annika - SLANÝ, Michal - PALLER, Michael - BOLAN, Nanthi - BOSCH, Julian - FRITZSCHE, Andreas - RINKLEBE, Jörg**. Ecotoxicological effects of per- and polyfluoroalkyl substances (PFAS) and of a new PFAS adsorbing organoclay to immobilize PFAS in soils on earthworms and plants. In Journal of Hazardous Materials, 2022, vol. 433, p. 128771-1-128771-11. (2021: 14.224 - IF, Q1 - JCR, 1.991 - SJR, Q1 - SJR). ISSN 0304-3894.

Konferencie:

MADEJOVÁ, Jana - BARLOG, Martin - SLANÝ, Michal - JANKOVIČ, Ľuboš. Characterization of montmorillonite modified with polyoxazoline. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022: Book of abstracts. Kraków, Poland, 2022, p. 62. ISBN 978-83-65955-60-9. Type: AFG

MADEJOVÁ, Jana** - BARLOG, Martin - JANKOVIČ, Ľuboš - SLANÝ, Michal - PÁLKOVÁ, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey: Scientific Research Abstracts. Turkey, 2022, p. 164

10.) Porozumenie mechanizmu interakcií znečisťujúcich látok adsorbovaných na povrchu aluminosilikátových štruktúr (*Insight into the mechanism of interactions of pollutants adsorbed on the surface of aluminosilicate structures*)

Zodpovedný riešiteľ: Eva Scholtzová
Trvanie projektu: 1.1.2019 / 31.12.2022
Evidenčné číslo projektu: 2/0021/19
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 8614 €

Dosiahnuté výsledky:

BASHIR, Sanam** - ŠKORŇA, Peter - SCHOLTZOVÁ, Eva. Theoretical DFT-D3 study of interactions between montmorillonite clay and different polymers. In Czech Chemical Society Symposium Series, 2022, roč. 20, č. 4, s. 238. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností) Typ: AFG

BASHIR, Sanam - SCHOLTZOVÁ, Eva** - TUNEGA, Daniel. Theoretical study of interactions in the clay-polymer advanced hybrid nanomaterials. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 101. (AIPEA - International Clay Conference ICC) Typ: GII

BÖHM, Leonard** - GRANČIČ, Peter - SCHOLTZOVÁ, Eva - HEYDE, Benjamin Justus - DÜRING, Rolf-Alexander - SIEMENS, Jan - GERZABEK, Martin H. - TUNEGA, Daniel. Adsorption of the hydrophobic organic pollutant hexachlorobenzene to phyllosilicate minerals. In Environmental science and pollution research, p. ISSN 0944-1344 IF=5.19. Typ: ADCA

GIANNI, Eleni** - MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - POSPÍŠIL, Miroslav. How herbicides like atrazine and diuron interact with the spiral halloysite structure. In Journal of Environmental Chemical Engineering, 2022, vol. 10, no. 6, p. 108785-1-108785-10. (2021: 7.968 - IF, Q1 - JCR, 1.042 - SJR, Q1 - SJR). ISSN 2213-3437. Dostupné na: <https://doi.org/10.1016/j.jece.2022.108785> Typ: ADCA

MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva. Immobilisation of diuron herbicide employing smectites. In Materials Today Communications, 2022, vol. 31, p. 103252-1-103252-12. (2021: 3.662 - IF, Q3 - JCR, 0.623 - SJR, Q2 - SJR). ISSN 2352-4928. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2022.103252> Typ: ADCA

MORENO RODRÍGUEZ, Daniel**. On search of the clay-herbicide interaction. In Informátor, 2022, no. 71, p. 3-8. ISSN 1802-2480. Typ: AFA

MORENO RODRÍGUEZ, Daniel - GIANNI, Eleni - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - POSPÍŠIL, Miroslav. How atrazine and diuron are absorbed into spiral halloysite structure. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 67. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference) Typ: AFG

SCHOLTZOVÁ, Eva - ZIMOWSKA, Malgorzata - TUNEGA, Daniel. Ab initio thermodynamics study of the MgCO₃ formation. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 77. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference) Typ: AFG

ŠKORŇA, Peter** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Hexavalent chromium adsorption by tetrahexylphosphonium modified beidellite clay. In Applied Clay Science, 2022, vol. 228, p. 106623-1-106623-8. (2021: 5.907 - IF, Q1 - JCR, 0.958 - SJR, Q1 - SJR). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2022.106623> Typ: ADCA

ŠKORŇA, Peter - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Perchlorate pollutants adsorption by tetrahexylphosphonium-modified beidellite clay - theoretical and experimental research. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 82. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference) Typ: AFG

MADEJOVÁ, Jana** - BARLOG, Martin - SLANÝ, Michal - BASHIR, Sanam - SCHOLTZOVÁ, Eva - TUNEGA, Daniel - JANKOVIČ, Ľuboš. Advanced materials based on montmorillonite modified with poly(ethylenimine) and poly(2-methyl-2-oxazoline): Experimental and DFT study. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, vol. 659, art. no. 130784. ISSN 0927-7757. Typ: ADCA

MURÁTH, Szabolcs - DVORNÍKOVÁ, Natálie - MORENO RODRÍGUEZ, Daniel - NOVOTNÝ, Radek - POSPÍŠIL, Miroslav - URBANOVÁ, Martina - BRUS, Jiří - KOVANDA, František**. Intercalation of atorvastatin and valsartan into Mg-Al layered double hydroxide host using a restacking procedure. In Applied Clay Science, 2023, vol. 231, p. 106717-1-106717-12. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2022.106717> Typ: ADCA

11.) Fluoridové taveninové systémy pre zelenú výrobu hliníka bez produkcie CO₂ (Molten fluoride systems for green production of aluminium without CO₂ emissions)

Zodpovedný riešiteľ: František Šimko
Trvanie projektu: 1.1.2022 / 31.12.2025
Evidenčné číslo projektu: 2/0046/22
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských 0
inštitúcií:
Čerpané financie: SAV: 14676 €

Dosiahnuté výsledky:

Pomocou termickej analýzy sa stanovili fázové diagramy systémov Na₃AlF₆-NdF₃ a (Na₃AlF₆-NdF₃)_{eut}-Nd₂O₃. Systém Na₃AlF₆-NdF₃ je jednoduchý eutektický systém s eutektickým bodom so súradnicami: 49 mol% NdF₃, a t = 905oC. Dané eutektické zloženie sa následne použilo na termickú analýzu trojzložkového systému (Na₃AlF₆-NdF₃)_{eut}-Nd₂O₃. Zistilo sa, že súradnice eutektického bodu sústavy (Na₃AlF₆-NdF₃)_{eut}-Nd₂O₃ sú približne 46 mol% Nd₂O₃ a t = 733oC. Po termickej analýze bola vykonaná röntgenová difrakcia stuhnutých vzoriek oboch systémov. XRD analýza systému Na₃AlF₆-NdF₃ ukázala tvorbu dvoch nových zlúčenín; NaNdF₄ a NdOF. Tvorba NdOF je pravdepodobne produktom vysokoteplotnej hydrolýzy medzi vlhkosťou v atmosfére a NdF₃. XRD analýza stuhnutých vzoriek systému (Na₃AlF₆-NdF₃)_{eut}-Nd₂O₃ ukázala tvorbu nasledujúcich nových zlúčenín; NaNdF₄, NdOF, NdAlO₃ a NaF.

12.) In-situ tvorba bioaktívneho funkčne gradientného nitridu kremičitého počas spekania v elektrickom poli (*The in-situ formation of bioactive functionally graded silicon nitride by field assisted sintering*)

Zodpovedný riešiteľ: Monika Tatarková
Trvanie projektu: 1.1.2022 / 31.12.2024
Evidenčné číslo projektu: 2/0161/22
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských 0
inštitúcií:
Čerpané financie: SAV: 12572 €

Dosiahnuté výsledky:

Projekt skúma vývoj novej funkčne gradientnej (FG) biokeramiky na báze Si₃N₄ spekaním za asistencie elektrického prúdu s následným tepelným spracovaním povrchu kyslíkovo-acetylénovým plameňom. FG Si₃N₄ sa pripravil in-situ počas spekania homogénnej práškovej zmesi za asistencie elektrického poľa. V prvom roku riešenia bolo skúmané rôzne usporiadanie spekacej sústavy s cieľom zistiť usporiadanie s maximálnym smerovým účinkom elektrického prúdu na migráciu bioaktívnych prísad k jednému z povrchov materiálu. Tým sa zabezpečí tvorba Si₃N₄ biomateriálu so súvislou gradientnou štruktúrou priamo z homogénnej práškovej zmesi. Bol analyzovaný vplyv asymetrického spekania na funkčne gradientnú mikroštruktúru nitridu kremičitého s rôznymi kombináciami spekacích prísad s cieľom objasniť vplyv elektrického prúdu na in-situ tvorbu funkčne gradientného Si₃N₄.

Publikácie:

HIČÁK, Michal - MEDVECKÝ, Lubomír - HNATKO, Miroslav - ŠTULAJTEROVÁ, Radoslava - GIRETOVÁ, Mária - TATARKOVÁ, Monika - LENCĚŠ, Zoltán - ŠAJGALÍK, Pavol. Porous silicon nitride-based drug delivery carrier. In International Journal of Applied Ceramic Technology, 2022, vol. 19, no. 2, p. 882-892. (2021: 2.328 - IF, Q2 - JCR, 0.388 - SJR, Q2 - SJR). ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13908> Typ: ADCA

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - TATARKOVÁ, Monika. Effect of oxyacetylene flame to form a porous layer in silicon nitride. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Luboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 31-36. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses) Typ: AFD

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - LABUDOVÁ, Martina - TATARKOVÁ, Monika. Modification of the surface layer of silicon nitride using oxyacetylene flame. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 454. ISBN 978-83-942760-9-6.

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - LABUDOVÁ, Martina - HNATKO, Miroslav - TATARKOVÁ, Monika. Development of silicon nitride with bioactive surface using oxyacetylene flame. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 199. Typ: GII

DE LA TORRE OLVERA, Guido - ÜNSAL, Hakan - TABAK, Yasemin - VATANSEVER, Bayise Kavakli - KILIC, Aysen - POLAT, Seyda - HNATKO, Miroslav - LENČEŠ, Zoltán - TATARKOVÁ, Monika. Functionally graded silicon nitride with improved bioactivity prepared by tape casting. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey: Abstract Book. Turkey: Evcin ArGe, 2022, p. 197. Typ: GII

TATARKOVÁ, Monika - TATARKO, Peter - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - ŠAJGALÍK, Pavol. Boron nitride nanosheets as a reinforcement for silicon nitride. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 252. ISBN 978-83-942760-9-6. Typ: AFG

ZHUKOVA, Inga - KOMBAMUTHU, Vasanthakumar - HOSSEINI, Naser - ÜNSAL, Hakan - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - TATARKO, Peter. Theoretical predictions and synthesis of high-entropy diboride systems with different molar ratios of transition metals. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 566. ISBN 978-83-942760-9-6. Typ: AFG

HOSSEINI, Naser - ÜNSAL, Hakan - VALENZA, Fabrizio - KOMBAMUTHU, Vasanthakumar - ZHUKOVA, Inga - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Wetting, interfacial reaction and joining of monolithic SiC and Cf/SiC composites by ZrSi₂ alloy. In Ceramics in Europe 2022: Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 520. ISBN 978-83-942760-9-6. Typ: AFG

Programy: APVV

13.) Interakcia fluoridových taveninových systémov prvkov vzácnych zemín s oxidmi kritických prvkov v kontexte špeciálnych aplikácií (*Interaction of fluoride melts of rare earth elements with oxides of critical elements in the context of special applications*)

Zodpovedný riešiteľ:	Miroslav Boča
Trvanie projektu:	1.7.2020 / 30.6.2024
Evidenčné číslo projektu:	APVV-19-0270
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 60000 €

Dosiahnuté výsledky:

V rámci projektu boli študované viaceré fluoridové systémy: (LiF-MgF₂)eut-LnF₃; Ln = Sm, Gd, Nd; (LiF-CaF₂)eut-NdF₃ a (LiF-NaF)eut-NdF₃, pričom boli sledované tri rôzne fyzikálno-chemické vlastnosti – fázové rovnováhy, hustota a objemové vlastnosti a elektrická vodivosť. Vo všetkých prípadoch bola použitá aj rtg. prášková difrakčná analýza zatuhnutých vzoriek, ktoré dodali doplnujúcu informáciu k vyhodnoteným výsledkom zo štúdií fázových rovnováh. Získané výsledky boli porovnávané s výsledkami podobných fluoridových sústav a boli publikované a prezentované vo viacerých odborných publikáciách, ako i vedeckých podujatiach.

KUBÍKOVÁ, Blanka** - MLYNÁRIKOVÁ, Jarmila - MATSELKO, Oksana - MIKŠÍKOVÁ, Eva - NETRIOVÁ, Zuzana - VASKOVÁ, Zuzana - BOČA, Miroslav. Phase equilibria and volume properties of (LiF-MgF₂)eut-LnF₃ (Ln = Sm, Gd, Nd) molten systems. In Journal of Molecular Liquids, 2022, vol. 353, p. 118694-1-118694-10. (2021: 6.633 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2022.118694>

KORENKO, Michal** - KRISHNAN, Dhiya - ŠIMKO, František - AMBROVÁ, Marta - SZATMÁRY, Lórant. Electrical conductivity of the molten systems of (LiF - CaF₂)eut - NdF₃ and (LiF - NaF)eut - NdF₃. In Journal of Molecular Liquids, 2022, vol. 365, p. 120012-1-120012-7. (2021: 6.633 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2022.120012>

BOČA, Miroslav** - KUBÍKOVÁ, Blanka - NETRIOVÁ, Zuzana - MATSELKO, Oksana - MLYNÁRIKOVÁ, Jarmila. Systematic research on the selected ternary lanthanide fluoride systems. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece: Institute of Chemical Engineering Sciences, 2022, p. 62.

KRISHNAN, Dhiya** - KORENKO, Michal - ŠIMKO, František. Electrical conductivity of the molten systems of (LiF - CaF₂)eut - NdF₃ and (LiF - NaF)eut - NdF₃. In Czech Chemical Society Symposium Series. - Praha, ČR : Czech Chemical Society, 2022, roč. 20, č. 4, s. 246. ISSN 2336-7202.

KUBÍKOVÁ, Blanka** - MLYNÁRIKOVÁ, Jarmila - NETRIOVÁ, Zuzana - VASKOVÁ, Zuzana - MATSELKO, Oksana - BOČA, Miroslav. Physico-chemical investigation of selected lanthanide trifluorides in molten eutectic mixture LiF-MgF₂. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 63.

14.) Anódy pre Li-iónové batérie na báze uhlík-kremíkových kompozitov (*Carbon-silicon based composite anodes for Li-ion batteries*)

Zodpovedný riešiteľ:	Karol Fröhlich
Zodpovedný riešiteľ v organizácii SAV:	Zoltán Lenčేశ
Trvanie projektu:	1.7.2020 / 30.6.2024
Evidenčné číslo projektu:	APPV-19-0461
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Centrum pre využitie pokročilých materiálov SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	3 - Slovensko: 3
Čerpané financie:	APVV: 6330 €

Dosiahnuté výsledky:

Aktívny materiál v anóde Li-batérií na báze uhlíka a kremíka (C/Si) v pomere 80:20 hm% bol pripravený vysokoenergetickým mletím v planetovom mlyne za podmienok mletia vypočítaných z regresných rovníc o vplyve rýchlosti mletia, obsahu mlecích guľčiek a času mletia na veľkosť častíc C/Si prášku a jeho kontamináciu karbidom wolfrámu. Taktiež boli optimalizované viskozity suspenzií pozostávajúcich z 80% aktívneho materiálu SiOC + C/Si, 10% vodivého uhlíka a 10% spojiva na odlievanie pások anód. Kremíkové častice sa v dôsledku objemovej zmeny (?300%) rozpadajú a anóda stráca svoju integritu a nábojovú kapacitu. Jednou z možností ako sa vyhnúť takejto degradácii je použitie takých spojív, ktoré by zabránili/obmedzili praskaniu Si častíc. Z toho dôvodu bolo testovaných viacero druhov spojív: celulóza/styrén-butadiénový kaučuk (CMC/SBR), a novovyvinuté spojivá dopamín-alginát (d-Alg) a sulfo-alginát (s-Alg). Študoval sa aj vplyv obsahu spojiva, konkrétne 4 hm% a 10 hm% spojiva. Elektrochemické testy ukázali, že najvyššiu špecifickú kapacitu mali anódy so spojivom na báze sulfo-alginátu, kedy sa kapacita stabilizovala na hodnote približne 600 mAh/g aj po 20 nabíjaciach a vybíjaciach cykloch.

Doterajšie výsledky ukazujú sa, že vďaka vetvovej nelineárnej štruktúre sulfo-alginátu má spojivo lepší kontakt, viac bodových kontaktov OH- skupín s povrchom kremíka. V dôsledku toho integrita anódy a teda kapacita batérie je vo väčšej miere zachovaná aj pri vyšších rýchlostiach nabíjania.

GÜNEREN, Alper – LENČEŠ, Zoltán – NADA, Ahmed, Improvement of the performance of Silicon-graphite anodes in Li-ion batteries by application of self-healing binder, Proc. Processing and properties of advanced ceramics and glasses, Mojmirovce, Slovak republic, Sept. 28-30, 2022, pp. 72-75. ISBN 978-80-973578-1-8

GÜNEREN, Alper – LENČEŠ, Zoltán – NADA, Ahmed Self-healing binder adaption to silicon-graphite blended anodes. Abstract Book of the Ceramics in Europe 2022, July 10-14, 2022, Krakow, Poland, p. 409. ISBN: 978-83-942760-9-6

SAHOO, Prangya P. - GÜNEREN, Alper – HUDEC, Boris – MIČUŠÍK, Matej – LENČEŠ, Zoltán, P. ŠIFFALOVÍČ, Peter – FRÖHLICH, Karol: Improved properties of Li-ion battery electrodes protected by Al₂O₃ and ZnO ultrathin layers prepared by atomic layer deposition. In: 242nd Electrochemical Society Meeting, Atlanta, USA, 9-13.10. 2022.

15.) Nové sklenené a sklokeramické fosfory na báze hlinitanov vzácnych zemín pre aplikácie v pevnolátkových energiách šetriacich svetelných zdrojoch vyžarujúcich biele svetlo (pc-ELED diódy) (Novel glass and glass-ceramic rare-earth aluminates-based phosphors for energy-saving solid state lighting sources emitting white light (pc-WLEDs))

Zodpovedný riešiteľ: Dušan Galusek
Trvanie projektu: 1.8.2018 / 31.7.2022
Evidenčné číslo projektu: APVV-17-0049
Organizácia je koordinátorom projektu: nie
Koordinátor: Trenčianska univerzita Alexandra Dubčeka v Trenčíne
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 6720 €

Dosiahnuté výsledky:

Optimalizovaná bola príprava mikrogulôčok v systéme Y₂O-Al₂O₃ dopovanom luminiscenčne aktívnymi iónmi Ce³⁺, Eu^{3+/2+}, Mn^{2+/4+}. Detailne preštudované boli luminiscenčné vlastnosti v závislosti od koncentrácie aktivátora, podmienok prípravy skryštalizovaných mikrogulôčok (optimalizovaný časovo-teplotný režim v redukčnej atmosfére). Eu²⁺ -dopované systémy vykazujú pri excitácii NUV emisiu bieleho svetla, ktorú je možno ladiť vlnovou dĺžkou excitačného žiarenia s posunom do červenej spektrálnej oblasti. Z Ce³⁺ dopovaných sklenených mikrogulôčok boli žiarovým lisovaním pripravené sklo-kryštalické dvojfázové (YAG/Al₂O₃) translucenčné kompakty s luminiscenčnými vlastnosťami, ktoré emitujú žlté svetlo pri excitácii NUV a modrým svetelným žiarením. Žiarovým lisovaním a technikou SPS (Spark Plasma Sintering) boli pripravené kompozity dopované Eu^{2+/Eu3+} emitujúce biele a červené svetlo pri excitácii NUV iba s jedným typom aktivátora v matici. Detailne preštudované boli aj transparentné/translucenčné materiály na báze Al₂O₃ dopované luminiscenčnými aktivátormi Dy³⁺, Tb³⁺ a ich kombináciou s Cr³⁺ (Dy^{3+/Cr3+}, Tb^{3+/Cr3+}), čo umožnilo ladenie farby emitovaného svetla (luminiscencie) v závislosti od excitačnej vlnovej dĺžky.

R. Klement, K. Drdlíková, D. Drdlík, K. Maca, Photoluminescence of rare-earth/transition metal-doped transparent/translucent polycrystalline Al₂O₃ ceramics: A review, J. Am. Ceram. Soc. 106 (2023) 172-185.

K. Drdlíková, R. Klement, J. Svoboda, D. Drdlík, D. Galusek, K. Maca, Luminescent Dy³⁺ and Dy^{3+/Cr3+} doped transparent Al₂O₃ ceramics: Microstructure and optical properties, J. Eur. Ceram. Soc. 42 (2022) 4343-4352.

P. Švančárek, R. Klement, W. Wisniewski, M. Parchovianský, D. Galusek, ZnO-doped Y₂O₃ ceramic: A prospective Warm White Light Fluorescent Material, J. Eur. Ceram. Soc. 42 (2022) 2478-2486.

B. Pecušová, A. Prnová, J. Valúchová, M. Parchovianský, R. Klement, D. Galusek, Crystallization and photoluminescence properties of Er-doped microspheres with ytterbium-aluminium garnet composition, Ceram. Int. (2022), DOI: 10.1016/j.ceramint.2022.08.070

16.) Nanoštrukturované, funkčne navrstvené a bio-inšpirované 3D implantáty na báze titánu (Nanostructured, functionally graded, and bioinspired 3D Ti-based implants)

Zodpovedný riešiteľ: Miroslav Hnatko
Trvanie projektu: 1.8.2021 / 30.6.2025
Evidenčné číslo projektu: APVV-20-0322
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 1 - Slovensko: 1
Čerpané financie: APVV: 42310 €

Dosiahnuté výsledky:

Experimentálne práce prebiehali v súlade so stanoveným harmonogramom na rok 2022, t.j. bola realizovaná ďalšia optimalizácia procesov modifikácie povrchu Ti zliatiny. Bolo realizované hodnotenie biologickej aktivity, biokompatibility a antibakteriálnych vlastností zložiek, ktoré boli realizované ponorením do roztoku s podobným zložením ako ľudská krvná plazma bez organických zložiek (SBF) na základe in vitro simulácie podmienok in vivo (ISO 23317:2014). Bola študovaná schopnosť materiálu indukovať a vytvárať hydroxyapatit (HA) na svojom povrchu (technikami SEM-EDX, XRD a FTIR).

Publikácie:

KITYK, Anna** - PROTSENKO, V. - DANILOV, F.I. - BOBROVA, Lina - HNATKO, Miroslav - PAVLÍK, Viliam - ŠOLTÝS, Ján - LABUDOVÁ, Martina - RUSKOVÁ, Magdaléna - PANGALLO, Domenico. Design of Ti-6Al-4V alloy surface properties by galvanostatic electrochemical treatment in a deep eutectic solvent Ethaline. In Surface & Coatings Technology, 2022, vol. 429, art. no. 127936. (2021: 4.865 - IF, Q2 - JCR, 0.922 - SJR, Q1 - SJR). ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2021.127936> (ITMS2014+: 313021T081: Vybudovanie Centra pre využitie pokročilých materiálov Slovenskej akadémie vied) Typ: ADCA

17.) Nové vysoko-entropické keramické materiály pre pokročilé aplikácie (*New High - Entropy Ceramics for Advanced Applications*)

Zodpovedný riešiteľ:	Pavol Hvizdoš
Zodpovedný riešiteľ v organizácii SAV:	Pavol Šajgalík
Trvanie projektu:	1.7.2020 / 30.6.2024
Evidenčné číslo projektu:	APPV-19-0497
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Ústav materiálového výskumu SAV, v. v. i.
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 18500 €

Dosiahnuté výsledky:

Cieľom bolo pripraviť tzv. duálny vysokoentropický materiál, ktorý pozostáva z 60% vysokoentropického karbidu (Hf-Zr-Ta-Nb-Ti)C a 40% vysokoentropického boridu (Hf-Zr-Ta-Nb-Ti)B₂. Tento materiál bol pripravený boro/karbo-termickou redukciovou zmesou oxidov jednotlivých prechodných kovov. Bol študovaný vplyv podmienok redukciovania na čistotu, fázové zloženie a mriežkové parametre výslednej kryštálovej štruktúry. Následne sa študoval vplyv podmienok spekania s cieľom získať plne hutný materiál. V nasledujúcej etape riešenia projektu budú hodnotené mechanické vlastnosti tohto materiálu.

Publikácie:

KOMBAMUTHU, Vasanthakumar - HOSSEINI, Naser - ÜNSAL, Hakan - ZHUKOVA, Inga - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - TATARKO, Peter. Effect of SiC particulates/whiskers reinforcements on properties of spark plasma sintered high entropy borides (Ti_{0.2}Zr_{0.2}Hf_{0.2}Nb_{0.2}Ta_{0.2})B₂ synthesized using boro/carbothermal reduction. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 525. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

KOVALČÍKOVÁ, Alexandra - IVOR, Michal - TATARKO, Peter - ÜNSAL, Hakan - SEDLÁK, Richard - MEDVEĎ, Dávid - DUSZOVÁ, Annamária - BACZEK, Elżbieta - PODSIADLO, Marcin - DUSZA, Ján. Oxidation behaviour and thermal shock resistance of ceramic composites based on carbides and borides. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. 6/11. (VEGA 2/0118/20: Vysokoteplotné vlastnosti boridových MeB₂ (Me=Ti, Zr, Hf) keramických kompozitných materiálov. International ceramics congress: CIMTEC 2022)

18.) Bentonit: strategická surovina Slovenska - inovatívne hodnotenie zdrojov a ich kvality pre jej efektívne využívanie (*Bentonite: Slovak strategic raw material - Innovative assessment of bentonite quality and origin for its efficient use*)

Zodpovedný riešiteľ: Jana Madejová
Trvanie projektu: 1.1.2021 / 30.6.2025
Evidenčné číslo projektu: APVV-20-0175
Organizácia je koordinátorom projektu: nie
Koordinátor: Univerzita Komenského v Bratislave
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 8000 €

Dosiahnuté výsledky:

V roku 2022 prebiehala charakterizácia vzoriek odobratých zo slovenských ložísk bentonitov. Pre stanovenie kationovej výmennej kapacity (KVK) bentonitov sa využila metóda Cu-trien, ktorá je založená na výmene farebného komplexu Cu(II)-trietylén-tetramín za vymeniteľné katióny, kompenzujúce záporný náboj vrstiev montmorillonitu (Mt). Následne bol v supernatante metódou UV-Vis spektroskopie meraný nadbytok komplexu Cu-trien a vypočítaná hodnota KVK. Analyzovaných bolo 30 vzoriek, predovšetkým z ložiska Lutilla, ale aj iných ložísk ako Kopernica, Jelšový potok a podobne. Výsledné hodnoty KVK boli porovnané s obsahom montmorillonitu (Mt) vo vzorkách. Na základe KVK sa vzorky rozdelili do dvoch skupín. 1) Vzorky s KVK v rozmedzí 95 – 125 cmol (+) / kg, ide o vzorky s obsahom Mt v rozmedzí 65 – 80 hm.%. 2) Vzorky s KVK v rozmedzí 27 - 57 cmol (+) / kg obsahovali len 20 až 35 hm.% Mt a ako hlavnú fázu mali opál-C alebo opál-CT.

IČ spektroskopie sa využila najmä na získanie informácií o minerálnom zložení bentonitov. Porovnávali sa spektrá hrubozrnnej (<0.25 mm) a jemnozrnnej (<0.25 μm) frakcie z lokalít Bartošová lehôtka (BL), Stará Kremnička (STK), Lutilla (LUI), Jelšový potok (JP) a Kopernica (KOP). Vo vzorke BL bol popri Mt identifikovaný aj kaolinit a cristobalit. Po seprácii nebol pozorovaný rozdiel medzi spektrami. Vo vzorkách z lokality STK bol popri Mt pozorovaný aj kaolinit, množstvo ktorého v jemnozrnnej frakcii stúplo. Vzorky obsahovali aj cristobalit, v hrubozrnnej frakcii ho bolo viac ako v jemnozrnnej. Vo vzorkách z lokalít JP a KOP dominoval Mt a malé množstvo kaolinitu. Vo vzorkách bolo prítomné aj amorfné SiO₂, ktorého množstvo sa po separácii znížilo.

19.) Bionanokompozitné materiály na báze vrstevnatých silikátov (*Bionanocomposites based on organic polycations and layered silicates*)

Zodpovedný riešiteľ: Jana Madejová
Trvanie projektu: 1.7.2020 / 30.6.2024
Evidenčné číslo projektu: APVV-19-0487
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 32300 €

Dosiahnuté výsledky:

V roku 2022 sa dokončili experimentálne práce a DFT výpočty série organoílov z Na-Mt Kunipia a neiónového polyméru poly(2-metyl-2-oxazolin) a kationového polyméru poly(etylénimínu). Po spracovaní výsledkov sa pripravila publikácia „Madejová et al.: Advanced materials based on montmorillonite modified with poly(ethylenimine) and poly(2-methyl-2-oxazoline): Experimental and DFT study”, ktorá bola prijatá do časopisu Colloids and Surfaces A: Physicochemical and Engineering Aspects a bude publikovaná v januári 2023. Pripravili sa nové série vzoriek smektitov modifikovaných poly(etyl-oxazolinom) a poly(propyl-oxazolinom), ich charakterizácia je naplánovaná na rok 2023. Pokračoval aj výskum zameraný na kompozitné materiály pripravené zo smektitov modifikovaných alkylamóniovými a alkyfosfóniovými kationmi a fluorescenčnými farbivami.

PRIBUS, Marek** - BUDZÁK, Šimon - PRIBUSOVÁ SLUŠNÁ, Lenka - ŠIMONOVÁ, Tímea - JANKOVIČ, Ľuboš - MÉSZÁROS, R. - BUJDÁK, Juraj. Luminescence of Reichardt's dye in polyelectrolyte-modified saponite colloids. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, vol. 642, p. 128663-1-128663-10. (2021: 5.518 - IF, Q2 - JCR, 0.758 - SJR, Q2 - SJR).

BOHÁČ, Peter** - BUDZÁK, Šimon - PLANETOVÁ, Viktória - KLEMENT, Róbert - BUJDÁK, Juraj. Adsorption-

induced fluorescence of pseudoisocyanine monomers in systems with layered silicates. In *Journal of Physical Chemistry C*, 2022, vol. 126, no. 40, p. 17255-17265. (2021: 4.177 - IF, Q2 - JCR, 1.103 - SJR, Q1 - SJR, karentované - CCC).

Konferencie:

MADEJOVÁ, Jana - BARLOG, Martin - SLANÝ, Michal - JANKOVIČ, Ľuboš. Characterization of montmorillonite modified with polyoxazoline. In *MECC '20/22. 10th Jubilee Mid-European Clay Conference*, Kliczków, Poland, September 11-15, 2022: Book of abstracts. - Kraków, Poland, 2022, p. 62. ISBN 978-83-65955-60-9. Type: AFG
MADEJOVÁ, Jana** - BARLOG, Martin - JANKOVIČ, Ľuboš - SLANÝ, Michal - PÁLKOVÁ, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In *AIPEA - XVII International Clay Conference - ICC 2022*, 25-29 July 2022, Istanbul, Turkey: Scientific Research Abstracts. Turkey, 2022, p. 164

20.) Vývoj nástrojov pre pokročilú analýzu a predikciu parametrov spektier EPR, NMR a pNMR komplexných systémov obsahujúcich ťažké prvky (*Development of tools for advanced analysis and prediction of parameters of EPR, NMR and pNMR spectra of complex systems containing heavy elements*)

Zodpovedný riešiteľ: Oľga Malkin
Trvanie projektu: 1.7.2020 / 30.6.2024
Evidenčné číslo projektu: APVV-19-0516
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských 0
inštitúcií:
Čerpané financie: APVV: 37500 €

Dosiahnuté výsledky:

KONEČNÝ, Lukáš** - VÍCHA, Jan - KOMOROVSKÝ, Stanislav - RUUD, Kenneth - REPISKÝ, Michal**. Accurate X-ray absorption spectra near L- and M-edges from relativistic four-component damped response time-dependent density functional theory. In *Inorganic Chemistry*, 2022, vol. 61, no. 2, p. 830-846. (2021: 5.436 - IF, Q1 - JCR, 1.121 - SJR, Q1 - SJR). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c02412> Typ: ADCA

CUYACOT, Ben Joseph R. - NOVOTNÝ, Jan - BERGER, Raphael J. F. - KOMOROVSKÝ, Stanislav** - MAREK, Radek**. Relativistic spin-orbit electronegativity and the chemical bond between a heavy atom and a light atom. In *Chemistry - A European Journal*, 2022, vol. 28, no. 24, art. no. e202200277. (2021: 5.020 - IF, Q2 - JCR, 1.343 - SJR, Q1 - SJR). ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202200277> Typ: ADCA

MIŠENKOVÁ, Debora - LEMKEN, Florian - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Oľga - KOMOROVSKÝ, Stanislav**. The four-component DFT method for the calculation of the EPR g-tensor using a restricted magnetically balanced basis and London atomic orbitals. In *Journal of Chemical Physics*, 2022, vol. 157, no. 16, art. no. 164114. (2021: 4.304 - IF, Q1 - JCR, 1.103 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0103928> Typ: ADCA

MALKINA, Oľga** - LEMKEN, Florian - ASHER, James Richard - HIERO, Jean-Cyrille - BÜHL, Michael - MALKIN, Vladimír**. Transmission of spin-polarization by pi-orbitals: an approach to assessing its effect on NMR spin-spin coupling and EPR hyperfine structure. In *Physical Chemistry Chemical Physics*, 2022, vol. 24, no. 32, p. 24039-24049. (2021: 3.945 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d2cp03295c> Typ: ADCA

MALKINA, Oľga** - HIERO, Jean-Cyrille** - MALKIN, Vladimír. Distinguishing "through-space" from "through-bonds" contribution in indirect nuclear spin-spin coupling: General approaches applied to complex JPP and JPSe scalar couplings. In Journal of the American Chemical Society, 2022, vol. 144, no. 24, p. 10768-10784. (2021: 16.383 - IF, Q1 - JCR, 5.728 - SJR, Q1 - SJR). ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.2c01637> Typ: ADCA

HRICOVÍNI, Michal – ASHER, James Richard – HRICOVÍNI, Miloš**. A study of the photochemical behaviour and relaxation mechanisms of anti-syn isomerisation around quinazolinone -N-N=bonds. In RSC Advances, 2022, vol. 12, no. 42, p. 27442-27452. (2021: 4.036 – IF, Q2 – JCR, 0.667 – SJR, Q1 – SJR). ISSN 2046-2069. Dostupné na: <https://doi.org/10.1039/d2ra04529j> Typ: ADCA

21.) Povrchy polymérov modifikované vrstevnatými nanočasticami a fotoaktívnymi farbivami (*Polymer surfaces modified with layered nanoparticles and photoactive dyes*)

Zodpovedný riešiteľ: Helena Pálková
Trvanie projektu: 1.7.2019 / 30.6.2023
Evidenčné číslo projektu: APVV-18-0075
Organizácia je koordinátorom projektu: nie
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 24000 €

Dosiahnuté výsledky:

Výskum prebiehal dvomi hlavnými smermi: Jedným bola optimalizácia vlastností prekursorov v podobe hybridných koloidov farbív a silikátov. Našli sa nové systémy, v ktorých došlo k významnému zvýšeniu fotoaktivity adsorbovaných farbív. Ďalším smerom bolo rozpracovanie metód prípravy kompozitov s fotoaktívnym povrchom a fotodezinfekčnými vlastnosťami. Výsledky viedli k vzniku niekoľkých publikácií, boli súčasťou dvoch pozvaných prednášok a viacerých výstupov na konferenciách.

SKOURA, Eva - BOHÁČ, Peter - BARLOG, Martin - PÁLKOVÁ, Helena - DANKO, Martin - ŠURKA, Juraj - MAUTNER, Andreas - BUJDÁK, Juraj**. Modified polymer surfaces: Thin films of silicate composites via polycaprolactone melt fusion. In International Journal of Molecular Sciences, 2022, vol. 23, art. no. 9166, [16] p. (2021: 6.208 - IF, Q1 - JCR, 1.176 - SJR, Q1 - SJR, karentované - CCC).

BOHÁČ, Peter** - BUDZÁK, Šimon - PLANETOVÁ, Viktória - KLEMENT, Róbert - BUJDÁK, Juraj. Adsorption-induced fluorescence of pseudoisocyanine monomers in systems with layered silicates. In Journal of Physical Chemistry C, 2022, vol. 126, no. 40, p. 17255-17265. (2021: 4.177 - IF, Q2 - JCR, 1.103 - SJR, Q1 - SJR, karentované - CCC).

PRIBUS, Marek** - BUDZÁK, Šimon - PRIBUSOVÁ SLUŠNÁ, Lenka - ŠIMONOVÁ, Tímea - JANKOVIČ, Ľuboš - MÉSZÁROS, R. - BUJDÁK, Juraj. Luminescence of Reichardt's dye in polyelectrolyte-modified saponite colloids. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, vol. 642, p. 128663-1-128663-10. (2021: 5.518 - IF, Q2 - JCR, 0.758 - SJR, Q2 - SJR).

22.) Smerom k nanotechnológiám využívajúcim bioaktívne častice/molekuly v boji proti mikrobiálnym biofilmom (*Towards nanotechnologies using bioactive particles/molecules in the fight against microbial biofilms*)

Zodpovedný riešiteľ: Helena Pálková
Trvanie projektu: 1.7.2022 / 30.6.2026
Evidenčné číslo projektu: APVV-21-0302
Organizácia je koordinátorom projektu: nie

Koordinátor: Prírodovedecká fakulta UK
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 5000 €

Dosiahnuté výsledky:

Zo strany nášho ústavu sa rozpracovávali postupy a stratégie príprav hybridných systémov tvoriacich základ prípravy komplexných materiálov s antimikrobiálnymi vlastnosťami. Hlavné zameranie bolo na koloidné systémy fotosenzibilizátorov a vrstevnatých silikátov.

23.) Pokročilé materiály s eutektickou mikroštruktúrou pre vysokoteplotné funkčné aplikácie
(Advanced materials with eutectic microstructure for high temperature and functional applications)

Zodpovedný riešiteľ: Anna Prnová
Trvanie projektu: 1.7.2020 / 30.6.2024
Evidenčné číslo projektu: APVV-19-0010
Organizácia je koordinátorom projektu: nie
Koordinátor: Trenčianska univerzita Alexandra Dubčeka v Trenčíne
Počet spoluriešiteľských inštitúcií: 1 - Slovensko: 1
Čerpané financie: APVV: 18709 €

Dosiahnuté výsledky:

Boli pripravené materiály s eutektickou mikroštruktúrou a zaujímavými mechanickými vlastnosťami v systémoch Al₂O₃-Y₂O₃ a Al₂O₃-Y₂O₃-ZrO₂ Hv=17,3GPa a KIC=4.33 MPa.m^{1/2}, vyvinula sa metodika mletia prekurzorových praskov pred spekaním, čím sa vylepšila homogenita keramických materiálov a získali sa materiály s vyšším stupňom zhutnenia a nižšou pórovitosťou. Ďalšie vylepšenia sa týkali odstraňovania uhlíkových zvyškov z práškov po sol-gel metóde, čo tiež prispelo k zníženiu počtu defektov vo výsledných keramických materiáloch. Pripravili sa systémy s eutektickým zložením a s YbAG zložením v systéme Al₂O₃-Yb₂O₃, dopované Er a u týchto materiálov boli získané zaujímavé PL vlastnosti. Ďalej bolo skúmané teplotné správanie a kinetika kryštalizácie systémov s rôznym obsahom YAG a ?- Al₂O₃ a vplyv pomeru týchto dvoch fáz na teploty spekania, rýchlosť a mechanizmus kryštalizácie a na výsledné mechanické a vysokoteplotné vlastnosti. Publikácie:

• PRNOVÁ, Anna** – VALÚCHOVÁ, Jana – MICHÁLKOVÁ, Monika – PECUŠOVÁ, Beáta – PARCHOVIANSKÝ, Milan – ŠVANČÁREK, Peter – HANZEL, Ondrej – POUCHLÝ, Václav – GALUSEK, Dušan. Pressure assisted sintering of Al₂O₃-Y₂O₃ glass microspheres: sintering conditions, grain size, and mechanical properties of sintered ceramics. In Pure and Applied Chemistry, 2022, vol. 94, no. 2, p. 157-167. (2021: 2.320 – IF, Q3 – JCR, 0.440 – SJR, Q2 – SJR). ISSN 0033-4545. Dostupné na: <https://doi.org/10.1515/pac-2021-0705> Typ: ADCA

• PRNOVÁ, Anna – VALÚCHOVÁ, Jana – MAJEROVÁ, Melinda – PARCHOVIANSKÝ, Milan – MICHÁLKOVÁ, Monika – GALUSEK, Dušan. Vplyv prídavku ZrO₂ na mechanické vlastnosti Al₂O₃-Y₂O₃ keramiky. In 24. ročník konferencie o špeciálnych anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. – Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 69-73. ISBN 978-80-7560-419-4. (VEGA č. 2/0028/21 : Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities. VEGA č. 2/0141/21 : SQUID magnetometry of nano- and microparticles, nanocolloids and nanostructures in new applications in the field of biomedicine and materials research associated with the development of new measurement methods and procedures. Konferencie o špeciálnych anorganických pigmentech a práškových materiáloch) Typ: AFA

• PRNOVÁ, Anna – VALÚCHOVÁ, Jana – PECUŠOVÁ, Beáta – PLŠKO, Alfonz – GALUSEK, Dušan. Termická analýza skiel v systéme Al₂O₃-Y₂O₃-RE₂O₃ (RE = Er, Nd). In TAS 2022. Termooanalytický seminár, 27. leden 2022, Pardubice, Česká republika : Sborník příspěvků. Recenzenti: Petra Šulcová, Václav Slovák. – Pardubice, Česká republika : Česká společnost chemická, z.s., 2022, p. 44-49. ISBN 978-80-88307-09-9. Typ: AFC

• PRNOVÁ, Anna – MICHÁLIK, Jakub – PECUŠOVÁ, Beáta – KLEMENT, Róbert – VALÚCHOVÁ, Jana – GALUSEK, Dušan. Study of thermal and PL properties of Er³⁺ doped aluminate glasses, impact of crystallinity on PL properties. In Czech Chemical Society Symposium Series, 2022, roč. 20, č. 4, s. 270. ISSN 2336-7202. Typ: AFG

• VALÚCHOVÁ, Jana – PRNOVÁ, Anna – PARCHOVIANSKÝ, Milan – GALUSEK, Dušan. Použitie kombinácie DSC termickej analýzy a vysokoteplotnej RTG práškovej difrakčnej analýzy pri skúmaní teplotného správania sa sklenených mikrogulôčok v systéme Al₂O₃-Y₂O₃-ZrO₂. In 24. ročník konferencie o špeciálnych anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. – Pardubice, Czech republic: Univerzita Pardubice, 2022, p. 80-85. ISBN 978-80-7560-419-

pochopenia vplyvu prísad na báze vzácnych zemín na mechanické vlastnosti a hlavne oxidačnú/ablačnú odolnosť materiálov ZrB₂-SiC. Bol jasne pochopený a vysvetlený rozdiel medzi vplyvom prísady vo forme oxidov (Yb₂O₃) a zirkoničtanov (Yb₂Zr₂O₇) na odpovedajúce vysokoteplotné vlastnosti materiálov. Prítomnosť prvku vzácnej zeminy (Yb) stabilizovala vysokoteplotnú modifikáciu oxidačnej vrstvy ZrO₂ (t-ZrO₂), čo malo vplyv na výrazné zvýšenie odolnosti proti oxidácii/ablácii.

Súčasne sa študovalo využitie prvkov vzácnych zemín na zlepšenie vlastností materiálov SiC, ako aj na spájanie kompozitných materiálov Cf/SiC.

Publikácie:

YU, Teng - XU, Jie - ZHOU, Xiaobing - TATARKO, Peter - LI, Yang - HUANG, Zhengren - HUANG, Qing. Near-seamless joining of Cf/SiC composites using Y₃Si₂C₂ via electric field-assisted sintering technique. In Journal of Advanced Ceramics, 2022, vol. 11, no. 8, p. 1196–1207. (2021: 11.534 - IF, Q1 - JCR, 1.558 - SJR, Q1 - SJR). ISSN 2226-4108. Dostupné na: <https://doi.org/10.1007/s40145-022-0593-3> Typ: ADCA

XU, Jie - ZHOU, Xiaobing - ZOU, Shunrui - CHEN, Lu - TATARKO, Peter - DAI, Jian-Qing - HUANG, Zhengren - HUANG, Qing. Low-temperature Pr₃Si₂C₂-assisted liquid-phase sintering of SiC with improved thermal conductivity. In Journal of the American Ceramic Society, 2022, vol. 105, no. 9, p. 5576-5584. (2021: 4.186 - IF, Q1 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.18520> Typ: ADCA

ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - CHLUP, Zdeněk - DLOUHÝ, Ivo - TATARKO, Peter. Ablation resistance of ZrB₂-SiC composites prepared by reaction sintering of ZrSi₂, B₄C, C, and rare-earth based additives. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 138. (KERAMIK/CERAMICS 2022. DKG Annual Meeting) Typ: GII

ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - CHLUP, Zdeněk - DLOUHÝ, Ivo - TATARKO, Peter. Ablation behavior of rare-earth modified ZrB₂-SiC composites prepared by reaction sintering of ZrSi₂, B₄C and C. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 568. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

TATARKO, Peter - ÜNSAL, Hakan - MATOVIC, Branko - CHLUP, Zdeněk - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - DLOUHÝ, Ivo - ŠAJGALÍK, Pavol. The effect of rare-earth based additives on the ablation resistance of ZrB₂-SiC composites. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 178. (ISC'22 International Symposium on Characterization) Typ: GII

TATARKO, Peter - ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - MATOVIC, Branko - CHLUP, Zdeněk - TATARKOVÁ, Monika - HIČÁK, Michal - DLOUHÝ, Ivo. Ultra-high temperature ceramics with improved ablation resistance. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 18. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions) Typ: GII

KOVÁČOVÁ, Zuzana - OROVČÍK, Ľubomír - BAČA, Ľuboš - TATARKO, Peter - DOBROČKA, Edmund - KITZMANTEL, M. - NEUBAUER, Erich. Oxidation performance of ZrB₂-SiC composites tested above 2000 °C and effect of Y-containing additives. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 526. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022) Typ: AFG

26.) Vývoj bioaktívneho nitridu kremičitého modifikáciou povrchovej vrstvy (*Development of the bioactive silicon nitride by surface modification*)

Zodpovedný riešiteľ:	Monika Tatarková
Trvanie projektu:	1.7.2019 / 31.12.2022
Evidenčné číslo projektu:	APPV-18-0542
Organizácia je	áno
koordinátorom projektu:	
Koordinátor:	Ústav anorganickej chémie SAV, v. v. i.

Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: APVV: 57450 €

Dosiahnuté výsledky:

Povrch hutných materiálov na báze nitridu kremičitého spekaných s rôznymi bioaktívnymi prísadami bol oplotnený rôznymi technikami s cieľom zistiť vplyv povrchovej modifikácie na viabilitu buniek. Bola definovaná technika, ktorou sa podarilo z pôvodne inertného povrchu nitridu kremičitého vytvoriť bioaktívny povrch. Taktiež bola overená cytotoxicita pripravených materiálov a boli vybrané materiály, ktoré sú pre ľudský organizmus bezpečné. Na vybraných materiáloch boli uskutočnené mechanické skúšky, ktoré potvrdili, že mechanické vlastnosti pripravených bioaktívnych Si₃N₄ materiálov sú porovnateľné s vlastnosťami inertného komerčne pripraveného nitridu kremičitého.

Publikácie:

HIČÁK, Michal - MEDVECKÝ, Ľubomír - HNATKO, Miroslav - ŠTULAJTEROVÁ, Radoslava - GIRETOVÁ, Mária - TATARKOVÁ, Monika - LENCĚŠ, Zoltán - ŠAJGALÍK, Pavol. Porous silicon nitride-based drug delivery carrier. In International Journal of Applied Ceramic Technology, 2022, vol. 19, no. 2, p. 882-892. (2021: 2.328 - IF, Q2 - JCR, 0.388 - SJR, Q2 - SJR). ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13908> Typ: ADCA

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - TATARKOVÁ, Monika. Effect of oxyacetylene flame to form a porous layer in silicon nitride. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. Bratislava, Slovak Republic: Institute of Inorganic Chemistry SAS, 2022, p. 31-36. ISBN 978-80-973578-1-8. Typ: AFD

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - HNATKO, Miroslav - LABUDOVÁ, Martina - TATARKOVÁ, Monika. Modification of the surface layer of silicon nitride using oxyacetylene flame. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 454. ISBN 978-83-942760-9-6. Typ: AFG

DE LA TORRE OLVERA, Guido - HIČÁK, Michal - LABUDOVÁ, Martina - HNATKO, Miroslav - TATARKOVÁ, Monika. Development of silicon nitride with bioactive surface using oxyacetylene flame. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey: Abstract Book. Turkey: Evcin ArGe, 2022, p. 199. Typ: GII

TATARKOVÁ, Monika - TATARKO, Peter - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - ŠAJGALÍK, Pavol. Boron nitride nanosheets as a reinforcement for silicon nitride. In Ceramics in Europe 2022: Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 252. ISBN 978-83-942760-9-6. Typ: AFG

Programy: SASPRO

27.) Výskum ternárnych fáz v systémoch M-R-F (kde M – Li-Cs, (NH₄); R – Sc, Y, Ln) pre vývoj nových multifunkčných materiálov (*Investigation of the ternary phases in the systems M-R-F (where M – Li-Cs, (NH₄); R – Sc, Y, Ln) for the development of new multifunctional materials*)

Zodpovedný riešiteľ: Miroslav Boča
Trvanie projektu: 1.9.2022 / 31.8.2024
Evidenčné číslo projektu: 1171/01/02
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 1558 €

Dosiahnuté výsledky:

Projekt je zameraný na ternárne fluoridy v systémoch M-R-F (kde M – Li-Cs, (NH₄); R – Sc, Y, Ln) s dôrazom na teplotné riadené fázové premeny v tuhom stave a fotoluminiscenčné vlastnosti zlúčenín s ďalším stanovením zákonitostí štruktúrnych premien a zmien vlastností, v závislosti od obsahu M a R. Hlavnou výzvou takéhoto druhu výskumu je, že

je ťažké predpovedať, ktorá zlúčenina je schopná takýchto transformácií, kým sa nezískajú všetky experimentálne údaje. Bola uskutočnená syntéza zlúčenín NaRF₄ (R = La, Nd, Sm, Gd) z roztokov a reakcií v tuhom stave s ďalšou fázovou, štruktúrnou a termálnou analýzou získaných vzoriek. Počas výskumného pobytu v Inštitúte Maxa Plancka pre chemickú fyziku pevných látok (Dražďany, Nemecko) bola vykonaná štruktúrna analýza aj pre iné vzorky fluorolantanoidov, napr. LiGdF₄, zlúčeniny systémov {Na,Rb,(NH₄)}-Sc-F.

28.) Umelé fotosyntetické systémy založené na fotoaktívnych molekulách a kvantových bodoch (*Artificial photosynthetic systems based on photoactive molecules and quantum dots*)

Zodpovedný riešiteľ: Juraj Bujdák
Trvanie projektu: 1.9.2022 / 31.8.2025
Evidenčné číslo projektu: 1258/02/02
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 4327 €

Dosiahnuté výsledky:

Cieľom projektu SASPRO2 1258/02/02 je príprava umelého fotosyntetického systému schopného vo vodnom prostredí a pri správne nastavených podmienkach generovať reaktívne druhy kyslíka, alebo rozkladať vodu za účelom produkcie H₂. V počiatočnom kroku je naplánovaná syntéza nových fotoaktívnych látok a následná optimalizácia prípravy monovrstiev fotoaktívnych molekúl enkapsulovaných medzi dvoma vrstvami syntetického hektoritu. V rámci optimalizácie sa testuje kompozícia binárnych rozpúšťadiel a ich vplyv na priebeh iónovej výmeny medzi fotoaktívnymi molekulami a sodnými kationmi nachádzajúcich sa v medzivrství hektoritu.

Programy: Štrukturálne fondy EÚ Výskum a inovácie

29.) Vybudovanie centra pre využitie pokročilých materiálov SAV (*Building a centre for advanced material application SAS*)

Zodpovedný riešiteľ: Miroslav Hnatko
Zodpovedný riešiteľ v organizácii SAV: Miroslav Hnatko
Trvanie projektu: 1.7.2019 / 30.6.2023
Evidenčné číslo projektu: NFP313020T081
Organizácia je koordinátorom projektu: nie
Koordinátor: Centrum pre využitie pokročilých materiálov SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 6 - Slovensko: 6
Čerpané financie: MŠ: 42516 €

Dosiahnuté výsledky:

Programy: DoktoGranty

30.) Photoactive Surfaces of Polymer Nanocomposites with Antimicrobial Properties (*Photoactive Surfaces of Polymer Nanocomposites with Antimicrobial Properties*)

Zodpovedný riešiteľ: Eva Skoura

Trvanie projektu: 1.1.2022 / 31.12.2022
Evidenčné číslo projektu: APP0331
Organizácia je áno
koordinátorom projektu:
Koordinátor: Ústav anorganickej chémie SAV, v. v. i.
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: SAV: 2000 €

Dosiahnuté výsledky:

Vypracovala sa metóda modifikácie povrchu polyméru v podobe tenkého filmu nanokompozit s vrstevnatým silikátom. Princípom je difúzia roztaveného polyméru do mikrometrovej vrstvy organoílu. Pripravili sa materiály kompozitu funkcionalizovaného metylénovou modrou. Výsledky sú súčasťou publikácie, tvoria významnú časť výsledkov doktorandského štúdia a sú dôležité v pokračujúcom výskume. Jedným z výstupov je začiatok úspešnej spolupráce s pracoviskom na Univerzite vo Viedni.

Programy: Európsky fond regionálneho rozvoja (EFRR)

31.) Rozvoj a podpora výskumno – vývojových aktivít Centra pre testovanie kvality a diagnostiku materiálov v oblastiach špecializácie RIS3 SK (ITMS2014+: 313011W442) (Rozvoj a podpora výskumno – vývojových aktivít Centra pre testovanie kvality a diagnostiku materiálov v oblastiach špecializácie RIS3 SK)

Zodpovedný riešiteľ: Dušan Galusek
Trvanie projektu: 1.1.2019 / 30.6.2023
Evidenčné číslo projektu: ITMS2014+ 313011W442
Organizácia je nie
koordinátorom projektu:
Koordinátor: Trenčianska univerzita Alexandra Dubčeka v Trenčíne
Počet spoluriešiteľských inštitúcií: 4 - Slovensko: 4
Čerpané financie: ŠF: 38621 €

Dosiahnuté výsledky:

Spekanie v kvapalnej fáze sa po prvýkrát využilo na výrobu vysoko hutnej Y2O3 keramiky pre optické aplikácie. Študovali sa účinky prídavku Al2O3 a SiO2, do 1 % hm., ako prísad na podporu spekania, na spekanie nanopráškov Y2O3. Optimalizácia koncentrácie aditíva a režimu spekania umožnila výrobu vysoko hutného translucenčného Y2O3 pri teplote spekania o 100-200°C nižšej v porovnaní s komerčnými výrobnými procesmi. Pripravené materiály vykazovali jemnozrnnú mikroštruktúru.

Y2O3 keramika s vysokou hustotou sa tiež pripravila pridaním oxidov prechodných kovov ako prísad na podporu spekania metódou SPS. Dopovanie aj malým množstvom dvojmocných prechodných kovov výrazne podporuje zhutňovanie Y2O3; v dôsledku závislosti chémie defektov na rozpustnosti prvkov prechodných kovov si ich vplyv na Y2O3 vyžaduje ďalšie štúdium. Ióny prechodných kovov pôsobia ako opticky aktívne prvky v štruktúre Y2O3 a sú použiteľné pri modifikácii optických vlastností Y2O3.

Ďalšia aktivita projektu sa zamerala na výrobu vrstevnatých materiálov žiarovým lisovaním pások 8Y-FSZ, 10Y-FSZ a MgAl2O4 pripravených metódou tape casting; vrstevnaté kompozity sa zhutňovali metódou SPS, aby sa získali transparentné/translucenčné materiály. Rozdiel v koeficiente teplotnej rozťažnosti vrstiev má za následok vznik striedavých tlakových a ťahových napätí. Mechanické vlastnosti keramického laminátu, najmä odolnosť voči tvorbe trhlín, sa zlepšujú vytváraním povrchového tlakového napätia v štruktúrach 8Y-FSZ/MgAl2O4.

1. Aliasghar Najafzadehkhoe, Ali Talimian, Jaroslav Sedláček, Maksym Lisnichuk, Pavol Hvizdoš, Dušan Galusek, Translucent yttrium oxide ceramics from low-density green bodies shaped by uniaxial pressing, <https://doi.org/10.1016/j.jeurceramsoc.2022.04.036>.

2. Aliasghar Najafzadehkhoe, Ali Talimian, Václav Pouchlý, Ángela Gallardo-López, Rosalia Poyato Galan, Robert Klement, Karel Maca, Felipe Gutiérrez-Mora, Dušan Galusek, Densification behaviour and optical properties of nano-Y2O3 ceramics doped with bivalent transition metals, Ceramics in Europe 2022, Krakow, PL, 10-14.7.2022, ISBN 978-83-942760-9-6.

3. Aliasghar Najafzadehkhoe, Ali Talimian, Vladimír Girman, Tomáš Spusta, Pavol Hvizdoš, Karel Maca, Dušan

Galusek, Liquid Phase Sintering of Yttrium Oxide, FunGlass School 2022/1, Čertov, June 1- 3, ISBN 978-80-8075-976-6.

4. Ali Talimian, Dušan Galusek, Aliasghar Najafzadehkhoei, Vaclav Pouchly, Karel Maca, Improving Mechanical Properties of Laminated Transparent Ceramics by Engineering Residual Stress Profiles, CIMTEC 2022, 25-29.6.2022, Perugia, ITA, <http://2022.cimtec-congress.org/abstracts/15th-international-ceramics-congress>.

Príloha C - Publikačná činnosť organizácie (generovaná z ARL)

ACB Vysokoškolské učebnice vydané v domácich vydavateľstvách

- ACB01 JAKUBČINOVÁ, Jana - FESZTEROVÁ, Melánia - SILLIKOVÁ, Veronika. Organická chémia v otázkach a úlohách. Recenzenti: Malgorzata Kowalska, Pavel Bobáľ. 1. vyd. Nitra, Slovenská republika : Univerzita Konštantína Filozofa v Nitre, 2022. 213 s. ISBN 978-80-558-1952-5
- ACB02 OSACKÝ, Marek - ŠUCHA, Vladimír - UHLÍK, Peter - MAJZLAN, Juraj - MADEJOVÁ, Jana - KOMADEL, Peter - ŠIMON, Peter - BUJDÁK, Juraj. Laboratórne postupy úpravy a metódy výskumu nerudných surovín. 1. vyd. Bratislava : Univerzita Komenského v Bratislave, 2021. 158 s. ISBN 978-80-223-5285-7

ADCA Vedecké práce v zahraničných karentovaných časopisoch – impaktovaných

- ADCA01 AFSHARIMANI, Nasima** - TALIMIAN, Ali - MERINO, Emilia - DURÁN, Alicia - CASTRO, Yolanda - GALUSEK, Dušan. Improving corrosion protection of Mg alloys (AZ31B) using graphene-based hybrid coatings. In International Journal of Applied Glass Science, 2022, vol. 13, no. 1, pp. 143-150. (2021: 2.087 - IF, Q2 - JCR, 0.378 - SJR, Q3 - SJR). ISSN 2041-1286. Dostupné na: <https://doi.org/10.1111/ijag.16539>
- ADCA02 BABU, Singarapu - BALDA, Rolindes - FERNÁNDEZ, Joaquín - SEDANO, Mercedes - GORNI, Giulio - CABRAL, A. A. - GALUSEK, Dušan - DURÁN, Alicia - PASCUAL, María Jesús**. KLaF4:Nd3+-doped transparent glass-ceramics processed by spark plasma sintering. In Journal of Non-Crystalline Solids, 2022, vol. 578, art. no. 121289. (2021: 4.458 - IF, Q1 - JCR, 0.751 - SJR, Q1 - SJR). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrsol.2021.121289>
- ADCA03 BIJALWAN, V. - PRAJZLER, V. - ERHART, Jiří - VELÁZQUEZ, José Joaquín - GALUSEK, Dušan - MACA, Karel**. Rapid pressureless sintering of barium titanate-based piezoceramics and their electromechanical harvesting performance. In Journal of the American Ceramic Society, 2022, vol. 105, no. 11, p. 6886-6897. (2021: 4.186 - IF, Q1 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.18602>
- ADCA04 BOHÁČ, Peter** - BUDZÁK, Šimon - PLANETOVÁ, Viktória - KLEMENT, Róbert - BUJDÁK, Juraj. Adsorption-induced fluorescence of pseudoisocyanine monomers in systems with layered silicates. In Journal of Physical Chemistry C, 2022, vol. 126, no. 40, p. 17255-17265. (2021: 4.177 - IF, Q2 - JCR, 1.103 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.2c03497>
- ADCA05 BYSTRICKÝ, Roman - TIWARI, S.K. - HUTÁR, Peter - VANČO, L. - SÝKORA, M.**. Synthesis of sulfide perovskites by sulfurization with boron sulfides. In Inorganic Chemistry, 2022, vol. 61, p. 18823-18827. (2021: 5.436 - IF, Q1 - JCR, 1.121 - SJR, Q1 - SJR). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.2c03200>
- ADCA06 CUYACOT, Ben Joseph R. - NOVOTNÝ, Jan - BERGER, Raphael J. F. - KOMOROVSKÝ, Stanislav** - MAREK, Radek**. Relativistic spin-orbit electronegativity and the chemical bond between a heavy atom and a light atom. In Chemistry - A European Journal, 2022, vol. 28, no. 24, art. no. e202200277. (2021: 5.020 - IF, Q2 - JCR, 1.343 - SJR, Q1 - SJR). ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202200277>
- ADCA07 DASAN, Arish** - KRAXNER, Jozef - GRIGOLATO, Luca - SAVIO, Gianpaolo - ELSAYED, Hamada - GALUSEK, Dušan - BERNARDO, Enrico**. 3D printing of hierarchically porous lattice structures based on akermanite glass microspheres and reactive silicone binder. In Journal of Functional Biomaterials, 2022, vol. 13, no. 1, p. 8-1-8-11. (2021: 4.901 - IF, Q2 - JCR, 0.875 - SJR, Q2 - SJR). ISSN 2079-4983. Dostupné na: <https://doi.org/10.3390/jfb13010008>
- ADCA08 DIB, Eddy** - REY, Jérôme - VICENTE, Aurelie - KUNJIR, Shrikant - AWALA, Hussein - KOMATY, Sarah - DAOULI, Ayoub - BUČKO, Tomáš - EL SIBLANI, Hussein - BEDARD, Robert - BRICKER, Jeffery - GILSON, Jean-Pierre - BADAWI, Michael - MINTOVA, Svetlana**. Access to sodalite cages in ion-exchanged nanosized FAU zeolites probed by hyperpolarized ¹²⁹Xe NMR and DFT calculations. In Microporous and Mesoporous Materials, 2022, vol. 338, p. 111965-1-111965-7. (2021: 5.876 - IF, Q1 - JCR, 0.924 - SJR, Q1 - SJR). ISSN 1387-1811. Dostupné na: <https://doi.org/10.1016/j.micromeso.2022.111965>
- ADCA09 DRDLÍKOVÁ, K.** - KLEMENT, Róbert - SVOBODA, Jiří - DRDLÍK, Daniel - GALUSEK, Dušan - MACA, Karel. Luminescent Dy³⁺ and Dy³⁺/Cr³⁺ doped transparent Al₂O₃ ceramics: Microstructure and optical properties. In Journal of the European Ceramic Society, 2022, vol. 42, no. 10, p. 4343-4352. (2021: 6.364 - IF, Q1 - JCR, 1.107 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2022.03.047>

- ADCA10 DUDKO, Volodymyr - ROSENFELDT, Sabine - SIEGEL, Renée - SENKER, Jürgen - MATEJDES, Marián** - BREU, Josef**. Delamination by repulsive osmotic swelling of synthetic Na-hectorite with variable charge in binary dimethyl sulfoxide-water mixtures. In *Langmuir*, 2022, vol. 38, no. 35, p. 10781-10790. (2021: 4.331 - IF, Q2 - JCR, 0.884 - SJR, Q1 - SJR). ISSN 0743-7463. Dostupné na: <https://doi.org/10.1021/acs.langmuir.2c00965>
- ADCA11 ELSAYED, Hamada** - BERTOLINI, Rachele - BIASETTO, Lisa - OŽÓG, Paulina - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico**. Novel functional glass-ceramic coatings on titanium substrates from glass powders and reactive silicone binders. In *Polymers : Open Access Polymer Science Journal*, 2022, vol. 14, no. 19, art. no. 4016. (2021: 4.967 - IF, Q1 - JCR, 0.726 - SJR, Q1 - SJR). ISSN 2073-4360. Dostupné na: <https://doi.org/10.3390/polym14194016>
- ADCA12 FERUS, Martin** - KNÍŽEK, Antonín - PETERA, Lukáš - PASTOREK, Adam - HRNČÍŘOVÁ, Jana - JANKOVIČ, Ľuboš - IVANEK, Ondřej - ŠPONER, Jiří - KŘIVKOVÁ, Anna - SAEIDFIROZEH, Homa - CIVIŠ, Svatopluk - CHATZITHEODORIDIS, Elias - MRÁZIKOVÁ, Klaudia - NEJDL, Lukáš - SAIJA, Franz - ŠPONER, Judit E. - CASSONE, Guiseppe**. Formamide-based post-impact thermal prebiotic synthesis in simulated craters: Intermediates, products and mechanism. In *Frontiers in Astronomy and Space Sciences*, 2022, vol. 9, art. no. 882145. (2021: 4.055 - IF, Q2 - JCR, 0.947 - SJR, Q1 - SJR). ISSN 2296-987X. Dostupné na: <https://doi.org/10.3389/fspas.2022.882145>
- ADCA13 GALUSKOVÁ, Dagmar** - KAŇKOVÁ, Hana - ŠVANČÁRKOVÁ, Anna - BUŇOVÁ, Lenka - GALUSEK, Dušan. Direct monitoring of immediate release of Zn from zinc-doped bioactive glass. In *International Journal of Applied Glass Science*, 2022, vol. 13, no. 3, p. 476-483. (2021: 2.087 - IF, Q2 - JCR, 0.378 - SJR, Q3 - SJR). ISSN 2041-1286. Dostupné na: <https://doi.org/10.1111/ijag.16568>
- ADCA14 GEŠVANDTNEROVÁ, Monika** - BUČKO, Tomáš** - RAYBAUD, Pascal** - CHIZALLET, Céline**. Monomolecular mechanisms of isobutanol conversion to butenes catalyzed by acidic zeolites: Alcohol isomerization as a key to the production of linear butenes. In *Journal of Catalysis*, 2022, vol. 413, p. 786-802. (2021: 8.047 - IF, Q1 - JCR, 1.936 - SJR, Q1 - SJR). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2022.07.025>
- ADCA15 GIANNI, Eleni** - MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - POSPÍŠIL, Miroslav. How herbicides like atrazine and diuron interact with the spiral halloysite structure. In *Journal of Environmental Chemical Engineering*, 2022, vol. 10, no. 6, art. no. 108785. (2021: 7.968 - IF, Q1 - JCR, 1.042 - SJR, Q1 - SJR). ISSN 2213-3437. Dostupné na: <https://doi.org/10.1016/j.jece.2022.108785>
- ADCA16 HERZOG, Basile - DA SILVA, Mauricio Chagas - CASIER, Bastien - BADAWI, Michael - PASCALE, Fabien - BUČKO, Tomáš** - LEBÈGUE, Sébastien - ROCCA, Dario**. Assessing the accuracy of machine learning thermodynamic perturbation theory: Density functional theory and beyond. In *Journal of Chemical Theory and Computation*, 2022, vol. 18, no. 3, p. 1382-1394. (2021: 6.578 - IF, Q1 - JCR, 1.619 - SJR, Q1 - SJR). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c01034>
- ADCA17 HIČÁK, Michal - MEDVECKÝ, Ľubomír - HNATKO, Miroslav - ŠTULAJTEROVÁ, Radoslava - GIRETOVÁ, Mária - TATARKOVÁ, Monika - LENCÉŠ, Zoltán** - ŠAJGALÍK, Pavol. Porous silicon nitride-based drug delivery carrier. In *International Journal of Applied Ceramic Technology*, 2022, vol. 19, no. 2, p. 882-892. (2021: 2.328 - IF, Q2 - JCR, 0.388 - SJR, Q2 - SJR). ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13908>
- ADCA18 HRICOVÍNI, Michal - ASHER, James Richard - HRICOVÍNI, Miloš**. A study of the photochemical behaviour and relaxation mechanisms of anti-syn isomerisation around quinazolinone -N=N=bonds. In *RSC Advances*, 2022, vol. 12, no. 42, p. 27442-27452. (2021: 4.036 - IF, Q2 - JCR, 0.667 - SJR, Q1 - SJR). ISSN 2046-2069. Dostupné na: <https://doi.org/10.1039/d2ra04529j>
- ADCA19 CHROMČÍKOVÁ, Mária** - SVOBODA, Roman - PECUŠOVÁ, Beáta - HRUŠKA, Branislav - HUJOVÁ, Miroslava - NOWICKA, Aleksandra - LIŠKA, Marek. Effect of lithium doping on the glass transition behavior of the Bioglass 45S5. In *Journal of Non-Crystalline Solids*, 2022, vol. 594, p. 121797-1-121797-7. (2021: 4.458 - IF, Q1 - JCR, 0.751 - SJR, Q1 - SJR). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2022.121797>
- ADCA20 CHROMČÍKOVÁ, Mária** - SVOBODA, Roman - HRUŠKA, Branislav - OSIPOV, Armenak A. - OSIPOVA, Leyla M. - PECUŠOVÁ, Beáta - NOWICKA, Aleksandra - LIŠKA, Marek. Thermokinetic behavior of the Al2O3-PbO-B2O3 glasses. In *Journal of Non-Crystalline Solids*, 2022, vol. 576, p. 121230-1-121230-11. (2021: 4.458 - IF, Q1 - JCR, 0.751 - SJR, Q1 - SJR). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2021.121230>
- ADCA21 JAYKHEDKAR, Namrata - BYSTRICKÝ, Roman - SÝKORA, Milan - BUČKO, Tomáš**. Understanding the structure-band gap relationship in SrZrS3 at elevated temperatures: a detailed NPT MD study. In *Journal of Materials Chemistry C*, 2022, vol. 10, no. 33, p. 12032-12042. (2021: 8.067 - IF, Q1 - JCR, 1.608 - SJR, Q1 - SJR). ISSN 2050-7526. Dostupné na: <https://doi.org/10.1039/d2tc02253b>
- ADCA22 KITYK, Anna** - PROTSENKO, V. - DANILOV, F.I. - BOBROVA, Lina - HNATKO, Miroslav -

- PAVLÍK, Viliam - ŠOLTÝS, Ján - LABUDOVÁ, Martina - RUSKOVÁ, Magdaléna - PANGALLO, Domenico. Design of Ti-6Al-4V alloy surface properties by galvanostatic electrochemical treatment in a deep eutectic solvent Ethaline. In Surface & Coatings Technology, 2022, vol. 429, art. no. 127936. (2021: 4.865 - IF, Q2 - JCR, 0.922 - SJR, Q1 - SJR). ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2021.127936> (ITMS2014+: 313021T081 : Vybudovanie Centra pre využitie pokročilých materiálov Slovenskej akadémie vied)
- ADCA23 KODĚRA, Peter** - MAJZLAN, Juraj - POLLOK, Kilian - KIEFER, Stefan - ŠIMKO, František - SCHOLTZOVA, Eva - LUPTÁKOVÁ, Jarmila - CAWTHORN, Grant. Ferrous hydroxychlorides hibbingite [$\gamma\text{-Fe}_2(\text{OH})_3\text{Cl}$] and parahibbingite [$\beta\text{-Fe}_2(\text{OH})_3\text{Cl}$] as a concealed sink of Cl and H₂O in ultrabasic and granitic systems. In American Mineralogist, 2022, vol. 107, no. 5, p. 826-841. (2021: 3.066 - IF, Q2 - JCR, 1.246 - SJR, Q1 - SJR). ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2022-8011>
- ADCA24 KONEČNÝ, Lukáš** - VÍCHA, Jan - KOMOROVSKÝ, Stanislav - RUUD, Kenneth - REPISKÝ, Michal**. Accurate X-ray absorption spectra near L- and M-edges from relativistic four-component damped response time-dependent density functional theory. In Inorganic Chemistry, 2022, vol. 61, no. 2, p. 830-846. (2021: 5.436 - IF, Q1 - JCR, 1.121 - SJR, Q1 - SJR). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c02412>
- ADCA25 KORENKO, Michal** - KRISHNAN, Dhiya - ŠIMKO, František - AMBROVÁ, Marta - SZATMÁRY, Lóránt. Electrical conductivity of the molten systems of (LiF - CaF₂)eut - NdF₃ and (LiF - NaF)eut - NdF₃. In Journal of Molecular Liquids, 2022, vol. 365, art. no. 120012. (2021: 6.633 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2022.120012>
- ADCA26 KRAXNER, Jozef** - ELSAYED, Hamada - DASAN, Arish - HUJOVÁ, Miroslava - MICHÁLKOVÁ, Monika - MICHÁLEK, Martin - BERNARDO, Enrico - GALUSEK, Dušan. Additive manufacturing of Ca-Mg silicate scaffolds supported by flame-synthesized glass microspheres. In Ceramics International, 2022, vol. 48, no. 7, p. 9107-9113. (2021: 5.532 - IF, Q1 - JCR, 0.887 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.12.095>
- ADCA27 KUBÍKOVÁ, Blanka** - MLYNÁRIKOVÁ, Jarmila - MATSELKO, Oksana - MIKŠÍKOVÁ, Eva - NETRIOVÁ, Zuzana - VASKOVÁ, Zuzana - BOČA, Miroslav. Phase equilibria and volume properties of (LiF-MgF₂)eut-LnF₃ (Ln = Sm, Gd, Nd) molten systems. In Journal of Molecular Liquids, 2022, vol. 353, p. 118694-1-118694-10. (2021: 6.633 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2022.118694>
- ADCA28 KURTULDU, Fatih* - MUTLU, Nurshen* - BOCCACCINI, Aldo** - GALUSEK, Dušan**. Gallium containing bioactive materials: A review of anticancer, antibacterial, and osteogenic properties. In Bioactive materials, 2022, vol. 17, p. 125-146. (2021: 16.874 - IF, Q1 - JCR, 2.281 - SJR, Q1 - SJR). ISSN 2452-199X. Dostupné na: <https://doi.org/10.1016/j.bioactmat.2021.12.034>
- ADCA29 KUZIELOVÁ, Eva** - SLANÝ, Michal - ŽEMLIČKA, Matúš - MÁSLKO, Jiří - ŠILER, Pavel - PALOU, Martin T. Thermal stability of the phases developed at high-pressure hydrothermal curing of class G cement with different pozzolanic and latent hydraulic additives. In Journal of Thermal Analysis and Calorimetry, 2022, vol. 147, no. 18, p. 9891-9902. (2021: 4.755 - IF, Q1 - JCR, 0.639 - SJR, Q2 - SJR). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-022-11254-2> (APVV-19-0490 : Výskum a vývoj mnohohozložkových cementových zmesí pre špeciálne konštrukčné materiály. APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtloch. VEGA 2/0032/21 : Štúdium degradácie viaczložkových cementových materiálov v dôsledku uhlíkovej korózie v podmienkach simulujúcich geotermálne vrty. VEGA 2/0017/21 : Materiálové zloženie a vlastnosti samozhutniteľných ťažkých betónov)
- ADCA30 LASHEN, Zahraa M. - SHAMS, Mohamed S. - EL-SHESHTAWY, Hamdy S. - SLANÝ, Michal - ANTONIADIS, Vasileios - YANG, Xing - SHARMA, Gaurav - RINKLEBE, Jörg - SHAHEEN, Sabry M.** - ELMAHDY, Shimaa M. Remediation of Cd and Cu contaminated water and soil using novel nanomaterials derived from sugar beet processing- and clay brick factory-solid wastes. In Journal of Hazardous Materials, 2022, vol. 428, p. 128205-1-128205-11. (2021: 14.224 - IF, Q1 - JCR, 1.991 - SJR, Q1 - SJR). ISSN 0304-3894. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2021.128205>
- ADCA31 MA, Liwa - ZHANG, Shu - ZHANG, Xiaolong - DONG, Sanbao - YU, Tao - SLANÝ, Michal** - CHEN, Gang**. Enhanced aquathermolysis of heavy oil catalysed by bentonite supported Fe(III) complex in the presence of ethanol. In Journal of Chemical Technology and Biotechnology, 2022, vol. 97, no. 5, p. 1128-1137. (2021: 3.709 - IF, Q2 - JCR, 0.625 - SJR, Q1 - SJR). ISSN 0268-2575. Dostupné na: <https://doi.org/10.1002/jctb.6997>
- ADCA32 MAHMOUD, Mokhtar** - KRAXNER, Jozef - KAŇKOVÁ, Hana - HUJOVÁ, Miroslava - CHEN, Si - GALUSEK, Dušan - BERNARDO, Enrico. Porous glass microspheres from alkali-activated fiber

- glass waste. In *Materials*, 2022, vol. 15, no. 3, p. 1043-1-1043-9. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15031043>
- ADCA33 MAHMOUD, Mokhtar - KRAXNER, Jozef - ELSAYED, Hamada - GALUSEK, Dušan - BERNARDO, Enrico**. Advanced dye sorbents from combined stereolithography 3D printing and alkali activation on pharmaceutical glass waste. In *Materials*, 2022, vol. 15, no. 19, art. no. 6823. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15196823>
- ADCA34 MACHÁČEK, Jan** - GEDEON, Ondrej - LIŠKA, Marek. Comparison of silica and sodium trisilicate glass surfaces created by moulding and breaking - MD simulation. In *Ceramics-Silikáty*, 2022, vol. 66, no. 1, p. 43-53. (2021: 1.010 - IF, Q3 - JCR, 0.289 - SJR, Q3 - SJR). ISSN 0862-5468. Dostupné na: <https://doi.org/10.13168/cs.2021.0051>
- ADCA35 MAJEROVÁ, Melinda** - ŠKRÁTEK, Martin - HRUŠKA, Branislav - DVUREČENSKI, Andrej - ŠVANČÁREK, Peter - PRNOVÁ, Anna - CIGÁŇ, Alexander - KRAXNER, Jozef - MAŇKA, Ján - GALUSEK, Dušan. Structure and magnetic properties of Ni-doped gehlenite glass microspheres. In *Journal of Magnetism and Magnetic Materials*, 2022, vol. 546, art. no. 168859. (2021: 3.097 - IF, Q3 - JCR, 0.606 - SJR, Q2 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0304-8853. Dostupné na: <https://doi.org/10.1016/j.jmmm.2021.168859> (VEGA č. 2/0141/21 : SQUID magnetometry of nano- and microparticles, nanocolloids and nanostructures in new applications in the field of biomedicine and materials research associated with the development of new measurement methods and procedures. VEGA č. 2/0028/21 : Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities)
- ADCA36 MAJEROVÁ, Melinda** - ŠKRÁTEK, Martin - HRUŠKA, B. - DVUREČENSKI, Andrej - ŠVANČÁREK, Peter - PRNOVÁ, Anna - KRAXNER, J. - BRUNEEL, E. - DE BUYSSER, K. - GALUSEK, Dušan. Structure and magnetic properties of Bi-doped calcium aluminosilicate glass microspheres. In *Pure and Applied Chemistry*, 2022, vol. 94, no. 2, p. 197-213. (2021: 2.320 - IF, Q3 - JCR, 0.440 - SJR, Q2 - SJR). ISSN 0033-4545. Dostupné na: <https://doi.org/10.1515/pac-2021-0703> (VEGA č. 2/0028/21 : Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities. VEGA č. 2/0141/21 : SQUID magnetometry of nano- and microparticles, nanocolloids and nanostructures in new applications in the field of biomedicine and materials research associated with the development of new measurement methods and procedures)
- ADCA37 MALKINA, Olga** - HIERO, Jean-Cyrille** - MALKIN, Vladimír. Distinguishing "through-space" from "through-bonds" contribution in indirect nuclear spin-spin coupling: General approaches applied to complex JPP and JPSe scalar couplings. In *Journal of the American Chemical Society*, 2022, vol. 144, no. 24, p. 10768-10784. (2021: 16.383 - IF, Q1 - JCR, 5.728 - SJR, Q1 - SJR). ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.2c01637>
- ADCA38 MALKINA, Olga** - LEMKEN, Florian - ASHER, James Richard - HIERO, Jean-Cyrille - BÜHL, Michael - MALKIN, Vladimír**. Transmission of spin-polarization by pi-orbitals: an approach to assessing its effect on NMR spin-spin coupling and EPR hyperfine structure. In *Physical Chemistry Chemical Physics*, 2022, vol. 24, no. 32, p. 24039-24049. (2021: 3.945 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d2cp03295c>
- ADCA39 MEDEIROS MELO, Tatiane** - SCHAUERTE, Marina - BLUHM, Annika - SLANÝ, Michal - PALLER, Michael - BOLAN, Nanthi - BOSCH, Julian - FRITZSCHE, Andreas - RINKLEBE, Jörg**. Ecotoxicological effects of per- and polyfluoroalkyl substances (PFAS) and of a new PFAS adsorbing organoclay to immobilize PFAS in soils on earthworms and plants. In *Journal of Hazardous Materials*, 2022, vol. 433, p. 128771-1-128771-11. (2021: 14.224 - IF, Q1 - JCR, 1.991 - SJR, Q1 - SJR). ISSN 0304-3894. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2022.128771>
- ADCA40 MEHMOOD, Sajid* - AHMED, Waqas* - ALATALO, Juha - MAHMOOD, Mohsin - IMTIAZ, Muhammad - DITTA, Allah - ALI, Esmat F. - ABDELRAHMAN, Hamada - SLANÝ, Michal - ANTONIADIS, Vasileios - RINKLEBE, Jörg* - SHAHEEN, Sabry M.** - LI, Weidong**. Herbal plants- and rice straw-derived biochars reduced metal mobilization in fishpond sediments and improved their potential as fertilizers. In *Science of the Total Environment*, 2022, vol. 826, p. 154043-1-154043-13. (2021: 10.753 - IF, Q1 - JCR, 1.806 - SJR, Q1 - SJR). ISSN 0048-9697. Dostupné na: <https://doi.org/10.1016/j.scitotenv.2022.154043>
- ADCA41 MEHTA, Akansha** - KARBOUCHE, Khaoula - KRAXNER, Jozef - ELSAYED, Hamada - GALUSEK, Dušan - BERNARDO, Enrico. Upcycling of pharmaceutical glass into highly porous ceramics: From foams to membranes. In *Materials*, 2022, vol. 15, no. 11, art. no. 3784. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15113784>
- ADCA42 MEHTA, Akansha** - COLUSSO, Elena - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico. Waste-derived glass as a precursor for inorganic polymers: From foams to photocatalytic destructors for dye removal. In *Ceramics International*, 2022, vol. 48, no. 12, p. 27631-27636. (2021: 5.532 - IF, Q1 - JCR, 0.887 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2022.06.059>

- ADCA43 MIŠENKOVÁ, Debora - LEMKEN, Florian - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Olga - KOMOROVSKÝ, Stanislav**. The four-component DFT method for the calculation of the EPR g-tensor using a restricted magnetically balanced basis and London atomic orbitals. In Journal of Chemical Physics, 2022, vol. 157, no. 16, art. no. 164114. (2021: 4.304 - IF, Q1 - JCR, 1.103 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0103928>
- ADCA44 MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva. Immobilisation of diuron herbicide employing smectites. In Materials Today Communications, 2022, vol. 31, p. 103252-1-103252-12. (2021: 3.662 - IF, Q3 - JCR, 0.623 - SJR, Q2 - SJR). ISSN 2352-4928. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2022.103252>
- ADCA45 MOSAS, Kamalan Kirubakaran Amirtharaj** - CHANDRASEKAR, Ashok Raja** - DASAN, Arish - PAKSERESHT, Amirhossein - GALUSEK, Dušan**. Recent advancements in materials and coatings for biomedical implants. In Gels : open access journal, 2022, vol. 8, no. 5, p. 323-1-323-35. (2021: 4.432 - IF, Q1 - JCR, 0.693 - SJR, Q1 - SJR). ISSN 2310-2861. Dostupné na: <https://doi.org/10.3390/gels8050323>
- ADCA46 MUTLU, Nurshen - LIVERANI, Liliana - KURTULDU, Fatih - GALUSEK, Dušan** - BOCCACCINI, Aldo**. Zinc improves antibacterial, anti-inflammatory and cell motility activity of chitosan for wound healing applications. In International Journal of Biological Macromolecules, 2022, vol. 213, p. 845-857. (2021: 8.025 - IF, Q1 - JCR, 1.100 - SJR, Q1 - SJR). ISSN 0141-8130. Dostupné na: <https://doi.org/10.1016/j.ijbiomac.2022.05.199>
- ADCA47 NAJAFZADEHKHOEE, Aliasghar** - TALIMIAN, Ali - SEDLÁČEK, Jaroslav - LISNICHUK, Maksym - HVIZDOŠ, Pavol - GALUSEK, Dušan. Translucent yttrium oxide ceramics from low-density green bodies shaped by uniaxial pressing. In Journal of the European Ceramic Society, 2022, vol. 42, no. 11, p. 4623-4630. (2021: 6.364 - IF, Q1 - JCR, 1.107 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2022.04.036>
- ADCA48 OŽÓG, Paulina - ELSAYED, Hamada - GRIGOLATO, Luca - SAVIO, Gianpaolo - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico**. Engineering of silicone-based blends for the masked stereolithography of biosilicate/carbon composite scaffolds. In Journal of the European Ceramic Society, 2022, vol. 42, no. 13, p. 6192-6198. (2021: 6.364 - IF, Q1 - JCR, 1.107 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2022.06.057>
- ADCA49 PARCHOVIANSKÁ, Ivana** - PARCHOVIANSKÝ, Milan - PECUŠOVÁ, Beáta - HANZEL, Ondrej - PAKSERESHT, Amirhossein. Synthesis and characterization of fluorite-type La₂Ce₂O₇ plasma sprayable powder for TBCs application. In Materials, 2022, vol. 15, no. 11, art. no. 4007. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15114007>
- ADCA50 PARCHOVIANSKÝ, Milan** - PARCHOVIANSKÁ, Ivana - HANZEL, Ondrej - NETRIOVÁ, Zuzana - PAKSERESHT, Amirhossein. Phase evaluation, mechanical properties and thermal behavior of hot-pressed LC-YSZ composites for TBC applications. In Materials, 2022, vol. 15, no. 8, art. no. 2839. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15082839>
- ADCA51 PAVLÍK, Viliam** - BOČA, Miroslav - KITYK, Anna. Accelerated corrosion testing in molten fluoride salts: Effect of additives and the crucible material. In Corrosion Science, 2022, vol. 195, p. 110011-1-110011-15. (2021: 7.720 - IF, Q1 - JCR, 1.694 - SJR, Q1 - SJR). ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.110011>
- ADCA52 PRIBUS, Marek** - BUDZÁK, Šimon - PRIBUSOVÁ SLUŠNÁ, Lenka - ŠIMONOVÁ, Tímea - JANKOVIČ, Ľuboš - MÉSZÁROS, R. - BUJDAK, Juraj. Luminescence of Reichardt's dye in polyelectrolyte-modified saponite colloids. In Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, vol. 642, p. 128663-1-128663-10. (2021: 5.518 - IF, Q2 - JCR, 0.758 - SJR, Q2 - SJR). ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2022.128663>
- ADCA53 PRIBUS, Marek** - ORLIK, Marek - VALENT, Ivan**. From classical metal-catalyzed homogeneous oscillators to an uncatalyzed version of the Belousov-Zhabotinsky reaction: a review. In Reaction Kinetics, Mechanisms and Catalysis, 2022, vol. 135, no. 3, p. 1211-1260. (2021: 1.843 - IF, Q4 - JCR, 0.335 - SJR, Q3 - SJR). ISSN 1878-5204. Dostupné na: <https://doi.org/10.1007/s11144-021-02151-0> (APVV-14-0103 : Mechanochémia polovodičových nanokryštálov: od minerálov k materiálom a liekom)
- ADCA54 PRNOVÁ, Anna** - VALÚCHOVÁ, Jana - MICHÁLKOVÁ, Monika - PECUŠOVÁ, Beáta - PARCHOVIANSKÝ, Milan - ŠVANČÁREK, Peter - HANZEL, Ondrej - POUCHLÝ, Václav - GALUSEK, Dušan. Pressure assisted sintering of Al₂O₃-Y₂O₃ glass microspheres: sintering conditions, grain size, and mechanical properties of sintered ceramics. In Pure and Applied Chemistry, 2022, vol. 94, no. 2, p. 157-167. (2021: 2.320 - IF, Q3 - JCR, 0.440 - SJR, Q2 - SJR). ISSN 0033-4545. Dostupné na: <https://doi.org/10.1515/pac-2021-0705>
- ADCA55 SAID, Halima - BUČKO, Tomáš**. Effect of molecular impurities on properties of clean and

- cesiated Mo(001) surface: A DFT study of the low coverage limit. In *Applied Surface Science*, 2022, vol. 605, p. 154706-1-154706-12. (2021: 7.392 - IF, Q1 - JCR, 1.147 - SJR, Q1 - SJR). ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2022.154706>
- ADCA56 SCHWEITZER, Jean-Marc** - REY, Jérôme - BIGNAUD, Charles - BUČKO, Tomáš - RAYBAUD, Pascal - MOSCOVICI-MIRANDE, Mailys - PORTEJOIE, Frederic - JAMES, Christophe - BOUCHY, Christophe - CHIZALLET, Céline**. Multiscale modeling as a tool for the prediction of catalytic performances: The case of n-heptane hydroconversion in a large-pore zeolite. In *ACS Catalysis*, 2022, vol. 12, no. 2, p. 1068-1081. (2021: 13.700 - IF, Q1 - JCR, 4.202 - SJR, Q1 - SJR). ISSN 2155-5435. Dostupné na: <https://doi.org/10.1021/acscatal.1c04707>
- ADCA57 SILLIKOVÁ, Veronika** - JAKUBČINOVÁ, Jana - HORNÍK, Miroslav - GOMOLA, Igor - DULANSKÁ, Silvia. Determination of caesium-137 in water samples using modified carbon microfibers. In *Journal of Radioanalytical and Nuclear Chemistry-Articles*, 2022, vol. 331, no. 3, p. 1275-1284. (2021: 1.754 - IF, Q2 - JCR, 0.364 - SJR, Q2 - SJR). ISSN 0236-5731. Dostupné na: <https://doi.org/10.1007/s10967-022-08212-5>
- ADCA58 SKOURA, Eva - BOHÁČ, Peter - BARLOG, Martin - PÁLKOVÁ, Helena - DANKO, Martin - ŠURKA, Juraj - MAUTNER, Andreas - BUJDÁK, Juraj**. Modified polymer surfaces: Thin films of silicate composites via polycaprolactone melt fusion. In *International Journal of Molecular Sciences*, 2022, vol. 23, art. no. 9166, [16] p. (2021: 6.208 - IF, Q1 - JCR, 1.176 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents). ISSN 1422-0067. Dostupné na: <https://doi.org/10.3390/ijms23169166>
- ADCA59 SLANÝ, Michal** - JANKOVIČ, Ľuboš - MADEJOVÁ, Jana. Near-IR study of the impact of alkyl-ammonium and -phosphonium cations on the hydration of montmorillonite. In *Journal of Molecular Structure*, 2022, vol. 1256, p. 132568-1-132568-10. (2021: 3.841 - IF, Q3 - JCR, 0.480 - SJR, Q2 - SJR). ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2022.132568>
- ADCA60 ŠAJGALÍK, Pavol - CHENG, Zanlin - HAN, X. - ZHANG, Chengyu - HANZEL, Ondrej** - SEDLÁČEK, Jaroslav - ORLOVA, Tatyana - ZHUKOVSKIY, Maksym - MUKASYAN, Alexander S. Ultra-high creep resistant SiC ceramics prepared by rapid hot pressing. In *Journal of the European Ceramic Society*, 2022, vol. 42, no. 3, p. 820-829. (2021: 6.364 - IF, Q1 - JCR, 1.107 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.11.010>
- ADCA61 ŠKORŇA, Peter** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Hexavalent chromium adsorption by tetrahexylphosphonium modified beidellite clay. In *Applied Clay Science*, 2022, vol. 228, p. 106623-1-106623-8. (2021: 5.907 - IF, Q1 - JCR, 0.958 - SJR, Q1 - SJR). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2022.106623>
- ADCA62 ŠUTEKOVÁ, Monika - BARLOG, Martin - ŠIMONOVÁ, Tímea - KLEMENT, Róbert - RICHARDS, Gary J. - HILL, Jonathan P. - LABUTA, Jan - BUJDÁK, Juraj**. Pyrazinacene luminescence enhancement by heat-activated surface adsorption and de-aggregation in a saponite colloidal system. In *Applied Clay Science*, 2022, vol. 218, p. 106413-1-106413-8. (2021: 5.907 - IF, Q1 - JCR, 0.958 - SJR, Q1 - SJR). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2022.106413>
- ADCA63 ŠVANČÁREK, Peter** - KLEMENT, Róbert** - WISNIEWSKI, Wolfgang - PARCHOVIANSKÝ, Milan - GALUSEK, Dušan. ZnO-doped Y2O3 ceramic: A prospective warm white light fluorescent material. In *Journal of the European Ceramic Society*, 2022, vol. 42, no. 5, p. 2478-2486. (2021: 6.364 - IF, Q1 - JCR, 1.107 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.12.054>
- ADCA64 ŠVANČÁRKOVÁ, Anna - GALUSKOVÁ, Dagmar - NOWICKA, Aleksandra - PÁLKOVÁ, Helena - GALUSEK, Dušan**. Effect of corrosive media on the chemical and mechanical resistance of IPS e.max(R) CAD based Li2Si2O5 glass-ceramics. In *Materials*, 2022, vol. 15, no. 1, p. 365-1-365-14. (2021: 3.748 - IF, Q1 - JCR, 0.604 - SJR, Q2 - SJR). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma15010365>
- ADCA65 TANG, Ying** - SLANÝ, Michal* - YANG, Ying - LI, Shaoying - QIN, Fanglin - ZHAO, Yifei - ZHANG, Zhifang - ZHANG, Li. Highly active Mg-Al hydrotalcite for efficient O-methylation of phenol with DMC based on soft colloidal templates. In *Journal of Chemical Technology and Biotechnology*, 2022, vol. 97, no. 1, p. 79-86. (2021: 3.709 - IF, Q2 - JCR, 0.625 - SJR, Q1 - SJR). ISSN 0268-2575. Dostupné na: <https://doi.org/10.1002/jctb.6912>
- ADCA66 TRENTIN, Andressa** - PAKSERESHT, Amirhossein - DURÁN, Alicia - CASTRO, Yolanda - GALUSEK, Dušan. Electrochemical characterization of polymeric coatings for corrosion protection: A review of advances and perspectives. In *Polymers : Open Access Polymer Science Journal*, 2022, vol. 14, no. 12, p. 2306-1-2306-28. (2021: 4.967 - IF, Q1 - JCR, 0.726 - SJR, Q1 - SJR). ISSN 2073-4360. Dostupné na: <https://doi.org/10.3390/polym14122306>
- ADCA67 VALÁŠKOVÁ, Marta** - KOČÍ, Kamila - MADEJOVÁ, Jana - MATĚJOVÁ, Lenka - PAVLOVSKÝ, Jiří - TRINDADE BARROCAS, Beatriz - KLEMENCOVÁ, Kateřina. alpha-Fe2O3 nanoparticles/iron-containing vermiculite composites: Structural, textural, optical and photocatalytic

- ADCA68 properties. In Minerals-Basel, 2022, vol. 12, no. 5, p. 607-1-607-17. (2021: 2.818 - IF, Q2 - JCR, 0.522 - SJR, Q2 - SJR). ISSN 2075-163X. Dostupné na: <https://doi.org/10.3390/min12050607>
VALÁŠKOVÁ, Marta** - KLIKA, Zdeněk - VLČEK, Jozef - MATEJOVÁ, Lenka - TOPINKOVÁ, Michaela - PÁLKOVÁ, Helena - MADEJOVÁ, Jana. Alkali-activated metakaolins: Mineral chemistry and quantitative mineral composition. In Minerals-Basel, 2022, vol. 12, no. 11, art. no. 1342. (2021: 2.818 - IF, Q2 - JCR, 0.522 - SJR, Q2 - SJR). ISSN 2075-163X. Dostupné na: <https://doi.org/10.3390/min12111342>
- ADCA69 VARGAS-OSORIO, Zulema** - KLOTSCHAN, Artem* - ARANGO-OSPINA, Marcela* - PINEIRO, Yolanda - LIVERANI, Liliana - RIVAS, José - MICHÁLEK, Martin - GALUSEK, Dušan - BOCCACCINI, Aldo**. Effect of glycerol and H₃PO₄ on the bioactivity and degradability of rod-like SBA-15 particles with active surface for bone tissue engineering applications. In Microporous and Mesoporous Materials, 2022, vol. 329, p. 111543-1-111543-12. (2021: 5.876 - IF, Q1 - JCR, 0.924 - SJR, Q1 - SJR). ISSN 1387-1811. Dostupné na: <https://doi.org/10.1016/j.micromeso.2021.111543>
- ADCA70 WU, Yuman - ZHANG, Jie - DONG, Sanbao - LI, Yongfei - SLANÝ, Michal** - CHEN, Gang**. Use of betaine-based gel and its potential application in enhanced oil recovery. In Gels : open access journal, 2022, vol. 8, no. 6, art. no. 351. (2021: 4.432 - IF, Q1 - JCR, 0.693 - SJR, Q1 - SJR). ISSN 2310-2861. Dostupné na: <https://doi.org/10.3390/gels8060351>
- ADCA71 XING, Jing - WANG, Jianxu** - KINDER, Christoph E.S. - YANG, Xing - SLANÝ, Michal - WANG, Bing - SONG, Hocheol - SHAHEEN, Sabry M. - LEINWEBER, Peter - RINKLEBE, Jörg**. Rice hull biochar enhances the mobilization and methylation of mercury in a soil under changing redox conditions: Implication for Hg risks management in paddy fields. In Environment International, 2022, vol. 168, no., p. 107484-1-107484-11. (2021: 13.352 - IF, Q1 - JCR, 2.757 - SJR, Q1 - SJR). ISSN 0160-4120. Dostupné na: <https://doi.org/10.1016/j.envint.2022.107484>
- ADCA72 XU, Jie - ZHOU, Xiaobing** - ZOU, Shunrui - CHEN, Lu - TATARKO, Peter - DAI, Jian-Qing** - HUANG, Zhengren - HUANG, Qing. Low-temperature Pr₃Si₂C₂-assisted liquid-phase sintering of SiC with improved thermal conductivity. In Journal of the American Ceramic Society, 2022, vol. 105, no. 9, p. 5576-5584. (2021: 4.186 - IF, Q1 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.18520>
- ADCA73 YU, Teng* - XU, Jie* - ZHOU, Xiaobing** - TATARKO, Peter - LI, Yang - HUANG, Zhengren - HUANG, Qing. Near-seamless joining of Cf/SiC composites using Y₃Si₂C₂ via electric field-assisted sintering technique. In Journal of Advanced Ceramics, 2022, vol. 11, no. 8, p. 1196-1207. (2021: 11.534 - IF, Q1 - JCR, 1.558 - SJR, Q1 - SJR). ISSN 2226-4108. Dostupné na: <https://doi.org/10.1007/s40145-022-0593-3>
- ADCA74 ZHANG, Bowen - WANG, Qingchen - WEI, Yan - WEI, Wei - DU, Weichao - ZHANG, Jie - CHEN, Gang** - SLANÝ, Michal**. Preparation and swelling inhibition of mixed metal hydroxide to bentonite clay. In Minerals-Basel, 2022, vol. 12, no. 4, p. 459-1-459-12. (2021: 2.818 - IF, Q2 - JCR, 0.522 - SJR, Q2 - SJR). ISSN 2075-163X. Dostupné na: <https://doi.org/10.3390/min12040459>
- ADCA75 ZHANG, Bowen - WANG, Qingchen - DU, Weichao - LI, Yongfei - ZHANG, Jianqing - ZHANG, Jie - MATEJDES, Marián - SLANÝ, Michal** - CHEN, Gang**. Multi-mixed metal hydroxide as a strong stratigraphic nanoclay inhibitor in solid-free drilling fluid. In Nanomaterials-Basel, 2022, vol. 12, no. 21, p. 3863-1-3863-16. (2021: 5.719 - IF, Q1 - JCR, 0.839 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 2079-4991. Dostupné na: <https://doi.org/10.3390/nano12213863>
- ADCA76 ZHOU, Zhichao - SLANÝ, Michal** - KUZIELOVÁ, Eva - ZHANG, Wangyuan - MA, Liwa - DONG, Sanbao - ZHANG, Jie - CHEN, Gang**. Influence of reservoir minerals and ethanol on catalytic aquathermolysis of heavy oil. In Fuel, 2022, vol. 307, p. 121871-1-121871-11. (2021: 8.035 - IF, Q1 - JCR, 1.514 - SJR, Q1 - SJR). ISSN 0016-2361. Dostupné na: <https://doi.org/10.1016/j.fuel.2021.121871>
- ADCA77 ŽITŇAN, Michal** - MÜLLER, L. - ZUB, Karina - SCHUBERT, U. S. - GALUSEK, Dušan - WONDRAČZEK, L. Low-cost inkjet printing of thin-film mullite structures. In International Journal of Applied Glass Science, 2022, vol. 13, no. 1, p. 135-142. (2021: 2.087 - IF, Q2 - JCR, 0.378 - SJR, Q3 - SJR). ISSN 2041-1286. Dostupné na: <https://doi.org/10.1111/ijag.16537>

ADMA Vedecké práce v zahraničných impaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

- ADMA01 VARGAS-OSORIO, Zulema** - RUTHER, Florian - CHEN, Si - SENGUPTA, Susanta - LIVERANI, Liliana - MICHÁLEK, Martin - GALUSEK, Dušan - BOCCACCINI, Aldo**. Environmentally friendly fabrication of electrospun nanofibers made of polycaprolactone, chitosan and k-carrageenan (PCL/CSS/ k-C). In Biomedical Materials, 2022, vol. 17, p. 045019-1-045019-15. (2021: 4.103 - IF, Q2 - JCR, 0.625 - SJR, Q2 - SJR). ISSN 1748-6041. Dostupné na:

AFA Publikované pozvané príspevky na zahraničných vedeckých konferenciách

- AFA01 MORENO RODRÍGUEZ, Daniel**. On search of the clay-herbicide interaction. In Informátor, 2022, no. 71, p. 3-8. ISSN 1802-2480.
- AFA02 PRNOVÁ, Anna - VALÚCHOVÁ, Jana - MAJEROVÁ, Melinda - PARCHOVIANSKÝ, Milan - MICHÁLKOVÁ, Monika - GALUSEK, Dušan. Vplyv prídavku ZrO₂ na mechanické vlastnosti Al₂O₃-Y₂O₃ keramiky. In 24. ročník konferencie o špeciálných anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. - Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 69-73. ISBN 978-80-7560-419-4. (VEGA č. 2/0028/21 : Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities. VEGA č. 2/0141/21 : SQUID magnetometry of nano- and microparticles, nanocolloids and nanostructures in new applications in the field of biomedicine and materials research associated with the development of new measurement methods and procedures. Konference o speciálních anorganických pigmentech a práškových materiáloch)

AFC Publikované príspevky na zahraničných vedeckých konferenciách

- AFC01 GIANNI, Eleni - SCHOLTZOVÁ, Eva**. Theoretical investigation of halloysite as potential sorbent for pharmaceutical wastewaters. In SUSTENG 2022. 1st International Conference on Sustainable Chemical and Environmental Engineering, 31 Aug - 04 Sep 2022, Rethymno, Crete, Greece : Proceedings. - Crete, Greece : Design of Environmental Processes Laboratory, Technical University of Crete, Greece, 2022, p. 477-482. ISBN 978-618-86417-0-9. (SUSTENG 2022. International Conference on Sustainable Chemical and Environmental Engineering)
- AFC02 MAJEROVÁ, Melinda - PRNOVÁ, Anna - VALÚCHOVÁ, Jana - PECUŠOVÁ, Beáta - GALUSEK, Dušan. Štúdium termických vlastností gelenitových mikrogulôčok pomocou vysokoteplotnej RTG difrakcie. In 24. ročník konferencie o špeciálných anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. - Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 53-58. ISBN 978-80-7560-419-4. (Konference o speciálních anorganických pigmentech a práškových materiáloch)
- AFC03 MAJEROVÁ, Melinda - PRNOVÁ, Anna - PECUŠOVÁ, Beáta - KRAXNER, Jozef - GALUSEK, Dušan. Vplyv spôsobu prípravy Bi-dopovaných gelenitových skiel na výsledné termické vlastnosti. In TAS 2022. Termooanalytický seminár, 27. leden 2022, Pardubice, Česká republika : Sborník příspěvků. Recenzenti: Petra Šulcová, Václav Slovák. - Pardubice, Česká republika : Česká společnost chemická, z.s., 2022, p. 37-43. ISBN 978-80-88307-09-9. (VEGA č. 2/0028/21 : Ion exchange strengthened aluminosilicate glass/glass-ceramics with additional functionalities. VEGA č. 2/0141/21 : SQUID magnetometry of nano- and microparticles, nanocolloids and nanostructures in new applications in the field of biomedicine and materials research associated with the development of new measurement methods and procedures. TAS 2022. Termooanalytický seminár)
- AFC04 MICHALÍK, Jakub - PECUŠOVÁ, Beáta - VALÚCHOVÁ, Jana - PRNOVÁ, Anna - KLEMENT, Róbert - GALUSEK, Dušan. Príprava a charakterizácia Er³⁺ a Yb³⁺ dopovaných YAIO₃ prekurzorových práškov. In 24. ročník konferencie o špeciálných anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. - Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 59-63. ISBN 978-80-7560-419-4. (Konference o speciálních anorganických pigmentech a práškových materiáloch)
- AFC05 PECUŠOVÁ, Beáta - MAJEROVÁ, Melinda - PRNOVÁ, Anna - GALUSEK, Dušan. Vplyv spôsobu prípravy a obsahu Bi₂O₃ na termické vlastnosti bizmutom dopovaných gelenitových skiel. In 24. ročník konferencie o špeciálných anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. - Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 64-68. ISBN 978-80-7560-419-4. (Konference o speciálních anorganických pigmentech a práškových materiáloch)
- AFC06 PRNOVÁ, Anna - VALÚCHOVÁ, Jana - PECUŠOVÁ, Beáta - PLŠKO, Alfonz - GALUSEK, Dušan. Termická analýza skiel v systéme Al₂O₃-Y₂O₃-RE₂O₃ (RE = Er, Nd). In TAS 2022. Termooanalytický seminár, 27. leden 2022, Pardubice, Česká republika : Sborník příspěvků. Recenzenti: Petra Šulcová, Václav Slovák. - Pardubice, Česká republika : Česká společnost chemická, z.s., 2022, p. 44-49. ISBN 978-80-88307-09-9. (TAS 2022. Termooanalytický seminár)
- AFC07 VALÚCHOVÁ, Jana - PRNOVÁ, Anna - PARCHOVIANSKÝ, Milan - GALUSEK, Dušan. Použitie kombinácie DSC termickej analýzy a vysokoteplotnej RTG práškovej difrakčnej analýzy pri skúmaní teplotného správania sa sklenených mikrogulôčok v systéme Al₂O₃-Y₂O₃-ZrO₂. In 24. ročník

konference o speciálných anorganických pigmentech a práškových materiáloch, Pardubice, 22. září 2022 : Sborník příspěvků. Recenzenti: Pavla Honcová, Petr Bělina, Žaneta Dohnalová, Petra Šulcová. - Pardubice, Czech republic : Univerzita Pardubice, 2022, p. 80-85. ISBN 978-80-7560-419-4. (Konference o speciálných anorganických pigmentech a práškových materiáloch)

AFD Publikované príspevky na domácich vedeckých konferenciách

- AFD01 BAI, Yuqing** - OSACKÝ, Marek - UHLÍK, Peter - PÁLKOVÁ, Helena - PUŠKELOVÁ, Ľubica. Characterization of mature fine tailings from the Alberta oil sands under natural conditions. In Študentská vedecká konferencia PriF UK 2022 : zborník recenzovaných príspevkov. Editori: Eva Viglašová, Mária Chovancová, Táňa Sebechlebská, Darmara Gajanová ; recenzenti: Alžbeta Blehová, Petra Švábová. 1. vyd. - Bratislava : Univerzita Komenského, 2022, s. 974-977. ISBN 978-80-223-5385-4. (Študentská vedecká konferencia PriF UK 2022)
- AFD02 DE LA TORRE OLVERA, Guido - HICÁK, Michal - HNATKO, Miroslav - TATARKOVÁ, Monika. Effect of oxyacetylene flame to form a porous layer in silicon nitride. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 31-36. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD03 GÜNEREN, Alper - LENČEŠ, Zoltán - NADA, Ahmed A. Improvement of the performance of silicon-graphite anodes in Li-ion batteries by application of self-healing binder. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 72-75. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD04 HOSSEINI, Naser - CHLUP, Zdeněk - HANZEL, Ondrej - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Joining of ceramics for extreme environments using field assisted sintering technology. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 37-41. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD05 KLEMENT, Róbert - MIHALDOVÁ, K. - PARCHOVIANSKÁ, Ivana - PRNOVÁ, Anna - PARCHOVIANSKÝ, Milan. Photoluminescence of Eu³⁺/2⁺-doped yttrium aluminate glasses with eutectic composition. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 82-85. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD06 PARCHOVIANSKÁ, Ivana - PARCHOVIANSKÝ, Milan - KAŇKOVÁ, Hana - NOWICKA, Aleksandra - GALUSEK, Dušan. Hydrothermal corrosion of double-layer glass/ceramic coatings applied to AISI441 stainless steel substrates. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 58-62. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD07 PARCHOVIANSKÝ, Milan - PARCHOVIANSKÁ, Ivana - HANZEL, Ondrej - PAKSERESHT, Amirhossein. Synthesis and characterization of La₂Ce₂O₇ powder, mechanical performance and thermal properties of La₂Ce₂O₇-YSZ composites. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 53-57. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD08 TAVERI, Gianmarco - BARLOG, Martin - SAHOO, P.P. - NÁDAŽDY, Vojtech - HNATKO, Miroslav. Procedure for production of pristine and Si-doped Fe-based NaSiCON materials in a liquid-phase synthesis. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 63-71.

- AFD09 ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses) UHLÍK, Peter** - LEXA, Jaroslav - BOHÁČ, Peter - MADEJOVÁ, Jana - MAJDAN, Michal - GREAD, Faisal - BAI, Yuqing - OSACKÝ, Marek. Geochémia bentonitov jastrabej formácie. In Geochémia 2022 : Zborník vedeckých príspevkov z konferencie. Editor Ľubomír Jurkovič, Jozef Kordík, Claudia Čičáková ; rec. Edgar Hiller, Peter Koděra. - Bratislava : Štátny geologický ústav Dionýza Štúra, 2022, s. 111-113. ISBN 978-80-8174-067-1. (Vedecká konferencia Geochémia 2022)
- AFD10 VARGAS-OSORIO, Zulema - KUŘITKA, Ivo - PINEIRO, Yolanda - RIVAS, José - MICHÁLEK, Martin - GALUSEK, Dušan. Multifunctional biopolymer-based hybrid scaffolds enriched with modified-SBA-15 mesoporous silica rods for bone and dental tissue engineering. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 22-25. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)
- AFD11 ZHUKOVA, Inga - KOMBAMUTHU, Vasanthakumar - TATARKOVÁ, Monika - ZAGORAC, Dejan - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - MATOVIČ, Branko - TATARKO, Peter. Theoretical predictions and synthesis of high-entropy diboride systems with different molar ratios of transition metals. In Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. - Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022, p. 86-91. ISBN 978-80-973578-1-8. (Processing and properties of advanced ceramics and glasses)

AFE Abstrakty pozvaných príspevkov zo zahraničných konferencií

- AFE01 BUJDÁK, Juraj. Playing with dye molecules in hybrids with clay minerals to achieve photofunctionality. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 3. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFE02 CLAVIJO-MEJÍA, G.A.** - GALUSEK, Dušan - BOCCACCINI, Aldo - MICHÁLEK, Martin. Influence of progressive additions of Bi₂O₃ into 45S5 bioactive glass: properties and biological performance. In 2022 International Conference on Advanced Functional Materials and Nanotechnology and 24th Samahang Pisika ng Visayas at Mindanao (SPVM) National Physics Conference, October 27-29, 2022, Bohol, Philippines : Book of abstracts. - Philippines : Samahang Pisika ng Visayas at Mindanao (SPVM), 2022, p. 4. (2022 International Conference on Advanced Functional Materials and Nanotechnology and 24th Samahang Pisika ng Visayas at Mindanao (SPVM) National Physics Conference)
- AFE03 MALKINA, Olga**. A mystery of a through-space indirect NMR spin-spin coupling between two hydrogen atoms. In CEST 2022. 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Hungary, 7th - 10th September 2022 : Program and book of abstracts. - Hungary : Hungarian Chemical Society, 2022, p. 17. ISBN 978-615-6018-10-6. (CEST 2022. Central European Symposium on Theoretical Chemistry 2022)
- AFE04 TATARKO, Peter** - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - ÜNSAL, Hakan - HOSSEINI, Naser - ZHUKOVA, Inga - DLOUHÝ, Ivo - REECE, Michael J. Development of highly textured diboride ceramics using magnetic and electric fields. In 6CSCS-2022. 6th Conference of the Serbian Society for Ceramic Materials, June 28-29, 2022, Belgrade, Serbia : Programme and book of abstracts. Eds. Branko Matović, Aleksandra Dapčević, Vladimir V. Srdić. - Belgrade, Serbia : Institut za multidisciplinarnu istraživanja, 2022, p. 31. ISBN 987-86-80109-23-7. (6CSCS-2022. Conference of the Serbian Society for Ceramic Materials)

AFF Abstrakty pozvaných príspevkov z domácich konferencií

- AFF01 MALKINA, Olga**. Beyond the Dirac vector model: why one-bond reduced NMR spin-spin coupling can be negative. In Chemistry towards Biology 10 Instruct : programme. Abstract Booklet. Recenzenti: Miloš Hricovíni, Josef Jampílek, Roberta Pieratelli, Grazyna Stochel, Janez Plavec, Andras Perczel. - Bratislava : The Institute of Chemistry, Slovak Academy of Sciences, 2022, p. 29. ISBN 978-80-971665-3-3. (Chemistry towards Biology (CTB10) - Instruct : Structural Biology Meeting)

AFG Abstrakty príspevkov zo zahraničných konferencií

- AFG01 BARLOG, Martin - PÁLKOVÁ, Helena - BUJDÁK, Juraj. The clay-based nanocomposite with luminescent properties. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków,

- Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 27. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG02 BASHIR, Sanam** - ŠKORŇA, Peter - SCHOLTZOVÁ, Eva. Theoretical DFT-D3 study of interactions between montmorillonite clay and different polymers. In Czech Chemical Society Symposium Series, 2022, roč. 20, č. 4, s. 238. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností)
- AFG03 BOHÁČ, Peter - SASAI, Ryo - FUJIMIRA, Takuya - PLANETOVÁ, Viktória - BUJDÁK, Juraj. Dye aggregation-induced changes of photosensitizing properties of hybrid systems based on porphyrin dyes and smectite. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 30. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG04 DE LA TORRE OLVERA, Guido** - HICÁK, Michal - HNATKO, Miroslav - LABUDOVÁ, Martina - TATARKOVÁ, Monika. Modification of the surface layer of silicon nitride using oxyacetylene flame. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 454. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG05 GIANNI, Eleni - SCHOLTZOVÁ, Eva**. Theoretical investigation of halloysite as potential sorbent for pharmaceutical wastewaters. In SUSTENG 2022. 1st International Conference on Sustainable Chemical and Environmental Engineering, 31 Aug - 04 Sep 2022, Rethymno, Crete, Greece : Proceedings. - Crete, Greece : Design of Environmental Processes Laboratory, Technical University of Crete, Greece, 2022, p. 172-173. ISBN 978-618-86417-0-9. (SUSTENG 2022. International Conference on Sustainable Chemical and Environmental Engineering)
- AFG06 GÜNEREN, Alper** - LENČEŠ, Zoltán - NADA, Ahmed A. Self-healing binder adaption to silicon-graphite blended anodes. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 409. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG07 HANZEL, Ondrej** - LENČEŠ, Zoltán - KIM, Young-Wook - ŠAJGALÍK, Pavol. Effect of sintering additives and sintering conditions on electrical and thermal properties of SiC-GNPs and SiC-GO composites. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 292. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG08 HOSSEINI, Naser** - ÜNSAL, Hakan - VALENZA, Fabrizio - KOMBAMUTHU, Vasanthakumar - ZHUKOVA, Inga - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Wetting, interfacial reaction and joining of monolithic SiC and Cf/SiC composites by ZrSi₂ alloy. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 520. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG09 KOMBAMUTHU, Vasanthakumar** - HOSSEINI, Naser - ÜNSAL, Hakan - ZHUKOVA, Inga - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - TATARKO, Peter. Effect of SiC particulates/whiskers reinforcements on properties of spark plasma sintered high entropy borides (Ti_{0.2}Zr_{0.2}Hf_{0.2}Nb_{0.2}Ta_{0.2})B₂ synthesized using boro/carbothermal reduction. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 525. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG10 KOVÁČOVÁ, Zuzana** - OROVČÍK, Ľubomír - BAČA, Ľuboš - TATARKO, Peter - DOBROČKA, Edmund - KITZMANTEL, M. - NEUBAUER, Erich. Oxidation performance of ZrB₂-SiC composites tested above 2000 °C and effect of Y-containing additives. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 526. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG11 KRONEKOVÁ, Zuzana - JANKOVIČ, Ľuboš - MOŠKOVÁ, Zuzana - MADEJOVÁ, Jana - KRONEK, Juraj. New type of polymeric surfactants for modification of smectites and evaluation of their cytotoxicity. In EPF European Polymer Congress : 26 June - 1 July 2022 : book of abstracts. 1. - Prague, Czech republic : AMCA, spol. s r.o., 2022, p. 292. ISBN 978-80-88214-33-5. (EPF European Polymer Congress 2022)
- AFG12 KUZIELOVÁ, Eva - TATARKO, Miroslav - SLANÝ, Michal - ŽEMLIČKA, Matúš - MÁSILKO, Jiří - NOVOTNÝ, Radoslav - PALOU, Martin T. Influence of geothermal water and increased temperature on early and middle stages of hydration of multicomponent cement systems. In CEEC-PCMS1. 1st Central and Eastern European Conference on Physical Chemistry and Materials Science, 26-30 July 2022, Split, Croatia : book of abstracts. - Central and Eastern European Committee for Thermal Analysis and Calorimetry (CEEC-TAC), 2022, p. 131. ISBN 978-606-11-8164-3. (APVV-19-0490 : Výskum a vývoj mnohohozložkových cementových zmesí pre špeciálne konštrukčné materiály. APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0032/21 : Štúdium degradácie viacložkových cementových materiálov v dôsledku uhlíkovej korózie v podmienkach simulujúcich geotermálne vrty)
- AFG13 LENČEŠ, Zoltán** - PETRISKOVÁ, Patrícia - RADWAN, Mohamed - MONFORT, O. - ŠAJGALÍK, Pavol. Translucent/transparent spinel phosphors for solid state lighting and photocatalytic applications. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. -

- AFG14 B.V., 2022, p. 413. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
MADEJOVA, Jana - BARLOG, Martin - SLANÝ, Michal - JANKOVIČ, Ľuboš. Characterization of montmorillonite modified with polyoxazoline. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 62. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG15 MAJEROVÁ, Melinda - ŠKRÁTEK, Martin - PRNOVÁ, Anna - DVUREČENSKI, Andrej - MAŇKA, Ján - GALUSEK, Dušan. Vplyv teplotného žihania na magnetické vlastnosti Bi dopovaných gelenitových skiel. In Czech Chemical Society Symposium Series, 2022, roč. 20, č. 4, s. 269-270. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností)
- AFG16 MALKIN, Vladimír** - LEMKEN, Florian - KOMOROVSKÝ, Stanislav - MALKINA, Oľga. Visualization of EPR hyperfine structure coupling pathways. In CEST 2022. 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Hungary, 7th - 10th September 2022 : Program and book of abstracts. - Hungary : Hungarian Chemical Society, 2022, p. 59. ISBN 978-615-6018-10-6. (CEST 2022. Central European Symposium on Theoretical Chemistry 2022)
- AFG17 MATEJDES, Marián - HIMENO, Daisuke - SUZUKI, Yasutaka - KAWAMATA, Jun. Excitonic coupling in the interlayer space of layered silicates. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 65. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG18 MIŠENKOVÁ, Debora - LEMKEN, Florian** - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Oľga - KOMOROVSKÝ, Stanislav. Overcoming the gauge problem for g-tensor calculations in the framework of four-component DFT. In CEST 2022. 18th Central European Symposium on Theoretical Chemistry 2022, Balatonszárszó, Hungary, 7th - 10th September 2022 : Program and book of abstracts. - Hungary : Hungarian Chemical Society, 2022, p. 49. ISBN 978-615-6018-10-6. (CEST 2022. Central European Symposium on Theoretical Chemistry 2022)
- AFG19 MORENO RODRÍGUEZ, Daniel - GIANNI, Eleni - JANKOVIČ, Ľuboš - SCHOLTZOVA, Eva - POSPÍŠIL, Miroslav. How atrazine and diuron are absorbed into spiral halloysite structure. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 67. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG20 NAJAFZADEHKHOEE, Aliasghar - TALIMIAN, Ali** - POUCHLÝ, Václav - GALLARDO-LÓPEZ, Ángela - POYATO GALAN, Rosalia - KLEMENT, Róbert - MACA, Karel - GUTIÉRREZ-MORA, Felipe - GALUSEK, Dušan. Densification behaviour and optical properties of nano-Y2O3 ceramics doped with bivalent transition metals. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 164. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG21 NAJAFZADEHKHOEE, Aliasghar - TALIMIAN, Ali - GIRMAN, Vladimír - SPUSTA, Tomáš - HVIZDOŠ, Pavol - MACA, Karel - GALUSEK, Dušan. Liquid phase sintering of yttrium oxide. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 11. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFG22 PÁLKOVÁ, Helena - MADEJOVÁ, Jana - BARLOG, Martin - HRONSKÝ, Viktor - ŠIMON, Erik - ZIMOWSKA, Malgorzata. The effect of the occupancy of the octahedral sites on the mechanochemical stability of smectites. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 71. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG23 PETRISKOVÁ, Patrícia**. TiO2 nanotubes on translucent spinel substrate: degradation of different pollutants under UVA irradiation in water. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 421. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG24 PETRISKOVÁ, Patrícia - MONFORT, O. - LENČEŠ, Zoltán. TiO2 nanotubes on spinel substrate: preparation, characterization and degradation of different pollutants under UVA irradiation in water. In SPEA11. 11th European conference on solar chemistry and photocatalysis: Environmental applications. Turin, Italy, June 6th-10th, 2022 : Book of abstracts. - Torino, Italy, 2022, p. 366-367. ISBN 976-12-210-0970-5. (SPEA11. European conference on solar chemistry and photocatalysis: Environmental applications)
- AFG25 PRNOVÁ, Anna - MICHALÍK, Jakub - PECUŠOVÁ, Beáta - KLEMENT, Róbert - VALÚCHOVÁ, Jana - GALUSEK, Dušan. Study of thermal and PL properties of Er3+ doped aluminate glasses, impact of crystallinity on PL properties. In Czech Chemical Society Symposium Series, 2022, roč. 20, č. 4, s. 270. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností)
- AFG26 SCHOLTZOVA, Eva - NISHIHARA, H.. Characterization of the carbon-based material by DFT method. In ICMS XXXI. 31th International Conference on Multidisciplinary Studies "Recent Ideas and Research", 18-19 November 2022, Université du Luxembourg : Book of Proceedings. - Luxembourg : Revistia Publishing, 2022, p. 418. ISBN 978-1-915312-05-1. (ICMS XXXI. International Conference on Multidisciplinary Studies "Recent Ideas and Research")
- AFG27 SCHOLTZOVA, Eva - ZIMOWSKA, Malgorzata - TUNEGA, Daniel. Ab initio thermodynamics study of the MgCO3 formation. In MECC '20/22. 10th Jubilee Mid-European Clay Conference,

- AFG28 Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 77. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
SKOURA, Eva** - BOHÁČ, Peter - BARLOG, Martin - PÁLKOVÁ, Helena - BUJDÁK, Juraj. Modified surfaces of polycaprolactone with silicate films functionalized with methylene blue. In NANOCON 2022 : Abstracts. - Ostrava, Czech republic : Tanger Ltd., 2022, p. 74-75. ISBN 978-80-88365-07-5. (International Conference on Nanomaterials - Materials & Applications)
- AFG29 SLANÝ, Michal - JANKOVIČ, Ľuboš - MADEJOVÁ, Jana. Study of hydration of alkylammonium and alkylphosphonium-based organo-montmorillonites using near-IR spectroscopy. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 84. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG30 SLANÝ, Michal - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš. Effect of silica fume - metakaolin combination on the thermal stability of cement pastes under hydrothermal conditions. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 83. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG31 SLANÝ, Michal - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - MATEJDES, Marián - PALOU, Martin T. Metabentonite and metakaolin-based geopolymers: relation between kind of clay mineral, calcination temperature, and concentration of alkaline activator. In CEEC-PCMS1. 1st Central and Eastern European Conference on Physical Chemistry and Materials Science, 26-30 July 2022, Split, Croatia : book of abstracts. - Central and Eastern European Committee for Thermal Analysis and Calorimetry (CEEC-TAC), 2022, p. 76. ISBN 978-606-11-8164-3. (APVV-19-0490 : Výskum a vývoj mnohוזložkových cementových zmesí pre špeciálne konštrukčné materiály. VEGA 2/0032/21 : Štúdium degradácie viaczložkových cementových materiálov v dôsledku uhlíkovej korózie v podmienkach simulujúcich geotermálne vrty. VEGA 2/0017/21 : Materiálové zloženie a vlastnosti samozhutniteľných ťažkých betónov)
- AFG32 ŠKORŇA, Peter - JANKOVIČ, Ľuboš - SCHOLTZO VÁ, Eva - TUNEGA, Daniel. Perchlorate pollutants adsorption by tetrahexylphosphonium-modified beidellite clay - theoretical and experimental research. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 82. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG33 TATARKOVÁ, Monika** - TATARKO, Peter - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - ŠAJGALÍK, Pavol. Boron nitride nanosheets as a reinforcement for silicon nitride. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 252. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG34 UHLÍK, Peter - LEXA, Jaroslav - BRČEKOVÁ, Jana - PERESZLÉNYI, Miroslav - BIRON, Adrián - BAI, Yuqing - MAJDAN, Michal - MADEJOVÁ, Jana - BOHÁČ, Peter - KUREKOVÁ, Valéria - ŠURKA, Juraj - RYBÁRIK, Matej - LINTNEROVÁ, Otilia - OSACKÝ, Marek - HODERMARSKÝ, Jozef. Bentonite, perlite and kaolinite-rich zones in the Lutilla I bentonite deposit, the Western Carpathians, Slovakia. In MECC '20/22. 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022 : Book of abstracts. - Kraków, Poland, 2022, p. 92. ISBN 978-83-65955-60-9. (MECC '20/22. Jubilee Mid-European Clay Conference)
- AFG35 ÜNSAL, Hakan - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - HANZEL, Ondrej - TATARKOVÁ, Monika - DLOUHÝ, Ivo - TATARKO, Peter**. Effect of the electric field on the in-situ formation of graphene nanoplatelets during reactive sintering of B4C-TiB2 composites. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 556. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG36 ÜNSAL, Hakan** - KOVALČÍKOVÁ, Alexandra - HÍČÁK, Michal - CHLUP, Zdeněk - DLOUHÝ, Ivo - TATARKO, Peter. Ablation behavior of rare-earth modified ZrB2-SiC composites prepared by reaction sintering of ZrSi2, B4C and C. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 568. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)
- AFG37 ZHUKOVA, Inga** - KOMBAMUTHU, Vasanthakumar - HOSSEINI, Naser - ÜNSAL, Hakan - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - DUSZA, Ján - TATARKO, Peter. Theoretical predictions and synthesis of high-entropy diboride systems with different molar ratios of transition metals. In Ceramics in Europe 2022 : Abstract book. Kraków, 10.-14.7.2022. - B.V., 2022, p. 566. ISBN 978-83-942760-9-6. (Ceramics in Europe 2022)

AFH Abstrakty príspevkov z domácich konferencií

- AFH01 AKUSEVICH, A.** - PARCHOVIANSKÁ, Ivana - PARCHOVIANSKÝ, Milan - PRNOVÁ, Anna - LOFAJ, František - VOJTKO, Marek - KLEMENT, Róbert. Preparation and characterisation of Ce3+-doped YAG-Al2O3 glass-ceramic composites. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 13. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)

- AFH02 ARUCHAMY, Udhaya Kumar** - MERINO, Emilia - DURÁN, Alicia - GALUSEK, Dušan - CASTRO, Yolanda. Integrated corrosion-resistance system for Al alloys (AA2024-T3) via polyorganosilazane/GPTMS. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 29. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH03 ASHER, James Richard - HRICOVÍNI, Michal - HRICOVÍNI, Miloš. A study of the photochemical behaviour and relaxation mechanisms of anti-syn isomerisation around quanzolinone -N=N= bonds. In Chemistry towards Biology 10 Instruct : Programme. Abstract Booklet. - Bratislava : The Institute of Chemistry, Slovak Academy of Sciences, 2022, p. 48. ISBN 978-80-971665-3-3. (Chemistry towards Biology (CTB10) - Instruct : Structural Biology Meeting)
- AFH04 BASAK, Onat** - HUJOVÁ, Miroslava - CHROMČÍKOVÁ, Mária. Structure and properties of bioactive glasses doped with ions with potential therapeutic and antibacterial effects. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 23. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH05 BILSKÁ, Katarína** - PRIBUS, Marek - BUJDÁK, Juraj - BUJDÁKOVÁ, Helena. Eradication of staphylococcal biofilms manifesting up-regulation of the NorA gene on newly designed photoactive material. In Hot Topics in Microbiology : International Conference for Young Scientists, Abstract Book, 7. - 10. 12. 2022. 1. vydanie. - Bratislava : Comenius University in Bratislava, Faculty of Natural Sciences, Czechoslovak Society of Microbiology, s. 22. ISBN 978-80-973411-4-5. (Hot Topics in Microbiology : International Conference for Young Scientists)
- AFH06 BYSTRICKÝ, Roman** - TIWARI, S.K. - HUTÁR, Peter - SÝKORA, M. Synthesis and characterization of the ternary chalcogenide perovskites. In The 6th International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 16.-19.10.2022. - Košice : Prírodovedecká fakulta UPJŠ, 2022, p. 35-37. ISBN 978-80-5740127-8. (International conference on nanomaterials: Fundamentals and applications)
- AFH07 CZUCZ VARGA, Jarmila** - BUJDÁKOVÁ, Helena - BUJDÁK, Juraj. Optimization of photodynamic inactivation on biofilms formed by Candida albicans and Staphylococcus aureus. In Hot Topics in Microbiology : International Conference for Young Scientists, Abstract Book, 7. - 10. 12. 2022. 1. vydanie. - Bratislava : Comenius University in Bratislava, Faculty of Natural Sciences, Czechoslovak Society of Microbiology, s. 27. ISBN 978-80-973411-4-5. (Hot Topics in Microbiology : International Conference for Young Scientists)
- AFH08 DAGUPATI, Rajesh** - KLEMENT, Róbert - VELÁZQUEZ, José Joaquín - GALUSEK, Dušan. Er³⁺ doped oxafuoride silicate glass-ceramics: Analysis of spectral conversion and ratio metric optical thermometry for temperature sensor application. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 17. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH09 DASAN, Arish** - KRAXNER, Jozef - GRIGOLATO, Luca - SAVIO, Gianpaolo - BERNARDO, Enrico - GALUSEK, Dušan. Binder-jetting 3D printing: Opportunities and challenges. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 14. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH10 GHADAMYARI, Marzieh** - KRAXNER, Jozef - KLEMENT, Róbert - GALUSEK, Dušan - MICHÁLKOVÁ, Monika. Luminescent YAG: Er microspheres used for the preparation of phosphor in glass materials. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 14. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH11 GULER, Ali Can** - MASAR, Milan - MACHOVSKY, Michal - DAGUPATI, Rajesh - ŽITŇAN, Michal - VELÁZQUEZ, José Joaquín - GALUSEK, Dušan - KUŘITKA, Ivo. BiVO₄/ZnO nanodendrites heterojunction as photoanode for photoelectrochemical water splitting. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 28. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH12 HEGLASOVÁ, Katarína** - CHROMČÍKOVÁ, Mária - HRUŠKA, Branislav. Study of surface morphology and characterizations of corrosive products of industrially produced glasses. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 29. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH13 HRUŠKA, Branislav** - GREINER-WRONA, Elżbieta - NOWICKA, Aleksandra - CHROMČÍKOVÁ, Mária - LIŠKA, Marek. Identification of corrosion products and their depth on historical glass objects. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 3. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH14 CHAUHAN, Avnee - BLÁŠKO, Martin** - GALUSEK, Dušan. Experimental and theoretical study of the (Ce_{0.2}La_{0.2}Pr_{0.2}Sm_{0.2}Y_{0.2})O₂-delta high entropy oxide with fluorite structure. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. -

- Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 18. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH15 CHAUHAN, Aynee** - GALUSEK, Dušan. High-entropy oxides ceramics: Present status, challenges, and future opportunities. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 30. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH16 CHROMČÍKOVÁ, Mária** - HRUŠKA, Branislav - LIŠKA, Marek. Thermophysical methods and their use in the study of oxide glasses. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 7. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH17 KURTULDU, Fatih** - MUTLU, Nurshen - DETSCH, Rainer - LIVERANI, Liliana - GALUSEK, Dušan - BOCCACCINI, Aldo. Gallium-containing mesoporous glass nanoparticles for bone regeneration. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 8. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH18 LEMKEN, Florian** - MALKINA, Oľga - MALKIN, Vladimír - KOMOROVSKÝ, Stanislav. Indirect nuclear spin-spin & hyperfine coupling pathway visualisation in heavy metal complexes. In Chemistry towards Biology 10 Instruct : programme. Abstract Booklet. - Bratislava : The Institute of Chemistry, Slovak Academy of Sciences, 2022, p. 89. ISBN 978-80-971665-3-3. (Chemistry towards Biology (CTB10) - Instruct : Structural Biology Meeting)
- AFH19 MAHMOUD, Mokhtar** - KRAXNER, Jozef - ELSAYED, Hamada - GALUSEK, Dušan - BERNARDO, Enrico. Innovative dye sorbent based on additive manufacturing technique. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 31. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH20 MEHTA, Akansha** - KRAXNER, Jozef - BERNARDO, Enrico - GALUSEK, Dušan. Waste-derived glass as precursor for inorganic polymers: from binders to photocatalytic destructors for dye removal. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 15. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH21 MICHALÍK, Jakub** - PECUŠOVÁ, Beáta - VALÚCHOVÁ, Jana - PRNOVÁ, Anna - KLEMENT, Róbert - GALUSEK, Dušan. Preparation and characterization of Er³⁺ and Yb³⁺ doped YAlO₃ precursor powders. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 16. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH22 MICHÁLKOVÁ, Monika** - PRNOVÁ, Anna - MAHMOUD, Mokhtar - PÁLKOVÁ, Helena - KRAXNER, Jozef - GALUSEK, Dušan. The origin of glass microspheres blowing. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 9. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH23 MOGHADDAM, P.** - PARCHOVIANSKÝ, Milan - PARCHOVIANSKÁ, Ivana - GALUSEK, Dušan - PAKSERESHT, Amirhossein. Improvement of thermal stability of polymer derived ceramic coatings. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 31. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH24 MORENO RODRÍGUEZ, Daniel** - SCHOLTZOVÁ, Eva - NISHIHARA, H. DFT study of defects in graphene. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia : Book of Abstracts. - Slovakia : Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 23-24. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting)
- AFH25 MUTLU, Nurshen** - KURTULDU, Fatih - LIVERANI, Liliana - GALUSEK, Dušan - BOCCACCINI, Aldo. Biodegradable chitosan-based foams containing borate bioactive glasses for wound healing applications. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 19. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH26 NOVOKHATSKA, A.** - DASAN, Arish - KRAXNER, Jozef - GALUSEK, Dušan. Design and manufacturing of self-supported electrolytes for solid oxide fuel cells application by stereolithography 3D printing. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 16. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH27 NOWICKA, Aleksandra** - REVERON, Helen - MICHÁLKOVÁ, J. - GALUSKOVÁ, Dagmar - GALUSEK, Dušan. The assessment of the impact of the induced surface roughness on the tetragonal to monoclinic phase transformation of the 3Y-TZP ceramics. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 4. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH28 PARCHOVIANSKÁ, Ivana** - PARCHOVIANSKÝ, Milan - KAŇKOVÁ, Hana - NOWICKA, Aleksandra - GALUSEK, Dušan. Hydrothermal corrosion of double-layer glass/ceramic coatings applied to AISI441 stainless steel substrates. In FunGlass School 2022/2, Congress Centre of SAS

- AFH29 Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 11. ISBN 978-80-8075-981-0. (FunGlass School 2022/2) PARCHOVIANSKÝ, Milan** - PARCHOVIANSKÁ, Ivana - HANZEL, Ondrej - PAKSERESHT, Amirhossein. Synthesis and characterization of La₂Ce₂O₇ powder, mechanical and thermal properties of La₂Ce₂O₇-YSZ composites. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 10. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH30 PECUŠOVÁ, Beáta** - MAJEROVÁ, Melinda - PRNOVÁ, Anna - KRAXNER, Jozef - GALUSEK, Dušan. The influence of preparation method on thermal behavior of gehlenite glasses. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 1-2. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH31 PRIBUS, Marek** - BILSKÁ, Katarína - BUJDÁKOVÁ, Helena - BUJDÁK, Juraj. Preparation of antimicrobial polyurethane films. In Hot Topics in Microbiology : International Conference for Young Scientists, Abstract Book, 7. - 10. 12. 2022. 1. vydanie. - Bratislava : Comenius University in Bratislava, Faculty of Natural Sciences, Czechoslovak Society of Microbiology, s. 38. ISBN 978-80-973411-4-5. (Hot Topics in Microbiology : International Conference for Young Scientists)
- AFH32 PRNOVÁ, Anna** - VALÚCHOVÁ, Jana - PARCHOVIANSKÝ, Milan - DOHNALOVÁ ŽANETA - MICHÁLKOVÁ, Monika - GALUSEK, Dušan. Preparation of materials with eutectic microstructure in Al₂O₃-Y₂O₃ system. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 10. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH33 SHARIFAHMADIAN, Omid** - PAKSERESHT, Amirhossein - GALUSEK, Dušan. Role of fluorine in hydrophobicity and nanomechanical properties of the diamond-like carbon (DLC) film on glass substrate. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 12. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH34 SCHOLTZOVA, Eva**. Atomically designed carbon based materials studied by DFT method. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia : Book of Abstracts. - Slovakia : Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 16-17. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting)
- AFH35 ŠKORŇA, Peter** - SCHOLTZOVA, Eva - MICHÁLSKA, M. Thermal treatment processing of melamine precursor for preparing graphitic carbon nitride materials - theoretical calculations. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia : Book of Abstracts. - Slovakia : Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 30-31. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting)
- AFH36 ŠVANČÁREK, Peter** - KLEMENT, Róbert - GALUSEK, Dušan. Bi₂O₃ and Bi₄Ge₃O₁₂ doped yttria: A comparisons of white light emission fluorescent materials. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 8. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH37 TALIMIAN, Ali** - GALUSEK, Dušan. Mixed alkali effect and the mechanical properties of aluminoborate glasses. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 11. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH38 TIWARI, S.K. - BYSTRICKÝ, Roman - HUTÁR, Peter - SÝKORA, M.**. Novel synthesis approach for the preparation of chalcogenide Perovskites. In The 6th International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 16.-19.10.2022. - Košice : Prírodovedecká fakulta UPJŠ, 2022, p. 137. ISBN 978-80-5740127-8. (International conference on nanomaterials: Fundamentals and applications)
- AFH39 VAKHSHOURI, Maryam** - NAJAFZADEHKHOEE, Aliasghar - TALIMIAN, Ali - LÓPEZ PERNIA, Cristina - POYATO, Rosalía - GALLARDO-LÓPEZ, Ángela - GUTIÉRREZ-MORA, Felipe - PRNOVÁ, Anna - GALUSEK, Dušan. Preparation of Al₂O₃/Y₃Al₅O₁₂ (YAG)/ZrO₂ eutectic ceramic by spark plasma sintering. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 15. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH40 VALÚCHOVÁ, Jana - PRNOVÁ, Anna - GALUSEK, Dušan. Use of HT X-ray diffraction as a method supporting thermal analysis, data collection and evaluation in the Al₂O₃-La₂O₃ system. In FunGlass School 2022 : Book of abstracts. Čertov, 1.-3.6.2022. - B.V., 2022, p. 6. ISBN 978-80-8075-976-6. (FunGlass School 2022/1)
- AFH41 VARGAS-OSORIO, Zulema** - KURITKA, Ivo - PINEIRO, Yolanda - RIVAS, José - MICHÁLEK, Martin - GALUSEK, Dušan. 3D bioactive composite scaffolds with high drug loading capacity for bone tissue engineering. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface functionalized glass, 2022, p. 5. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
- AFH42 VIDOMANOVÁ, Eva** - MICHÁLEK, Martin - GALUSEK, Dušan. Biological methods for the study of biomaterials. In FunGlass School 2022/2, Congress Centre of SAS Smolenice, September 26-28, 2022 : Book of Abstracts. - Trenčín, Slovakia : Centre for functional and surface

- functionalized glass, 2022, p. 4. ISBN 978-80-8075-981-0. (FunGlass School 2022/2)
 AFH43 YOSHII, T.** - NISHIKAWA, G. - TANG, R. - SCHOLTZOVA, Eva - SZILAGYI, R. - NISHIHARA, H. Advanced temperature-programmed desorption as a new characterization method for N-doped carbons. In 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia : Book of Abstracts. - Slovakia : Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022, p. 20-21. ISBN 978-80-973578-3-2. (AtomDec Annual Meeting)

AFK Postery zo zahraničných konferencií

- AFK01 AMBATI, Ramu. Corrosion of partially submerged samples in molten FLiNaK salt. In Czech Chemical Society Symposium Series. - Praha, ČR : Czech Chemical Society, 2022, roč. 20, č. 4, s. 244. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností)
 AFK02 KRISHNAN, Dhiya** - KORENKO, Michal - ŠIMKO, František. Electrical conductivity of the molten systems of (LiF - CaF₂)eut - NdF₃ and (LiF - NaF) eut - NdF₃. In Czech Chemical Society Symposium Series. - Praha, ČR : Czech Chemical Society, 2022, roč. 20, č. 4, s. 246. ISSN 2336-7202. (Sjezd českých a slovenských chemických spoločností)

FAI Zostavovateľské práce knižného charakteru (bibliografie, encyklopédie, katalógy, slovníky, zborníky, atlasy ...)

- FAI01 Workshop Processing and properties of advanced ceramics and glasses, Mojmirovce, September 28-30, 2022, Slovak Republic : Proceedings. Ed. Jana Valúchová; recenzenti: Miroslav Hnatko, Ľuboš Bača, Marián Janek, Alexandra Kovalčíková, Zdeněk Chlup, Peter Tatarko. Bratislava, Slovak Republic : Institute of Inorganic Chemistry SAS, 2022. 95 p. ISBN 978-80-973578-1-8 (Processing and properties of advanced ceramics and glasses)

GII Rôzne publikácie a dokumenty, ktoré nemožno zaradiť do žiadnej z predchádzajúcich kategórií

- GII01 ARUCHAMY, Udhaya Kumar - GALUSEK, Dušan - MERINO, Emilia - DURÁN, Alicia - CASTRO, Yolanda. Integrated corrosion-resistant system for Al alloys (2024-T351) via polyorganosilazane/GPTMS. In MADRID 2022. LVIII Congreso de la Sociedad Española de Cerámica y Vidrio : Libro de Abstracts. - Madrid, Spain : Sociedad Española de Cerámica y Vidrio, 2022, p. IO08091. (MADRID 2022. Congreso de la Sociedad Española de Cerámica y Vidrio)
 GII02 BASHIR, Sanam - SCHOLTZOVA, Eva** - TUNEGA, Daniel. Theoretical study of interactions in the clay-polymer advanced hybrid nanomaterials. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 101. (AIPEA - International Clay Conference ICC)
 GII03 BOČA, Miroslav** - KUBÍKOVÁ, Blanka - NETRIOVÁ, Zuzana - MATSELKO, Oksana - MLYNÁRIKOVÁ, Jarmila. Systematic research on the selected ternary lanthanide fluoride systems. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 62. (EUCHEM Conference on Molten Salts and Ionic Liquids)
 GII04 BOHÁČ, Peter** - BUDZÁK, Šimon - BUJDÁK, Juraj. Enhanced fluorescence of hybrid systems on layered silicates and cyanine dyes. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 167. (AIPEA - International Clay Conference ICC)
 GII05 BUČKO, Tomáš** - GEŠVANDTNEROVÁ, Monika - ROCCA, Dario. MLPT - an effective method for determining free energies at multiple electronic structure levels. In MLQC4Dyn 2022, 14.9.2022, Paris, France : Abstracts. - France, 2022, 1 p. (MLQC4Dyn)
 GII06 DAGUPATI, Rajesh - SEDANO, Mercedes - KLEMENT, Róbert - VELÁZQUEZ, José Joaquín** - MUNOZ, Francisco - PASCUAL, María Jesús - DURÁN, Alicia - GALUSEK, Dušan. Effect of Al₂O₃ on the crystallization of NaYF₄ in oxyfluoride silicate glass-ceramics for optical thermometer. In SHIFT 2022 - Spectral sHapIng For biomedical and energy applicaTions, Tenerife, Canary Islands, 10-14th October, 2022 : Program / Book of abstracts. - Spain : Universidad de La Laguna, 2022, p. OB-7. (SHIFT 2022 - Spectral sHapIng For biomedical and energy applicaTions)
 GII07 DE LA TORRE OLVERA, Guido - ÜNSAL, Hakan - TABAK, Yasemin - VATANSEVER, Bayise Kavakli - KILIC, Aysen - POLAT, Seyda - HNATKO, Miroslav - LENČEŠ, Zoltán - TATARKOVÁ, Monika**. Functionally graded silicon nitride with improved bioactivity prepared by tape casting. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 197. (ISC'22 International Symposium on Characterization)
 GII08 DE LA TORRE OLVERA, Guido** - HICÁK, Michal - LABUDOVÁ, Martina - HNATKO,

- Miroslav - TATARKOVÁ, Monika. Development of silicon nitride with bioactive surface using oxyacetylene flame. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 199. (ISC'22 International Symposium on Characterization)
- GII09 DUSZOVÁ, Annamária - TIMKOVÁ, Lenka - CSANÁDI, Tamás - VOJTKO, Marek - TATARKO, Peter - KOMBAMUTHU, Vasanthakumar - ÜNSAL, Hakan - TATARKOVÁ, Monika - HVIZDOŠ, Pavol. Nanoindentation of dual-phase high-entropy ultrahigh temperature ceramics. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. C:P20. (International ceramics congress : CIMTEC 2022)
- GII10 GALUSEK, Dušan - BOCCACCINI, Aldo. Bioactive glasses and glass-biopolymer composites doped with therapeutic ions. In 1st ESBI Conference 2022, 18th - 20th of May 2022, Krems, Austria : Book of abstracts. - Austria, 2022, p. 8. (ESBI Conference 2022)
- GII11 HANZEL, Ondrej - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Silicon carbide - graphene composites with high functional properties. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 27. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions)
- GII12 HANZEL, Ondrej - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Silicon carbide - graphene composites with high thermal and electrical conductivity. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 64. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII13 HANZEL, Ondrej** - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Highly electrically and thermally conductive silicon carbide - graphene composites. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. CD-1:L10. (International ceramics congress : CIMTEC 2022)
- GII14 HÍČÁK, Michal - HNATKO, Miroslav - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Surface modification of Si₃N₄ - Y₂O₃ composites - optimisation of oxyacetylene torch conditions. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 24. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions)
- GII15 HÍČÁK, Michal - HNATKO, Miroslav - LABUDOVÁ, Martina - GALUSKOVÁ, Dagmar - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Surface bioactive silicon nitride modification by oxyacetylene flame treatment. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 65. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII16 HOSSEINI, Naser** - CHLUP, Zdeněk - VALENZA, Fabrizio - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Wetting and joining of SiC-based advanced ceramics by ZrSi₂ alloy. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 201. (ISC'22 International Symposium on Characterization)
- GII17 KOMOROVSKÝ, Stanislav**. Relativistic theory of pNMR and EPR. In Actinides revisited 2022, Dresden, 21st to 23rd September 2022 : Book of Abstracts. - Dresden, Germany, 2022, p. 34. (Actinides revisited 2022)
- GII18 KORENKO, Michal** - ŠIMKO, František - MLYNÁRIKOVÁ, Jarmila - LARSON, Carol - MIKŠÍKOVÁ, Eva - PRIŠČÁK, Jozef - AMBROVÁ, Marta - PALUMBO, Robert. Physico-chemical properties of (MgF₂-CaF₂-(LiF))eut-MgO system as a molten electrolyte for Mg electrowinning. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 143. (EUCHEM Conference on Molten Salts and Ionic Liquids)
- GII19 KOVALČÍKOVÁ, Alexandra - IVOR, Michal - TATARKO, Peter - ÜNSAL, Hakan - SEDLÁK, Richard - MEDVEĎ, Dávid - DUSZOVÁ, Annamária - BACZEK, Elżbieta - PODSIADLO, Marcin - DUSZA, Ján. Oxidation behaviour and thermal shock resistance of ceramic composites based on carbides and borides. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. 6/11. (VEGA 2/0118/20 : Vysokoteplotné vlastnosti boridových MeB₂ (Me=Ti, Zr, Hf) keramických kompozitných materiálov. International ceramics congress : CIMTEC 2022)
- GII20 KOVALČÍKOVÁ, Alexandra - TATARKO, Peter - SEDLÁK, Richard - CHLUP, Zdeněk - MÚDRA, Erika - DUSZA, Ján. The influence of graphene platelets on mechanical properties of

- titanium diboride ceramic composites. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 77. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII21 KUBÍKOVÁ, Blanka** - MLYNÁRIKOVÁ, Jarmila - NETRIOVÁ, Zuzana - VASKOVÁ, Zuzana - MATSELKO, Oksana - BOČA, Miroslav. Physico-chemical investigation of selected lanthanide trifluorides in molten eutectic mixture LiF-MgF₂. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 63. (EUCHEM Conference on Molten Salts and Ionic Liquids)
- GII22 LENČEŠ, Zoltán - RADWAN, Mohamed - PETRISKOVÁ, Patrícia - CZÍMEROVÁ, Adriana - BOHÁČ, Peter - ŠAJGALÍK, Pavol. Spinel-based ceramics for LEDs and photocatalytic applications. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 23. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions)
- GII23 LENČEŠ, Zoltán - HANZEL, Ondrej - ŠAJGALÍK, Pavol - KIM, Young-Wook. Silicon carbide ceramics with high thermal, electrical conductivity and other exceptional properties. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 85. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII24 MADEJOVÁ, Jana** - BARLOG, Martin - JANKOVIČ, Ľuboš - SLANÝ, Michal - PÁLKOVÁ, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 164. (AIPEA - International Clay Conference ICC)
- GII25 NISHIKAWA, G. - YOSHII, T. - TAKATANI, K. - SCHOLTZOVÁ, Eva - SZILAGYI, R. - NISHIHARA, H. Analysis of nitrogen-doped carbon materials using temperature programmed desorption method. In 130th Catalysis Society of Japan Meeting, Toyama University, Toyama, Japan, 20.09.-26.09.2022 : Book of abstracts. - Japan : Catalysis Society of Japan, 2022, p. 236. (Catalysis Society of Japan Meeting)
- GII26 OSACKÝ, Marek** - BAI, Yuqing - UHLÍK, Peter - PÁLKOVÁ, Helena - PUŠKELOVÁ, Ľubica. Characterization of K-bentonite from Dolná Ves deposit (Kremnické vrchy Mts., Western Carpathians, Slovakia) - a source of illite-smectite (ISCz-1). In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 117. (AIPEA - International Clay Conference ICC)
- GII27 RAKHMATULLIN, Aydar** - ZANGHI, Didier - POLOVOV, Ilya B. - ŠIMKO, František - MAKSIMTSEV, Konstantin V. - KORENKO, Michal - BESSADA, Catherine. Structural study by NMR and modeling Al-Sc alloy formation in NaF-ScF₃ eutectic melt. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 152. (EUCHEM Conference on Molten Salts and Ionic Liquids)
- GII28 RYBKA, Karolina** - MATUSIK, Jakub - SLANÝ, Michal. LDH-containing materials derived from minerals: from technical aspects of synthesis to the application in As(V) removal. In AIPEA - XVII International Clay Conference - ICC 2022, 25-29 July 2022, Istanbul, Turkey : Scientific Research Abstracts. - Turkey, 2022, p. 192. (AIPEA - International Clay Conference ICC)
- GII29 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - CSANÁDI, Tamás - DUSZA, Ján - ÜNSAL, Hakan - TATARKO, Peter - TATARKOVÁ, Monika - ŠAJGALÍK, Pavol. Influence of the sintering parameters on microstructure development and mechanical properties of (Mo-Nb-Ta-V-W)C based high-entropy carbides. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. 6/17. (International ceramics congress : CIMTEC 2022)
- GII30 SHEPA, Ivan - MÚDRA, Erika - PAVLIŇÁK, D. - VOJTKO, Marek - TATARKO, Peter - DUSZA, Ján. Nanoceramic fibrous materials and composites prepared by needle-less electrospinning. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 169. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII31 SHEPA, Ivan - MÚDRA, Erika - VOJTKO, Marek - MILKOVIČ, Ondrej - DUSZA, Ján - PAVLINAK, D. - TATARKO, Peter - ANTAL, Vitaliy - BEDNARČÍK, Jozef. Low-temperature plasma treatment in designing the morphology of titania nanofibers. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. 5/9. (International ceramics congress : CIMTEC 2022)
- GII32 2nd AtomDec Annual Meeting - Atomic Design of Carbon-Based Materials for New Society, November 2 - 4, 2022, Smolenice, Slovakia : Book of Abstracts. Slovakia : Institute of Inorganic Chemistry, Slovak Academy of Sciences, 2022. 34 p. ISBN 978-80-973578-3-2 (AtomDec Annual

- Meeting)
- GII33 SILLIKOVÁ, Veronika** - JAKUBČINOVÁ, Jana - HORNÍK, Miroslav - GOMOLA, Igor - DULANSKÁ, Silvia. Answer to comments of Dr. Berek on the paper: Veronika Silliková, Jana Jakubčinová, Miroslav Horník, Igor Gomola, Silvia Dulanská, "Determination of caesium-137 in water samples using modified carbon microfibers", J. Radioanal. Nuclear Chem. (2022) 331.1275-1284, <https://doi.org/10.1007/s10967-022-08212-5>. In Journal of Radioanalytical and Nuclear Chemistry-Articles, 2022, vol., 2 p. (2021: 1.754 - IF, Q2 - JCR, 0.364 - SJR, Q2 - SJR). ISSN 0236-5731. Dostupné na: <https://doi.org/10.1007/s10967-022-08367-1>
- GII34 ŠAJGALÍK, Pavol - LENČEŠ, Zoltán - ZHANG, Chengyu - MUKASYAN, Alexander S. Rapid hot-pressed ultra-high creep resistant silicon carbide ceramics. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 118. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII35 ŠAJGALÍK, Pavol. Silicon carbide ceramics with high thermal, electrical conductivity and other exceptional properties. In ICCCI 2022. The 7th International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials and the 57th Summer Symposium on Powder Technology, Fujiyoshida, Japan, November 15-18, 2022 : Program and Abstracts. - Japan, 2022, p. 79. (ICCCI 2022. The 7th International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials and the 57th Summer Symposium on Powder Technology)
- GII36 ŠAJGALÍK, Pavol**. Hot-pressed ultra-high creep resistant silicon carbide ceramics. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. CC-1:IL08. (International ceramics congress : CIMTEC 2022)
- GII37 ŠIMKO, František** - RAKHMATULLIN, Aydar - NETRIOVÁ, Zuzana - KORENKO, Michal - BESSADA, Catherine. Oxo- and (Oxo)(Fluoro)-Aluminates: Synthesis, Stability and Structure Correlation. In 28th EUCHEM conference on Molten Salts and Ionic Liquids, Patras, 5-10th June 2022 : book of abstracts. - Greece : Institute of Chemical Engineering Sciences, 2022, p. 142. (EUCHEM Conference on Molten Salts and Ionic Liquids)
- GII38 TALIMIAN, Ali** - GALUSEK, Dušan - NAJAFZADEHKHOEE, Aliasghar - POUCHLÝ, Václav - MACA, Karel. Improving mechanical properties of laminated transparent ceramics by engineering residual stress profiles. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. CA-7: L08. (International ceramics congress : CIMTEC 2022)
- GII39 TATARKO, Peter - ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - MATOVIC, Branko - CHLUP, Zdeněk - TATARKOVÁ, Monika - HIČÁK, Michal - DLOUHÝ, Ivo. Ultra-high temperature ceramics with improved ablation resistance. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 18. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions)
- GII40 TATARKO, Peter - ÜNSAL, Hakan - MATOVIC, Branko - CHLUP, Zdeněk - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - DLOUHÝ, Ivo - ŠAJGALÍK, Pavol. The effect of rare-earth based additives on the ablation resistance of ZrB₂-SiC composites. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 178. (ISC'22 International Symposium on Characterization)
- GII41 TATARKO, Peter** - ÜNSAL, Hakan - MATOVIČ, Branko - CHLUP, Zdeněk - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - DLOUHÝ, Ivo - ŠAJGALÍK, Pavol. The effect of rare-earth based additives on the mechanical properties of ZrB₂-SiC composites prepared by reactive and non-reactive sintering route. In 15th international ceramics congress : CIMTEC 2022. Perugia, 20.-24.6.2022. - B.V., 2022, p. CD-3: IL03. (International ceramics congress : CIMTEC 2022)
- GII42 ÜNSAL, Hakan - HANZEL, Ondrej - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. Preparation and characterization of B₄C/TiB₂ composites. In IMEC 2022. 1st International Conference on Innovative Materials in Extreme Conditions, 22-23 March 2022, Belgrade, Serbia : Program and Book of Abstracts. - Belgrade, Serbia : Vinča Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade and Serbian Society for Innovative Materials in Extreme Conditions, 2022, p. 28. (IMEC 2022. International Conference on Innovative Materials in Extreme Conditions)
- GII43 ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - HIČÁK, Michal - CHLUP, Zdeněk - DLOUHÝ, Ivo - TATARKO, Peter. Ablation resistance of ZrB₂-SiC composites prepared by reaction sintering of ZrSi₂, B₄C, C, and rare-earth based additives. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 138. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)

- GII44 ÜNSAL, Hakan - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - HANZEL, Ondrej - TATARKOVÁ, Monika - DLOUHÝ, Ivo - TATARKO, Peter. In-situ graphene platelets formation and its suppression during reactive spark plasma sintering of boron carbide/titanium diboride composites. In KERAMIK/CERAMICS 2022, 97. DKG Annual Meeting, virtual conference, 07.-09.03.2022 : Abstracts. - Köln, Germany : Deutsche Keramische Gesellschaft e.V., 2022, p. 135. (KERAMIK/CERAMICS 2022. DKG Annual Meeting)
- GII45 ÜNSAL, Hakan** - HANZEL, Ondrej - TATARKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - DLOUHÝ, Ivo - TATARKO, Peter. In-situ synthesis and characterization of B4C-TiB2 composites. In ISC'22. 2nd International Symposium on Characterization, 22-25 September 2022, Afyonkarahisar, Turkey : Abstract Book. - Turkey : Evcin ArGe, 2022, p. 200. (ISC'22 International Symposium on Characterization)
- GII46 VALÚCHOVÁ, Jana** - PRNOVÁ, Anna - PECUŠOVÁ, Beáta - PARCHOVIANSKÝ, Milan - MICHÁLKOVÁ, Monika - KLEMENT, Róbert - GALUSEK, Dušan. The influence of ZrO2 addition on thermal behavior and mechanical properties of Al2O3-Y2O3-ZrO2 ceramics. In PNCS16 - Canterbury 2022. 16th International Conference on the Physics of Non-Crystalline Solids, University of Kent, Canterbury, 10-15 July 2022 : Programme and abstracts. - Canterbury, UK : Society of Glass Technology, 2022, 1 p. (PNCS16 - Canterbury 2022. International Conference on the Physics of Non-Crystalline Solids)

Nezaradené publikácie

- 01 MUTLU, Nurshen - KURTULDU, Fatih - UNALAN, Irem - NEŠČÁKOVÁ, Z. - KAŇKOVÁ, Hana - GALUSKOVÁ, Dagmar - MICHÁLEK, Martin - LIVERANI, Liliana - GALUSEK, Dušan** - BOCCACCINI, Aldo**. Effect of Zn and Ga doping on bioactivity, degradation, and antibacterial properties of borate 1393-B3 bioactive glass. In Ceramics International, 2022, vol. 48, no. 11, p. 16404-16417. (2021: 5.532 - IF, Q1 - JCR, 0.887 - SJR, Q1 - SJR, karentované - CCC). (2022 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2022.02.192>

Ohlasy (citácie):

ABA Štúdie charakteru vedeckej monografie v časopisoch a zborníkoch vydané v zahraničných vydavateľstvách

- ABA01 BUJDÁK, Juraj. Hybrids with functional dyes : Chapter 18. In Inorganic nanosheets and nanosheet-based materials : Fundamentals and applications of two-dimensional systems. - Tokyo, Japan : Springer Japan, 2017, p. 419-465. ISBN 978-4-431-56494-2. ISSN 1571-5744. Dostupné na: https://doi.org/10.1007/978-4-431-56496-6_18
Citácie:
1. [1.1] SASAI, Ryo - YAMAMOTO, Satoshi - NAITO, Akane. Photoluminescence Gas Sensing by Fluorescein-Dye Anions/1-Butanesulfonate/Layered Double Hydroxide Hybrid Materials under Humid Environment Conditions. In NANOMATERIALS, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/nano11040914>, Registrované v: WOS
- ABA02 BUJDÁK, Juraj. Resonance energy transfer in hybrid systems of photoactive dye molecules and layered inorganics. In Dyes and Photoactive Molecules in Microporous Systems : Structure and Bonding. - Švajčiarsko : Springer, 2020, 2020, vol. 183, p. 205-250. ISBN 978-3-030-56633-3. Dostupné na: https://doi.org/10.1007/430_2020_55
Citácie:
1. [1.1] BONARDD, Sebastian - DIAZ DIAZ, David - LEIVA, Angel - SALDIAS, Cesar. Chromophoric Dendrimer-Based Materials: An Overview of Holistic-Integrated Molecular Systems for Fluorescence Resonance Energy Transfer (FRET) Phenomenon. In POLYMERS, 2021, vol. 13, no. 24, pp. Available on: <https://doi.org/10.3390/polym13244404>, Registrované v: WOS
2. [1.1] CUNNINGHAM, Paul D. - SPILLMANN, Christopher M. - MELINGER, Joseph S. - ANCONA, Mario G. - KIM, Young C. - MATHUR, Divita - BUCKHOUT-WHITE, Susan - GOLDMAN, Ellen R. - MEDINTZ, Igor L. Forster Resonance Energy Transfer in Linear DNA Multifluorophore Photonic Wires: Comparing Dual versus Split Rail Building Block Designs. In ADVANCED OPTICAL MATERIALS, 2021, vol. 9, no. 21, pp. ISSN 2195-1071. Available on: <https://doi.org/10.1002/adom.202100884>, Registrované v: WOS

ABC Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

- ABC01 GATES, W.P. - PETIT, Sabine - MADEJOVÁ, Jana. Applications of NIR/MIR to determine site

occupancy in smectites : Chapter 7. In *Infrared and Raman spectroscopies of clay minerals*. - Netherlands : Elsevier, 2017, p. 200-221. ISBN 978-0-08-100355-8. ISSN 1572-4352. Dostupné na: <https://doi.org/10.1016/B978-0-08-100355-8.00007-2>

Citácie:

1. [1.1] FOX, Valerie K. - KUPPER, Robert J. - EHLMANN, Bethany L. - CATALANO, Jeffrey G. - RAZZELL-HOLLIS, Joseph - ABBEY, William J. - SCHILD, Dirk J. - NICKERSON, Ryan D. - PETERS, Jonas C. - KATZ, Sydney M. - WHITE, Andrew A. Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. In *AMERICAN MINERALOGIST*. ISSN 0003-004X, 2021, vol. 106, no. 6, pp. 964-982. Dostupné na: <https://doi.org/10.2138/am-2020-7419>., Registrované v: WOS
2. [1.1] NODA, Natsumi - YAMASHITA, Shohei - TAKAHASHI, Yoshio - MATSUMOTO, Megumi - ENOKIDO, Yuma - AMANO, Kana - KAWAI, Takahiro - SAKUMA, Hiroshi - FUKUSHI, Keisuke - SEKINE, Yasuhito - NAKAMURA, Tomoki. Anaerobic Microscopic Analysis of Ferrous Saponite and Its Sensitivity to Oxidation by Earth's Air: Lessons Learned for Analysis of Returned Samples from Mars and Carbonaceous Asteroids. In *MINERALS*, 2021, vol. 11, no. 11, pp. Available on: <https://doi.org/10.3390/min11111244>., Registrované v: WOS
3. [1.1] RODRIGUES, Andreia - ANGELICA, Romulo - PAZ, Simone. CATIONIC DIFFERENTIATION OF BENTONITES BY INFRARED: A STUDY OF THE HYDRATION EFFECTS OF EXCHANGEABLE CATIONS. In *QUIMICA NOVA*. ISSN 0100-4042, 2021, vol. 44, no. 3, pp. 272-277. Dostupné na: <https://doi.org/10.21577/0100-4042.20170705>., Registrované v: WOS
4. [1.1] ZUO, Hongyan - HUANG, Liuqin - CHU, Rosalie K. - TOLIC, Nikola - WASHTON, Nancy - ZHU, Zihua - EDELMANN, Richard E. - ELAGAMY, Samar - SOMMER, Andre - LUAN, Fubo - ZENG, Qiang - CHEN, Yu - HU, Dafu - ZHAN, Di - HU, Jinglong - DONG, Hailiang. Reduction of structural Fe(III) in nontronite by humic substances in the absence and presence of *Shewanella putrefaciens* and accompanying secondary mineralization. In *AMERICAN MINERALOGIST*. ISSN 0003-004X, 2021, vol. 106, no. 12, pp. 1957-1970. Dostupné na: <https://doi.org/10.2138/am-2021-7828>., Registrované v: WOS

ABC02

KOMADEL, Peter - MADEJOVÁ, Jana. Acid activation of clay minerals. In *Handbook of Clay Science*. Vol. 1. - Elsevier, 2006, p. 263-287. Dostupné na: [https://doi.org/10.1016/S1572-4352\(05\)01008-1](https://doi.org/10.1016/S1572-4352(05)01008-1)

Citácie:

1. [1.1] AMER, Mohammad W. - ALHESAN, Jameel S. Aljariri - KHALILI, Fawwaz. Enhanced method for the removal of U (VI) and Th (IV) from aqueous solutions using chemically modified kaolinite. In *INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY*, 2021, vol., no., pp. ISSN 0306-7319. Available on: <https://doi.org/10.1080/03067319.2021.2010726>., Registrované v: WOS
2. [1.1] BEGUM, Ayisha F. - BALASUBRAMANIAN, Kalpattu K. - SHANMUGASUNDARAM, Bhagavathy. Acid activated montmorillonite K-10 mediated intramolecular acylation: Simple and convenient synthesis of 4-chromanones. In *TETRAHEDRON LETTERS*, 2021, vol. 82, no., pp. ISSN 0040-4039. Available on: <https://doi.org/10.1016/j.tetlet.2021.153372>., Registrované v: WOS
3. [1.1] CHAARI, Islem - MEDHIOUB, Mounir - JAMOSSI, Fakher - HAMZAOU, Ahmed Hichem. Acid-treated clay materials (Southwestern Tunisia) for removing sodium leuco-vat dye : Characterization, adsorption study and activation mechanism. In *JOURNAL OF MOLECULAR STRUCTURE*, 2021, vol. 1223, no., pp. ISSN 0022-2860. Available on: <https://doi.org/10.1016/j.molstruc.2020.128944>., Registrované v: WOS
4. [1.1] DILL, Lais P. - KOCHPEKA, Debora M. - LIMA, Larissa L. - LEITAO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian Mineral Clays: Classification, Acid Activation and Application as Catalysts for Methyl Esterification Reactions. In *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, 2021, vol. 32, no. 1, pp. 145-157. ISSN 0103-5053. Available on: <https://doi.org/10.21577/0103-5053.20200164>., Registrované v: WOS
5. [1.1] DIM, P. E. - MUSTAPHA, L. S. - TERMTANUN, M. - OKAFOR, J. O. Adsorption of chromium (VI) and iron (III) ions onto acid-modified kaolinite: Isotherm, kinetics and thermodynamics studies. In *ARABIAN JOURNAL OF CHEMISTRY*, 2021, vol. 14, no. 4, pp. ISSN 1878-5352. Available on: <https://doi.org/10.1016/j.arabjc.2021.103064>., Registrované v: WOS
6. [1.1] ERDOGAN, Burcu - ESENLI, Fahri. Sepiolite as an efficient adsorbent for ethylene gas. In *CLAY MINERALS*, 2021, vol. 56, no. 3, pp. 222-228. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.36>., Registrované v: WOS
7. [1.1] MERINO, Danila - IGLESIAS, Maria J. - MANSILLA, Andrea Y. - CASALONGUE, Claudia A. - ALVAREZ, Vera A. FIGHTING AGAINST PLANT SALINE STRESS: DEVELOPMENT OF A NOVEL BIOACTIVE COMPOSITE BASED ON BENTONITE AND L-PROLINE. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 2, pp. 232-242. ISSN 0009-8604. Available on: <https://doi.org/10.1007/s42860-021-00120-1>., Registrované v: WOS

ABC03

8. [1.1] PLUANGKLANG, Chutima - RANGSRIWATANANON, Kunwadee. Facile Method by Bentonite Treated with Heat and Acid to Enhance Pesticide Adsorption. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 11, pp. Available on: <https://doi.org/10.3390/app11115147>., Registrované v: WOS

9. [1.1] TENEQJA, Valdet - KORPA, Arjan - DRUSHKU, Spiro - XHAXHIU, Kledi - SKENDULI, Enkeleida. PROPERTIES COMPARISON OF TWO ACID-ACTIVATED BENTONITES OF KOSOVO TO BE USED AS BLEACHING AGENTS. In *INTERNATIONAL JOURNAL OF ECOSYSTEMS AND ECOLOGY SCIENCE-IJEES*, 2021, vol. 11, no. 2, pp. 321-326. ISSN 2224-4980. Available on: <https://doi.org/10.31407/ijeess11.217>., Registrované v: WOS

KOMADEL, Peter - MADEJOVÁ, Jana. Acid activation of clay minerals. In *Handbook of Clay Science. A.Fundamentals*. 2nd. ed. - Oxford : Elsevier, 2013, p. 385-410. ISBN 978-0-08-098259-5. ISSN 1572-4352. Dostupné na: <https://doi.org/10.1016/B978-0-08-098258-8.00013-4>

Citácie:

1. [1.2] AMER, Mohammad W. - ALJARIRI ALHESAN, Jameel S. - KHALILI, Fawwaz I. Enhanced method for the removal of U (VI) and Th (IV) from aqueous solutions using chemically modified kaolinite. In *International Journal of Environmental Analytical Chemistry*, 2021-01-01, pp. ISSN 03067319. Available on: <https://doi.org/10.1080/03067319.2021.2010726>., Registrované v: SCOPUS

2. [1.2] BEGUM, Ayisha F. - BALASUBRAMANIAN, Kalpattu K. - SHANMUGASUNDARAM, Bhagavathy. Acid activated montmorillonite K-10 mediated intramolecular acylation: Simple and convenient synthesis of 4-chromanones. In *Tetrahedron Letters*, 2021-10-12, 82, pp. ISSN 00404039. Available on: <https://doi.org/10.1016/j.tetlet.2021.153372>., Registrované v: SCOPUS

3. [1.2] DILL, Laís P. - KOCHPEKA, Débora M. - LIMA, Larissa L. - LEITÃO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian mineral clays: Classification, acid activation and application as catalysts for methyl esterification reactions. In *Journal of the Brazilian Chemical Society*, 2021-01-01, 32, 1, pp. 145-157. ISSN 01035053. Available on: <https://doi.org/10.21577/0103-5053.20200164>., Registrované v: SCOPUS

4. [1.2] DIM, P. E. - MUSTAPHA, L. S. - TERMTANUN, M. - OKAFOR, J. O. Adsorption of chromium (VI) and iron (III) ions onto acid-modified kaolinite: Isotherm, kinetics and thermodynamics studies. In *Arabian Journal of Chemistry*, 2021-04-01, 14, 4, pp. ISSN 18785352. Available on: <https://doi.org/10.1016/j.arabjc.2021.103064>., Registrované v: SCOPUS

5. [1.2] ERDOĞAN, Burcu - ESENLİ, Fahri. Sepiolite as an efficient adsorbent for ethylene gas. In *Clay Minerals*, 2021-09-05, 56, 3, pp. 222-228. ISSN 00098558. Available on: <https://doi.org/10.1180/clm.2021.36>., Registrované v: SCOPUS

6. [1.2] FRIESEM, David E. - SHAHACK-GROSS, Ruth - WEINSTEIN-EVRON, Mina - TEUTSCH, Nadya - WEISSBROD, Lior - SHIMELMITZ, Ron. High-resolution study of Middle Palaeolithic deposits and formation processes at Tabun Cave, Israel: Guano-rich cave deposits and detailed stratigraphic appreciation of Layer C. In *Quaternary Science Reviews*, 2021-12-15, 274, pp. ISSN 02773791. Available on: <https://doi.org/10.1016/j.quascirev.2021.107203>., Registrované v: SCOPUS

7. [1.2] IGLESIAS, Isaac - JIMÉNEZ, Mayra - GALLARDO, Andrea M. - ÁVILA, Edward E. - MORERA, Vivian - VILORIA, Alfredo - RICAURTE, Marvin - TAFUR, Juan P. Mechanical properties and X-ray diffraction analyses of clay/sand pellets for CO₂ adsorption: The effects of sand content and humidity. In *Oil and Gas Science and Technology*, 2021-01-01, 76, pp. ISSN 12944475. Available on: <https://doi.org/10.2516/ogst/2021030>., Registrované v: SCOPUS

8. [1.2] KYPRITIDOU, Zacharenia - ARGYRAKI, Ariadne. Geochemical interactions in the trace element-soil-clay system of treated contaminated soils by Fe-rich clays. In *Environmental Geochemistry and Health*, 2021-07-01, 43, 7, pp. 2483-2503. ISSN 02694042. Available on: <https://doi.org/10.1007/s10653-020-00542-1>., Registrované v: SCOPUS

9. [1.2] LO DICO, Giulia - NUÑEZ, Álvaro Peña - CARCELÉN, Verónica - HARANCZYK, Maciej. Machine-learning-accelerated multimodal characterization and multiobjective design optimization of natural porous materials. In *Chemical Science*, 2021-07-21, 12, 27, pp. 9309-9317. ISSN 20416520. Available on: <https://doi.org/10.1039/d1sc00816a>., Registrované v: SCOPUS

10. [1.2] MACHIDA, Shingo - GOTOH, Takahiro - KATSUMATA, Ken ichi - YASUMORI, Atsuo. A facile method of generating aluminosilicate nanoparticles: Complete fragmentation of kaolinite nanoscrolls via manual grinding. In *Applied Clay Science*, 2021-11-15, 214, pp. ISSN 01691317. Available on: <https://doi.org/10.1016/j.clay.2021.106295>., Registrované v: SCOPUS

11. [1.2] MACHIDA, Shingo - KATSUMATA, Ken Ichi - YASUMORI, Atsuo. Expansion of orderly stacked metakaolinite layers and order destruction using a kaolinite-tetraphenylphosphonium chloride intercalation compound. In *RSC Advances*, 2021-06-30, 11, 37, pp. 23090-23094. Available on: <https://doi.org/10.1039/d1ra03926a>., Registrované v: SCOPUS

12. [1.2] MERINO, Danila - IGLESIAS, María J. - MANSILLA, Andrea Y. - CASALONGUÉ,

- Claudia A. - ALVAREZ, Vera A. *FIGHTING AGAINST PLANT SALINE STRESS: DEVELOPMENT OF A NOVEL BIOACTIVE COMPOSITE BASED ON BENTONITE AND L-PROLINE*. In *Clays and Clay Minerals*, 2021-04-01, 69, 2, pp. 232-242. ISSN 00098604. Available on: <https://doi.org/10.1007/s42860-021-00120-1>, Registrované v: SCOPUS
13. [1.2] MULU, Elshaday - M'; ARIMI, Milton - RAMKAT, Rose c. - KIPROP, Ambrose. *Biogas upgrade using modified natural clay*. In *Energy Conversion and Management: X*, 2021-12-01, 12, pp. Available on: <https://doi.org/10.1016/j.ecmx.2021.100134>, Registrované v: SCOPUS
14. [1.2] MULU, Elshaday - M'; ARIMI, Milton M. - RAMKAT, Rose C. *A review of recent developments in application of low cost natural materials in purification and upgrade of biogas*. In *Renewable and Sustainable Energy Reviews*, 2021-07-01, 145, pp. ISSN 13640321. Available on: <https://doi.org/10.1016/j.rser.2021.111081>, Registrované v: SCOPUS
15. [1.2] NUNES FILHO, F. G. - ALVES, A. P.M. - NASCIMENTO, T. R.L. - CASTELLANO, L. R.C. - FONSECA, M. G. *Graphene/montmorillonite and graphene oxide/montmorillonite hybrids as functional nanomaterials: A view in the current literature*. In *Ceramica*, 2021-06-01, 67, 382, pp. 210-229. ISSN 03666913. Available on: <https://doi.org/10.1590/0366-69132021673823063>, Registrované v: SCOPUS
16. [1.2] OLIVEIRA, Leandro - OSAJIMA, Josy - PEÑA-GARCIA, Ramon Raudel - SILVA-FILHO, Edson Cavalcanti - FONSECA, Maria Gardennia. *Effect of oxyations in clay mineral on adsorption—vanadyl exchange bentonites and their ability for amiloride removal*. In *Minerals*, 2021-12-01, 11, 12, pp. Available on: <https://doi.org/10.3390/min11121327>, Registrované v: SCOPUS
17. [1.2] OYUN-ERDENE, Gendenjamts - ANUDARI, Dolgormaa - MANDAKHSAIKHAN, Luvsandagva - ZOLZAYA, Tsoodol - TEMUJIN, Jadambaa. *Comparative acid leaching study of mongolian muscovite and montmorillonite clay minerals*. In *Solid State Phenomena*, 2021-01-01, 323 SSP, pp. 21-27. ISSN 10120394. Available on: <https://doi.org/10.4028/www.scientific.net/SSP.323.21>, Registrované v: SCOPUS
18. [1.2] PAREDES-QUEVEDO, Laura C. - CASTELLANOS, Nelson J. - CARRIAZO, José G. *Influence of Porosity and Surface Area of a Modified Kaolinite on the Adsorption of Basic Red 46 (BR-46)*. In *Water, Air, and Soil Pollution*, 2021-12-01, 232, 12, pp. ISSN 00496979. Available on: <https://doi.org/10.1007/s11270-021-05450-3>, Registrované v: SCOPUS
19. [1.2] PLUANGKLANG, Chutima - RANGSRIWATANANON, Kunwadee. *Article facile method by bentonite treated with heat and acid to enhance pesticide adsorption*. In *Applied Sciences (Switzerland)*, 2021-06-01, 11, 11, pp. Available on: <https://doi.org/10.3390/app11115147>, Registrované v: SCOPUS
20. [1.2] ROUHANI, Hadi - FARHADI, Fatola - AKBARI KENARI, Mahsa - ESKANDARI, Effat - RAMAKRISHNA, Seeram. *Selection of suitable bentonite and the influence of various acids on the preparation of a special clay for the removal of trace olefins from aromatics*. In *Clay Minerals*, 2021-09-01, 56, 3, pp. 185-196. ISSN 00098558. Available on: <https://doi.org/10.1180/clm.2021.32>, Registrované v: SCOPUS
21. [1.2] SOETAREDJO, Felicia Edi - LAYSANDRA, Livy - PUTRO, Jindrayani Nyoo - SANTOSO, Shella Permatasari - ANGKAWIJAYA, Artik Elisa - YULIANA, Maria - JU, Yi Hsu - ZHOU, Chun Hui - ISMADJI, Suryadi. *Ecological-safe and low-cost activated-bleaching earth: Preparation, characteristics, bleaching performance, and scale-up production*. In *Journal of Cleaner Production*, 2021-01-10, 279, pp. ISSN 09596526. Available on: <https://doi.org/10.1016/j.jclepro.2020.123793>, Registrované v: SCOPUS
22. [1.2] WAL, Katarzyna - RUTKOWSKI, Piotr - STAWIŃSKI, Wojciech. *Application of clay minerals and their derivatives in adsorption from gaseous phase*. In *Applied Clay Science*, 2021-12-01, 215, pp. ISSN 01691317. Available on: <https://doi.org/10.1016/j.clay.2021.106323>, Registrované v: SCOPUS
23. [1.2] YANG, Yixuan - ZHU, Runliang - CHEN, Qingze - XING, Jieqi - MA, Lingya - HE, Qiuzhi - FAN, Jian - XI, Yunfei - ZHU, Jianxi - HE, Hongping. *Development of novel multifunctional adsorbent by effectively hosting both zwitterionic surfactant and hydrated ferric oxides in montmorillonite*. In *Science of the Total Environment*, 2021-06-20, 774, pp. ISSN 00489697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.144974>, Registrované v: SCOPUS
24. [1.2] ZHANG, Tingting - WANG, Wei - ZHAO, Yunliang - BAI, Haoyu - WEN, Tong - KANG, Shichang - SONG, Guangsen - SONG, Shaoxian - KOMARNENI, Sridhar. *Removal of heavy metals and dyes by clay-based adsorbents: From natural clays to 1D and 2D nano-composites*. In *Chemical Engineering Journal*, 2021-09-15, 420, pp. ISSN 13858947. Available on: <https://doi.org/10.1016/j.cej.2020.127574>, Registrované v: SCOPUS
25. [1.2] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. *Effect of acid activation on structural evolution and surface charge of different derived kaolinites*. In *Applied Clay Science*, 2021-03-15, 203, pp. ISSN 01691317. Available on: <https://doi.org/10.1016/j.clay.2021.105997>,

- Registrované v: SCOPUS
- ABC04 KOMADEL, Peter. Structure and chemical characteristics of modified clays. In MISAEILIDES, P. et al. Natural Microporous Materials in Environmental Technology : Series E: Applied Sciences. - Dordrecht : Kluwer Academic Publishers, 1999, 1999, vol. 362, p. 3-18. ISBN 0-7923-5889-9.
- Citácie:
- [1.1] YANG, Yixuan - ZHU, Runliang - CHEN, Qingze - XING, Jieqi - MA, Lingya - HE, Qiuzhi - FAN, Jian - XI, Yunfei - ZHU, Jianxi - HE, Hongping. Development of novel multifunctional adsorbent by effectively hosting both zwitterionic surfactant and hydrated ferric oxides in montmorillonite. In SCIENCE OF THE TOTAL ENVIRONMENT, 2021, vol. 774, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.144974>., Registrované v: WOS
 - [1.1] ZHOU, Lvshan - PENG, Tongjiang - SUN, Hongjuan - FU, Dong - LAI, Chuan. A novel separation method of the valuable components for activated clay production wastewater. In OPEN CHEMISTRY, 2021, vol. 19, no. 1, pp. 530-540. ISSN 2391-5420. Available on: <https://doi.org/10.1515/chem-2021-0052>., Registrované v: WOS
 - [1.1] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. Effect of acid activation on structural evolution and surface charge of different derived kaolinites. In APPLIED CLAY SCIENCE, 2021, vol. 203, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105997>., Registrované v: WOS
- ABC05 MADEJOVÁ, Jana - GATES, W.P. - PETIT, Sabine. IR spectra of clay minerals : Chapter 5. In Infrared and Raman spectroscopies of clay minerals. - Netherlands : Elsevier, 2017, p. 107-149. ISBN 978-0-08-100355-8. ISSN 1572-4352. Dostupné na: <https://doi.org/10.1016/B978-0-08-100355-8.00005-9>
- Citácie:
- [1.1] AMORIM, Fabio Farias - AGRA BEZERRA DA SILVA, Yuri Jacques - NASCIMENTO, Rennan Cabral - AGRA BEZERRA DA SILVA, Ygor Jacques - TIECHER, Tales - ARAUJO DO NASCIMENTO, Clistenes Williams - GOMES MINELLA, Jean Paolo - ZHANG, Yusheng - UPADHAYAY, Hari Ram - PULLEY, Simon - COLLINS, Adrian L. Sediment source apportionment using optical property composite signatures in a rural catchment, Brazil. In CATENA. ISSN 0341-8162, 2021, vol. 202, no., pp. Dostupné na: <https://doi.org/10.1016/j.catena.2021.105208>., Registrované v: WOS
 - [1.1] ASHIQ, Ahmed - WALPITA, Janitha - VITHANAGE, Meththika. Functionalizing non-smectic clay via methoxy-modification for enhanced removal and recovery of oxytetracycline from aqueous media. In CHEMOSPHERE. ISSN 0045-6535, 2021, vol. 276, no., pp. Dostupné na: <https://doi.org/10.1016/j.chemosphere.2021.130079>., Registrované v: WOS
 - [1.1] BAHRANOWSKI, Krzysztof - KLIMEK, Agnieszka - GAWEL, Adam - SERWICKA, Ewa M. Rehydration Driven Na-Activation of Bentonite-Evolution of the Clay Structure and Composition. In MATERIALS, 2021, vol. 14, no. 24, pp. Dostupné na: <https://doi.org/10.3390/ma14247622>., Registrované v: WOS
 - [1.1] BELOUSOV, P. - CHUPALENKOV, N. - CHRISTIDIS, G. E. - ZAKUSINA, O. - ZAKUSIN, S. - MOROZOV, I - CHERNOV, M. - ZAITSEVA, T. - TYUPINA, E. - KRUPSKAYA, V. Carboniferous bentonites from 10Th Khutor deposit (Russia): Composition, properties and features of genesis. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 215, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106308>., Registrované v: WOS
 - [1.1] CARBONEL-RAMOS, Dalia Elisa - CHIRINOS, Hugo David - GOMEZ-MARROQUIN, Mery Cecilia - AGARWAL, Madhu. RESPONSE SURFACE METHODOLOGY FOR OPTIMIZATION OF HEAVY METAL ADSORPTION IN A MULTIMETAL SOLUTION BY BENTONITE-KAOLIN-ZEOLITE PELLETS. In PERIODICO TCHE QUIMICA. ISSN 1806-0374, 2021, vol. 18, no. 37, pp. 57-75., Registrované v: WOS
 - [1.1] CHRUSZCZ-LIPSKA, Katarzyna - SOLECKI, Marek Leszek - TRZEWIK, Bartosz - MARUTA, Michal - WARTAK, Joanna - ZAGRAJCZUK, Danuta. IR spectroscopy as a fast method of determining carbonate content in the Sarmatian-Badenian sandstone reservoirs: A case study from the Carpathian Foredeep (Poland). In GEOLOGICA CARPATHICA. ISSN 1335-0552, 2021, vol. 72, no. 4, pp. 333-343. Dostupné na: <https://doi.org/10.31577/GeolCarp.72.4.4>., Registrované v: WOS
 - [1.1] DADI, Nitin Chandra Teja - BUJDAK, Juraj - MEDVECKA, Veronika - PALKOVA, Helena - BARLOG, Martin - BUJDAKOVA, Helena. Surface Characterization and Anti-Biofilm Effectiveness of Hybrid Films of Polyurethane Functionalized with Saponite and Phloxine B. In MATERIALS, 2021, vol. 14, no. 24, pp. Dostupné na: <https://doi.org/10.3390/ma14247583>., Registrované v: WOS
 - [1.1] DE OLIVEIRA, Luis H. - TRIGUEIRO, Pollyana - RIGAUD, Baptiste - DA SILVA-FILHO, Edson C. - OSAJIMA, Josy A. - FONSECA, Maria G. - LAMBERT, JeanFrancois - GEORGELIN, Thomas - JABER, Maguy. When RNA meets montmorillonite: Influence of the pH and divalent cations. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 214, no., pp.

- Dostupné na: <https://doi.org/10.1016/j.clay.2021.106234>., Registrované v: WOS
9. [1.1] HU, Xin - LI, Meixian - YANG, Jie - LIU, Feng - HUANG, Hao - PAN, Haifeng - YANG, Hongyu. *In situ fabrication of melamine hydroxy ethylidene diphosphonate wrapped montmorillonite for reducing the fire hazards of epoxy resin*. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 201, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105934>., Registrované v: WOS
 10. [1.1] JOAQUIM SALGADO-CAMPOS, Victor Matheus - BERTOLINO, Luiz Carlos - DA SILVA, Francisco Jose - MENDES, Julio Cezar - NEUMANN, Reiner. *Mineralogy and chemistry of a new halloysite deposit from the Rio de Janeiro pegmatite province, south-eastern Brazil*. In *CLAY MINERALS*. ISSN 0009-8558, 2021, vol. 56, no. 1, pp. 1-15. Dostupné na: <https://doi.org/10.1180/clm.2021.8>., Registrované v: WOS
 11. [1.1] KANBAR, Hussein Jaafar - TRAN LE, Thai - OLAJOS, Fredrik - ENGLUND, Goran - HOLMBOE, Michael. *Tracking mineral and geochemical characteristics of Holocene lake sediments: the case of Hotagen, west-central Sweden*. In *JOURNAL OF SOILS AND SEDIMENTS*. ISSN 1439-0108, 2021, vol. 21, no. 9, pp. 3150-3168. Dostupné na: <https://doi.org/10.1007/s11368-021-03012-y>., Registrované v: WOS
 12. [1.1] KLOPROGGE, J. Theo - PONCE, Concepcion P. *Spectroscopic Studies of Synthetic and Natural Saponites: A Review*. In *MINERALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020112>., Registrované v: WOS
 13. [1.1] LI, Shu E. - MU, B. - DING, Jun J. - ZHANG, H. - WANG, Xiao W. - WANG, Ai Q. *FABRICATION OF ANTHOCYANIN/MONTMORILLONITE HYBRID PIGMENTS TO ENHANCE THEIR ENVIRONMENTAL STABILITY AND APPLICATION IN ALLOCHROIC COMPOSITE FILMS*. In *CLAYS AND CLAY MINERALS*. ISSN 0009-8604, 2021, vol. 69, no. 1, pp. 142-151. Dostupné na: <https://doi.org/10.1007/s42860-021-00114-z>., Registrované v: WOS
 14. [1.1] MARTSOUKA, Fotini - PAPAGIANNOPOULOS, Konstantinos - HATZIANTONIOU, Sophia - BARLOG, Martin - LAGIOPOULOS, Giorgos - TATOULIS, Triantafyllos - TEKERLEKOPOULOU, Athanasia G. - LAMPROPOULOU, Paraskevi - PAPOULIS, Dimitrios. *The Antimicrobial Properties of Modified Pharmaceutical Bentonite with Zinc and Copper*. In *PHARMACEUTICS*, 2021, vol. 13, no. 8, pp. Dostupné na: <https://doi.org/10.3390/pharmaceutics13081190>., Registrované v: WOS
 15. [1.1] MO, Limei - WANG, Qiaohui - BI, Erping. *Effects of endogenous and exogenous dissolved organic matter on sorption behaviors of bisphenol A onto soils*. In *JOURNAL OF ENVIRONMENTAL MANAGEMENT*. ISSN 0301-4797, 2021, vol. 287, no., pp. Dostupné na: <https://doi.org/10.1016/j.jenvman.2021.112312>., Registrované v: WOS
 16. [1.1] PALAK, Handan - AKTURK, Beste - KAYA OGLU, Burcak Karaguzel - GOCEK, Ikilem. *Fabrication of montmorillonite nanoclay-loaded electrospun nanofibrous mats for UV protection*. In *JOURNAL OF INDUSTRIAL TEXTILES*. ISSN 1528-0837, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1177/15280837211020826>., Registrované v: WOS
 17. [1.1] PEREIRA, Vanessa de Abreu - PAZ, Iara dos Santos - GOMES, Amanda Lima - LEITE, Lorena Alves - FECHINE, Pierre Basilio A. - FILHO, Men de Sa Moreira de S. *Effects of acid activation on the halloysite nanotubes for curcumin incorporation and release*. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 200, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105953>., Registrované v: WOS
 18. [1.1] PLAZA, Lorenzo - CASTELLOTE, Marta - NEVSHUPA, Roman - JIMENEZ-RELINQUE, Eva. *High-capacity adsorbents from stainless steel slag for the control of dye pollutants in water*. In *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*. ISSN 0944-1344, 2021, vol. 28, no. 19, pp. 23896-23910. Dostupné na: <https://doi.org/10.1007/s11356-020-12174-0>., Registrované v: WOS
 19. [1.1] QUEFFELEC, Alain - BELLOT-GURLET, Ludovic - FOY, Eddy - LEFRAIS, Yannick - FRITSCH, Emmanuel. *FIRST IDENTIFICATION OF SUDOITE IN CARIBBEAN CERAMIC-AGE LAPIDARY CRAFTSMANSHIP*. In *GEMS & GEMOLOGY*. ISSN 0016-626X, 2021, vol. 57, no. 3, pp. 206-226. Dostupné na: <https://doi.org/10.5741/GEMS.57.3.206>., Registrované v: WOS
 20. [1.1] SEREDIN, Valery V. - YADZINSKAYA, Marina R. - ANDRIANOV, Andrey. *CLASSIFICATION OF BOUND WATER FORMS IN KAOLINITIC CLAYS*. In *BULLETIN OF THE TOMSK POLYTECHNIC UNIVERSITY-GEO ASSETS ENGINEERING*. ISSN 2500-1019, 2021, vol. 332, no. 6, pp. 73-81. Dostupné na: <https://doi.org/10.18799/24131830/2021/06/3237>., Registrované v: WOS
 21. [1.1] STRAUSS, Jakolien A. - BAZHKO, Volha - VENTRUTI, Genarro - XUAN LIGUO - GOMEZ, Mario A. *Arsenic behavior during the treatment of refractory gold ores via POX: Characterization of Fe-AsO4-SO4 precipitates*. In *HYDROMETALLURGY*. ISSN 0304-386X, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.hydromet.2021.105616>., Registrované v: WOS
 22. [1.1] SURANEK, Matej - MELICHOVA, Zuzana - KUREKOVA, Valeria - KLJAJEVIC,

- Ljiljana - NENADOVIC, Snezana. Removal of Nickel from Aqueous Solutions by Natural Bentonites from Slovakia. In MATERIALS, 2021, vol. 14, no. 2, pp. Dostupné na: <https://doi.org/10.3390/ma14020282>., Registrované v: WOS
23. [1.1] TSIMPOURIS, Evangelos - TSAKIRIDIS, Nikolaos L. - THEOCHARIS, John B. Using autoencoders to compress soil VNIR-SWIR spectra for more robust prediction of soil properties. In GEODERMA. ISSN 0016-7061, 2021, vol. 393, no., pp. Dostupné na: <https://doi.org/10.1016/j.geoderma.2021.114967>., Registrované v: WOS
24. [1.1] YAMCHELOU, Morteza Tahmasebi - LAW, David - BRKLJACA, Robert - LI, Jie - PATNAIKUNI, Indubhushan. The effect of pre-treatment and curing temperature on the strength development of alkali-activated clay. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2021, vol. 287, no., pp. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.123000>., Registrované v: WOS
25. [1.1] YARO, Nura Shehu Aliyu - BIN NAPIAH, Madzlan - SUTANTO, Muslich Hartadi - USMAN, Aliyu - SAEED, Saeed Modibbo. Modeling and optimization of mixing parameters using response surface methodology and characterization of palm oil clinker fine modified bitumen. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2021, vol. 298, no., pp. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.123849>., Registrované v: WOS
26. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>., Registrované v: WOS
27. [1.1] ZHOU, Junming - LI, Mengyuan - YUAN, Peng - LI, Yun - LIU, Hongmei - FAN, Wenxiao - LIU, Dong - ZHANG, Huan. Partial rehydration of tubular halloysite (7 angstrom) immersed in La(NO₃)(3) solution for 3 years and its implication for understanding REE occurrence in weathered crust elution-deposited rare earth ores. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 213, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106244>., Registrované v: WOS
28. [1.2] ASSÍAS, Sergio G. - CLAVIJO, Carlos - USMA, Sandra - DELVASTO, Pedro. On the Incorporation of Pristine and Pre-vitrified Alkaline Battery Waste into Non-structural Clay Bricks. In Waste and Biomass Valorization. ISSN 18772641, 2021-07-01, 12, 7, pp. 3589-3604. Dostupné na: <https://doi.org/10.1007/s12649-020-01259-z>., Registrované v: SCOPUS
29. [1.2] ATUGODA, Thilakshani - ASHIQ, Ahmed - KEERTHANAN, S. - WIJEKON, Prabuddhi - RAMANAYAKA, Sammani - VITHANAGE, Meththika. Biochar amalgamation with clay: Enhanced performance for environmental remediation. In Advances in Chemical Pollution, Environmental Management and Protection. ISSN 24689289, 2021-01-01, 7, pp. 1-37. Dostupné na: <https://doi.org/10.1016/bs.apmp.2021.08.001>., Registrované v: SCOPUS
30. [1.2] BOLLINGER, David L. - ERICKSON, Jessica - STONE-WEISS, Nicholas - LERE-ADAMS, Arumala Josiah - KARCHER, Sam - AKIN, Idil Deniz - MCCLOY, John S. Structure of amorphous aluminosilicates obtained from mineral transformation: Potential path for partial remediation of alkaline bauxite residues. In Environmental Advances. ISSN 26667657, 2021-12-01, 6, pp. Dostupné na: <https://doi.org/10.1016/j.envadv.2021.100136>., Registrované v: SCOPUS
31. [1.2] BONDÁR, Mária - DEMÉNY, Attila - NÉMETH, Péter - KARLIK, Máté - FINTOR, Krisztián - TÓTH, Mária. SPECIAL „JET-LIKE” BEAD FROM A SPECIAL LATE COPPER AGE GRAVE. In Archeometriai Műhely, 2021-01-01, 18, 2, pp. 143-155., Registrované v: SCOPUS
32. [1.2] DE ABREU PEREIRA, Vanessa - DOS SANTOS PAZ, Iara - GOMES, Amanda Lima - LEITE, Lorena Alves - FECHINE, Pierre Basilio A. - DE SÁ MOREIRA DE S. FILHO, Men. Effects of acid activation on the halloysite nanotubes for curcumin incorporation and release. In Applied Clay Science. ISSN 01691317, 2021-01-01, 200, pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105953>., Registrované v: SCOPUS
33. [1.2] FARIAS AMORIM, Fábio - JACQUES AGRA BEZERRA DA SILVA, Yuri - CABRAL NASCIMENTO, Rennan - JACQUES AGRA BEZERRA DA SILVA, Ygor - TIECHER, Tales - WILLIAMS ARAÚJO DO NASCIMENTO, Clístenes - PAOLO GOMES MINELLA, Jean - ZHANG, Yusheng - RAM UPADHAYAY, Hari - PULLEY, Simon - COLLINS, Adrian L. Sediment source apportionment using optical property composite signatures in a rural catchment, Brazil. In Catena. ISSN 03418162, 2021-07-01, 202, pp. Dostupné na: <https://doi.org/10.1016/j.catena.2021.105208>., Registrované v: SCOPUS
34. [1.2] NODA, Natsumi - YAMASHITA, Shohei - TAKAHASHI, Yoshio - MATSUMOTO, Megumi - ENOKIDO, Yuma - AMANO, Kana - KAWAI, Takahiro - SAKUMA, Hiroshi - FUKUSHI, Keisuke - SEKINE, Yasuhito - NAKAMURA, Tomoki. Anaerobic microscopic analysis of ferrous saponite and its sensitivity to oxidation by earth's air: Lessons learned for analysis of returned samples from mars and carbonaceous asteroids. In Minerals, 2021-11-01, 11, 11, pp. Dostupné na: <https://doi.org/10.3390/min11111244>., Registrované v: SCOPUS

35. [1.2] OYUN-ERDENE, Gendenjamts - ANUDARI, Dolgormaa - MANDAKHSAIKHAN, Luvsandagva - ZOLZAYA, Tsoodol - TEMUJIN, Jadambaa. Comparative acid leaching study of mongolian muscovite and montmorillonite clay minerals. In *Solid State Phenomena*. ISSN 10120394, 2021-01-01, 323 SSP, pp. 21-27. Dostupné na:

<https://doi.org/10.4028/www.scientific.net/SSP.323.21>, Registrované v: SCOPUS

36. [1.2] SINGH, Moirangthem Johnson - BORANA, Lalit - WEIQIANG, Feng - XU, Dong Sheng. Long-term swelling characteristics of montmorillonite clay with and without fly ash: Wetting-drying cycle influence in 1d oedometer condition. In *Journal of Testing and Evaluation*. ISSN 00903973, 2021-01-01, 51, 1, pp. Dostupné na: <https://doi.org/10.1520/JTE20210248>, Registrované v: SCOPUS

37. [1.2] TAHMASEBI YAMCHELOU, Morteza - LAW, David - BRKLJAČA, Robert - LI, Jie - PATNAIKUNI, Indubhushan. The effect of pre-treatment and curing temperature on the strength development of alkali-activated clay. In *Construction and Building Materials*. ISSN 09500618, 2021-06-14, 287, pp. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.123000>, Registrované v: SCOPUS

38. [1.2] WANG, Chaowen - ZHAO, Chenlei - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In *Applied Clay Science*. ISSN 01691317, 2021-03-15, 203, pp. Dostupné na:

<https://doi.org/10.1016/j.clay.2021.106026>, Registrované v: SCOPUS

39. [1.2] ZERHOUNI, Jaouad - FILALI, Fouzia Rhazi - BENNANI, Mohammed Naciri - QABAQOUS, Omar - BOUYMAJANE, Aziz - HOUSSAINI, Jamal - ALLAOUI, Safae - BENHALLAM, Faouzia. Study of the effect of acid-base character of the lamellar double hydroxides "zn3al-co3" and of the "ghassoul" clay on their redox potential and antimicrobial activities. In *Iranian Journal of Materials Science and Engineering*. ISSN 17350808, 2021-12-01, 18, 4, pp. 1-13. Dostupné na: <https://doi.org/10.22068/ijmse.2202>, Registrované v: SCOPUS

ABC06

MADEJOVÁ, Jana - PÁLKOVÁ, Helena, NIR contribution to the study of modified clay minerals. In *Infrared and Raman spectroscopies of clay minerals*. - Netherlands : Elsevier, 2017, p. 447-481. ISBN 978-0-08-100355-8. ISSN 1572-4352. Dostupné na: <https://doi.org/10.1016/B978-0-08-100355-8.00013-8>

Citácie:

1. [1.1] ABOU, Brahim - LEBKIRI, Imane - OUADDARI, Hanae - KADIRI, Lamya - OUASS, Abdelkarim - HABSAOUI, Amar - LEBKIRI, Ahmed - RIFI, El Housseine. Removal of Cd(II), Cu(II), and Pb(II) by adsorption onto natural clay: a kinetic and thermodynamic study. In *TURKISH JOURNAL OF CHEMISTRY*. ISSN 1300-0527, 2021, vol. 45, no. 2, pp. 362-376. Dostupné na: <https://doi.org/10.3906/kim-2004-82>, Registrované v: WOS

2. [1.1] CARBONEL-RAMOS, Dalia Elisa - CHIRINOS, Hugo David - AGARWAL, Madhu. HEAVY METAL ADSORPTION FROM A MULTIMETAL SOLUTION BY BENTONITE-KAOLIN-ZEOLITE PELLETS: LINEAR AND NONLINEAR REGRESSION, AND ERROR ANALYSIS. In *PERIODICO TCHE QUIMICA*. ISSN 1806-0374, 2021, vol. 18, no. 37, pp. 13-32., Registrované v: WOS

3. [1.1] FOX, Valerie K. - KUPPER, Robert J. - EHLMANN, Bethany L. - CATALANO, Jeffrey G. - RAZZELL-HOLLIS, Joseph - ABBEY, William J. - SCHILD, Dirk J. - NICKERSON, Ryan D. - PETERS, Jonas C. - KATZ, Sydney M. - WHITE, Andrew A. Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. In *AMERICAN MINERALOGIST*. ISSN 0003-004X, 2021, vol. 106, no. 6, pp. 964-982. Dostupné na: <https://doi.org/10.2138/am-2020-7419>, Registrované v: WOS

4. [1.1] JEDLI, Hedi - BRAHMI, Jihed - CHROUDA, Amani - JBARA, Abdessalem - ALMALKI, Sami Garallah - OSMAN, Gamal - SLIMI, Khalifa. CO2 adsorption performance of amine clay adsorbent. In *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*, 2021, vol. 127, no. 1, pp. ISSN 0947-8396. Dostupné na: <https://doi.org/10.1007/s00339-020-04142-9>, Registrované v: WOS

ABC07

MADEJOVÁ, Jana - PÁLKOVÁ, Helena - KOMADEL, Peter, IR spectroscopy of clay minerals and clay nanocomposites. In *Spectroscopic Properties of Inorganic and Organometallic Compounds : Techniques, materials and applications*. - Cambridge : UK, The Royal Society of Chemistry, 2010, 2010, vol. 41, p. 22-71. Dostupné na: <https://doi.org/10.1039/9781849730853-00022>

Citácie:

1. [1.1] HUANG, Jianzhi - JONES, Adele - WAITE, T. David - CHEN, Yiling - HUANG, Xiaopeng - ROSSO, Kevin M. - KAPPLER, Andreas - MANSOR, Muammar - TRATNYEK, Paul G. - ZHANG, Huichun. Fe(II) Redox Chemistry in the Environment. In *CHEMICAL REVIEWS*, 2021, vol. 121, no. 13, pp. 8161-8233. ISSN 0009-2665. Dostupné na: <https://doi.org/10.1021/acs.chemrev.0c01286>, Registrované v: WOS

ABC08

MADEJOVÁ, Jana - BALAN, Etienne - PETIT, Sabine. Application of vibrational spectroscopy to

the characterization of phyllosilicates and other industrial minerals. In *Advances in the Characterization of Industrial Minerals*. - London : The Mineralogical Society of Great Britain and Ireland, 2011, p. 171-226. ISBN 978-0-903056-28-1. Dostupné na: <https://doi.org/10.1180/EMU-notes.9.6>

Citácie:

1. [1.1] AUBINEAU, Jeremie - BANKOLE, Olabode M. - BARON, Fabien - GREGOIRE, Brian - EL ALBANI, Abderrazak. *Authigenic kaolinite and sudoite in sandstones from the Paleoproterozoic Franceville sub-basin (Gabon)*. In *COMPTES RENDUS GEOSCIENCE*, 2021, vol. 353, no. 1, pp. 209-226. ISSN 1631-0713. Available on: <https://doi.org/10.5802/crgeos.62>., Registrované v: WOS

2. [1.1] MAIER, Matthias - BEUNTNER, Nancy - THIENEL, Karl-Christian. *Mineralogical characterization and reactivity test of common clays suitable as supplementary cementitious material*. In *APPLIED CLAY SCIENCE*, 2021, vol. 202, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105990>., Registrované v: WOS

ABC09 MADEJOVÁ, Jana - KOMADEL, Peter. Information available from infrared spectra of the fine fractions of bentonites. In *The Application of Vibrational Spectroscopy to Clay Minerals and Layered double Hydroxides*. Vol. 13. - Aurora CO, 2005, p. 65-98.

Citácie:

1. [1.1] BELOUSOV, P. - CHUPALENKOV, N. - CHRISTIDIS, G. E. - ZAKUSINA, O. - ZAKUSIN, S. - MOROZOV, I - CHERNOV, M. - ZAITSEVA, T. - TYUPINA, E. - KRUPSKAYA, V. *Carboniferous bentonites from 10th Khutor deposit (Russia): Composition, properties and features of genesis*. In *APPLIED CLAY SCIENCE*, 2021, vol. 215, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106308>., Registrované v: WOS

ABC10 SCHOLTZOVA, Eva**. Computational modeling of nanoclays. In *Micro & Nano Technologies Series : Clay Nanoparticles. Properties and Applications*. - Netherlands : Elsevier, 2020, p. 139-166. ISBN 978-0-12-816783-0. Dostupné na: <https://doi.org/10.1016/B978-0-12-816783-0.00006-2>

Citácie:

1. [1.1] AIT HAMOUDI, Souhila - HAMD, Boualem - BRENDLE, Jocelyne. *TETRACYCLINE REMOVAL FROM WATER BY ADSORPTION ON GEOMATERIAL, ACTIVATED CARBON AND CLAY ADSORBENTS*. In *ECOLOGICAL CHEMISTRY AND ENGINEERING S-CHEMIA I INZYNIERIA EKOLOGICZNA S*, 2021, vol. 28, no. 3, pp. 303-328. ISSN 1898-6196. Dostupné na: <https://doi.org/10.2478/eces-2021-0021>., Registrované v: WOS

ABC11 ŠAJGALÍK, Pavol - DUSZA, Ján - LENČEŠ, Zoltán - HNATKO, Miroslav - GALUSEK, Dušan - GHILLÁNYOVÁ, Katarína. Bulk ceramic nanostructures. In *CHEN, I-Wei. Ceramics Science and Technology*. Vol. 1. Structures. - Weinheim : WILEY-VCH, 2008, p. 347-375. ISBN 978-527-31155-2. Dostupné na: <https://doi.org/10.1002/9783527631940.ch8>

Citácie:

1. [1.1] XU, Man - GIRISH, Yarabahally R. - RAKESH, Kadalipura P. - WU, Piye - MANUKUMAR, Honnayakanahalli M. - BYRAPPA, Shayan M. - UDAYABHANU - BYRAPPA, Kullaiah. *Recent advances and challenges in silicon carbide (SiC) ceramic nanoarchitectures and their applications*. In *MATERIALS TODAY COMMUNICATIONS*, 2021, vol. 28, no., pp. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2021.102533>., Registrované v: WOS

***ADC Vedecké práce v zahraničných karentovaných časopisoch**

ADC01 DANĚK, Vladimír - CHRENKOVÁ, Marta - NGUYEN, D.K. - VIET, V. - SILNÝ, A. - POLYAKOV, E. - KREMENETSKY, V. Structural and thermodynamic aspects of niobium deposition in the system LiF-KF-K2NbF7. In *Journal of Molecular Liquids*, 2000, vol. 88, p. 277-298. ISSN 0167-7322. Dostupné na: [https://doi.org/10.1016/S0167-7322\(00\)00145-8](https://doi.org/10.1016/S0167-7322(00)00145-8)

Citácie:

1. [1.1] KUZNETSOV, S. A. *Electroreduction of Hafnium and Electrodeposition of its Protective Coatings on a Molybdenum Substrate in Chloride-Fluoride Melt*. In *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*, 2020, vol. 167, no. 14, pp. ISSN 0013-4651. Dostupné na: <https://doi.org/10.1149/1945-7111/abc1a7>., Registrované v: WOS

ADCA Vedecké práce v zahraničných karentovaných časopisoch – impaktovaných

ADCA01 AFSHARIMANI, Nasima** - DURÁN, Alicia - GALUSEK, Dušan - CASTRO, Yolanda. Hybrid sol-gel silica coatings containing graphene nanosheets for improving the corrosion protection of AA2024-T3. In *Nanomaterials-Basel*, 2020, vol.10, no. 6, p. 1050-1-1050-13. (2019: 4.324 - IF, Q2 - JCR, 0.858 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 2079-4991. Dostupné na: <https://doi.org/10.3390/nano10061050>

Citácie:

1. [1.1] CHEUMANI YONA, Arnaud Maxime - ZIGON, Jure - NGUETEU KAMLO, Alexis - PAVLIC, Matjaz - DAHLE, Sebastian - PETRIC, Marko. Preparation, Surface Characterization, and Water Resistance of Silicate and Sol-Silicate Inorganic-Organic Hybrid Dispersion Coatings for Wood. In *MATERIALS*, 2021, vol. 14, no. 13, pp. Dostupné na: <https://doi.org/10.3390/ma14133559>., Registrované v: WOS
- ADCA02 ALDERMAN, Oliver - LIŠKA, Marek - MACHÁČEK, Jan - BENMORE, C.J. - LIN, A. - TAMALONIS, A. - WEBER, J.K.R. Temperature-driven structural transitions in molten sodium borates Na₂O-B₂O₃: X-ray diffraction, thermodynamic modeling, and implications for topological constraint theory. In *Journal of Physical Chemistry C*, 2016, vol. 120, no. 1, p. 553-560. (2015: 4.509 - IF, Q1 - JCR, 1.886 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.5b10277>
- Citácie:
1. [1.1] GE, Xuan - HU, Qiaodan - YANG, Fan - XU, Jun - HAN, Yanfeng - LAI, Pingsheng - QIN, Jingyu - LI, Jianguo. Anomalous structure transition in undercooled melt regulates polymorphic selection in barium titanate crystallization. In *COMMUNICATIONS CHEMISTRY*. ISSN 2399-3669, 2021, vol. 4, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s42004-021-00462-w>., Registrované v: WOS
2. [1.1] LELONG, Gerald - CORMIER, Laurent - HENNET, Louis - MICHEL, Florent - RUEFF, Jean-Pascal - ABLETT, James M. - MONACO, Giulio. Lithium Borates from the Glass to the Melt: A Temperature-Induced Structural Transformation Viewed from the Boron and Oxygen Atoms. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 2, pp. 799-807. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.0c02844>., Registrované v: WOS
3. [1.1] OHKUBO, Takahiro - URATA, Shingo - IMAMURA, Yutaka - TANIGUCHI, Taketoshi - ISHIOKA, Nanae - TANIDA, Masamichi - TSUCHIDA, Eiji - DENG, Lu - DU, Jincheng. Modeling the Structure and Dynamics of Lithium Borosilicate Glasses with Ab Initio Molecular Dynamics Simulations. In *JOURNAL OF PHYSICAL CHEMISTRY C*. ISSN 1932-7447, 2021, vol. 125, no. 15, pp. 8080-8089. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c00309>., Registrované v: WOS
- ADCA03 AMSLER, Jonas** - PLESSOW, Philipp N. - STUDDT, Felix - BUČKO, Tomáš**. Anharmonic correction to adsorption free energy from DFT-based MD using thermodynamic integration. In *Journal of Chemical Theory and Computation*, 2021, vol. 17, no. 2, p. 1155-1169. (2020: 6.006 - IF, Q1 - JCR, 2.001 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c01022>
- Citácie:
1. [1.1] BLONDAL, Katrin - SARGSYAN, Khachik - BROSS, David H. - RUSCIC, Branko - GOLDSMITH, C. Franklin. Adsorbate Partition Functions via Phase Space Integration: Quantifying the Effect of Translational Anharmonicity on Thermodynamic Properties. In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 37, pp. 20249-20260. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c04009>., Registrované v: WOS
2. [1.1] BORODIN, Dmitriy - RAHINOV, Igor - GALPARSORO, Oihana - FINGERHUT, Jan - SCHWARZER, Michael - GOLIBRZUCH, Kai - SKOULATAKIS, Georgios - AUERBACH, Daniel J. - KANDRATSENKA, Alexander - SCHWARZER, Dirk - KITSOPOULOS, Theofanis N. - WODTKE, Alec M. Kinetics of NH₃ Desorption and Diffusion on Pt: Implications for the Ostwald Process. In *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2021, vol. 143, no. 43, pp. 18305-18316. ISSN 0002-7863. Available on: <https://doi.org/10.1021/jacs.1c09269>., Registrované v: WOS
3. [1.1] GALIMBERTI, Daria Ruth - SAUER, Joachim. Chemically Accurate Vibrational Free Energies of Adsorption from Density Functional Theory Molecular Dynamics: Alkanes in Zeolites. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 9, pp. 5849-5862. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.1c00519>., Registrované v: WOS
4. [1.1] LEE, Elizabeth M. Y. - LUDWIG, Thomas - YU, Boyuan - SINGH, Aayush R. - GYGI, Francois - NORSEKOV, Jens K. - DE PABLO, Juan J. Neural Network Sampling of the Free Energy Landscape for Nitrogen Dissociation on Ruthenium. In *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*, 2021, vol. 12, no. 11, pp. 2954-2962. ISSN 1948-7185. Available on: <https://doi.org/10.1021/acs.jpclett.1c00195>., Registrované v: WOS
5. [1.1] MORTEN, Magnus - CORDERO-LANZAC, Tomas - CNUDDER, Pieter - REDEKOP, Evgeniy A. - SVELLE, Stian - VAN SPEYBROECK, Veronique - OLSBYE, Unni. Acidity effect on benzene methylation kinetics over substituted H-MeAlPO-5 catalysts. In *JOURNAL OF CATALYSIS*, 2021, vol. 404, no., pp. 594-606. ISSN 0021-9517. Available on: <https://doi.org/10.1016/j.jcat.2021.11.002>., Registrované v: WOS
6. [1.1] WAITT, Craig - MILES, Audrey R. - SCHNEIDER, William F. Adsorbate Free Energies from DFT-Derived Translational Energy Landscapes. In *JOURNAL OF PHYSICAL CHEMISTRY*

- C*, 2021, vol. 125, no. 37, pp. 20331-20342. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c05917>., Registrované v: WOS
7. [1.2] DAHRI, Mohammad - ABOLMAALI, Samira Sadat - ABEDANZADEH, Mozghan - SALMANPOUR, Mohsen - MALEKI, Reza. Composition and surface chemistry engineering of graphene grafting chitosan for stimuli-responsive cancer therapy: An in-silico study. In *Informatics in Medicine Unlocked*, 2021-01-01, 24, pp. ISSN 23529148. Available on: <https://doi.org/10.1016/j.imu.2021.100627>., Registrované v: SCOPUS
- ADCA04 ANDREJKOVIČOVÁ, Slávka - ROCHA, Fernando - JANOTKA, Ivan - KOMADEL, Peter. An investigation into the use of blends of two bentonites for geosynthetic clay liners. In *Geotextiles and Geomembranes*, 2008, vol. 26, no. 5, p. 436-445. (2007: 3.050 - IF, Q1 - JCR, 1.798 - SJR, Q1 - SJR). ISSN 0266-1144. Dostupné na: <https://doi.org/10.1016/j.geotextmem.2008.01.001>
- Citácie:
1. [1.2] LIU, Yiliang - SU, Youpo - YIN, Yao - ZHAO, Jiangshan - WANG, Shuo - MO, Zongyun. Research Progress of Bentonite Modified Cementitious Materials. In *Cailiao Daobao/Materials Reports*, 2021, 35, 5, pp. 5040-5052. ISSN 1005023X. Dostupné na: <https://doi.org/10.11896/cldb.19090070>., Registrované v: SCOPUS
- ADCA05 ARBUZNIKOV, Alexei V. - KAUPP, Martin - MALKIN, Vladimír - REVIKINE, Roman - MALKINA, Olga. Validation study of meta-GGA functionals and of a model exchange-correlation potential in density functional calculations of EPR parameters. In *Physical Chemistry Chemical Physics*, 2002, vol. 4, no. 22, p. 5467-5474. Dostupné na: <https://doi.org/10.1039/b207171a>
- Citácie:
1. [1.1] CRESPI, Ayelen F. - SANCHEZ, Veronica M. - VEGA, Daniel - PEREZ, Ana L. - BRONDINO, Carlos D. - LINCK, Yamila Garro - HODGKINSON, Paul - RODRIGUEZ-CASTELLON, Enrique - LAZARO-MARTINEZ, Juan M. Paramagnetic solid-state NMR assignment and novel chemical conversion of the aldehyde group to dihydrogen ortho ester and hemiacetal moieties in copper(ii)- and cobalt(ii)-pyridinecarboxaldehyde complexes. In *RSC ADVANCES*, 2021, vol. 11, no. 33, pp. 20216-20231. Dostupné na: <https://doi.org/10.1039/d1ra02512k>., Registrované v: WOS
2. [1.1] THEIBICH, Yusuf A. - SAUER, Stephan P. A. - LO LEGGIO, Leila - HEDEGARD, Erik D. Estimating the accuracy of calculated electron paramagnetic resonance hyperfine couplings for a lytic polysaccharide monooxygenase. In *COMPUTATIONAL AND STRUCTURAL BIOTECHNOLOGY JOURNAL*. ISSN 2001-0370, 2021, vol. 19, no., pp. 555-567. Dostupné na: <https://doi.org/10.1016/j.csbj.2020.12.014>., Registrované v: WOS
- ADCA06 ATANASOV, M. - BARRAS, J.L. - BENCO, Ľubomír - DAUL, C. Electronic structure, chemical bonding, and vibronic coupling in Mn IV/Mn III mixed valent LixMn2O4 spinels and their effect on the dynamics of intercalated Li: A cluster study using DFT. In *Journal of the American Chemical Society*, 2000, vol. 122, no. 19, p. 4718-4728. ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/ja9904484>
- Citácie:
1. [1.1] LI, Yunjiao - GUO, Jia - CHEN, Yongxiang - DENG, Shiyi - ZHU, Jie - CAO, Guolin - LEI, Tongxing - ZHANG, Jinping - WANG, Shilei - CHANG, Shenghong. Phase transition regulation and Cd-O/Cd-F compounds multi-effect modification synergistically act on LiNi0.5Mn1.5O4 cathode. In *IONICS*. ISSN 0947-7047, 2020, vol. 26, no. 4, pp. 1681-1693. Dostupné na: <https://doi.org/10.1007/s11581-019-03257-1>., Registrované v: WOS
- ADCA07 AZZI, Andreza de Almeida - OSACKÝ, Marek - UHLÍK, Peter - ČAPLOVIČOVÁ, Mária - ZANARDO, Antenor - MADEJOVÁ, Jana. Characterization of clays from the Corumbataí formation used as raw material for ceramic industry in the Santa Gertrudes district, Sao Paulo, Brazil. In *Applied Clay Science*, 2016, vol. 132-133, p. 232-242. (2015: 2.586 - IF, Q1 - JCR, 0.806 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2016.06.009>
- Citácie:
1. [1.1] BABAHOUM, Nabil - OULD HAMOU, Malek. Characterization and purification of Algerian natural bentonite for pharmaceutical and cosmetic applications. In *BMC CHEMISTRY*, 2021, vol. 15, no. 1, pp. Dostupné na: <https://doi.org/10.1186/s13065-021-00776-9>., Registrované v: WOS
2. [1.1] CHALOUATI, Youssef - MANNAI, Faouzi - BENNOUR, Ali - SRASRA, Ezzedine. Firing behavior of argillites from northern Tunisia as raw materials for ceramic applications. In *INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY*. ISSN 1546-542X, 2021, vol. 18, no. 6, pp. 2323-2335. Dostupné na: <https://doi.org/10.1111/ijac.13713>., Registrované v: WOS
3. [1.1] HAN, Weiye - LI, Ye - YIN, Hang. The Influence of Mechanical Composition and Mineral Composition of Calcareous Soil on Slope Farmland on Phosphorus Fixation. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/app11093731>.,

- Registrované v: WOS*
- ADCA08 BABU, Singarapu** - GALUSEK, Dušan - DURÁN, Alicia - PASCUAL, María Jesús**. Glass-ceramics processed by spark plasma sintering (SPS) for optical applications. In *Applied Sciences-Basel*, 2020, vol. 10, no. 8, art. no. 2791. (2019: 2.474 - IF, Q2 - JCR, 0.418 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2076-3417. Dostupné na: <https://doi.org/10.3390/APP10082791>
- Citácie:*
1. [1.1] GUO, Junwei - LIU, Xiaomin - YU, Jiamei - XU, Chunfang - WU, Yufeng - PAN, De';an - SENTHIL, Raja Arumugam. An overview of the comprehensive utilization of silicon-based solid waste related to PV industry. In *RESOURCES CONSERVATION AND RECYCLING*. ISSN 0921-3449, 2021, vol. 169, no., pp. Dostupné na: <https://doi.org/10.1016/j.resconrec.2021.105450>.
- Registrované v: WOS*
- ADCA09 BAČA, Ľuboš - LENČEŠ, Zoltán - JOGL, Christian - NEUBAUER, Erich - VITKOVIČ, Martin - MERSTALLINGER, Andreas - ŠAJGALÍK, Pavol. Microstructure evolution and tribological properties of TiB₂/Ni-Ta cermets. In *Journal of the European Ceramic Society*, 2012, vol. 32, no. 9, p. 1941-1948. (2011: 2.353 - IF, Q1 - JCR, 1.343 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2011.10.039>
- Citácie:*
1. [1.1] CHANG, Shih-Hsien - LIANG, Che-Hsuan - HUANG, Kuo-Tsung - LIANG, Cheng. Evaluation of the microstructures, strengthening mechanisms and corrosion behaviors of TiB₂ powder added to Ti-8Ta-6Ni alloys through the vacuum sintering process. In *JOURNAL OF ALLOYS AND COMPOUNDS*. ISSN 0925-8388, 2021, vol. 857, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2020.157629>.
- Registrované v: WOS*
- ADCA10 BAČÍK, Peter** - FRIDRICHOVÁ, Jana - UHER, Pavel - RYBÁR, S. - KUREKOVÁ, Valéria - LUPTÁKOVÁ, Jarmila - VRABLÍKOVÁ, Dana - PUKANČÍK, Libor - VACULOVÍČ, T. Octahedral substitution in beryl from weakly fractionated intragranitic pegmatite Predne Solisko, Tatry Mountains (Slovakia): the indicator of genetic conditions. In *Journal of Geosciences*, 2019, vol. 64, no. 1, p. 59-72. (2018: 1.275 - IF, Q3 - JCR, 0.559 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1802-6222. Dostupné na: <https://doi.org/10.3190/jgeosci.272>
- Citácie:*
1. [1.2] GAVRILCHIK, A. K. - SKUBLOV, S. G. - KOTOVA, E. L. Trace element composition of beryl from the sherlovaya gora deposit, South-Eastern Transbaikalia, Russia. In *Zapiski Rossiiskogo Mineralogicheskogo Obshchestva*, 2021-01-01, 150, 2, pp. 69-82. ISSN 08696055. Available on: <https://doi.org/10.31857/S0869605521020052>.
- Registrované v: SCOPUS*
- ADCA11 BALÁZSI, Csaba - FOGARASSY, Zsolt - TAPASZTÓ, Orsolya - KAILER, Andreas - SCHRÖDER, Christian - PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - DUSZA, Ján - BALÁZSI, K. Si₃N₄/graphene nanocomposites for tribological application in aqueous environments prepared by attritor milling and hot pressing. In *Journal of the European Ceramic Society*, 2017, vol. 37, no. 12, p. 3797-3804. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.03.022>
- Citácie:*
1. [1.1] BASKUT, Sinem - SERT, Abdullah - CELIK, Osman Nuri - TURAN, Servet. Anisotropic mechanical and tribological properties of SiAlON matrix composites containing different types of GNPs. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 3, pp. 1878-1890.
- Registrované v: WOS*
2. [1.1] CHEN, Fei - YAN, Ke - ZHANG, Xiaohong - ZHU, Yongsheng - HONG, Jun. Microscale simulation method for prediction of mechanical properties and composition design of multilayer graphene-reinforced ceramic bearings. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 12, pp. 17531-17539. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.071>.
- Registrované v: WOS*
3. [1.1] CHEN, Fei - YAN, Ke - ZHOU, Jianping - ZHU, Yongsheng - HONG, Jun. Multilayer graphene and beta-Si₃N₄ whisker-reinforced porous Si₃N₄ ceramics by spark plasma incomplete sintering. In *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING*. ISSN 0921-5093, 2021, vol. 823, no., pp. Dostupné na: <https://doi.org/10.1016/j.msea.2021.141770>.
- Registrované v: WOS*
4. [1.1] LIN, Rui-Lin - BAO, Wei-Chao - YU, Jun-Jie - GUO, Wei-Ming - LIN, Hua-Tay. Effect of ZrB₂ and its oxide impurities (ZrO₂ and B₂O₃) on hot-pressed Si₃N₄ ceramics at low temperature. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 13, pp. 6763-6766. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.06.041>.
- Registrované v: WOS*
5. [1.1] MIR, Aqib Hussain - AHMAD, S. N. A study on fabrication of silicon nitride-based advanced ceramic composite materials via spark plasma sintering. In *PROCEEDINGS OF THE*

INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS. ISSN 1464-4207, 2021, vol. 235, no. 8, pp. 1739-1756. Dostupné na: <https://doi.org/10.1177/14644207211013560>, Registrované v: WOS

6. [1.1] RAMIREZ, Cristina - BELMONTE, Manuel - MIRANZO, Pilar - ISABEL OSENDI, Maria. *Applications of Ceramic/Graphene Composites and Hybrids. In MATERIALS, 2021, vol. 14, no. 8, pp., Registrované v: WOS*

7. [1.2] BELMONTE, Manuel. *Contact damage resistance and tribological behavior of ceramic/carbon nanostructure composites. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 1-3, pp. 733-744. Dostupné na: <https://doi.org/10.1016/B978-0-12-803581-8.12134-4>, Registrované v: SCOPUS*

8. [1.2] XU, Sen - FANG, Ningxiang - ZHANG, Shanwei - ZHANG, Hong - LIN, Wensong. *Preparation and Characterization of Boron Carbide Ceramics Enhanced by Reduced GO. In Rengong Jingti Xuebao/Journal of Synthetic Crystals, 2021-03-01, 50, 3, pp. 572-577. ISSN 1000985X, Registrované v: SCOPUS*

ADCA12

BALESTRAT, Maxime - ACOSTA, Emmanuelle Diz - HANZEL, Ondrej - TESSIER-DOYEN, Nicolas - MACHADO, Ricardo - ŠAJGALÍK, Pavol - LENČEŠ, Zoltán - BERNARD, Samuel**. *Additive-free low temperature sintering of amorphous Si-B-C powders derived from boron-modified polycarbosilanes: Toward the design of SiC with tunable mechanical, electrical and thermal properties. In Journal of the European Ceramic Society, 2020, vol. 40, no. 7, p. 2604-2612. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.12.037>*

Citácie:

1. [1.1] KULTAYEVA, Shynar - KIM, Young-Wook - SONG, In-Hyuck. *Effects of dopants on electrical, thermal, and mechanical properties of porous SiC ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 7, pp. 4006-4015. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.01.049>, Registrované v: WOS*

2. [1.1] KULTAYEVA, Shynar - KIM, Young-Wook - SONG, In-Hyuck. *Influence of sintering atmosphere and BN additives on microstructure and properties of porous SiC ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 14, pp. 6925-6933. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.07.039>, Registrované v: WOS*

3. [1.1] XIA, Aidong - YIN, Jie - CHEN, Xiao - HUANG, Zhengren - LIU, Xuejian - LIU, Wei. *Fabrication of (SiC-AlN)/ZrB₂ Composite with Nano-Micron Hybrid Microstructure via PCS-Derived Ceramics Route. In MATERIALS, 2021, vol. 14, no. 2, pp. Dostupné na: <https://doi.org/10.3390/ma14020334>, Registrované v: WOS*

ADCA13

BALOG, Miroslav - ŠAJGALÍK, Pavol - HOFER, F. - WARBICHLER, P. - FRÖHLICH, Karol - VÁVRA, Ondrej - JANEK, Jozef - HUANG, J.-L. *Electrically conductive SiC-(Nb, Ti)ss-(Nb, Ti)C_{ss} cermet. In Journal of the European Ceramic Society. - Essex : Elsevier Science Publishers, 2006, vol. 26, p. 1259-1266. (2005: 1.567 - IF, Q1 - JCR, 1.095 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.*

Citácie:

1. [1.1] REMYAMOL, T. - GOPI, R. - AJITH, M. R. - PANT, Bhanu. *Porous silicon carbide structures with anisotropic open porosity for high-temperature cycling applications. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 3, pp. 1828-1833. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.060>, Registrované v: WOS*

ADCA14

BALOG, Miroslav - SEDLÁČKOVÁ, K. - ZIFCAK, P. - JANEKA, J. *Liquid phase sintering of SiC with rare-earth oxides. In Ceramics-Silikáty, 2005, vol. 49, p. 259-262. (2004: 0.385 - IF, karentované - CCC). (2005 - Current Contents, WOS, SCOPUS). ISSN 0862-5468.*

Citácie:

1. [1.1] YASAR, Zeynep Ayguzer - DELUCCA, Vincent A. - HABER, Richard A. *Effect of boron carbide additive and sintering temperature Dwelling time on silicon carbide properties. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 5, pp. 7177-7182. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.11.071>, Registrované v: WOS*

2. [1.1] YASAR, Zeynep Ayguzer - DELUCCA, Vincent A. - HABER, Richard A. *Effect of carbon source on the properties of dense alpha-SiC. In MATERIALS RESEARCH EXPRESS, 2021, vol. 8, no. 12, pp. Dostupné na: <https://doi.org/10.1088/2053-1591/ac406c>, Registrované v: WOS*

3. [1.1] YASAR, Zeynep Ayguzer - HABER, Richard A. *Effect of Carbon Addition and Mixture Method on the Microstructure and Mechanical Properties of Silicon Carbide. In MATERIALS, 2020, vol. 13, no. 17, pp. Dostupné na: <https://doi.org/10.3390/ma13173768>, Registrované v: WOS*

ADCA15

BALOG, Miroslav - KEČKÉŠ, Jozef - SCHÖBERL, T. - GALUSEK, Dušan - HÖFER, F. - KRŠTAN, Jan - LENČEŠ, Zoltán - HUANG, J.-L. - ŠAJGALÍK, Pavol. *Nano/macro-hardness and fracture resistance of Si₃N₄/SiC composites with up to 13 wt.% of SiC nano-particles. In Journal of*

the European Ceramic Society, 2007, vol. 27, no. 5, p. 2145-2152. (2006: 1.576 - IF, Q1 - JCR, 1.220 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2006.08.010>

Citácie:

1. [1.1] WANG, Yuhan - LIU, Wen - GUO, JingXia - LI, Mingliang - FAN, Bingbing - WANG, Hailong - XU, Hongliang - LU, Hongxia - SHAO, Gang - ZHANG, Rui - AN, Linan. In situ formation of Si₃N₄-SiC nanocomposites through polymer-derived SiAlCN ceramics and spark plasma sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 15, pp. 22049-22054. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.225>., Registrované v: WOS

ADCA16 BALOG, Miroslav - ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČEŠ, Zoltán - MONTEVERDE, E. - KEČKÉŠ, Jozef - HUANG, J.-L. Nano- versus macro-hardness of liquid phase sintered SiC. In Journal of the European Ceramic Society, 2005, vol. 25, no. 4, p. 529-534. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2004.01.026>

Citácie:

1. [1.1] KIM, Yanghee - LEE, Ji Yeong - CHO, Min Kyung - AHN, Jae-Pyoung - KIM, Young-Wook. Electrical resistivity at the micron scale in a polycrystalline SiC ceramic. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 19, pp. 27100-27106. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.123>., Registrované v: WOS

2. [1.1] LI, Zhijian - GUO, Ruru - LI, Lu - ZHENG, Ruixiao - MA, Chaoli. Improvement in high-temperature oxidation resistance of SiC nanocrystalline ceramics by doping AlN. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 21, pp. 30999-31003. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.276>., Registrované v: WOS

ADCA17 BALTRUSAITIS, Jonas - BUČKO, Tomáš - MICHAELS, W. - MAKKEE, M. - MUL, G. Catalytic methyl mercaptan coupling to ethylene in chabazite: DFT study of the first C-C bond formation. In Applied Catalysis B: Environmental, 2016, vol. 187, p. 195-203. (2015: 8.328 - IF, Q1 - JCR, 2.326 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0926-3373. Dostupné na: <https://doi.org/10.1016/j.apcatb.2016.01.021>

Citácie:

1. [1.1] REN, Sida - LIANG, Wenjun - FANG, Hongping - ZHU, Yuxue. Performance and poisoning analysis of organic sulfur resistance of Pd-Ce catalyst in catalytic oxidation of VOCs. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106640>., Registrované v: WOS

2. [1.1] YU, Miao - TORMENE, Nicolo - BOLSHAKOV, Aleksei - MEZARI, Brahim - LIUTKOVA, Anna - KOSINOV, Nikolay - HENSEN, Emiel J. M. Selective methanethiol-to-olefins conversion over HSSZ-13 zeolite. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2021, vol. 57, no. 27, pp. 3323-3326. Dostupné na: <https://doi.org/10.1039/d1cc00397f>., Registrované v: WOS

3. [1.2] YAN, Jun Kai - LIU, Xu Peng - MAO, Jing - LI, Ke - LUO, Yong Ming - MEI, Yi - HE, De Dong. Research Progress of Catalytic Reaction Mechanism of Methyl Mercaptan to Olefins. In Journal of Molecular Catalysis, 2021-08-01, 35, 4, pp. 353-364. ISSN 10013555. Available on: <https://doi.org/10.16084/j.issn1001-3555.2021.04.006>., Registrované v: SCOPUS

ADCA18 BARAN, Peter - BOČA, Miroslav - BOČA, Roman - KRUTOŠÍKOVÁ, Alžbeta - MIKLOVIČ, Jozef - PELIKÁN, Juraj - TITIŠ, Ján. Structural characterization, spectral and magnetic properties of isothiocyanate nickel(II) complexes with furopyridine derivatives. In Polyhedron, 2005, vol. 24, no. 12, p. 1510-1516. Dostupné na: <https://doi.org/10.1016/j.poly.2005.03.103>

Citácie:

1. [1.1] CURLEY, S. P. M. - SCATENA, R. - WILLIAMS, R. C. - GODDARD, P. A. - MACCHI, P. - HICKEN, T. J. - LANCASTER, T. - XIAO, F. - BLUNDELL, S. J. - ZAPF, V. - ECKERT, J. C. - KRENKEL, E. H. - VILLA, J. A. - RHODEHOUSE, M. L. - MANSON, J. L. Magnetic ground state of the one-dimensional ferromagnetic chain compounds M(NCS)₂(thiourea)₂ (M = Ni, Co). In PHYSICAL REVIEW MATERIALS, 2021, vol. 5, no. 3, pp. ISSN 2475-9953. Available on: <https://doi.org/10.1103/PhysRevMaterials.5.034401>., Registrované v: WOS

ADCA19 BARBIERIKOVÁ, Zuzana - BELLA, Maroš - SEKERÁKOVÁ, Ľudmila - LIETAVA, Jozef - BOBENÍČOVÁ, Miroslava - DVORANOVÁ, Dana - MILATA, Viktor - SÁDECKÁ, Jana - TOPOLESKÁ, Dominika - HEIZER, Tomáš - HUDEC, Roman - CZÍMEROVÁ, Adriana - JANTOVÁ, Soňa - BREZOVÁ, Vlasta. Spectroscopic characterization, photoinduced processes and cytotoxic properties of substituted N-ethyl selenadiazoloquinolones. In Journal of Physical Organic Chemistry, 2013, vol. 26, no. 7, p. 565-574. (2012: 1.578 - IF, Q3 - JCR, 0.708 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0894-3230. Dostupné na: <https://doi.org/10.1002/poc.3133>

Citácie:

1. [1.1] ALY, Ashraf A. - RAMADAN, Mohamed - ABUO-RAHMA, Gamal El-Din A. - ELSHAIER, Yaseen A. M. M. - ELBASTAWESY, Mohammed A. I. - BROWN, Alan B. - BRAESE, Stefan. Quinolones as prospective drugs: Their syntheses and biological applications. In ADVANCES IN

- HETEROCYCLIC CHEMISTRY, VOL 135, 2021, vol. 135, no., pp. 147-196. ISSN 0065-2725.*
Dostupné na: <https://doi.org/10.1016/bs.aihch.2020.08.001>, Registrované v: WOS
- ADCA20 BARBIERIKOVÁ, Zuzana - DVORANOVÁ, Dana - BELLA, Maroš - MILATA, Viktor - CZÍMEROVÁ, Adriana - BREZOVÁ, Vlasta. Fused-ring derivatives of quinoxalines: spectroscopic characterization and photoinduced processes investigated by EPR spin trapping technique. In *Molecules*, 2014, vol. 19, no. 8, p. 12078-12098. (2013: 2.095 - IF, Q3 - JCR, 0.707 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1420-3049. Dostupné na: <https://doi.org/10.3390/molecules190812078>
- Citácie:
- [1.1] VELO-GALA, Inmaculada - TORRES-PINTO, Andre - SILVA, Claudia G. - OHTANI, Bunsho - SILVA, Adrian M. T. - FARIA, Joaquim L. Graphitic carbon nitride photocatalysis: the hydroperoxyl radical role revealed by kinetic modelling. In *CATALYSIS SCIENCE & TECHNOLOGY*, 2021, vol. 11, no. 23, pp. 7712-7726. ISSN 2044-4753. Dostupné na: <https://doi.org/10.1039/d1cy01657a>, Registrované v: WOS
 - [1.2] TANKOV, Ivaylo - YANKOVA, Rumyana - SHESTAKOVA, Pavleta - GONSALVES, Leniya - JANATI, Ali El - RODI, Youssef Kandri - OUZIDAN, Younes - JASINSKI, Jerry P. - KAUR, Manpreet. EXPERIMENTAL AND DFT STUDY ON THE SPECTROSCOPIC (FT-IR, UV-VIS, NMR) AND NLO PROPERTIES OF 1,4-DIALLYL-6-CHLOROQUINOXALINE-2,3(1H,4H)-DIONE. In *Journal of Chemical Technology and Metallurgy*, 2021-01-01, 56, 5, pp. 881-900. ISSN 13147471, Registrované v: SCOPUS
- ADCA21 BELUŠÁKOVÁ, Silvia - MARTÍNEZ-MARTÍNEZ, V. - LOPEZ ARBELOA, I. - BUJDÁK, Juraj. Resonance energy transfer between dye molecules in colloids of a layered silicate. The effect of dye surface concentration. In *Journal of Physical Chemistry C*, 2017, vol. 121, p. 8300-8309. (2016: 4.536 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.7b00947>
- Citácie:
- [1.1] MATHUR, Divita - SAMANTA, Anirban - ANCONA, Mario G. - DIAZ, Sebastian A. - KIM, Youngchan - MELINGER, Joseph S. - GOLDMAN, Ellen R. - SADOWSKI, John Paul - ONG, Luvena L. - YIN, Peng - MEDINTZ, Igor L. Understanding Forster Resonance Energy Transfer in the Sheet Regime with DNA Brick-Based Dye Networks. In *ACS NANO*. ISSN 1936-0851, 2021, vol. 15, no. 10, pp. 16452-16468. Dostupné na: <https://doi.org/10.1021/acsnano.1c05871>, Registrované v: WOS
 - [1.1] SYNAK, Anna - KULAK, Leszek - BOJARSKI, Piotr - SCHLICHTHOLZ, Agnieszka. Forster Energy Transfer in Core-Shell Nanoparticles: Theoretical Model and Monte Carlo Study. In *JOURNAL OF PHYSICAL CHEMISTRY C*. ISSN 1932-7447, 2021, vol. 125, no. 33, pp. 18517-18525. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c05314>, Registrované v: WOS
 - [1.1] ZHANG, Wenbo - BERTINETTI, Luca - BLANK, Kerstin G. - DIMOVA, Rumiana - GAO, Changyou - SCHNECK, Emanuel - FRATZL, Peter. Spatiotemporal Measurement of Osmotic Pressures by FRET Imaging. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*. ISSN 1433-7851, 2021, vol. 60, no. 12, pp. 6488-6495. Dostupné na: <https://doi.org/10.1002/anie.202011983>, Registrované v: WOS
- ADCA22 BENCO, Ľubomír - BUČKO, Tomáš - HAFNER, Jürgen. Dehydrogenation of propane over Zn-MOR. Static and dynamic reaction energy diagram. In *Journal of Catalysis*, 2011, vol. 277, no. 1, p. 104-116. (2010: 5.415 - IF, Q1 - JCR, 3.380 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2010.10.018>
- Citácie:
- [1.1] CABANA, Nancy C. - SERRA, Ramiro R. - BOIX, Alicia - BOLCATTO, Pablo G. Geometries and Interaction Energies of Toluene on Cs(x)Na(1-x)Mordenite. In *PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS*. ISSN 0370-1972, 2020, vol. 257, no. 9, pp. Dostupné na: <https://doi.org/10.1002/pssb.202000131>, Registrované v: WOS
 - [1.1] DU, Yu-Jue - HU, Wen-De - WANG, Chuan-Ming - ZHOU, Jian - YANG, Guang - WANG, Yang-Dong - YANG, Wei-Min. First-principles microkinetic analysis of Lewis acid sites in Zn-ZSM-5 for alkane dehydrogenation and its implication to methanol-to-aromatics conversion. In *CATALYSIS SCIENCE & TECHNOLOGY*. ISSN 2044-4753, 2021, vol. 11, no. 6, pp. 2031-2046. Dostupné na: <https://doi.org/10.1039/d0cy02318c>, Registrované v: WOS
 - [1.1] LIU, Jie - LIU, Yong - LIU, Hongchao - FU, Yi - CHEN, Zhiyang - ZHU, Wenliang. Silicalite-1 Supported ZnO as an Efficient Catalyst for Direct Propane Dehydrogenation. In *CHEMCATCHEM*. ISSN 1867-3880, 2021, vol. 13, no. 22, pp. 4780-4786. Dostupné na: <https://doi.org/10.1002/cctc.202101069>, Registrované v: WOS
 - [1.1] LIU, Yi - ZHANG, Guanghui - WANG, Jianyang - ZHU, Jie - ZHANG, Xinbao - MILLER, Jeffrey T. - SONG, Chunshan - GUO, Xinwen. Promoting propane dehydrogenation with CO₂ over Ga₂O₃/SiO₂ by eliminating Ga-hydrides. In *CHINESE JOURNAL OF CATALYSIS*. ISSN 0253-9837, 2021, vol. 42, no. 12, pp. 2225-2233. Dostupné na: <https://doi.org/10.1016/S1872->

- 2067(21)63900-1., Registrované v: WOS
5. [1.1] VAN DER MYNSBRUGGE, Jeroen - BELL, Alexis T. Challenges for the theoretical description of the mechanism and kinetics of reactions catalyzed by zeolites. In *JOURNAL OF CATALYSIS*. ISSN 0021-9517, 2021, vol. 404, no., pp. 832-849. Dostupné na: <https://doi.org/10.1016/j.jcat.2021.08.048>., Registrované v: WOS
6. [1.1] WANG, Ya-Lan - WANG, Xin-Xin - ZHU, Yi-An - ZHU, Ka-Ke - CHEN, De - ZHOU, Xing-Gui. Shape selectivity in acidic zeolite catalyzed 2-pentene skeletal isomerization from first principles. In *CATALYSIS TODAY*. ISSN 0920-5861, 2020, vol. 347, no., pp. 115-123. Dostupné na: <https://doi.org/10.1016/j.cattod.2018.06.009>., Registrované v: WOS
- ADCA23 BENCO, Ľubomír - TUNEGA, Daniel. Adsorption of H₂O, NH₃ and C₆H₆ on alkali metal cations in internal surface of mordenite and in external surface of smectite: A DFT study. In *Physics and Chemistry of Minerals*, 2009, vol. 36, no. 5, p. 281-290. (2008: 1.524 - IF, karentované - CCC). (2009 - Current Contents). Dostupné na: <https://doi.org/10.1007/s00269-008-0276-9>
- Citácie:
1. [1.1] ZHU, Na - SHAN, Wenpo - SHAN, Yulong - DU, Jinpeng - LIAN, Zhihua - ZHANG, Yan - HE, Hong. Effects of alkali and alkaline earth metals on Cu-SSZ-39 catalyst for the selective catalytic reduction of NO_x with NH₃. In *CHEMICAL ENGINEERING JOURNAL*. ISSN 1385-8947, 2020, vol. 388, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.124250>., Registrované v: WOS
- ADCA24 BENCO, Ľubomír - BUČKO, Tomáš - HAFNER, Jürgen. Activity and reactivity of Fe²⁺ cations in the zeolite. Ab initio free-energy MD calculation of the N₂O dissociation over iron-exchanged ferrierite. In *Journal of Physical Chemistry C*, 2009, vol. 113, no. 43, p. 18807-18816. (2008: 3.396 - IF, Q1 - JCR, 1.883 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents, WOS, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp906901t>
- Citácie:
1. [1.1] BOLS, Max L. - RHODA, Hannah M. - SNYDER, Benjamin E. R. - SOLOMON, Edward - PIERLOOT, Kristine - SCHOONHEYDT, Robert A. - SELS, Bert F. Advances in the synthesis, characterisation, and mechanistic understanding of active sites in Fezeolites for redox catalysts. In *DALTON TRANSACTIONS*. ISSN 1477-9226, 2020, vol. 49, no. 42, pp. 14749-14757. Dostupné na: <https://doi.org/10.1039/d0dt01857k>., Registrované v: WOS
- ADCA25 BENCO, Ľubomír - BUČKO, Tomáš - HAFNER, Jürgen - TOULHOAT, H. Periodic DFT calculations of the stability of Al/Si substitutions and extraframework Zn²⁺ cations in mordenite and reaction pathway for the dissociation of H₂ and CH₄. In *Journal of Physical Chemistry B*, 2005, vol. 109, no. 43, p. 20361-20369. (2005 - Current Contents, SCOPUS). ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp0530597>
- Citácie:
1. [1.1] JAJKO, Gabriela - KOZYRA, Pawel - STRZEMPEK, Maciej - INDYKA, Paulina - ZAJAC, Marcin - WITKOWSKI, Stefan - PISKORZ, Witold. Structural Studies of Aluminated form of Zeolites-EXAFS and XRD Experiment, STEM Micrography, and DFT Modelling. In *MOLECULES*, 2021, vol. 26, no. 12, pp. Dostupné na: <https://doi.org/10.3390/molecules26123566>., Registrované v: WOS
2. [1.1] NOZIK, Danna - TINGA, Francesca Mikaela P. - BELL, Alexis T. Propane Dehydrogenation and Cracking over Zn/H-MFI Prepared by Solid-State Ion Exchange of ZnCl₂. In *ACS CATALYSIS*. ISSN 2155-5435, 2021, vol. 11, no. 23, pp. 14489-14506. Dostupné na: <https://doi.org/10.1021/acscatal.1c03641>., Registrované v: WOS
3. [1.1] STRZEMPEK, Maciej - TARACH, Karolina - GORA-MAREK, Kinga - REY, Fernando - PALOMINO, Miguel - VALENCIA, Susana - PISKORZ, Witold. Multiscale exploration of hydrocarbon adsorption and hopping through ZSM-5 channels from Monte Carlo modelling to experiment. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 2981-2990. Dostupné na: <https://doi.org/10.1039/d0cp05128d>., Registrované v: WOS
4. [1.1] XIE, Linjun - WANG, Rui - CHAI, Yuchao - WENG, Xuefei - GUAN, Naijia - LI, Landong. Propane dehydrogenation catalyzed by in-situ partially reduced zinc cations confined in zeolites. In *JOURNAL OF ENERGY CHEMISTRY*. ISSN 2095-4956, 2021, vol. 63, no., pp. 262-269. Dostupné na: <https://doi.org/10.1016/j.jechem.2021.04.034>., Registrované v: WOS
5. [1.1] ZHAO, Peng - QIAN, Weixin - MA, Hongfang - SHENG, Haibing - ZHANG, Haitao - YING, Weiyong. Effect of Zr Incorporation on Mordenite Catalyzed Dimethyl Ether Carbonylation. In *CATALYSIS LETTERS*. ISSN 1011-372X, 2021, vol. 151, no. 4, pp. 940-954. Dostupné na: <https://doi.org/10.1007/s10562-020-03359-w>., Registrované v: WOS
6. [1.1] ZHAO, Xingling - XU, Jun - DENG, Feng. Solid-state NMR for metal-containing zeolites: From active sites to reaction mechanism. In *FRONTIERS OF CHEMICAL SCIENCE AND ENGINEERING*. ISSN 2095-0179, 2020, vol. 14, no. 2, pp. 159-187. Dostupné na: <https://doi.org/10.1007/s11705-019-1885-1>., Registrované v: WOS
- ADCA26 BENCO, Ľubomír - BUČKO, Tomáš - GRYBOS, Robert - HAFNER, Jürgen - SOBALÍK, Zdeněk -

DĚDEČEK, Jiří - HRUŠÁK, J. Adsorption of NO in Fe²⁺-exchanged ferrierite. A density functional theory study. In Journal of Physical Chemistry C, 2007, vol. 111, no. 2, p. 586-595. (2007 - Current Contents, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp065618v>

Citácie:

1. [1.1] ZHAO, Guangyu - ADESINA, Adesoji - KENNEDY, Eric - STOCKENHUBER, Michael. Formation of Surface Oxygen Species and the Conversion of Methane to Value-Added Products with N₂O as Oxidant over Fe-Ferrierite Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 2, pp. 1406-1416. Dostupné na: <https://doi.org/10.1021/acscatal.9b03466>.

Registrované v: WOS

ADCA27

BENCO, Ľubomír - BUČKO, Tomáš - GRYBOS, Robert - HAFNER, Jürgen - SOBALÍK, Zdeněk - DĚDEČEK, Jiří - SKLENÁK, Štěpán - HRUŠÁK, J. Multiple adsorption of NO on Fe²⁺ cations in the alpha- and beta-positions of ferrierite: An experimental and density functional study. In Journal of Physical Chemistry C, 2007, vol. 111, no. 26, p. 9393-9402. (2007 - Current Contents, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp0724018>

Citácie:

1. [1.1] ZHANG, Tao - QIU, Yu - LIU, Guohua - CHEN, Jianjun - PENG, Yue - LIU, Bing - LI, Junhua. Nature of active Fe species and reaction mechanism over high-efficiency Fe/CHA catalysts in catalytic decomposition of N₂O. In JOURNAL OF CATALYSIS. ISSN 0021-9517, 2020, vol. 392, no., pp. 322-335. Dostupné na: <https://doi.org/10.1016/j.jcat.2020.10.015>.

Registrované v: WOS

2. [1.1] ZHAO, Guangyu - ADESINA, Adesoji - KENNEDY, Eric - STOCKENHUBER, Michael. Formation of Surface Oxygen Species and the Conversion of Methane to Value-Added Products with N₂O as Oxidant over Fe-Ferrierite Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 2, pp. 1406-1416. Dostupné na: <https://doi.org/10.1021/acscatal.9b03466>.

Registrované v: WOS

ADCA28

BENCO, Ľubomír - DEMUTH, Th. - HAFNER, Jürgen - HUTSCHKA, F. - TOULHOAT, H. Extraframework aluminum species in zeolites: Ab initio molecular dynamics simulation of gmelinite. In Journal of Catalysis, 2002, vol. 209, no. 2, p. 480-488. Dostupné na: <https://doi.org/10.1006/jcat.2002.3631>

Citácie:

1. [1.1] CHIZALLET, Celine. Toward the Atomic Scale Simulation of Intricate Acidic Aluminosilicate Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 10, pp. 5579-5601. Dostupné na: <https://doi.org/10.1021/acscatal.0c01136>.

Registrované v: WOS

2. [1.1] HEARD, Christopher James - GRAJCIAR, Lukas - UHLIK, Filip - SHAMZHY, Mariya - OPANASENKO, Maksym - CEJKA, Jiri - NACHTIGALL, Petr. Zeolite (In)Stability under Aqueous or Steaming Conditions. In ADVANCED MATERIALS. ISSN 0935-9648, 2020, vol. 32, no. 44, pp. Dostupné na: <https://doi.org/10.1002/adma.202003264>.

Registrované v: WOS

3. [1.1] PEREIRA, Marcelo M. - SANTOS, Fabiana M. - SILVA, Alessandra - BATALLA, Nuno - DA SILVA HENRIQUE, Fabio Junior Ferreira - ESTEVES, Pierre M. - LOUIS, Benoit. Insights into the Role of Framework and Nonframework Aluminum in the Protolytic Reaction of Carbon-Carbon and Tertiary Carbon-Hydrogen Bonds of Isobutane. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 21, pp. 11636-11647. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c01989>.

Registrované v: WOS

4. [1.1] YI, Fengjiao - CHEN, Huimin - HUANG, Lihua - HU, Caixia - WANG, Jun - LI, Tao - WANG, Hongxing - TAO, Zhichao - YANG, Yong - LI, Yongwang. Effects of the acidity and shape selectivity of dealuminated zeolite beta on butene transformations. In FUEL. ISSN 0016-2361, 2021, vol. 300, no., pp. Dostupné na: <https://doi.org/10.1016/j.fuel.2021.120694>.

Registrované v: WOS

ADCA29

BENCO, Ľubomír. Chemical bonding in stoichiometric and substoichiometric vanadium nitride. In Journal of Solid State Chemistry, 1994, vol. 110, no. 1, p. 58-65. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1006/jssc.1994.1135>

Citácie:

1. [1.1] MEI, A. B. - KINDLUND, H. - BROITMAN, E. - HULTMAN, L. - PETROV, I - GREENE, J. E. - SANGIOVANNI, D. G. Adaptive hard and tough mechanical response in single-crystal B1 VN_x ceramics via control of anion vacancies. In ACTA MATERIALIA. ISSN 1359-6454, 2020, vol. 192, no., pp. 78-88. Dostupné na: <https://doi.org/10.1016/j.actamat.2020.03.037>.

Registrované v: WOS

ADCA30

BENCO, Ľubomír. Crystal orbital schemes for solids. Titanium and vanadium monocarbides and mononitrides. In Solid State Communications : an international journal, 1995, vol. 94, no. 10, p. 861-866. (1994: 1.450 - IF, karentované - CCC). (1995 - Current Contents). ISSN 0038-1098. Dostupné na: [https://doi.org/10.1016/0038-1098\(95\)00175-1](https://doi.org/10.1016/0038-1098(95)00175-1)

Citácie:

1. [1.1] FERREIRA, Ary R. Chemical bonding in metallic glasses from machine learning and

crystal orbital Hamilton population. In PHYSICAL REVIEW MATERIALS. ISSN 2475-9953, 2020, vol. 4, no. 11, pp. Dostupné na: <https://doi.org/10.1103/PhysRevMaterials.4.113603>., Registrované v: WOS

ADCA31

BENCO, Ľubomír - DEMUTH, Th. - HAFNER, Jürgen - HUTSCHKA, F. Spontaneous proton transfer between O-sites in zeolites. In Chemical Physics Letters, 2000, vol. 324, no. 5-6, p. 373-380. (1999: 2.270 - IF). Dostupné na: [https://doi.org/10.1016/S0009-2614\(00\)00628-X](https://doi.org/10.1016/S0009-2614(00)00628-X)

Citácie:

1. [1.1] BELTRAMI, Giada - DI RENZO, Francesco - PARODI, Ilaria - ALBERTI, Alberto - GUZMAN-CASTILLO, Maria De Lourdes - FAJULA, Francois - SUARD, Emmanuelle - MARTUCCI, Annalisa. Thermal activation of NH₄ precursor of acidic omega zeolite: A neutron and in-situ synchrotron powder diffraction combined study. In MICROPOROUS AND MESOPOROUS MATERIALS. ISSN 1387-1811, 2021, vol. 314, no., pp. Dostupné na: <https://doi.org/10.1016/j.micromeso.2020.110825>., Registrované v: WOS
2. [1.1] CHIZALLET, Celine. Toward the Atomic Scale Simulation of Intricate Acidic Aluminosilicate Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 10, pp. 5579-5601. Dostupné na: <https://doi.org/10.1021/acscatal.0c01136>., Registrované v: WOS

ADCA32

BENCO, Ľubomír - **TUNEGA, Daniel** - HAFNER, Jürgen - LISCHKA, H. Orientation of OH groups in kaolinite and dickite: Ab initio molecular dynamics study. In American Mineralogist. - Richmond, 2001, vol. 86, no. 9, p. 1057-1065. (2000: 1.862 - IF, karentované - CCC). (2001 - Current Contents). ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2001-8-912>

Citácie:

1. [1.1] DOR, Maoz - LEVI-KALISMAN, Yael - DAY-STIRRAT, Ruarri J. - MISHAEL, Yael - EMMANUEL, Simon. Assembly of clay mineral platelets, tactoids, and aggregates: Effect of mineral structure and solution salinity. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, 2020, vol. 566, no., pp. 163-170. Dostupné na: <https://doi.org/10.1016/j.jcis.2020.01.084>., Registrované v: WOS
2. [1.1] GARCIA, Karien - QUEZADA, Gonzalo R. - ARUMI, Jose L. - URRUTIA, Roberto - TOLEDO, Pedro G. Adsorption of Phosphate Ions on the Basal and Edge Surfaces of Kaolinite in Low Salt Aqueous Solutions Using Molecular Dynamics Simulations. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 38, pp. 21179-21190. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c05995>., Registrované v: WOS
3. [1.1] LI, Tingting - HUANG, Xiaoxiao - WANG, Qian - YANG, Gang. Adsorption of metal ions at kaolinite surfaces: Ion-specific effects, and impacts of charge source and hydroxide formation. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2020, vol. 194, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105706>., Registrované v: WOS
4. [1.1] SCHOLTZOVA, Eva. Computational modeling of nanoclays. In CLAY NANOPARTICLES: PROPERTIES AND APPLICATIONS, 2020, vol., no., pp. 139-166. Dostupné na: <https://doi.org/10.1016/B978-0-12-816783-0.00006-2>., Registrované v: WOS
5. [1.1] ZHAO, Jian - GAO, Wei - QIN, Xin-Zhan - HE, Man-Chao. First-principles study on adsorption behavior of as on the kaolinite (001) and (001 over bar) surfaces. In ADSORPTION-JOURNAL OF THE INTERNATIONAL ADSORPTION SOCIETY. ISSN 0929-5607, 2020, vol. 26, no. 3, pp. 443-452. Dostupné na: <https://doi.org/10.1007/s10450-019-00194-3>., Registrované v: WOS
6. [1.1] ZHAO, Jian - QIN, Xinzhan - WANG, Jiamin - HE, Manchao. Effect of Mg(II) and Na(I) Doping on the Electronic Structure and Mechanical Properties of Kaolinite. In MINERALS, 2020, vol. 10, no. 4, pp. Dostupné na: <https://doi.org/10.3390/min10040368>., Registrované v: WOS
7. [1.1] ZHAO, Jian - WANG, Zheng - GAO, Wei - WANG, Yi-Fei - HUANG, Bo-Wen. Theoretical Investigation on Rare Earth Elements of Y, Nd and La Atoms'; Adsorption on the Kaolinite (001) and (001 over bar) Surfaces. In MINERALS, 2021, vol. 11, no. 8, pp. Dostupné na: <https://doi.org/10.3390/min11080856>., Registrované v: WOS

ADCA33

BENCO, Ľubomír - **TUNEGA, Daniel** - HAFNER, Jürgen - LISCHKA, H. Upper limit of the O-H...O hydrogen bond. Ab initio study of the kaolinite structure. In Journal of physical chemistry. B. Materials, surfaces, interfaces, and biophysical, 2001, vol. 105, no. 44, p. 10812-10817. (2001 - Current Contents). ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp0124802>

Citácie:

1. [1.1] GIREESHKUMAR, T. R. - MATHEW, D. - UDAYAKRISHNAN, P. B. - SHAMEEM, K. - FATHIN, Fahad K. P. - FURTADO, C. M. - DEEPULAL, P. M. - NAIR, M. - BALACHANDRAN, K. K. Montmorillonite and phosphorus enrichment in sediments as the causative factor for mud bank formation along the southwest coast of India. In REGIONAL STUDIES IN MARINE SCIENCE. ISSN 2352-4855, 2020, vol. 40, no., pp. Dostupné na:

- <https://doi.org/10.1016/j.rsma.2020.101517>., Registrované v: WOS
2. [1.1] HOU, Shaoxiang - TONG, Yanjun - YANG, Hailin - FENG, Shoushuai. Molecular Insights into the Copper-Sensitive Operon Repressor in *Acidithiobacillus caldus*. In *APPLIED AND ENVIRONMENTAL MICROBIOLOGY*. ISSN 0099-2240, 2021, vol. 87, no. 16, pp. Dostupné na: <https://doi.org/10.1128/AEM.00660-21>., Registrované v: WOS
3. [1.1] HUANG, Wei - CHIEN, Po-Hsiu - MCMILLEN, Kyle - PATEL, Sawankumar - TEDESCO, Joshua - ZENG, Li - MUKHERJEE, Subhrangsu - WANG, Binghao - CHEN, Yao - WANG, Gang - WANG, Yang - GAO, Yanshan - BEDZYK, Michael J. - DELONGCHAMP, Dean M. - HU, Yan-Yan - MEDVEDEVA, Julia E. - MARKS, Tobin J. - FACCHETTI, Antonio. Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. In *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*. ISSN 0027-8424, 2020, vol. 117, no. 31, pp. 18231-18239. Dostupné na: <https://doi.org/10.1073/pnas.2007897117>., Registrované v: WOS
4. [1.1] ILIN, Eduard - MARCHEVSKY, Maxim - BURKOVA, Irina - PAK, Michael - BEZRYADIN, Alexey. Nanometer-Scale Deformations of Berea Sandstone Under Moisture-Content Variations. In *PHYSICAL REVIEW APPLIED*. ISSN 2331-7019, 2020, vol. 13, no. 2, pp. Dostupné na: <https://doi.org/10.1103/PhysRevApplied.13.024043>., Registrované v: WOS
5. [1.1] JANARDHANAN, Jayakrishnan Aerathupalathu - VALABOJU, Anusha - DHAWAN, Udes - MANSOURE, Tharwat Hassan - YAN, Ching-Cher Sanders - YANG, Chou-Hsun - GAUTAM, Bhaskarchand - HSU, Chao-Ping - YU, Hsiao-hua. Molecular and nano structures of chiral PEDOT derivatives influence the enantioselective recognition of biomolecules. In *in silico analysis of chiral recognition*. In *ANALYST*. ISSN 0003-2654, 2021, vol. 146, no. 23, pp. 7118-7125. Dostupné na: <https://doi.org/10.1039/d1an01465j>., Registrované v: WOS
6. [1.1] PADILLA, Jessyka - RAMIREZ, Ingrid - GUZMAN, Alexander - CARLOS POVEDA-JARAMILLO, Juan. Characterization and morphology of spray dried kaolin particles. In *BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING*. ISSN 0104-6632, 2021, vol. 38, no. 4, pp. 945-956. Dostupné na: <https://doi.org/10.1007/s43153-021-00157-8>., Registrované v: WOS
7. [1.1] SCHOLTZOVA, Eva. Computational modeling of nanoclays. In *CLAY NANOPARTICLES: PROPERTIES AND APPLICATIONS*, 2020, vol., no., pp. 139-166. Dostupné na: <https://doi.org/10.1016/B978-0-12-816783-0.00006-2>., Registrované v: WOS
8. [1.1] ZHOU, Junming - LI, Mengyuan - YUAN, Peng - LI, Yun - LIU, Hongmei - FAN, Wenxiao - LIU, Dong - ZHANG, Huan. Partial rehydration of tubular halloysite (7 angstrom) immersed in La(NO₃)(3) solution for 3 years and its implication for understanding REE occurrence in weathered crust elution-deposited rare earth ores. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 213, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106244>., Registrované v: WOS

ADCA34

BENCO, Ľubomír - TUNEGA, Daniel - HAFNER, Jürgen - LISCHKA, H. Ab initio density functional theory applied to the structure and proton dynamics of clays. In *Chemical Physics Letters*, 2001, vol. 333, no. 6, p. 479-484. Dostupné na: [https://doi.org/10.1016/S0009-2614\(00\)01412-3](https://doi.org/10.1016/S0009-2614(00)01412-3)

Citácie:

1. [1.1] SCHOLTZOVA, Eva. Computational modeling of nanoclays. In *CLAY NANOPARTICLES: PROPERTIES AND APPLICATIONS*, 2020, vol., no., pp. 139-166. Dostupné na: <https://doi.org/10.1016/B978-0-12-816783-0.00006-2>., Registrované v: WOS
2. [1.1] WANG, Yan - LIN, Sen - FENG, Hao - JI, Wentao - MA, Hongyan - ZHANG, Yimin. Suppression of different functional group modified powders on 9.5% CH₄-air explosion and molecular simulation mechanism. In *JOURNAL OF LOSS PREVENTION IN THE PROCESS INDUSTRIES*. ISSN 0950-4230, 2021, vol. 69, no., pp. Dostupné na: <https://doi.org/10.1016/j.jlp.2020.104344>., Registrované v: WOS

ADCA35

BENCO, Ľubomír - BARRAS, J.L. - DAUL, C. - DEISS, E. Theoretical study of the intercalation of Li into TiO₂ structures. In *Inorganic Chemistry*, 1999, vol. 38, no. 1, p. 20-28. ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/ic9803558>

Citácie:

1. [1.1] SIMONARSON, Gunnar - CALCAGNO, Giulio - LOTSARI, Antiope - PALMQVIST, Anders E. C. Electrochemical and structural characterization of lithiation in spray deposited ordered mesoporous titania as an anode for Li ion batteries. In *RSC ADVANCES*, 2020, vol. 10, no. 34, pp. 20279-20287. Dostupné na: <https://doi.org/10.1039/d0ra02687e>., Registrované v: WOS

ADCA36

BENCO, Ľubomír - HAFNER, Jürgen - HUTSCHKA, F. - TOULHOAT, H. Physisorption and chemisorption of some n-hydrocarbons at the Bronsted acid site in zeolites 12-membered ring main channel: Ab initio study of the gmelinite structure. In *Journal of Physical Chemistry B*, 2003, vol. 107, no. 36, p. 9756-9762. ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp027625z>

Citácie:

1. [1.1] CHIZALLET, Celine. Toward the Atomic Scale Simulation of Intricate Acidic

- Aluminosilicate Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 10, pp. 5579-5601. Dostupné na: <https://doi.org/10.1021/acscatal.0c01136>., Registrované v: WOS*
2. [1.1] JAJKO, Gabriela - TARACH, Karolina - GORA-MAREK, Kinga - KOZYRA, Pawel - PISKORZ, Witold. Toward the Mechanism of o-Xylene Isomerization in Selected Zeolites of Different Si/Al Ratios and Channel Sizes-Experiment Corroborated by Periodic DFT plus D Simulations. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 19, pp. 10334-10348. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c01307>., Registrované v: WOS
3. [1.1] STRZEMPEK, Maciej - TARACH, Karolina - GORA-MAREK, Kinga - REY, Fernando - PALOMINO, Miguel - VALENCIA, Susana - PISKORZ, Witold. Multiscale exploration of hydrocarbon adsorption and hopping through ZSM-5 channels from Monte Carlo modelling to experiment. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 2981-2990. Dostupné na: <https://doi.org/10.1039/d0cp05128d>., Registrované v: WOS
- ADCA37 **BENCO, Ľubomír** - BUČKO, Tomáš - HAFNER, Jürgen - TOULHOAT, H. Ab initio simulation of Lewis sites in mordenite and comparative study of the strength of active sites via CO adsorption. In Journal of Physical Chemistry B, 2004, vol. 108, no. 36, p. 13656-13666. ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp048056t>
- Citácie:
1. [1.1] CHEN, Xiaobo - LI, Ruiying - YAN, Hao - LIU, Yibin - YANG, Chaohe. A DFT Study for Catalytic Deoxygenation of Methyl Butyrate on a Lewis Acid Site of ZSM-5 Zeolite. In CATALYSTS, 2020, vol. 10, no. 11, pp. Dostupné na: <https://doi.org/10.3390/catal10111233>., Registrované v: WOS
2. [1.1] CHIZALLET, Celine. Toward the Atomic Scale Simulation of Intricate Acidic Aluminosilicate Catalysts. In ACS CATALYSIS. ISSN 2155-5435, 2020, vol. 10, no. 10, pp. 5579-5601. Dostupné na: <https://doi.org/10.1021/acscatal.0c01136>., Registrované v: WOS
3. [1.1] HESSOU, Etienne Paul - JABRAOUI, Hicham - KHALIL, Ibrahim - DZIURLA, Marie-Antoinette - BADAWI, Michael. Ab initio screening of zeolite Y formulations for efficient adsorption of thiophene in presence of benzene. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, 2021, vol. 541, no., pp. Dostupné na: <https://doi.org/10.1016/j.apsusc.2020.148515>., Registrované v: WOS
4. [1.1] JUNG, Hyun Seung - HAM, Hyungwon - BAE, Jong Wook. Highly stable seed-derived ferrierite for carbonylation of dimethyl ether to methyl acetate: Effects of seed content to catalytic stability. In CATALYSIS TODAY. ISSN 0920-5861, 2020, vol. 339, no., pp. 79-85. Dostupné na: <https://doi.org/10.1016/j.cattod.2019.02.042>., Registrované v: WOS
5. [1.1] NEWTON, Mark A. - KNORPP, Amy J. - SUSHKEVICH, Vitaly L. - PALAGIN, Dennis - VAN BOKHOVEN, Jeroen A. Active sites and mechanisms in the direct conversion of methane to methanol using Cu in zeolitic hosts: a critical examination. In CHEMICAL SOCIETY REVIEWS. ISSN 0306-0012, 2020, vol. 49, no. 5, pp. 1449-1486. Dostupné na: <https://doi.org/10.1039/c7cs00709d>., Registrované v: WOS
6. [1.1] PALAGIN, Dennis - SUSHKEVICH, Vitaly L. - KNORPP, Amy J. - RANOCCHIARI, Marco - VAN BOKHOVEN, Jeroen A. Mapping Vibrational Spectra to the Structures of Copper Species in Zeolites Based on Calculated Stretching Frequencies of Adsorbed Nitrogen and Carbon Monoxides. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 22, pp. 12094-12106. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c01649>., Registrované v: WOS
7. [1.1] ZHANG, Dandan - LIU, Hongyan - LING, Lixia - ZHANG, Hairong - ZHANG, Riguang - LIU, Ping - WANG, Baojun. The effect of introducing Ga on the ZSM-5-catalyzed methanol to aromatics reaction: taking methylcyclopentane to benzene as an example. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 18, pp. 10988-11003. Dostupné na: <https://doi.org/10.1039/d0cp05778a>., Registrované v: WOS
- ADCA38 **BENCO, Ľubomír** - BARRAS, J.L. - ATANASOV, M. - DAUL, C. - DEISS, E. First principles calculation of electrode material for lithium intercalation batteries: TiS₂ and LiTi₂S₄ cubic spinel structures. In Journal of Solid State Chemistry, 1999, vol. 145, no. 2, p. 503-510. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1006/jssc.1999.8195>
- Citácie:
1. [1.1] SHARMA, Sheetal - DUTTA, Vishal - RAIZADA, Pankaj - HOSSEINI-BANDEGHARAEI, Ahmad - SINGH, Pardeep - NGUYEN, Van-Huy. Tailoring cadmium sulfide-based photocatalytic nanomaterials for water decontamination: a review. In ENVIRONMENTAL CHEMISTRY LETTERS. ISSN 1610-3653, 2021, vol. 19, no. 1, pp. 271-306. Dostupné na: <https://doi.org/10.1007/s10311-020-01066-x>., Registrované v: WOS
- ADCA39 **BENCO, Ľubomír**. Covalent bonding in MGO and Y₂O₃. In Ceramics International, 1995, vol. 21, no. 4, p. 283-287. ISSN 0272-8842. Dostupné na: [https://doi.org/10.1016/0272-8842\(95\)99795-D](https://doi.org/10.1016/0272-8842(95)99795-D)
- Citácie:

1. [1.1] RZAYEV, R. F. - DASHDEMIROV, A. O. - AKHUNDZADA, H. - POPOV, E. - MIRZAYEVA, D. M. - MIRZAYEV, Matlab N. Surface binding energy and erosion coefficient on the nanoyttrium oxide under ionization irradiation. In *INTERNATIONAL JOURNAL OF MODERN PHYSICS B*. ISSN 0217-9792, 2021, vol. 35, no. 30, pp. Dostupné na: <https://doi.org/10.1142/S0217979221503094>, Registrované v: WOS
- ADCA40 BENCO, Ľubomír - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol - JÁNĚ, Eduard - VELIČ, Dušan. Europium-doped LaSi₃N₅ ternary nitride: synthesis, spectroscopy, computed electronic structure and band gaps. In *Journal of the American Ceramic Society*, 2011, vol. 94, no. 12, p. 4345-4351. (2010: 2.169 - IF, Q1 - JCR, 1.449 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2011.04706.x>
- Citácie:
1. [1.1] HUANG, Jinlong - WAN, Jieqiong - LI, Yue - LI, Yan - WU, Xiaohan - ZHANG, Wenqi. A novel Eu-dependent G-La₂Si₂O₇ single matrix phosphor for white light-emitting diodes. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 19, pp. 27571-27576. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.181>, Registrované v: WOS
- ADCA41 BENCO, Ľubomír - HAFNER, Jürgen - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Density functional study of structures and mechanical properties of Y-doped alpha-SiAlONs. In *Journal of the European Ceramic Society*, 2008, vol. 28, no. 5, p. 995-1002. (2007: 1.562 - IF, Q1 - JCR, 1.212 - SJR, Q1 - SJR). (2008 - WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2007.09.030>
- Citácie:
1. [1.1] NOORI, R. - ALIZADEH, Parvin - AFGHAHI, S. S. S. Effect of dissolution on dielectric properties of Y-alpha/beta SiAlON fabricated by SPS. In *JOURNAL OF THE KOREAN CERAMIC SOCIETY*. ISSN 1229-7801, 2021, vol. 58, no. 6, pp. 706-717. Dostupné na: <https://doi.org/10.1007/s43207-021-00145-1>, Registrované v: WOS
2. [1.1] ZHANG, Liguang - ZHANG, Can - JI, Yun - XU, Enxia - MU, Jinghua - LIU, Xinhong - ZHAO, Fei - YUAN, Huiyu - CUI, Junyan - GAO, Jinxing. Effects of Z-value on physicochemical and biological properties of beta-SiAlONs ceramics. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 24, pp. 34810-34819. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.09.021>, Registrované v: WOS
- ADCA42 BENEDEK, R. - THACKERAY, M. M. - LOW, J. - BUČKO, Tomáš. Simulation of aqueous dissolution of lithium manganate spinel from first principles. In *Journal of Physical Chemistry C*, 2012, vol. 116, no. 6, p. 4050-4059. (2011: 4.805 - IF, Q1 - JCR, 2.339 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp208793k>
- Citácie:
1. [1.1] ECKHOFF, Marco - BEHLER, Joerg. Insights into lithium manganese oxide-water interfaces using machine learning potentials. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 155, no. 24, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0073449>, Registrované v: WOS
2. [1.1] LEE, Seunghwan - KIM, Hyoungchul - LEE, Jong-Ho - KIM, Byung-Kook - SHIN, Hyunjung - KIM, Joosun - PARK, Sangbaek. Nano-interface engineering in all-solid-state lithium metal batteries: Tailoring exposed crystal facets of epitaxially grown LiNi_{0.5}Mn_{1.5}O₄ films. In *NANO ENERGY*, 2021, vol. 79, no., pp. ISSN 2211-2855. Available on: <https://doi.org/10.1016/j.nanoen.2020.105480>, Registrované v: WOS
3. [1.1] LIANG, Qimei - GUO, Yujiao - GUO, Junming - XIANG, Mingwu - LIU, Xiaofang - BAI, Wei - NING, Ping. Preparation and High Temperature Electrochemical Performance of LiNi_{0.08}Mn_{1.92}O₄ Cathode Material of Submicron Truncated Octahedron. In *ACTA CHIMICA SINICA*, 2021, vol. 79, no. 12, pp. 1526-1533. ISSN 0567-7351. Available on: <https://doi.org/10.6023/A21070324>, Registrované v: WOS
4. [1.1] LIANG, Qimei - WANG, Zilin - BAI, Wei - GUO, Junming - XIANG, Mingwu - LIU, Xiaofang - BAI, Hongli. Stimulative formation of truncated octahedral LiMn₂O₄ by Cr and Al co-doping for use in durable cycling Li-ion batteries. In *DALTON TRANSACTIONS*, 2021, vol. 50, no. 46, pp. 17052-17061. ISSN 1477-9226. Available on: <https://doi.org/10.1039/d1dt03221f>, Registrované v: WOS
- ADCA43 BENEDICT, Hans - SHENDEROVICH, Ilja G. - MALKINA, Oľga - MALKIN, Vladimír - DENISOV, Gleb S. - GOLUBEV, Nikolai S. - LIMBACH, Hans-Heinrich. Nuclear scalar spin-spin couplings and geometries of hydrogen bonds. In *Journal of the American Chemical Society*, 2000, vol. 122, no. 9, p. 1979-1988. ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/ja9907461>
- Citácie:
1. [1.1] COSTA, Fabio L. P. - DE ALBUQUERQUE, Ana C. F. - FIOROT, Rodolfo G. - LIAO, Luciano M. - MARTORANO, Lucas H. - MOTA, Gunar V. S. - VALVERDE, Alessandra L. - CARNEIRO, Jose W. M. - JUNIOR, Fernando M. dos Santos. Structural characterisation of natural products by means of quantum chemical calculations of NMR parameters: new insights. In

ORGANIC CHEMISTRY FRONTIERS, 2021, vol. 8, no. 9, pp. 2019-2058. ISSN 2052-4129.

Dostupné na: <https://doi.org/10.1039/d1qo00034a>., Registrované v: WOS

2. [1.1] FERNANDEZ-ALARCON, Alberto - GUEVARA-VELA, Jose Manuel - CASALS-SAINZ, Jose Luis - FRANCISCO, Evelio - COSTALES, Aurora - PENDAS, Angel Martin - ROCHA-RINZA, Tomas. The nature of the intermolecular interaction in (H₂X)(2) (X = O, S, Se). In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 16, pp. 10097-10107. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp00047k>., Registrované v: WOS

3. [1.1] GRABOWSKI, Slawomir J. Experimental Methods and Techniques. In UNDERSTANDING HYDROGEN BONDS, 2021, vol. 19, no., pp. 225-306., Registrované v: WOS

4. [1.1] ZARYCZ, M. Natalia C. - SCHIEL, M. Ayelen - ANGELINA, Emilio - ENRIZ, Ricardo D. Covalence and pi-electron delocalization influence on hydrogen bonds in proton transfer process of o-hydroxy aryl Schiff bases: A combined NMR and QTAIM analysis. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 155, no. 5, pp. ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0058422>., Registrované v: WOS

5. [1.2] ORLANDI, Manuel. Basic principles of substrate activation through non-covalent bond interactions. In Organocatalysis: Stereoselective Reactions and Applications in Organic Synthesis, 2021-01-01, pp. 263-292. Dostupné na: <https://doi.org/10.1515/9783110590050-007>., Registrované v: SCOPUS

ADCA44

BERTOLLA, Luca - DLOUHÝ, Ivo - TATARKO, Peter - VIANI, Alberto - MAHAJAN, Amit - CHLUP, Zdeněk - REECE, Michael J. - BOCCACCINI, Aldo. Pressureless spark plasma-sintered Bioglass® 45S5 with enhanced mechanical properties and stress-induced new phase formation. In Journal of the European Ceramic Society, 2017, vol. 37, no. 7, p. 2727-2736. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.02.003>

Citácie:

1. [1.1] LI, X. Y. - ZHANG, Z. H. - CHENG, X. W. - HUO, G. J. - ZHANG, S. Z. - SONG, Q. The Development and Application of Spark Plasma Sintering Technique in Advanced Metal Structure Materials: A Review. In POWDER METALLURGY AND METAL CERAMICS. ISSN 1068-1302, 2021, vol. 60, no. 7-8, pp. 410-438. Dostupné na: <https://doi.org/10.1007/s11106-021-00254-w>., Registrované v: WOS

2. [1.1] SHENBAGAVALLI, S. - MUTHUVINAYAGAM, M. - JAYANTHI, S. - REVATHY, M. S. Investigations on Al₂O₃ dispersed PEO/PVP based Na⁺ ion conducting blend polymer electrolytes. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 8, pp. 9998-10007. Dostupné na: <https://doi.org/10.1007/s10854-021-05658-3>., Registrované v: WOS

ADCA45

BISHOP, J.L. - MADEJOVÁ, Jana - KOMADEL, Peter - FRÖSCHL, H. The influence of structural Fe, Al and Mg on the infrared OH bands in spectra of dioctahedral smectites. In Clay Minerals, 2002, vol. 37, no. 4, p. 607-616. (2001: 0.610 - IF, karentované - CCC). (2002 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/0009855023740063>

Citácie:

1. [1.1] CROTTEAU, Molly A. - GREENBERGER, Rebecca N. - EHLMANN, Bethany L. - ROSSMAN, George R. - HARRIS, Michelle - KELEMEN, Peter B. - TEAGLE, Damon A. H. Characterizing Hydration of the Ocean Crust Using Shortwave Infrared Microimaging Spectroscopy of ICDP Oman Drilling Project Cores. In JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, 2021, vol. 126, no. 11, pp. ISSN 2169-9313. Dostupné na: <https://doi.org/10.1029/2021JB022676>., Registrované v: WOS

2. [1.1] GRANATH, Tim - LOEBMANN, Peer - MANDEL, Karl. Oxidative Precipitation as a Versatile Method to Obtain Ferromagnetic Fe₃O₄ Nano- and Mesocrystals Adjustable in Morphology and Magnetic Properties. In PARTICLE & PARTICLE SYSTEMS CHARACTERIZATION, 2021, vol. 38, no. 3, pp. ISSN 0934-0866. Dostupné na: <https://doi.org/10.1002/ppsc.202000307>., Registrované v: WOS

3. [1.1] GREENBERGER, Rebecca N. - HARRIS, Michelle - EHLMANN, Bethany L. - CROTTEAU, Molly A. - KELEMEN, Peter B. - MANNING, Craig E. - TEAGLE, Damon A. H. Hydrothermal Alteration of the Ocean Crust and Patterns in Mineralization With Depth as Measured by Micro-Imaging Infrared Spectroscopy. In JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, 2021, vol. 126, no. 8, pp. ISSN 2169-9313. Dostupné na: <https://doi.org/10.1029/2021JB021976>., Registrované v: WOS

4. [1.1] LAUKAMP, Carsten - RODGER, Andrew - LEGRAS, Monica - LAMPINEN, Heta - LAU, Ian C. - PEJCIC, Bobby - STROMBERG, Jessica - FRANCIS, Neil - RAMANAIDOU, Erick. Mineral Physicochemistry Underlying Feature-Based Extraction of Mineral Abundance and Composition from Shortwave, Mid and Thermal Infrared Reflectance Spectra. In MINERALS, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/min11040347>., Registrované v: WOS

5. [1.1] NGUYEN-THANH, Lan - MAEHLMANN, Rafael Ferreira - HOANG-MINH, Thao - PETSCHICK, Rainer - REISCHMANN, Thomas - NESBOR, Heinz-Dieter - RUTTMANN, Myriam - FRITSCH, Johann-Gerhard. Clay mineral formation in Permian rocks of a geothermal borehole at Northern Upper Rhine Graben, Germany. In *INTERNATIONAL JOURNAL OF EARTH SCIENCES*, 2021, vol. 110, no. 4, pp. 1415-1438. ISSN 1437-3254. Dostupné na: <https://doi.org/10.1007/s00531-021-02022-y>, Registrované v: WOS
 6. [1.1] POUR, Amin Beiranvand - SEKANDARI, Milad - RAHMANI, Omeid - CRISPINI, Laura - LAEUFER, Andreas - PARK, Yongcheol - HONG, Jong Kuk - PRADHAN, Biswajeet - HASHIM, Mazlan - HOSSAIN, Mohammad Shawkat - MUSLIM, Aidy M. - MEHRANZAMIR, Kamyar. Identification of Phyllosilicates in the Antarctic Environment Using ASTER Satellite Data: Case Study from the Mesa Range, Campbell and Priestley Glaciers, Northern Victoria Land. In *REMOTE SENSING*, 2021, vol. 13, no. 1, pp. Dostupné na: <https://doi.org/10.3390/rs13010038>, Registrované v: WOS
 7. [1.1] YE, B. - MICHALSKI, J. R. Precipitation-Driven Pedogenic Weathering of Volcaniclastics on Early Mars. In *GEOPHYSICAL RESEARCH LETTERS*, 2021, vol. 48, no. 5, pp. ISSN 0094-8276. Dostupné na: <https://doi.org/10.1029/2020GL091551>, Registrované v: WOS
 8. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>, Registrované v: WOS
- ADCA46 BLUGAN, Gurdial - MICHÁLKOVÁ, Monika - HNATKO, Miroslav - ŠAJGALÍK, Pavol - MINGHETTI, Tiziano - SCHELLE, Christian - GRAULE, Thomas - KUEBLER, Jakob. Processing and properties of alumina-carbon nano fibre ceramic composites using standard ceramic technology. In *Ceramics International*, 2011, vol. 37, no. 8, p. 3371-3379. (2010: 1.472 - IF, Q1 - JCR, 0.855 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2011.05.139>
- Citácie:
1. [1.1] KRISHNAN, Saravanan Vanal - AMBALAM, Muthumanickam Muthukaruppan - VENKATESAN, Ragavendran - MAYANDI, Jeyanthinath - VENKATACHALAPATHY, Vishnukanthan. Technical review: Improvement of mechanical properties and suitability towards armor applications Alumina composites. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 17, pp. 23693-23701. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.146>, Registrované v: WOS
 2. [1.1] TAO, Guidong - LI, Hengkui - XU, Zhongxuan - CHEN, Zhiyuan - SUN, Hongliang. Microstructure and properties of Moiff/inf/TiAl composites prepared by foil-fiber-foil method. In *Jinshu Rechuli/Heat Treatment of Metals*, 2020-04-25, 45, 4, pp. 22-28. ISSN 02546051. Available on: <https://doi.org/10.13251/j.issn.0254-6051.2020.04.005>, Registrované v: SCOPUS
- ADCA47 BOČA, Miroslav - BARBORÍK, Peter - MIČUŠÍK, Matej - OMASTOVÁ, Mária. X-ray photoelectron spectroscopy as detection tool for coordinated or uncoordinated fluorine atoms demonstrated on fluoride systems NaF, K2TaF7, K3TaF8, K2ZrF6, Na7Zr6F31 and K3ZrF7. In *Solid State Sciences*, 2012, vol. 14, p. 828 - 832. (2011: 1.856 - IF, Q2 - JCR, 0.797 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents, WOS, SCOPUS). ISSN 1293-2558. Dostupné na: <https://doi.org/10.1016/j.solidstatesciences.2012.04.018>
- Citácie:
1. [1.1] LEONELLO, D. - FENDRICH, M.A. - PARRINO, F. - PATEL, N. - ORLANDI, M. - MIOTELLO, A. Light-Induced Advanced Oxidation Processes as PFAS Remediation Methods: A Review. In *APPLIED SCIENCES-BASEL*. SEP 2021, vol. 11, no. 18., Registrované v: WOS
 2. [1.1] WARIBAM, P. - JAIYEN, K. - SAMART, C. - OGAWA, M. - GUAN, G.Q. - KONGPARAKUL, S. MXene potassium titanate nanowire/sulfonated polyether ether ketone (SPEEK) hybrid composite proton exchange membrane for photocatalytic water splitting. In *RSC ADVANCES*. MAR 12 2021, vol. 11, no. 16, p. 9327-9335., Registrované v: WOS
- ADCA48 BOČA, Miroslav - RAKHMATULLIN, Aydar - MLYNÁRIKOVÁ, Jarmila - HADZIMOVÁ, Eva - VASKOVÁ, Zuzana - MIČUŠÍK, Matej. Differences in XPS and solid state NMR spectral data and thermo-chemical properties of iso-structural compounds in the series KTaF6, K2TaF7 and K3TaF8 and KNbF6, K2NbF7 and K3NbF8. In *Dalton Transactions*, 2015, vol. 44, p. 17106-17117. (2014: 4.197 - IF, Q1 - JCR, 1.389 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1477-9226. Dostupné na: <https://doi.org/10.1039/c5dt02560e>
- Citácie:
1. [1.1] GOREV, Mikhail - MOLOKEEV, Maxim S. - KARTASHEV, Andrey - POGORELTSEV, Evgeniy - MEL'NIKOVA, Svetlana - LAPTASH, Natalia M. - FLEROV, Igor N. Investigation of thermal properties and structure of complex fluoride K3ZrF7. In *JOURNAL OF FLUORINE CHEMISTRY*, 2021, vol. 241, 109677. ISSN 0022-1139. Dostupné na:

ADCA49

<https://doi.org/10.1016/j.jfluchem.2020.109677>, Registrované v: WOS
BOČA, Miroslav - JAMESON, Reginald F. - LINERT, Wolfgang. Fascinating variability in the chemistry and properties of 2,6-bis-(benzimidazol-2-yl)-pyridine and 2,6-bis-(benzthiazol-2-yl)-pyridine and their complexes. In *Coordination Chemistry Reviews*, 2011, vol. 255, n. 1-2, p. 290-317. (2010: 10.018 - IF, Q1 - JCR, 4.633 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0010-8545. Dostupné na: <https://doi.org/10.1016/j.ceramint.2011.05.139>

Citácie:

1. [1.1] CHORоба, Katarzyna - KOTOWICZ, Sonia - MARON, Anna - SWITLICKA, Anna - SZLAPA-KULA, Agata - SIWY, Mariola - GRZELAK, Justyna - SUŁOWSKA, Karolina - MACKOWSKI, Sebastian - SCHAB-BALCERZAK, Ewa - MACHURA, Barbara. Ground- and excited-state properties of Re(I) carbonyl complexes-Effect of triimine ligand core and appended heteroaromatic groups. In *DYES AND PIGMENTS*, 2021, vol. 192, no., pp. ISSN 0143-7208. Available on: <https://doi.org/10.1016/j.dyepig.2021.109472>, Registrované v: WOS
2. [1.1] CRUZ-NAVARRO, Antonio - HERNANDEZ-ROMERO, Delia - FLORES-PARRA, Angelina - RIVERA, Jose Maria - ELENA CASTILLO-BLUM, Silvia - COLORADO-PERALTA, Raul. Structural diversity and luminescent properties of coordination complexes obtained from trivalent lanthanide ions with the ligands: tris((1H-benzo[d]imidazol-2-yl)methyl)amine and 2,6-bis(1H-benzo[d]imidazol-2-yl)pyridine. In *COORDINATION CHEMISTRY REVIEWS*, 2021, vol. 427, no., pp. ISSN 0010-8545. Available on: <https://doi.org/10.1016/j.ccr.2020.213587>, Registrované v: WOS
3. [1.1] MAŁECKA, Magdalena - MACHURA, Barbara - SZLAPA-KULA, Agata. Optical properties of 2,6-di(pyrazin-2-yl)pyridines substituted with extended aryl groups. In *DYES AND PIGMENTS*, 2021, vol. 188, no., pp. ISSN 0143-7208. Available on: <https://doi.org/10.1016/j.dyepig.2021.109168>, Registrované v: WOS
4. [1.1] OULMIDI, Afaf - ROTARU, Aurelian - RADI, Smaail - GARCIA, Yann. Pyrazole's substituents effect on the spin state of [Fe(bpp)(2)](2+) complexes. In *HYPERFINE INTERACTIONS*, 2021, vol. 242, no. 1, pp. ISSN 0304-3843. Available on: <https://doi.org/10.1007/s10751-021-01730-w>, Registrované v: WOS
5. [1.1] SCHAEFER, Bernhard - SURYADEVARA, Nithin - GREISCH, Jean-Francois - FUHR, Olaf - KAPPES, Manfred M. - RUBEN, Mario. Ditopic Hexadentate Ligands with a Central Dihydrobenzo-diimidazole Unit Forming a [2x2] Zn-4 Grid Complex. In *EUROPEAN JOURNAL OF ORGANIC CHEMISTRY*, 2021, vol. 2021, no. 16, pp. 2301-2310. ISSN 1434-193X. Available on: <https://doi.org/10.1002/ejoc.202100230>, Registrované v: WOS
6. [1.1] SHAHID, Namrah - BURROWS, Kay E. - HOWARD, Mark J. - PASK, Christopher M. - CESPEDDES, Oscar - MCGOWAN, Patrick C. - HALCROW, Malcolm A. Spin-States of Diastereomeric Iron(II) Complexes of 2,6-Bis(thiazolin-2-yl)pyridine (ThioPyBox) Ligands and a Comparison with the Corresponding PyBox Derivatives. In *INORGANIC CHEMISTRY*, 2021, vol. 60, no. 18, pp. 14336-14348. ISSN 0020-1669. Available on: <https://doi.org/10.1021/acs.inorgchem.1c01988>, Registrované v: WOS
7. [1.1] SOLEIMANI, Mahboobeh - TIRGIR, Farhang - DINARI, Mohammad. Fabrication and characterization of the novel bionanocomposite poly(ester-imide-sulfonamide)s/Ag film coated on glass bead for inactivation of E. coli. In *POLYMER BULLETIN*, 2021, vol., no., pp. ISSN 0170-0839. Available on: <https://doi.org/10.1007/s00289-021-03782-y>, Registrované v: WOS
8. [1.1] TURGUT, Enes - GUNGOR, Ozge - KIRPIK, Hilal - KOSE, Aysegul - GUNGOR, Seyit Ali - KOSE, Muhammet. Benzimidazole ligands with allyl, propargyl or allene groups, DNA binding properties, and molecular docking studies. In *APPLIED ORGANOMETALLIC CHEMISTRY*, 2021, vol. 35, no. 9, pp. ISSN 0268-2605. Available on: <https://doi.org/10.1002/aoc.6323>, Registrované v: WOS

ADCA50

BOČA, Roman - BOČA, Miroslav - GEMBICKÝ, Milan - JÄGER, Lothar - WAGNER, Christoph - FUESS, H. Versatile coordination mode of dicyanamide in nickel(II) complexes containing polyamines as blocking ligands. In *Polyhedron*, 2004, vol. 23, no. 15, p. 2337-2348. ISSN 0277-5387. Dostupné na: <https://doi.org/10.1016/j.poly.2004.06.022>

Citácie:

1. [1.1] ADAK, Sarmistha - SUN, Yu-Chen - JANA, Narayan Ch - BRANDAO, Paula - WANG, Xin-Yi - PANJA, Anangamohan. Tuneable structures and magnetic properties of pseudohalobridged dinuclear Ni(II) complexes derived from {N-4} and {N3O} donor ligands. In *CRYSTENGCOMM*, 2021, vol. 23, no. 18, pp. 3371-3382. Available on: <https://doi.org/10.1039/d1ce00202c>, Registrované v: WOS
2. [1.1] MAUTNER, Franz A. - JANTSCHER, Patricia V. - FISCHER, Roland C. - REICHMANN, Klaus - MASSOUD, Salah S. - SPEED, Saskia - VICENTE, Ramon. Synthesis, crystal structures, spectral, magnetic and thermal properties of 1-D polymeric dicyanamido-metal(II) complexes. In *POLYHEDRON*, 2021, vol. 204, no., pp. ISSN 0277-5387. Available on: <https://doi.org/10.1016/j.poly.2021.115263>, Registrované v: WOS

- ADCA51 BOČA, Roman - RENZ, Franz - BOČA, Miroslav - FUESS, H. - HAASE, Wolfgang - KICKELBICK, Guido - LINERT, Wolfgang - VRBOVÁ-SCHIKORA, Martina. Tuning the spin crossover above room temperature: iron(II) complexes of substituted and deprotonated 2,6-bis(benzimidazol-2-yl)pyridine. In *Inorganic Chemistry Communications*, 2005, vol. 8, no. 2, p. 227-230. Dostupné na: <https://doi.org/10.1016/j.inoche.2004.12.014>
Citácie:
1. [1.1] BONDÍ, Luca - BROOKER, Sally - TOTTI, Federico. Accurate prediction of pressure and temperature T-1/2 variation in solid state spin crossover by ab initio methods: the [Co-II(dpzca)(2)] case. In *JOURNAL OF MATERIALS CHEMISTRY C*, 2021, vol. 9, no. 40, pp. 14256-14268. ISSN 2050-7526. Available on: <https://doi.org/10.1039/d1tc03467g>, Registrované v: WOS
- ADCA52 BODÍŠOVÁ, Katarína - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - LENCĚŠ, Zoltán - VARCHULOVÁ NOVÁKOVÁ, Zuzana - VOJTAŠŠÁK, Ján - GROMOŠOVÁ, Silvia - ŠAJGALÍK, Pavol. Porous silicon nitride ceramics designed for bone substitute applications. In *Ceramics International*, 2013, vol. 39, p. 8355-8362. (2012: 1.789 - IF, Q1 - JCR, 0.810 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2013.04.015>
Citácie:
1. [1.1] CHEN, Yu - WANG, Nannan - OLA, Oluwafunmilola - XIA, Yongde - ZHU, Yanqiu. Porous ceramics: Light in weight but heavy in energy and environment technologies. In *MATERIALS SCIENCE & ENGINEERING R-REPORTS*. ISSN 0927-796X, 2021, vol. 143, no., pp. Dostupné na: <https://doi.org/10.1016/j.mser.2020.100589>, Registrované v: WOS
2. [1.1] FIANI, Brian - JARRAH, Ryan - SHIELDS, Jennifer - SEKHON, Manraj. Enhanced biomaterials: systematic review of alternatives to supplement spine fusion including silicon nitride, bioactive glass, amino peptide bone graft, and tantalum. In *NEUROSURGICAL FOCUS*. ISSN 1092-0684, 2021, vol. 50, no. 6, pp. Dostupné na: <https://doi.org/10.3171/2021.3.FOCUS201044>, Registrované v: WOS
3. [1.1] GONG, Yanan - HONDA, Yoshitomo - ADACHI, Tetsuya - MARIN, Elia - YOSHIKAWA, Kazushi - PEZZOTTI, Giuseppe - YAMAMOTO, Kazuyo. Tailoring Silicon Nitride Surface Chemistry for Facilitating Odontogenic Differentiation of Rat Dental Pulp Cells. In *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, 2021, vol. 22, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ijms222313130>, Registrované v: WOS
4. [1.1] MARIN, E. - BOSCHETTO, F. - ZANOTTO, M. - ZHU, W. - ADACHI, T. - KANAMURA, N. - YAMAMOTO, T. - MCENTIRE, B. J. - JONES, E. N. - POWELL, C. - HENDRY, J. - BOCK, R. M. - BAL, B. S. - PEZZOTTI, G. Biological responses to silicon and nitrogen-rich PVD silicon nitride. In *MATERIALS TODAY CHEMISTRY*. ISSN 2468-5194, 2021, vol. 19, no., pp. Dostupné na: <https://doi.org/10.1016/j.mtchem.2020.100404>, Registrované v: WOS
5. [1.1] SHANKAR, S. - NITHYAPRAKASH, R. - SUGUNESH, A. P. - SELVAMANI, A. - UDDIN, M. S. Experimental and Finite Element Wear Study of Silicon Nitride Against Alumina for Hip Implants with Bio-Lubricant for Various Gait Activities. In *SILICON*. ISSN 1876-990X, 2021, vol. 13, no. 3, pp. 633-644. Dostupné na: <https://doi.org/10.1007/s12633-020-00462-w>, Registrované v: WOS
6. [1.1] SHEN, Mui - ZHAO, Huifen - FENG, Weiwei - LUO, Yali - CHEN, Han - ZHENG, Yifeng - GE, Lin - GUO, Lucun. Porous silicon nitride for scaffold material by direct forming with protective gelling. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 29342-29354. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.101>, Registrované v: WOS
7. [1.1] ZHANG, Ligu - ZHANG, Can - JI, Yun - XU, Enxia - MU, Jinghua - LIU, Xinhong - ZHAO, Fei - YUAN, Huiyu - CUI, Junyan - GAO, Jinxing. Effects of Z-value on physicochemical and biological properties of beta-SiAlONs ceramics. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 24, pp. 34810-34819. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.09.021>, Registrované v: WOS
8. [1.2] HAMPSHIRE, Stuart. Non-oxide ceramics as biomaterials. In *Encyclopedia of Materials: Technical Ceramics and Glasses*, 2021-05-24, 3-3, pp. 526-532. Dostupné na: <https://doi.org/10.1016/B978-0-12-803581-8.12130-7>, Registrované v: SCOPUS
- ADCA53 BODÍŠOVÁ, Katarína - KAŠIAROVÁ, Monika - PRAMUKOVÁ, Zuzana - DOMANICKÁ, Magdaléna - LENCĚŠ, Zoltán - HNATKO, Miroslav - GROMOŠOVÁ, Silvia - ŠAJGALÍK, Pavol. Mechanical properties of macroporous silicon nitride-based ceramics designed for bone substitutes. In *Ceramics-Silikáty*, 2014, vol. 58, no. 2, p. 99-105. (2013: 0.434 - IF, Q3 - JCR, 0.289 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0862-5468.
Citácie:
1. [1.1] BOLGARU, Konstantin - REGER, Anton - VERESHCHAGIN, Vladimir - AKULINKIN, Alexander. Combustion synthesis of porous ceramic beta-Si₃N₄-based composites with the use of

ferroalloys. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 24, pp. 34765-34773. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.09.015>, Registrované v: WOS
2. [1.1] SHEN, Muiyi - ZHAO, Huiifen - FENG, Weiwei - LUO, Yali - CHEN, Han - ZHENG, Yifeng - GE, Lin - GUO, Lucun. Porous silicon nitride for scaffold material by direct forming with protective gelling. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 29342-29354. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.101>, Registrované v: WOS

ADCA54

BODIŠOVÁ, Katarína - GALUSEK, Dušan - ŠVANČÁREK, Peter - POUCHLÝ, Václav - MACA, Karel. Grain growth suppression in alumina via doping and two-step sintering. In Ceramics International, 2015, vol. 41, no. 9, p. 11975-11983. (2014: 2.605 - IF, Q1 - JCR, 0.856 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2015.05.162>

Citácie:

1. [1.1] HE, Li - WANG, Xiao - FEI, Fan - CHEN, Lei - SONG, Xuan. Selectively doped piezoelectric ceramics with tunable piezoelectricity via suspension-enclosing projection stereolithography. In ADDITIVE MANUFACTURING, 2021, vol. 48, no., pp. ISSN 2214-8604. Dostupné na: <https://doi.org/10.1016/j.addma.2021.102407>, Registrované v: WOS
2. [1.1] MAZUMDER, Subhrojyoti - SADHU, Kishor Kumar - GHOSH, Kunal - ROY, Poulomi - MANDAL, Nilrudra. An Effective Approach of Nanoscale CaF₂ Addition into ZTA Composite to Enhance Tribological Characteristics in Dry Sliding. In TRANSACTIONS OF THE INDIAN CERAMIC SOCIETY, 2021, vol. 80, no. 1, pp. 19-27. ISSN 0371-750X. Dostupné na: <https://doi.org/10.1080/0371750X.2020.1863863>, Registrované v: WOS
3. [1.1] SU, Chen - WANG, Jingfeng - LI, Hongyun - YOU, Zhipeng - LI, Junchao. Binder-jetting additive manufacturing of Mg alloy densified by two-step sintering process. In JOURNAL OF MANUFACTURING PROCESSES, 2021, vol. 72, no., pp. 71-79. ISSN 1526-6125. Dostupné na: <https://doi.org/10.1016/j.jmapro.2021.09.061>, Registrované v: WOS
4. [1.1] WALECZEK, Martin - DENDOOVEN, Jolien - DYACHENKO, Pavel - PETROV, Alexander Y. - EICH, Manfred - BLICK, Robert H. - DETAVERNIER, Christophe - NIELSCH, Kornelius - FURLAN, Kaline P. - ZIEROLD, Robert. Influence of Alumina Addition on the Optical Properties and the Thermal Stability of Titania Thin Films and Inverse Opals Produced by Atomic Layer Deposition. In NANOMATERIALS, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/nano11041053>, Registrované v: WOS
5. [1.1] WANG, Xuchao - ZHAO, Jun - CUI, Enzhao - TIAN, Xianhua - SUN, Zhefei. Effect of Interfacial Structure on Mechanical Properties of Graphene Reinforced Al₂O₃-WC Matrix Ceramic Composite. In NANOMATERIALS, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/nano11061374>, Registrované v: WOS
6. [1.1] YANG, Hongbing - LI, Lu - LI, Yuanyuan - SHEN, Bing - KANG, Yueming - ZHAO, Libin - LI, Jiajie - DONG, Yanhao - LI, Jiangong. Unveiling exceptional sinterability of ultrafine alpha-Al₂O₃ nanopowders. In JOURNAL OF MATERIALS, 2021, vol. 7, no. 4, pp. 837-844. ISSN 2352-8478. Dostupné na: <https://doi.org/10.1016/j.jmat.2020.12.011>, Registrované v: WOS
7. [1.1] ZADOROZHNYA, O. Yu. - KHABAS, T. A. - KAMYSHNAYA, K. S. - KUTUGIN, V. A. - MALYKHIN, S. E. Effects of sintering curves on microstructure, physical and mechanical properties and on low temperature degradation of zirconia-toughened alumina. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 16, pp. 274-281. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.009>, Registrované v: WOS
8. [1.2] HUSSAIN, Md Sajid - GOSWAMI, Sourav - GHOSH, Kunal - KUMAR, Prakash - MANDAL, Nilrudra. Evaluation of mechanical and tribological characteristics of hot-pressed self-lubricating CuO/MgO/ZTA ceramic composites. In Materials Today: Proceedings, 2021-01-01, 50, pp. 2522-2527. Dostupné na: <https://doi.org/10.1016/j.matpr.2021.10.507>, Registrované v: SCOPUS
9. [1.2] LERICHE, Anne - HAMPSHIRE, Stuart - CAMBIER, Francis. Control of the microstructure in ceramics. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 1-3, pp. 349-366. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00017-5>, Registrované v: SCOPUS

ADCA55

BODIŠOVÁ, Katarína - KLEMENT, Róbert - GALUSEK, Dušan - POUCHLÝ, Václav - DRDLÍK, Daniel - MACA, Karel. Luminescent rare-earth-doped transparent alumina ceramics. In Journal of the European Ceramic Society, 2016, vol. 36, no. 12, p. 2975-2980. (2015: 2.933 - IF, Q1 - JCR, 1.135 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2015.12.032>

Citácie:

1. [1.1] KAHLAOUI, Massoud - MARTIN, Inocencio Rafael - BENMOHAMED, Mohammed - SOUAMTI, Ahmed - CHEFI, Chaabane. Synthesis, structural characterization and luminescence properties of new Na_{0.3-x}NdxAl_{0.3}Si_{0.7}O_{2+delta} (0-0.1) ceramics for optical applications. In

ADCA56

JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T. ISSN 2238-7854, 2021, vol. 13, no., pp. 1181-1190. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.05.016>, Registrované v: WOS

2. [1.1] NAKAMURA, Takashi - OKAMURA, Shinya - NISHIDA, Hisataka - KAWANO, Akiyo - TAMIYA, Shingo - WAKABAYASHI, Kazumichi - SEKINO, Tohru. Fluorescence and physical properties of thulium and erbium co-doped dental zirconia. In *DENTAL MATERIALS JOURNAL*. ISSN 0287-4547, 2021, vol. 40, no. 5, pp. 1080-1085. Dostupné na: <https://doi.org/10.4012/dmj.2020-387>, Registrované v: WOS

3. [1.1] PABST, Willi - HRIBALOVA, Sona. Light scattering models for describing the transmittance of transparent and translucent alumina and zirconia ceramics. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 3, pp. 2058-2075. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.025>, Registrované v: WOS

4. [1.2] LEE, Kuo Yang - CHEN, Chih Cheng - HSIANG, Hsing I. - WANG, Jun - TANG, Dingyuan - YEN, Fu Su - HUANG, Chi Yuen. Effects of glycerol addition on the slurry dispersion and mechanical properties of alumina ceramics prepared by gel-casting process. In *Ceramics International*. ISSN 02728842, 2021-07-15, 47, 14, pp. 20260-20267. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.033>, Registrované v: SCOPUS

5. [1.2] STEPANOV, S. A. - VALIEV, D. T. - VAGANOV, V. A. - SHRAYBER, A. M. - PAYGIN, V. D. Emission properties of YAG: Ce ceramics with barium fluoride flux. In *IOP Conference Series: Materials Science and Engineering*. ISSN 17578981, 2021-01-20, 1019, 1, pp. Dostupné na: <https://doi.org/10.1088/1757-899X/1019/1/012018>, Registrované v: SCOPUS

BODÍŠOVÁ, Katarína - ŠAJGALÍK, Pavol - GALUSEK, Dušan - ŠVANČÁREK, Peter. Two-stage sintering of alumina with submicrometer grain size. In *Journal of the American Ceramic Society*, 2007, vol. 90, no. 1, p. 330-332. (2006: 1.396 - IF, Q1 - JCR, 1.128 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2006.01408.x>

Citácie:

1. [1.1] BEJUGAMA, Shiva - CHAMEETTACHAL, Shibu - PATI, Falguni - PANDEY, Ajoy Kumar. In vitro cellular response and hydrothermal aging of two-step sintered Nb₂O₅ doped ceria stabilized zirconia ceramics. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 2, pp. 1594-1601. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.08.275>, Registrované v: WOS

2. [1.1] HUANG, Baoteng - LI, Changhe - ZHANG, Yanbin - DING, Wenfeng - YANG, Min - YANG, Yuying - ZHAI, Han - XU, Xuefeng - WANG, Dazhong - DEBNATH, Sujana - JAMIL, Muhammad - LI, Hao Nan - ALI, Hafiz Muhammad - GUPTA, Munish Kumar - SAID, Zafar. Advances in fabrication of ceramic corundum abrasives based on sol-gel process. In *CHINESE JOURNAL OF AERONAUTICS*. ISSN 1000-9361, 2021, vol. 34, no. 6, pp. 1-17. Dostupné na: <https://doi.org/10.1016/j.cja.2020.07.004>, Registrované v: WOS

3. [1.1] YANG, Hongbing - LI, Lu - LI, Yuanyuan - SHEN, Bing - KANG, Yueming - ZHAO, Libin - LI, Jiajie - DONG, Yanhao - LI, Jiangong. Unveiling exceptional sinterability of ultrafine alpha-Al₂O₃ nanopowders. In *JOURNAL OF MATERIALS*. ISSN 2352-8478, 2021, vol. 7, no. 4, pp. 837-844. Dostupné na: <https://doi.org/10.1016/j.jmat.2020.12.011>, Registrované v: WOS

4. [1.1] ZADOROZHNYA, O. Yu. - KHABAS, T. A. - KAMYSHNAYA, K. S. - KUTUGIN, V. A. - MALYKHIN, S. E. Effects of sintering curves on microstructure, physical and mechanical properties and on low temperature degradation of zirconia-toughened alumina. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 16, pp. 274-281. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.009>, Registrované v: WOS

5. [1.2] BAUDÍN, Carmen. Alumina, structure and properties. In *Encyclopedia of Materials: Technical Ceramics and Glasses*, 2021-05-24, 2-3, pp. 25-46. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00028-X>, Registrované v: SCOPUS

6. [1.2] LOONG, Teow Hsien - NOUM, Se Yong Eh - MUN, Wong Wai. The effect of tainf2/inf oinf5/inf on the densification behaviour and mechanical properties of zirconia-toughened alumina (Zta) composites prepared by two-stage sintering. In *Key Engineering Materials*, 2020-01-01, 861 KEM, pp. 320-326. ISSN 10139826. Dostupné na: <https://doi.org/10.4028/www.scientific.net/KEM.861.320>, Registrované v: SCOPUS

7. [1.2] LOONG, Teow Hsien - SOOSAI, Ananthan - MUNIANDY, Suresh. Densification behaviour and mechanical properties on mgo doped zirconia toughened alumina (ZTA) prepared by two-stage sintering. In *Materials Science Forum*, 2021-01-01, 1030 MSF, pp. 3-10. ISSN 02555476. Dostupné na: <https://doi.org/10.4028/www.scientific.net/MSF.1030.3>, Registrované v: SCOPUS

8. [1.2] LOONG, Teow Hsien - SOOSAI, Ananthan - MUNIANDY, Suresh. Effect of temperature and holding time on zirconia toughened alumina (Zta) prepared by two-stage sintering. In *Materials Science Forum*, 2021-01-01, 1030 MSF, pp. 11-18. ISSN 02555476. Dostupné na:

- <https://doi.org/10.4028/www.scientific.net/MSF.1030.11.>, Registrované v: SCOPUS
9. [1.2] TEOW, Hsien Loong - SIVANESAN, Siva Kumar - NOUM, Se Yong Eh. *Densification behaviour and mechanical properties of CuO doped zirconia-toughened alumina (ZTA) composites prepared by two-stage sintering*. In *AIP Conference Proceedings*, 2020-05-04, 2233, pp. ISSN 0094243X. Dostupné na: <https://doi.org/10.1063/5.0001623.>, Registrované v: SCOPUS
10. [1.2] TEOW, Hsien Loong - SIVANESAN, Siva Kumar - NOUM, Se Yong Eh. *Effect of Fe²⁺/Fe³⁺ on the densification behaviour and mechanical properties of zirconia-toughened alumina (ZTA) composites prepared by two-stage sintering*. In *AIP Conference Proceedings*, 2020-05-04, 2233, pp. ISSN 0094243X. Dostupné na: <https://doi.org/10.1063/5.0001622.>, Registrované v: SCOPUS
- ADCA57 BOHÁČ, Peter - CZÍMEROVÁ, Adriana - BUJDÁK, Juraj. Enhanced luminescence of 3,3'-diethyl-2,2'-thiacyanine cations adsorbed on saponite particles. In *Applied Clay Science*, 2016, vol. 127-128, p. 64-69. (2015: 2.586 - IF, Q1 - JCR, 0.806 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2016.04.008>
- Citácie:
1. [1.1] YOSHIDA, Yuma - SHIMADA, Tetsuya - ISHIDA, Tamao - TAKAGI, Shinsuke. *Effects of the Surface Charge Density of Clay Minerals on Surface-Fixation Induced Emission of Acridinium Derivatives*. In *ACS OMEGA*. ISSN 2470-1343, 2021, vol. 6, no. 33, pp. 21702-21708. Dostupné na: <https://doi.org/10.1021/acsomega.1c03157.>, Registrované v: WOS
- ADCA58 BORA, Pankaj L. - NOVOTNÝ, Jan - RUUD, Kenneth - KOMOROVSKÝ, Stanislav - MAREK, Radek**. Electron-spin structure and metal-ligand bonding in open-shell systems from relativistic EPR and NMR: A case study of square-planar iridium catalysts. In *Journal of Chemical Theory and Computation*, 2019, vol. 15, no. 1, p. 201-214. (2018: 5.313 - IF, Q1 - JCR, 2.236 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.8b00914>
- Citácie:
1. [1.1] ANDERSEN, Anders B. A. - PYYKKONEN, Ari - JENSEN, Hans Jorgen Aa. - MCKEE, Vickie - VAARA, Juha - NIELSEN, Ulla Gro. *Remarkable reversal of C-13-NMR assignment in d(1), d(2) compared to d(8), d(9) acetylacetonate complexes: analysis and explanation based on solid-state MAS NMR and computations*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2020, vol. 22, no. 15, pp. 8048-8059. Dostupné na: <https://doi.org/10.1039/d0cp00980f.>, Registrované v: WOS
2. [1.1] CASTRO, Abril C. - SWART, Marcel. *Recent Advances in Computational NMR Spectrum Prediction*. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS
3. [1.2] KUPKA, Teobald. *Theory and computation of nuclear shielding*. In *Nuclear Magnetic Resonance*, 2021-01-01, 46, pp. 1-33. ISSN 03059804. Dostupné na: <https://doi.org/10.1039/9781788010665-00001.>, Registrované v: SCOPUS
- ADCA59 BRANDOVÁ, Daniela - SVOBODA, Roman - LIŠKA, Marek - MÁLEK, Jiří. Thermal characterization of (As₂Se₃)_{0.5}(As₂Te₃)_{0.5} infrared glass. In *Journal of Non-Crystalline Solids*, 2017, vol. 475, p. 121-128. (2016: 2.124 - IF, Q1 - JCR, 0.685 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents, WOS, SCOPUS). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2017.09.011>
- Citácie:
1. [1.1] EL-DENGLAWAY, A. - DAHSHAN, A. - ALY, K. A. - SADDEEK, Y. B. *Elastic moduli and theoretical estimations of physical properties of Ge₃Se₇-As₂Te₃*. In *CURRENT APPLIED PHYSICS*. ISSN 1567-1739, 2021, vol. 31, no., pp. 214-220. Dostupné na: <https://doi.org/10.1016/j.cap.2021.08.013.>, Registrované v: WOS
- ADCA60 BREEN, Christopher - MADEJOVÁ, Jana - KOMADEL, Peter. Characterization of moderately acid-treated, size-fractionated montmorillonites using IR and MAS NMR-spectroscopy and thermal analysis. In *Journal of Materials Chemistry*, 1995, vol. 5, no. 3, p. 469-474. (1994: 1.520 - IF, karentované - CCC). (1995 - Current Contents). ISSN 0959-9428.
- Citácie:
1. [1.1] XIA, Meng - GAO, Ran - WANG, Yingying - WANG, Shengrui - YUN, Ying - DOU, Junfeng. *Synthesis and phosphate adsorption behaviour of Mg/Al-pillared montmorillonite loaded with La(OH)(3)*. In *ENVIRONMENTAL TECHNOLOGY*. ISSN 0959-3330, 2019, vol., no., pp., Registrované v: WOS
2. [1.2] XIA, Meng - GAO, Ran - WANG, Yingying - WANG, Shengrui - YUN, Ying - DOU, Junfeng. *Synthesis and phosphate adsorption behaviour of Mg/Al-pillared montmorillonite loaded with La(OH)₃*. In *Environmental Technology (United Kingdom)*, 2021-01-01, 42, 11, pp. 1652-1668. ISSN 09593330. Dostupné na: <https://doi.org/10.1080/09593330.2019.1675775.>, Registrované v: SCOPUS
- ADCA61 BREEN, Christopher - MADEJOVÁ, Jana - KOMADEL, Peter. Correlation of catalytic activity with

infra-red, ²⁹Si MAS NMR and acidity data for HCl-treated fine fractions of montmorillonites. In *Applied Clay Science*, 1995, vol. 10, no. 3, p. 219-230. ISSN 0169-1317. Dostupné na: [https://doi.org/10.1016/0169-1317\(95\)00024-X](https://doi.org/10.1016/0169-1317(95)00024-X)

Citácie:

1. [1.1] *CHERIFI, Badia Imene - BELBACHIR, Mohammed - BENNABI, Souad. GREEN POLYMERIZATION OF VINYL ACETATE USING MAGNITE-Na⁺, AN EXCHANGED MONTMORILLONITE CLAY, AS AN ECOLOGIC CATALYST. In CHEMISTRY & CHEMICAL TECHNOLOGY*, 2021, vol. 15, no. 2, pp. 183-190. ISSN 1996-4196. Dostupné na:

<https://doi.org/10.23939/chcht15.02.183>, Registrované v: WOS

2. [1.1] *JIANG, Kun - LIU, Kun - PENG, Qian - ZHOU, Muyang. Adsorption of Pb(II) and Zn(II) ions on humus-like substances modified montmorillonite. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 631, no., pp. ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127706>, Registrované v: WOS

ADCA62

BREEN, Christopher - ZAHOOOR, F.D. - MADEJOVÁ, Jana - KOMADEL, Peter. Characterization and catalytic activity of acid-treated, size-fractionated smectites. In *Journal of Physical Chemistry B*, 1997, vol. 101, no. 27, p. 5324-5331. ISSN 1520-6106.

Citácie:

1. [1.1] *YANG, Yixuan - ZHU, Runliang - CHEN, Qingze - XING, Jieqi - MA, Lingya - HE, Qiuzhi - FAN, Jian - XI, Yunfei - ZHU, Jianxi - HE, Hongping. Development of novel multifunctional adsorbent by effectively hosting both zwitterionic surfactant and hydrated ferric oxides in montmorillonite. In SCIENCE OF THE TOTAL ENVIRONMENT*. ISSN 0048-9697, 2021, vol. 774, no., pp. Dostupné na: <https://doi.org/10.1016/j.scitotenv.2021.144974>, Registrované v: WOS

ADCA63

BREEN, Christopher - WATSON, R. - MADEJOVÁ, Jana - KOMADEL, Peter - KLAPYTA, Z. Acid-activated organoclays: Preparation, characterization and catalytic activity of acid-treated tetraalkylammonium-exchanged smectites. In *Langmuir*, 1997, vol. 13, no. 24, p. 6473-6479. (1997 - Current Contents). ISSN 0743-7463.

Citácie:

1. [1.1] *TENEQJA, Valdet - KORPA, Arjan - DRUSHKU, Spiro - XHAXHIU, Kledi - SKENDULI, Enkeleida. PROPERTIES COMPARISON OF TWO ACID-ACTIVATED BENTONITES OF KOSOVO TO BE USED AS BLEACHING AGENTS. In INTERNATIONAL JOURNAL OF ECOSYSTEMS AND ECOLOGY SCIENCE-IJEES*. ISSN 2224-4980, 2021, vol. 11, no. 2, pp. 321-326. Dostupné na: <https://doi.org/10.31407/ijeess11.217>, Registrované v: WOS

ADCA64

BROSKA, Igor - RAVNA, Erling J. Krogh - VOJTKO, Peter - JANÁK, Marian - KONEČNÝ, Patrik - PENTRÁK, Martin - BAČÍK, Peter - LUPTÁKOVÁ, Jarmila - KULLERUD, K. Oriented inclusions in apatite in a post-UHP fluid-mediated regime (Tromsø Nappe, Norway). In *European Journal of Mineralogy*, 2014, vol. 26, p. 623-634. (2013: 1.506 - IF, Q2 - JCR, 0.936 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0935-1221. Dostupné na: <https://doi.org/10.1016/j.lithos.2012.12.014>

Citácie:

1. [1.1] *KOSTYUK, A. V. - GORBACHEV, N. S. - NEKRASOV, A. N. Petrogenesis of Garnet-Bearing Carbonatite in the Tromsø Nappe, Norway. In GEOCHEMISTRY INTERNATIONAL*. ISSN 0016-7029, 2021, vol. 59, no. 8, pp. 801-812. Dostupné na:

<https://doi.org/10.1134/S0016702921080036>, Registrované v: WOS

2. [1.1] *YU, Kaizhang - LIU, Yongsheng - FOLEY, Stephen F. - ZHU, Yangtao - HU, Zhaochu - ZONG, Keqing - CHEN, Haihong. Transformation from oxidized to reduced alkaline magmas in the northern North China Craton. In LITHOS*. ISSN 0024-4937, 2021, vol. 390, no., pp. Dostupné na: <https://doi.org/10.1016/j.lithos.2021.106104>, Registrované v: WOS

ADCA65

BUČKO, Tomáš - BENCO, Ľubomír - DUBAY, Orest - DELLAGO, Christoph - HAFNER, Jürgen. Mechanism of alkane dehydrogenation catalyzed by acidic zeolites: Ab initio transition path sampling. In *Journal of Chemical Physics*, 2009, vol. 131, no. 21, p. 214508-1-214508-11. (2008: 3.149 - IF, Q1 - JCR, 2.270 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3265715>

Citácie:

1. [1.1] *CHIZALLET, Celine. Toward the Atomic Scale Simulation of Intricate Acidic Aluminosilicate Catalysts. In ACS CATALYSIS*. ISSN 2155-5435, 2020, vol. 10, no. 10, pp. 5579-5601. Dostupné na: <https://doi.org/10.1021/acscatal.0c01136>, Registrované v: WOS

2. [1.1] *SMITH, Ashley T. - PLESSOW, Philipp N. - STUDDT, Felix. Trends in the Reactivity of Proximate Aluminum Sites in H-SSZ-13. In JOURNAL OF PHYSICAL CHEMISTRY C*. ISSN 1932-7447, 2021, vol. 125, no. 30, pp. 16508-16515. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c03509>, Registrované v: WOS

3. [1.1] *VAN DER MYNSBRUGGE, Jeroen - BELL, Alexis T. Challenges for the theoretical description of the mechanism and kinetics of reactions catalyzed by zeolites. In JOURNAL OF CATALYSIS*. ISSN 0021-9517, 2021, vol. 404, no., pp. 832-849. Dostupné na:

- ADCA66 <https://doi.org/10.1016/j.jcat.2021.08.048>, Registrované v: WOS
 BUČKO, Tomáš - LEBÈGUE, Sébastien - GOULD, Tim - ÁNGYÁN, János G. Many-body dispersion corrections for periodic systems: an efficient reciprocal space implementation. In *Journal of Physics: Condensed Matter*, 2016, vol. 28, no. 4, p. 045201-1-045201-13. (2015: 2.209 - IF, Q2 - JCR, 1.043 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0953-8984. Dostupné na: <https://doi.org/10.1088/0953-8984/28/4/045201>
 Citácie:
 1. [1.1] JANA, Subrata - MYNENI, Hemanadhan - SMIGA, Szymon - CONSTANTIN, Lucian A. - SAMAL, Prasanjit. Benchmark test of a dispersion corrected revised Tao-Mo semilocal functional for thermochemistry, kinetics, and noncovalent interactions of molecules and solids. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 155, no. 11, pp. Dostupné na: <https://doi.org/10.1063/5.0060538>, Registrované v: WOS
 2. [1.1] LI, Kun - WANG, Junjie - BLATOV, Vladislav A. - GONG, Yutong - UMEZAWA, Naoto - TADA, Tomofumi - HOSONO, Hideo - OGANOV, Artem R. Crystal and electronic structure engineering of tin monoxide by external pressure. In *JOURNAL OF ADVANCED CERAMICS*. ISSN 2226-4108, 2021, vol. 10, no. 3, pp. 565-577. Dostupné na: <https://doi.org/10.1007/s40145-021-0458-1>, Registrované v: WOS
 3. [1.1] LI, Xiaowen - QIANG, Xiaobin - GONG, Zhenhao - ZHANG, Yubo - GONG, Penglai - CHEN, Lang. Tunable Negative Poisson's Ratio in Van der Waals Superlattice. In *RESEARCH*, 2021, vol. 2021, no., pp. Dostupné na: <https://doi.org/10.34133/2021/1904839>, Registrované v: WOS
 4. [1.1] MELISSEN, Sigismund T. A. G. - LE BAHERS, Tangui - SAUTET, Philippe - STEINMANN, Stephan N. What does graphitic carbon nitride really look like? In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 2853-2859. Dostupné na: <https://doi.org/10.1039/d0cp06063a>, Registrované v: WOS
 5. [1.1] OUYANG, Wengen - SOFER, Reut - GAO, Xiang - HERMANN, Jan - TKATCHENKO, Alexandre - KRONIK, Leeor - URBACH, Michael - HOD, Oded. Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 11, pp. 7237-7245. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00782>, Registrované v: WOS
 6. [1.1] SHELDON, Christopher - PAIER, Joachim - SAUER, Joachim. Adsorption of CH₄ on the Pt(111) surface: Random phase approximation compared to density functional theory. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 155, no. 17, pp. Dostupné na: <https://doi.org/10.1063/5.0071995>, Registrované v: WOS
 7. [1.1] SUN, GuangXu - LIU, Xuetao - ABRAMOV, Yuriy A. - LILL, Sten O. Nilsson - CHANG, Chao - BURGER, Virginia - BROO, Anders. Current State-of-the-art In-house and Cloud-Based Applications of Virtual Polymorph Screening of Pharmaceutical Compounds: A Challenging Case of AZD1305. In *CRYSTAL GROWTH & DESIGN*. ISSN 1528-7483, 2021, vol. 21, no. 4, pp. 1972-1983. Dostupné na: <https://doi.org/10.1021/acs.cgd.0c01266>, Registrované v: WOS
 8. [1.1] TUNEGA, Daniel - ZAOUI, Ali. Adsorption of polycyclic aromatic hydrocarbons on FeOOH polymorphs: A theoretical study. In *SURFACE SCIENCE*. ISSN 0039-6028, 2021, vol. 706, no., pp. Dostupné na: <https://doi.org/10.1016/j.susc.2020.121795>, Registrované v: WOS
 ADCA67 BUČKO, Tomáš - ŠIMKO, František. On the structure of crystalline and molten cryolite: Insights from the ab initio molecular dynamics in NpT ensemble. In *Journal of Chemical Physics*, 2016, vol. 144, no. 6, art. no. 064502. (2015: 2.894 - IF, Q2 - JCR, 1.255 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4941333>
 Citácie:
 1. [1.1] DIOP, Mouhamadou A. - BOUSSO, Sokhna A. - TAO, Wenju - LIU, Aimin. Structural Studies in Cryolite-Alumina Melts Investigated by Molecular Dynamics Simulations and High-Temperature NMR Data. In *METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE*. ISSN 1073-5615, 2021, vol. 52, no. 6, pp. 4230-4230. Dostupné na: <https://doi.org/10.1007/s11663-021-02223-5>, Registrované v: WOS
 ADCA68 BUČKO, Tomáš** - GEŠVANDTNEROVÁ, Monika - ROCCA, Dario**. Ab initio calculations of free energy of activation at multiple electronic structure levels made affordable: An effective combination of perturbation theory and machine learning. In *Journal of Chemical Theory and Computation*, 2020, vol. 16, no. 10, p. 6049-6060. (2019: 5.011 - IF, Q1 - JCR, 1.759 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00486>
 Citácie:
 1. [1.1] RIZZI, Andrea - CARLONI, Paolo - PARRINELLO, Michele. Targeted Free Energy Perturbation Revisited: Accurate Free Energies from Mapped Reference Potentials. In *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*, 2021, vol. 12, no. 39, pp. 9449-9454. ISSN 1948-7185.

- ADCA69 *Available on: <https://doi.org/10.1021/acs.jpcclett.1c02135>, Registrované v: WOS*
 BUČKO, Tomáš - CHIBANI, Siwar - PAUL, Jean-François - CANTREL, Laurent - BADAWI, Michael. Dissociative iodomethane adsorption on Ag-MOR and the formation of AgI clusters: an ab initio molecular dynamics study. In *Physical Chemistry Chemical Physics*, 2017, vol. 19, no. 40, p. 27530-27543. (2016: 4.123 - IF, Q1 - JCR, 1.685 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/c7cp05562e>
 Citácie:
 1. [1.1] WANG, Juan - FAN, Daoqing - JIANG, Chunhuan - LU, Lehui. Host-guest interaction-mediated nanointerface engineering for radioiodine capture. In *NANO TODAY*. ISSN 1748-0132, 2021, vol. 36, no., pp. Dostupné na: <https://doi.org/10.1016/j.nantod.2020.101034>, Registrované v: WOS
 2. [1.2] YU, Jianzhong - XV, Xinling - YE, Song. Research Progress on the Applications of Silver-loaded Zeolites. In *Cailiao Yanjiu Xuebao/Chinese Journal of Materials Research*. ISSN 10053093, 2021-11-25, 35, 11, pp. 801-810. Dostupné na: <https://doi.org/10.11901/1005.3093.2020.487>, Registrované v: SCOPUS
- ADCA70 BUČKO, Tomáš*. Transition state optimization of periodic systems using delocalized internal coordinates. In *Theoretical Chemistry Accounts*, 2018, vol. 137, no. 12, art. no. 164, p. 1-10. (2017: 1.545 - IF, Q3 - JCR, 0.564 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1432-881X. Dostupné na: <https://doi.org/10.1007/s00214-018-2367-0>
 Citácie:
 1. [1.1] XU, Jiayan - CAO, Xiao-Ming - HU, P. Perspective on computational reaction prediction using machine learning methods in heterogeneous catalysis. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 19, pp. 11155-11179. ISSN 1463-9076. Available on: <https://doi.org/10.1039/d1cp01349a>, Registrované v: WOS
- ADCA71 BUČKO, Tomáš - LEBÈGUE, Sébastien - ÁNGYÁN, János G. - HAFNER, Jürgen. Extending the applicability of the Tkatchenko-Scheffler dispersion correction via iterative Hirshfeld partitioning. In *Journal of Chemical Physics*, 2014, vol. 141, p. 034114-1-034114-17. (2013: 3.122 - IF, Q1 - JCR, 1.532 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4890003>
 Citácie:
 1. [1.1] BOWSKILL, David H. - SUGDEN, Isaac J. - KONSTANTINOPOULOS, Stefanos - ADJIMAN, Claire S. - PANTELIDES, Constantinos C. Crystal Structure Prediction Methods for Organic Molecules: State of the Art. In *ANNUAL REVIEW OF CHEMICAL AND BIOMOLECULAR ENGINEERING*, VOL 12, 2021, 2021, vol. 12, no., pp. 593-623. ISSN 1947-5438. Available on: <https://doi.org/10.1146/annurev-chembioeng-060718-030256>, Registrované v: WOS
 2. [1.1] COCKAYNE, Eric - WONG-NG, Winnie - CHEN, Yu-Sheng - CULP, Jeffrey T. - ALLEN, Andrew J. Density Functional Theory Study of the Structure of the Pillared Hofmann Compound Ni(3-Methyl-4,4'-bipyridine)[Ni(CN)(4)] (Ni-BpyMe or PICNIC-21). In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 29, pp. 15882-15889. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c01896>, Registrované v: WOS
 3. [1.1] HENKEL, Pascal - MOLLENHAUER, Doreen. Uncertainty of exchange-correlation functionals in density functional theory calculations for lithium-based solid electrolytes on the case study of lithium phosphorus oxynitride. In *JOURNAL OF COMPUTATIONAL CHEMISTRY*, 2021, vol. 42, no. 18, pp. 1283-1295. ISSN 0192-8651. Available on: <https://doi.org/10.1002/jcc.26546>, Registrované v: WOS
 4. [1.1] HESSOU, Etienne P. - BEDE, Lucie A. - JABRAOUI, Hicham - SEMMEQ, Abderrahmane - BADAWI, Michael - VALTCHEV, Valentin. Adsorption of Toluene and Water over Cationic-Exchanged Y Zeolites: A DFT Exploration. In *MOLECULES*, 2021, vol. 26, no. 18, pp. Available on: <https://doi.org/10.3390/molecules26185486>, Registrované v: WOS
 5. [1.1] HESSOU, Etienne Paul - JABRAOUI, Hicham - KHALIL, Ibrahim - DZIURLA, Marie-Antoinette - BADAWI, Michael. Ab initio screening of zeolite Y formulations for efficient adsorption of thiophene in presence of benzene. In *APPLIED SURFACE SCIENCE*, 2021, vol. 541, no., pp. ISSN 0169-4332. Available on: <https://doi.org/10.1016/j.apsusc.2020.148515>, Registrované v: WOS
 6. [1.1] HOFMANN, Oliver T. - ZOJER, Egbert - HOERMANN, Lukas - JEINDL, Andreas - MAURER, Reinhard J. First-principles calculations of hybrid inorganic-organic interfaces: from state-of-the-art to best practice. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 14, pp. 8132-8180. ISSN 1463-9076. Available on: <https://doi.org/10.1039/d0cp06605b>, Registrované v: WOS
 7. [1.1] LI, Yongchang - LIU, Chang - ZHAO, Guo-Dong - HU, Tao - REN, Wei. Two-dimensional multiferroics in a breathing kagome lattice. In *PHYSICAL REVIEW B*, 2021, vol. 104, no. 6, pp. ISSN 2469-9950. Available on: <https://doi.org/10.1103/PhysRevB.104.L060405>, Registrované v:

WOS

8. [1.1] OUYANG, Wengen - SOFER, Reut - GAO, Xiang - HERMANN, Jan - TKATCHENKO, Alexandre - KRONIK, Leeor - URBACH, Michael - HOD, Oded. Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 11, pp. 7237-7245. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.1c00782>, Registrované v: WOS
9. [1.1] P. OLIVEIRA, Marina - HUENENBERGER, Philippe H. Systematic optimization of a fragment-based force field against experimental pure-liquid properties considering large compound families: application to oxygen and nitrogen compounds. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 33, pp. 17774-17793. ISSN 1463-9076. Available on: <https://doi.org/10.1039/d1cp02001c>, Registrované v: WOS
10. [1.1] PASTUKH, Svitlana - LASKOWSKA, Magdalena - DULSKI, Mateusz - KRZYKAWSKI, Tomasz - PARLINSKI, Krzysztof - PIEKARZ, Przemyslaw. Ab initio studies for characterization and identification of nanocrystalline copper pyrophosphate confined in mesoporous silica. In *NANOTECHNOLOGY*, 2021, vol. 32, no. 41, pp. ISSN 0957-4484. Available on: <https://doi.org/10.1088/1361-6528/ac10e5>, Registrované v: WOS
11. [1.1] PISARRA, Michele - DIAZ, Cristina - MARTIN, Fernando. Theoretical study of structural and electronic properties of 2H-phase transition metal dichalcogenides. In *PHYSICAL REVIEW B*, 2021, vol. 103, no. 19, pp. ISSN 2469-9950. Available on: <https://doi.org/10.1103/PhysRevB.103.195416>, Registrované v: WOS
12. [1.1] SRIKULWONG, Unnop - PHANCHAI, Witthawat - SREPUSHARAWOOT, Pornjuk - SAKONSINSIRI, Chadamas - PUANGMALI, Theerapong. Computational Insights into Molecular Adsorption Characteristics of Methylated DNA on Graphene Oxide for Multicancer Early Detection. In *JOURNAL OF PHYSICAL CHEMISTRY B*, 2021, vol. 125, no. 24, pp. 6697-6708. ISSN 1520-6106. Available on: <https://doi.org/10.1021/acs.jpcc.1c02808>, Registrované v: WOS
13. [1.1] WELSH, Ivan D. - CRITTENDEN, Deborah L. New atoms-in-molecules dispersion models for use in ab initio derived force fields. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 154, no. 9, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0037157>, Registrované v: WOS
14. [1.1] WILLIAMS, Logan - MUKHERJEE, Arpan - DASGUPTA, Aparajita - RAJAN, Krishna. Monitoring the role of site chemistry on the formation energy of perovskites via deep learning analysis of Hirshfeld surfaces. In *JOURNAL OF MATERIALS CHEMISTRY C*, 2021, vol. 9, no. 34, pp. 11153-11162. ISSN 2050-7526. Available on: <https://doi.org/10.1039/d1tc01972d>, Registrované v: WOS
15. [1.1] ZHANG, Hong-ping - ZHANG, Run - SUN, Chenghua - JIAO, Yan - ZHANG, Yaping. CO₂ reduction to CH₄ on Cu-doped phosphorene: a first-principles study. In *NANOSCALE*, 2021, vol. 13, no. 48, pp. 20541-20549. ISSN 2040-3364. Available on: <https://doi.org/10.1039/d1nr06066j>, Registrované v: WOS

ADCA72

BUČKO, Tomáš - HAFNER, Jürgen. The role of spatial constraints and entropy in the adsorption and transformation of hydrocarbons catalyzed by zeolites. In *Journal of Catalysis*, 2015, vol. 329, p. 32-48. (2014: 6.921 - IF, Q1 - JCR, 2.688 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2015.04.015>

Citácie:

1. [1.1] GUTIERREZ-ACEBO, Ester - REY, Jerome - BOUCHY, Christophe - SCHUURMAN, Yves - CHIZALLET, Celine. Ethylcyclohexane Hydroconversion in EU-1 Zeolite: DFT-based Microkinetic Modeling Reveals the Nature of the Kinetically Relevant Intermediates. In *CHEMCATCHEM*, 2021, vol. 13, no. 15, pp. 3434-3442. ISSN 1867-3880. Available on: <https://doi.org/10.1002/cctc.202100421>, Registrované v: WOS
2. [1.1] RANDRIANANDRAINANA, Joharimanitra - BADAWI, Michael - CARDEY, Bruno - GRIVET, Manuel - GROETZ, Jean-Emmanuel - RAMSEYER, Christophe - ANZOLA, Freddy Torrealba - CHAMBELLAND, Caroline - DUCRET, Didier. Adsorption of water in Na-LTA zeolites: an ab initio molecular dynamics investigation. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 34, pp. 19032-19042. ISSN 1463-9076. Available on: <https://doi.org/10.1039/d1cp02624k>, Registrované v: WOS
3. [1.1] RUBES, Miroslav - KOUDELKOVA, Eva - VACULIK, Jan - TRACHTA, Michal - BULANEK, Roman - BLUDSKY, Ota. Analysis of the BAS OH band reveals a non-statistical incorporation of Al into the MOR framework. In *MICROPOROUS AND MESOPOROUS MATERIALS*, 2021, vol. 317, no., pp. ISSN 1387-1811. Available on: <https://doi.org/10.1016/j.micromeso.2021.110994>, Registrované v: WOS
4. [1.1] VAN DER MYNSBRUGGE, Jeroen - BELL, Alexis T. Challenges for the theoretical description of the mechanism and kinetics of reactions catalyzed by zeolites. In *JOURNAL OF CATALYSIS*, 2021, vol. 404, no., pp. 832-849. ISSN 0021-9517. Available on: <https://doi.org/10.1016/j.jcat.2021.08.048>, Registrované v: WOS

ADCA73

BUČKO, Tomáš - LEBÈGUE, Sébastien - HAFNER, Jürgen - ÁNGYÁN, János G. Tkatchenko-Scheffler van der Waals correction method with and without self-consistent screening applied to solids. In *Physical Review B*, 2013, vol. 87, no. 6, art. no. 064110. (2012: 3.767 - IF, Q1 - JCR, 1.779 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 1550-235X. Dostupné na: <https://doi.org/10.1103/PhysRevB.87.064110>

Citácie:

1. [1.1] CUAUTLI, Cristina - ROMERO-IBARRA, Issis - VAZQUEZ-ARENAS, Jorge - GALVAN, Marcelo. Determination of active sites on Na₂SiO₃ and Li₂SiO₃ catalysts for methanol dissociation and methoxide stabilization concerning biodiesel production. In *FUEL*, 2021, vol. 298, no., pp. ISSN 0016-2361. Available on: <https://doi.org/10.1016/j.fuel.2021.120840>, Registrované v: WOS
2. [1.1] DU, Lixiaosong - JIN, Shaohua - NIE, Pengsong - SHE, Chongchong - WANG, Junfeng. Initial Decomposition Mechanism of 3-Nitro-1,2,4-triazol-5-one (NTO) under Shock Loading: ReaxFF Parameterization and Molecular Dynamic Study. In *MOLECULES*, 2021, vol. 26, no. 16, pp. Available on: <https://doi.org/10.3390/molecules26164808>, Registrované v: WOS
3. [1.1] MUHLI, Heikki - CHEN, Xi - BARTOK, Albert P. - HERNANDEZ-LEON, Patricia - CSANYI, Gabor - ALA-NISSILA, Tapio - CARO, Miguel A. Machine learning force fields based on local parametrization of dispersion interactions: Application to the phase diagram of C-60. In *PHYSICAL REVIEW B*, 2021, vol. 104, no. 5, pp. ISSN 2469-9950. Available on: <https://doi.org/10.1103/PhysRevB.104.054106>, Registrované v: WOS
4. [1.1] PASTUKH, Svitlana - LASKOWSKA, Magdalena - DULSKI, Mateusz - KRZYKAWSKI, Tomasz - PARLINSKI, Krzysztof - PIEKARZ, Przemyslaw. Ab initio studies for characterization and identification of nanocrystalline copper pyrophosphate confined in mesoporous silica. In *NANOTECHNOLOGY*, 2021, vol. 32, no. 41, pp. ISSN 0957-4484. Available on: <https://doi.org/10.1088/1361-6528/ac10e5>, Registrované v: WOS
5. [1.1] PONCIROLI, Roberto - STAUFF, Nicolas - MEI, Zhi-Gang - SHRIWISE, Patrick - BROCKMEYER, Landon - CAO, Yan - FENG, Bo - ROMANO, Paul. Integration of a Wigner effect-based energy storage system with an advanced nuclear reactor. In *NUCLEAR ENGINEERING AND DESIGN*, 2021, vol. 385, no., pp. ISSN 0029-5493. Available on: <https://doi.org/10.1016/j.nucengdes.2021.111521>, Registrované v: WOS
6. [1.1] RAKIB, Tawfiqur - ERTEKIN, Elif - POCHET, Pascal - JOHNSON, Harley T. An efficient computational framework for charge density estimation in twisted bilayer graphene. In *COMPUTATIONAL MATERIALS SCIENCE*, 2021, vol. 199, no., pp. ISSN 0927-0256. Available on: <https://doi.org/10.1016/j.commatsci.2021.110746>, Registrované v: WOS
7. [1.1] SHAKIL, M. - NAZ, Anam - ZEBA, I - GILLANI, S. S. A. - RAFIQUE, M. - AHMED, Shabbir - ZAFAR, M. Structural and Magnetic Behavior of MoS₂ on Doping of Transition Metals: a DFT Study. In *JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM*, 2021, vol. 34, no. 12, pp. 3441-3453. ISSN 1557-1939. Available on: <https://doi.org/10.1007/s10948-021-06074-8>, Registrované v: WOS
8. [1.1] SHAN, Weitao - WANG, Guofeng. Enhancing Catalytic Properties of Iron- and Nitrogen-Doped Carbon for Nitrogen Reduction through Structural Distortion: A Density Functional Theory Study. In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 29, pp. 16004-16012. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c04510>, Registrované v: WOS
9. [1.1] SHIRALI, K. - SHELTON, W. A. - VEKHTER, I. Importance of van der Waals interactions forab initio studies of topological insulators. In *JOURNAL OF PHYSICS-CONDENSED MATTER*, 2021, vol. 33, no. 3, pp. ISSN 0953-8984. Available on: <https://doi.org/10.1088/1361-648X/abdbbc>, Registrované v: WOS
10. [1.1] SHUKLA, Nishant - AHMED, Gazi A. Sb₀Te₃ an optically potent topological insulator: A density functional study. In *MATERIALS TODAY-PROCEEDINGS*, 2021, vol. 45, no., pp. 4819-4823. ISSN 2214-7853. Available on: <https://doi.org/10.1016/j.matpr.2021.01.293>, Registrované v: WOS
11. [1.1] TUNEGA, Daniel - ZAOUI, Ali. Adsorption of polycyclic aromatic hydrocarbons on FeOOH polymorphs: A theoretical study. In *SURFACE SCIENCE*, 2021, vol. 706, no., pp. ISSN 0039-6028. Available on: <https://doi.org/10.1016/j.susc.2020.121795>, Registrované v: WOS
12. [1.1] VILLARREAL, Renan - LIN, Pin-Cheng - FARAJI, Fahim - HASSANI, Nasim - BANA, Harsh - ZARKUA, Zviadi - NAIR, Maya N. - TSAI, Hung-Chieh - AUGÉ, Manuel - JUNGE, Felix - HOFSAESS, Hans C. - DE GENDT, Stefan - DE FEYTER, Steven - BREMS, Steven - AHLGREN, E. Harriet - NEYTS, Erik C. - COVACI, Lucian - PEETERS, Francois M. - NEEK-AMAL, Mehdi - PEREIRA, Lino M. C. Breakdown of Universal Scaling for Nanometer-Sized Bubbles in Graphene. In *NANO LETTERS*, 2021, vol. 21, no. 19, pp. 8103-8110. ISSN 1530-6984. Available on: <https://doi.org/10.1021/acs.nanolett.1c02470>, Registrované v: WOS
13. [1.1] WANG, Jiali - ZHAO, Xiuwen - HU, Guichao - REN, Junfeng - YUAN, Xiaobo.

- Manipulable Electronic and Optical Properties of Two-Dimensional MoTe/MoGe₂N₄ van der Waals Heterostructures.* In *NANOMATERIALS*, 2021, vol. 11, no. 12, pp. Available on: <https://doi.org/10.3390/nano11123338>, Registrované v: WOS
14. [1.1] WEI, Fenfei - SMEETS, Egidius W. F. - VOSS, Johannes - KROES, Geert-Jan - LIN, Sen - GUO, Hua. Assessing density functionals for describing methane dissociative chemisorption on Pt(110)-(2x1) surface. In *CHINESE JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 34, no. 6, pp. 883-895. ISSN 1674-0068. Available on: <https://doi.org/10.1063/1674-0068/cjcp2110207>, Registrované v: WOS
15. [1.1] YONEZAWA, Alex F. - NAGURNIAK, Glaucio R. - ORENHA, Renato P. - DA SILVA, Eder H. - PARREIRA, Renato L. T. - PIOTROWSKI, Mauricio J. Stability Changes in Iridium Nanoclusters via Monoxide Adsorption: A DFT Study within the van der Waals Corrections. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 22, pp. 4805-4818. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c02694>, Registrované v: WOS
16. [1.1] ZHANG, Hong-ping - ZHANG, Run - SUN, Chenghua - JIAO, Yan - ZHANG, Yaping. CO₂ reduction to CH₄ on Cu-doped phosphorene: a first-principles study. In *NANOSCALE*, 2021, vol. 13, no. 48, pp. 20541-20549. ISSN 2040-3364. Available on: <https://doi.org/10.1039/d1nr06066j>, Registrované v: WOS
17. [1.1] ZHAO, Daming - WANG, Yiqing - DONG, Chung-Li - HUANG, Yu-Cheng - CHEN, Jie - XUE, Fei - SHEN, Shaohua - GUO, Liejin. Boron-doped nitrogen-deficient carbon nitride-based Z-scheme heterostructures for photocatalytic overall water splitting. In *NATURE ENERGY*, 2021, vol. 6, no. 4, pp. 388-397. ISSN 2058-7546. Available on: <https://doi.org/10.1038/s41560-021-00795-9>, Registrované v: WOS

ADCA74

BUČKO, Tomáš - LEBÈGUE, Sébastien - HAFNER, Jürgen - ÁNGYÁN, János G. Improved density dependent correction for the description of London dispersion forces. In *Journal of Chemical Theory and Computation*, 2013, vol. 9, no. 10, p. 4293-4299. (2012: 5.389 - IF, Q1 - JCR, 2.784 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/ct400694h>

Citácie:

1. [1.1] ALZATE-CARVAJAL, Natalia - PARK, Jaewoo - PYKAL, Martin - LAZAR, Petr - RAUTELA, Ranjana - SCARFE, Samantha - SCARFE, Lukas - MENARD, Jean-Michel - OTYEPKA, Michal - LUICAN-MAYER, Adina. Graphene Field Effect Transistors: A Sensitive Platform for Detecting Sarin. In *ACS APPLIED MATERIALS & INTERFACES*, 2021, vol. 13, no. 51, pp. 61751-61757. ISSN 1944-8244. Available on: <https://doi.org/10.1021/acsami.1c17770>, Registrované v: WOS
2. [1.1] BARHOUMI, M. - SAID, M. Electronic and optical properties of bismuth oxyhalides from ab initio calculations. In *MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS*, 2021, vol. 264, no., pp. ISSN 0921-5107. Available on: <https://doi.org/10.1016/j.mseb.2020.114921>, Registrované v: WOS
3. [1.1] COCKAYNE, Eric - WONG-NG, Winnie - CHEN, Yu-Sheng - CULP, Jeffrey T. - ALLEN, Andrew J. Density Functional Theory Study of the Structure of the Pillared Hofmann Compound Ni(3-Methyl-4,4'-bipyridine)[Ni(CN)(4)] (Ni-BpyMe or PICNIC-21). In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 29, pp. 15882-15889. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c01896>, Registrované v: WOS
4. [1.1] HENKEL, Pascal - MOLLENHAUER, Doreen. Uncertainty of exchange-correlation functionals in density functional theory calculations for lithium-based solid electrolytes on the case study of lithium phosphorus oxynitride. In *JOURNAL OF COMPUTATIONAL CHEMISTRY*, 2021, vol. 42, no. 18, pp. 1283-1295. ISSN 0192-8651. Available on: <https://doi.org/10.1002/jcc.26546>, Registrované v: WOS
5. [1.1] HESSOU, Etienne P. - BEDE, Lucie A. - JABRAOUI, Hicham - SEMMEQ, Abderrahmane - BADAWI, Michael - VALTCHEV, Valentin. Adsorption of Toluene and Water over Cationic-Exchanged Y Zeolites: A DFT Exploration. In *MOLECULES*, 2021, vol. 26, no. 18, pp. Available on: <https://doi.org/10.3390/molecules26185486>, Registrované v: WOS
6. [1.1] HESSOU, Etienne Paul - JABRAOUI, Hicham - KHALIL, Ibrahim - DZIURLA, Marie-Antoinette - BADAWI, Michael. Ab initio screening of zeolite Y formulations for efficient adsorption of thiophene in presence of benzene. In *APPLIED SURFACE SCIENCE*, 2021, vol. 541, no., pp. ISSN 0169-4332. Available on: <https://doi.org/10.1016/j.apsusc.2020.148515>, Registrované v: WOS
7. [1.1] LI, Yongchang - LIU, Chang - ZHAO, Guo-Dong - HU, Tao - REN, Wei. Two-dimensional multiferroics in a breathing kagome lattice. In *PHYSICAL REVIEW B*, 2021, vol. 104, no. 6, pp. ISSN 2469-9950. Available on: <https://doi.org/10.1103/PhysRevB.104.L060405>, Registrované v: WOS
8. [1.1] P. OLIVEIRA, Marina - HUENENBERGER, Philippe H. Systematic optimization of a fragment-based force field against experimental pure-liquid properties considering large

compound families: application to oxygen and nitrogen compounds. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 33, pp. 17774-17793. ISSN 1463-9076. Available on: <https://doi.org/10.1039/d1cp02001c>., Registrované v: WOS

9. [1.1] PRICE, Alastair J. A. - BRYENTON, Kyle R. - JOHNSON, Erin R. Requirements for an accurate dispersion-corrected density functional. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 154, no. 23, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0050993>., Registrované v: WOS

10. [1.1] SHAO, Penghui - PEI, Junjun - TANG, Huan - YU, Shuiping - YANG, Liming - SHI, Hui - YU, Kai - ZHANG, Kai - LUO, Xubiao. Defect-rich porous carbon with anti-interference capability for adsorption of bisphenol A via long-range hydrophobic interaction synergized with short-range dispersion force. In *JOURNAL OF HAZARDOUS MATERIALS*, 2021, vol. 403, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2020.123705>., Registrované v: WOS

11. [1.1] WANG, Fengmei - MATHUR, Nitish - JANES, Aurora N. - SHENG, Hongyuan - HE, Peng - ZHENG, Xueli - YU, Peng - DERUITER, Andrew J. - SCHMIDT, J. R. - HE, Jun - JIN, Song. Defect-mediated ferromagnetism in correlated two-dimensional transition metal phosphorus trisulfides. In *SCIENCE ADVANCES*, 2021, vol. 7, no. 43, pp. ISSN 2375-2548. Available on: <https://doi.org/10.1126/sciadv.abj4086>., Registrované v: WOS

12. [1.1] WELSH, Ivan D. - CRITTENDEN, Deborah L. New atoms-in-molecules dispersion models for use in ab initio derived force fields. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 154, no. 9, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0037157>., Registrované v: WOS

ADCA75

BUČKO, Tomáš - BENCO, Ľubomír - HAFNER, Jürgen - ÁNGYÁN, János G. Monomolecular cracking of propane over acidic chabazite: An ab initio molecular dynamics and transition path sampling study. In *Journal of Catalysis*, 2011, vol. 279, no. 1, p. 220-228. (2010: 5.415 - IF, Q1 - JCR, 3.380 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2011.01.022>

Citácie:

1. [1.1] BERGER, Fabian - RYBICKI, Marcin - SAUER, Joachim. Adsorption and cracking of propane by zeolites of different pore size. In *JOURNAL OF CATALYSIS*. ISSN 0021-9517, 2021, vol. 395, no., pp. 117-128. Dostupné na: <https://doi.org/10.1016/j.jcat.2020.12.008>., Registrované v: WOS

2. [1.1] GALIMBERTI, Daria Ruth - SAUER, Joachim. Chemically Accurate Vibrational Free Energies of Adsorption from Density Functional Theory Molecular Dynamics: Alkanes in Zeolites. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 9, pp. 5849-5862. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00519>., Registrované v: WOS

3. [1.1] GUTIERREZ-ACEBO, Ester - REY, Jerome - BOUCHY, Christophe - SCHUURMAN, Yves - CHIZALLET, Celine. Ethylcyclohexane Hydroconversion in EU-1 Zeolite: DFT-based Microkinetic Modeling Reveals the Nature of the Kinetically Relevant Intermediates. In *CHEMCATCHER*. ISSN 1867-3880, 2021, vol. 13, no. 15, pp. 3434-3442. Dostupné na: <https://doi.org/10.1002/cctc.202100421>., Registrované v: WOS

4. [1.1] LI, Xinyu - PEI, Chunlei - GONG, Jinlong. Shale gas revolution: Catalytic conversion of C-1-C-3 light alkanes to value-added chemicals. In *CHEM*. ISSN 2451-9294, 2021, vol. 7, no. 7, pp. 1755-1801. Dostupné na: <https://doi.org/10.1016/j.chempr.2021.02.002>., Registrované v: WOS

5. [1.1] SHI, Xiangcheng - LIN, Xiaoyun - LUO, Ran - WU, Shican - LI, Lulu - ZHAO, Zhi-Jian - GONG, Jinlong. Dynamics of Heterogeneous Catalytic Processes at Operando Conditions. In *JACS AU*, 2021, vol. 1, no. 12, pp. 2100-2120. Dostupné na: <https://doi.org/10.1021/jacsau.1c00355>., Registrované v: WOS

ADCA76

BUČKO, Tomáš - HAFNER, Jürgen - LEBÈGUE, Sébastien - ÁNGYÁN, János G. Spin crossover transition of Fe(phen)2(NCS)2: periodic dispersion-corrected density-functional study. In *Physical Chemistry Chemical Physics*, 2012, vol. 14, no. 16, p. 5389-5396. (2011: 3.573 - IF, Q1 - JCR, 1.707 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1016/j.jcat.2011.01.022>

Citácie:

1. [1.1] FENG-LEI YANG - WEN-HAO WU - YA-QUN WANG - CHEN, Xin - BEI-BEI LIANG - HONG-LI MI - GUI-LIN ZHANG - XIAO-YU CHEN - SHI, Yanhui. Abundant Solvatomorphism-Tuned Spin Crossover in a Dinuclear Fe(II) Compound: Computational Insights on Molecular Distortion and Packing Effects. In *CRYSTAL GROWTH & DESIGN*, 2021, vol. 21, no. 12, pp. 6671-6683. ISSN 1528-7483. Available on: <https://doi.org/10.1021/acs.cgd.1c00218>., Registrované v: WOS

2. [1.1] SANCHEZ-DE-ARMAS, Rocio - MONTENEGRO-POHLHAMMER, Nicolas -

- DEVELIOGLU, Aysegul - BURZURI, Enrique - CALZADO, Carmen J. Spin-crossover complexes in nanoscale devices: main ingredients of the molecule-substrate interactions. In NANOSCALE, 2021, vol. 13, no. 44, pp. 18702-18713. ISSN 2040-3364. Available on: <https://doi.org/10.1039/d1nr04577f>., Registrované v: WOS*
3. [1.1] SHAKIL, M. - NAZ, Anam - ZEBA, I - GILLANI, S. S. A. - RAFIQUE, M. - AHMED, Shabbir - ZAFAR, M. Structural and Magnetic Behavior of MoS₂ on Doping of Transition Metals: a DFT Study. In JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, 2021, vol. 34, no. 12, pp. 3441-3453. ISSN 1557-1939. Available on: <https://doi.org/10.1007/s10948-021-06074-8>., Registrované v: WOS
4. [1.1] VIDAL, Daniel - CIRERA, Jordi - RIBAS-ARINO, Jordi. Accurate calculation of spin-state energy gaps in Fe(III) spin-crossover systems using density functional methods. In DALTON TRANSACTIONS, 2021, vol. 50, no. 47, pp. 17635-17642. ISSN 1477-9226. Available on: <https://doi.org/10.1039/d1dt03335b>., Registrované v: WOS
- ADCA77 BUČKO, Tomáš - TUNEGA, Daniel - ÁNGYÁN, János G. - HAFNER, Jürgen. Ab initio study of structure and interconversion of native cellulose phases. In Journal of Physical Chemistry A, 2011, vol. 115, no. 35, p. 10097-10105. (2010: 2.732 - IF, Q2 - JCR, 1.489 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/jp205827y>
Citácie:
1. [1.1] CHEN, Pan - NISHIYAMA, Yoshiharu - WOHLERT, Jakob. Quantifying the influence of dispersion interactions on the elastic properties of crystalline cellulose. In CELLULOSE, 2021, vol. 28, no. 17, pp. 10777-10786. ISSN 0969-0239. Available on: <https://doi.org/10.1007/s10570-021-04210-0>., Registrované v: WOS
2. [1.1] CHI, Yin - HUANG, Bo - SAAFI, Mohamed - FULLWOOD, Nigel - LAMBERT, Colin - WHALE, Eric - HEPWORTH, David - YE, Jianqiao. 2D bio-based nanomaterial as a green route to amplify the formation of hydrate phases of cement composites: Atomistic simulations and analytical characterization. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 299, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.123867>., Registrované v: WOS
- ADCA78 BÜHL, Michael - KNIGHT, F.R. - KŘÍSTKOVÁ, Anežka - MALKIN-ONDÍK, Irina - MALKINA, Oľga - RANDALL, R.A.M. - SLAWIN, A.M.Z. - WOOLINS, J.D. Weak Te, Te interactions through the looking glass of NMR spin-spin coupling. In Angewandte Chemie - International Edition, 2013, vol. 52, no. 9, p. 2495-2498. (2012: 13.734 - IF, Q1 - JCR, 6.407 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.201205998>
Citácie:
1. [1.1] KRIVDIN, Leonid B. Computational NMR of heavy nuclei involving Ag-109, Cd-113, Sn-119, Te-125, Pt-195, Hg-199, Tl-205, and Pb-207. In RUSSIAN CHEMICAL REVIEWS, 2021, vol. 90, no. 9, pp. 1166-1212. ISSN 0036-021X. Dostupné na: <https://doi.org/10.1070/RCR4976>., Registrované v: WOS
2. [1.1] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of Se-77 and Te-125 nuclear magnetic resonance spectral parameters and their structural applications. In MAGNETIC RESONANCE IN CHEMISTRY, 2021, vol. 59, no. 4, pp. 359-407. ISSN 0749-1581. Dostupné na: <https://doi.org/10.1002/mrc.5111>., Registrované v: WOS
- ADCA79 BÜHL, Michael - KAUPP, Martin - MALKINA, Oľga - MALKIN, Vladimír. The DFT route to NMR chemical shifts. In Journal of Computational Chemistry, 1999, vol. 20, no. 1, p. 91-105. (1998: 2.860 - IF, karentované - CCC). (1999 - Current Contents). ISSN 0192-8651.
Citácie:
1. [1.1] ABE, M. T. Ottou - NZIA, C. L. - SIDJUI, L. Sidjui - KAMSI, R. A. Yossa - MVEME, C. D. D. - ASSATSE, Y. Tadjouteu - NDJAKA, J. M. B. - EJUJH, G. W. Predictive calculation of structural, nonlinear optical, electronic and thermodynamic properties of andirobin molecule from ab initio and DFT methods. In SN APPLIED SCIENCES, 2021, vol. 3, no. 9, pp. ISSN 2523-3963. Dostupné na: <https://doi.org/10.1007/s42452-021-04749-4>., Registrované v: WOS
2. [1.1] BORGES, Ricardo M. - COLBY, Sean M. - DAS, Susanta - EDISON, Arthur S. - FIEHN, Oliver - KIND, Tobias - LEE, Jesi - MERRILL, Amy T. - MERZ, Kenneth M. - METZ, Thomas O. - NUNEZ, Jamie R. - TANTILLO, Dean J. - WANG, Lee-Ping - WANG, Shunyang - RENSLOW, Ryan S. Quantum Chemistry Calculations for Metabolomics. In CHEMICAL REVIEWS, 2021, vol. 121, no. 10, pp. 5633-5670. ISSN 0009-2665. Dostupné na: <https://doi.org/10.1021/acs.chemrev.0c00901>., Registrované v: WOS
3. [1.1] KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - GANUSHEVICH, Yulia S. - LATYPOV, Shamil K. DFT Approach for Predicting C-13 NMR Shifts of Atoms Directly Coordinated to Nickel. In ORGANOMETALLICS, 2021, vol. 40, no. 11, pp. 1614-1625. ISSN 0276-7333. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00074>., Registrované v: WOS
4. [1.1] SILVA, Joyce H. C. e - DOS SANTOS, Helio F. - PASCHOAL, Diego F. S. Predicting Pt-

- 195 NMR Chemical Shift and (1)J(Pt-195-P-31) Coupling Constant for Pt(0) Complexes Using the NMR-DKH Basis Sets. In *MAGNETOCHEMISTRY*, 2021, vol. 7, no. 11, pp. Dostupné na: <https://doi.org/10.3390/magnetochemistry7110148>, Registrované v: WOS
5. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. Inverse halogen dependence in anion C-13 NMR. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 4, pp. 3019-3030. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d0cp05891b>, Registrované v: WOS
6. [1.2] IGGO, Jonathan Ainsley - LUZYANIN, Konstantin V. Nuclear magnetic resonance spectroscopy. In *Comprehensive Coordination Chemistry III*, 2021-07-21, 1-9, pp. 3-43. Dostupné na: <https://doi.org/10.1016/B978-0-08-102688-5.00002-7>, Registrované v: SCOPUS
- ADCA80 BÜCHEL, Gabriel E. - KOSSATZ, Susanne - SADIQUE, Ahmad - RAPTA, Peter - ZALIBERA, Michal - BUČINSKÝ, Lukáš - KOMOROVSKÝ, Stanislav - TELSER, Joshua - EPPINGER, Jörg - REINER, Thomas - ARION, Vladimír. cis-Tetrachlorido-bis(indazole)osmium(IV) and its osmium(III) analogues: paving the way towards the cis-isomer of the ruthenium anticancer drugs KP1019 and/or NKP1339. In *Dalton Transactions*, 2017, vol. 46, no. 35, p. 11925-11941. (2016: 4.029 - IF, Q1 - JCR, 1.229 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1477-9226. Dostupné na: <https://doi.org/10.1039/c7dt02194a>
- Citácie:
1. [1.1] GARCIA-VALDIVIA, Antonio A. - ECHENIQUE-ERRANDONEA, Estitxu - RAMIREZ-RODRIGUEZ, Gloria B. - DELGADO-LOPEZ, Jose M. - FERNANDEZ, Belen - ROJAS, Sara - CEPEDA, Javier - RODRIGUEZ-DIEGUEZ, Antonio. Photoluminescent Coordination Polymers Based on Group 12 Metals and 1H-Indazole-6-Carboxylic Acid. In *INORGANICS*, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.3390/inorganics9030020>, Registrované v: WOS
2. [1.1] PURSUWANI, Bharat H. - BHATT, Bhupesh S. - RAVAL, Dilip B. - THAKKAR, Vasudev R. - SHARMA, Jyoti - PATHAK, Chandramani - PATEL, Mohan N. Synthesis, characterization, and biological applications of pyrazole moiety bearing osmium(IV) complexes. In *NUCLEOSIDES NUCLEOTIDES & NUCLEIC ACIDS*. ISSN 1525-7770, 2021, vol. 40, no. 6, pp. 593-618. Dostupné na: <https://doi.org/10.1080/15257770.2021.1921795>, Registrované v: WOS
3. [1.1] SHANG, Congshan - HOU, Yan - MENG, Tingting - SHI, Min - CUI, Guoyan. The Anticancer Activity of Indazole Compounds: A Mini Review. In *CURRENT TOPICS IN MEDICINAL CHEMISTRY*. ISSN 1568-0266, 2021, vol. 21, no. 5, pp. 363-376. Dostupné na: <https://doi.org/10.2174/1568026620999201124154231>, Registrované v: WOS
- ADCA81 BUJDÁK, Juraj - DANKO, Martin - CHORVÁT, Dušan Jr. - CZÍMEROVÁ, Adriana - SÝKORA, J. - LANG, K. Selective modification of layered silicate nanoparticle edges with fluorophores. In *Applied Clay Science*, 2012, vol. 65-66, p. 152 - 157. (2011: 2.474 - IF, Q1 - JCR, 1.159 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2012.04.029>
- Citácie:
1. [1.1] KASPRZHITSKII, Anton - LAZORENKO, Georgy - KRUGLIKOV, Alexander - KUCHKINA, Irina - GORODOV, Vadim. Effect of Silane Functionalization on Properties of Poly(Lactic Acid)/Palygorskite Nanocomposites. In *INORGANICS*, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.3390/inorganics9010003>, Registrované v: WOS
- ADCA82 BUJDÁK, Juraj - EDER, Artur - YONGYAI, Y. - FAYBÍKOVÁ, Katarína - RODE, B.M. Investigation on the mechanism of peptide chain prolongation on montmorillonite. In *Journal of Inorganic Biochemistry*, 1996, vol. 61, no. 1, p. 69-78. ISSN 0162-0134.
- Citácie:
1. [1.1] SWANSON, Haley L. - POKHREL, Suman - DAVIDOWSKI, Stephen K. - MAEDLER, Lutz - BRINKER, C. Jeffrey - HOLLAND, Gregory P. The impact of metal doping on fumed silica structure and amino acid thermal condensation catalytic properties. In *JOURNAL OF MATERIALS SCIENCE*. ISSN 0022-2461, 2021, vol. 56, no. 30, pp. 16916-16927. Dostupné na: <https://doi.org/10.1007/s10853-021-06412-0>, Registrované v: WOS
- ADCA83 BUJDÁK, Juraj**. The effects of layered nanoparticles and their properties on the molecular aggregation of organic dyes. In *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, 2018, vol. 35, p. 108-133. (2017: 15.325 - IF, Q1 - JCR, 4.416 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1389-5567. Dostupné na: <https://doi.org/10.1016/j.jphotochemrev.2018.03.001>
- Citácie:
1. [1.1] EGUCHI, Miharuru - NUGRAHA, Asep Sugih - ROWAN, Alan E. - SHAPTER, Joe - YAMAUCHI, Yusuke. Adsorchromism: Molecular Nanoarchitectonics at 2D Nanosheets-Old Chemistry for Advanced Chromism. In *ADVANCED SCIENCE*, 2021, vol. 8, no. 14, pp. Dostupné na: <https://doi.org/10.1002/advs.202100539>, Registrované v: WOS
2. [1.1] GIOVANNINI, Giorgia - ROSSI, Rene M. - BOESEL, Luciano F. Changes in Optical Properties upon Dye-Clay Interaction: Experimental Evaluation and Applications. In *NANOMATERIALS*, 2021, vol. 11, no. 1, pp. Dostupné na:

<https://doi.org/10.3390/nano11010197>., Registrované v: WOS

3. [1.1] KUMAR, Harini Sampath - CHOI, Chang-Shik - LEE, Ki Hwan. Synthesis, Photophysical Properties, and Cytotoxicity of Rhodamine Based Fluorescent Probes. In *RUSSIAN JOURNAL OF BIOORGANIC CHEMISTRY*. ISSN 1068-1620, 2021, vol. 47, no. 3, pp. 691-699. Dostupné na: <https://doi.org/10.1134/S1068162021030109>., Registrované v: WOS

4. [1.1] LIU, Lifeng - KOUSHKI, Ehsan - TAYEBEE, Reza. Surface modification of gold nanoparticles by cetirizine through surface plasmon resonance and preliminary study of the in vitro cellular cytotoxicity. In *JOURNAL OF MOLECULAR LIQUIDS*. ISSN 0167-7322, 2021, vol. 330, no., pp. Dostupné na: <https://doi.org/10.1016/j.molliq.2021.115542>., Registrované v: WOS

5. [1.1] LOMAN-CORTES, Paula - JACOBS, Donald J. - VIVERO-ESCOTO, Juan L. Molecular dynamic simulation of polyhedral oligomeric silsesquioxane porphyrin molecules: Self-assembly and influence on morphology. In *MATERIALS TODAY COMMUNICATIONS*, 2021, vol. 29, no., pp. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2021.102815>., Registrované v: WOS

6. [1.1] NAHI, Ouassef - KULAK, Alexander N. - BROAD, Alexander - XU, Yifei - O'SHAUGHNESSY, Cedrick - CAYRE, Olivier J. - DAY, Sarah J. - DARKINS, Robert - MELDRUM, Fiona C. Solvent-Mediated Enhancement of Additive-Controlled Crystallization. In *CRYSTAL GROWTH & DESIGN*. ISSN 1528-7483, 2021, vol. 21, no. 12, pp. 7104-7115.

Dostupné na: <https://doi.org/10.1021/acs.cgd.1c01002>., Registrované v: WOS

ADCA84

BUJDÁK, Juraĵ.** Adsorption kinetics models in clay systems. The critical analysis of pseudo-second order mechanism. In *Applied Clay Science*, 2020, vol. 191, p. 105630-1-105630-7. (2019: 4.605 - IF, Q1 - JCR, 1.069 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105630>

Citácie:

1. [1.1] CHANG, Po-Hsiang - LIU, Pan - SARKAR, Binoy - MUKHOPADHYAY, Raj - YANG, Qing-Yuan - TZOU, Yu-Min - ZHONG, Bo - LI, Xuxiang - OWENS, Gary. Unravelling the mechanism of amitriptyline removal from water by natural montmorillonite through batch adsorption, molecular simulation and adsorbent characterization studies. In *JOURNAL OF COLLOID AND INTERFACE SCIENCE*. ISSN 0021-9797, 2021, vol. 598, no., pp. 379-387. Dostupné na: <https://doi.org/10.1016/j.jcis.2021.04.033>., Registrované v: WOS

2. [1.1] CHARAABI, Saddam - ABSI, Rafik - PENSE-LHERITIER, Anne-Marie - LE BORGNE, Marc - ISSA, Samar. Adsorption studies of benzophenone-3 onto clay minerals and organosilicates: Kinetics and modelling. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 202, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105937>., Registrované v: WOS

3. [1.1] DE ASSIS FILHO, Romero Barbosa - SALGUEIRO BAPTISTELLA, Ana Maria - BEZERRA DE ARAUJO, Caroline Maria - MARQUES FRAGA, Tiago Jose - NOGUEIRA DE PAIVA, Tarsila Maira - MORAES DE ABREU, Cesar Augusto - DA MOTTA SOBRINHO, Mauricio Alves. Removal of textile dyes by benefited marine shells wastes: From circular economy to multi-phenomenological modeling. In *JOURNAL OF ENVIRONMENTAL MANAGEMENT*. ISSN 0301-4797, 2021, vol. 296, no., pp. Dostupné na: <https://doi.org/10.1016/j.jenvman.2021.113222>., Registrované v: WOS

4. [1.1] GARCIA-HERNANDEZ, E. - AGUILAR-MADERA, C. G. - HERRERA-HERNANDEZ, E. C. - OCAMPO-PEREZ, R. - BAILON-GARCIA, E. - CORTES, Farid B. Hydrodynamic effects on the overall adsorption rate of phenol on activated carbon cloth through the advection-diffusion model application. In *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*. ISSN 1226-086X, 2021, vol. 93, no., pp. 267-278. Dostupné na: <https://doi.org/10.1016/j.jiec.2020.10.003>., Registrované v: WOS

5. [1.1] GONZALEZ-LOPEZ, Martin E. - LAUREANO-ANZALDO, Cesar M. - PEREZ-FONSECA, Aida A. - ARELLANO, Martin - ROBLEDON-ORTIZ, Jorge R. A Critical Overview of Adsorption Models Linearization: Methodological and Statistical Inconsistencies. In *SEPARATION AND PURIFICATION REVIEWS*. ISSN 1542-2119, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1080/15422119.2021.1951757>., Registrované v: WOS

6. [1.1] HU, Shunxuan - JIANG, Fenghao - LI, Junguo - WU, Changning - LIU, Ke - CHEN, Yumeng. Understanding the adsorption behaviors of naphthalene sulfonate formaldehyde in coal water slurry. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*. ISSN 0927-7757, 2021, vol. 628, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127245>., Registrované v: WOS

7. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>., Registrované v: WOS

8. [1.1] LI, Xinxin - LI, Xing - FENG, Yan - WANG, Xinwei - SUO, Ning - YANG, Shumin - LONG, Yingying - ZHANG, Shoubin. Production of an electro-biological particle electrode (EBPE) from lithium slag and its removal performance to salicylic acid in a three-dimensional

electrocatalytic biological coupling reactor (3D-EBCR). In CHEMOSPHERE. ISSN 0045-6535, 2021, vol. 282, no., pp. Dostupné na: <https://doi.org/10.1016/j.chemosphere.2021.131020>, Registrované v: WOS

9. [1.1] LU, Zhixu - QI, Xianjin - ZHU, Xing - LI, Xuezhu - LI, Kongzhai - WANG, Hua. Highly effective remediation of high-arsenic wastewater using red mud through formation of $AlAsO_4$ silicate precipitate. In ENVIRONMENTAL POLLUTION. ISSN 0269-7491, 2021, vol. 287, no., pp. Dostupné na: <https://doi.org/10.1016/j.envpol.2021.117484>, Registrované v: WOS

10. [1.1] OBIJOLE, Olumuyiwa A. - MUGERA, Gitari Wilson - MUDZIELWANA, Rabelani - NDUNGU, Patrick G. - SAMIE, Amidou - BABATUNDE, Ayinde W. Hydrothermally treated aluminosilicate clay (HTAC) for remediation of fluoride and pathogens from water: Adsorbent characterization and adsorption modelling. In WATER RESOURCES AND INDUSTRY, 2021, vol. 25, no., pp. Dostupné na: <https://doi.org/10.1016/j.wri.2021.100144>, Registrované v: WOS

11. [1.1] PARK, Jong-Hwan - HWANG, Se-Wook - LEE, Su-Lim - LEE, Jae-Hoon - SEO, Dong-Cheol. Sorption behavior of phosphate by fly ash discharged from biomass thermal power plant. In APPLIED BIOLOGICAL CHEMISTRY. ISSN 2468-0834, 2021, vol. 64, no. 1, pp. Dostupné na: <https://doi.org/10.1186/s13765-021-00614-5>, Registrované v: WOS

12. [1.1] PARK, Jong-Hwan - LEE, Jae-Hoon - LEE, Su-Lim - HWANG, Se-Wook - SEO, Dong-Cheol. Adsorption behavior of arsenic onto lignin-based biochar decorated with zinc. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 626, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127095>, Registrované v: WOS

13. [1.1] PARK, Jong-Hwan - WANG, Jim J. - SEO, Dong-Cheol. Sorption characteristics of phosphate by bauxite residue in aqueous solution. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 618, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.126465>, Registrované v: WOS

14. [1.1] WU, Hao - LIU, Xuezhu - WEN, Jing - LIU, Yong - ZHENG, Xiaogang. Rare-earth oxides modified Mg-Al layered double oxides for the enhanced adsorption-photocatalytic activity. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 610, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.125933>, Registrované v: WOS

15. [1.1] YU, Yongsheng - YANG, Mengnan - YAN, Zhaoli - LI, Tiantian - JING, Qiangshan - LIU, Peng - XU, Bing - CAO, Jianliang. Regulation of hierarchically porous structures based on multi-scale nanosheets derived from kaolinite for enhanced adsorption. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 200, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105895>, Registrované v: WOS

ADCA85

BUJDÁK, Juraj - IYI, Nobuo - VALÚCHOVÁ, Jana - FUJITA, Taketoshi. Aggregation and decomposition of a pseudisocyanine dye in dispersions of layered silicates. In Journal of Colloid and Interface Science, 2002, vol. 247, no. 2, p. 494-503. Dostupné na:

<https://doi.org/10.1006/jcis.2001.8140>

Citácie:

1. [1.1] LI, Qi - HUANG, Kun - QIU, Qi - ZHANG, Xiangyu - QIN, Dabin - ZENG, Xianshun. Imidazole decorated dicyanomethylene-4H-pyran skeletons with aggregation induced emission effect and applications for sensing viscosity. In DYES AND PIGMENTS, 2021, vol. 193, no., pp. ISSN 0143-7208. Available on: <https://doi.org/10.1016/j.dyepig.2021.109537>, Registrované v: WOS

2. [1.2] ILINA, Kristina - HENARY, Maged. Cyanine Dyes Containing Quinoline Moieties: History, Synthesis, Optical Properties, and Applications. In Chemistry A European Journal, 2021-03-01, 27, 13, pp. 4230-4248. ISSN 09476539. Available on:

<https://doi.org/10.1002/chem.202003697>, Registrované v: SCOPUS

ADCA86

BUJDÁK, Juraj - JANEK, Marián - MADEJOVÁ, Jana - KOMADEL, Peter. Influence of the layer charge density of smectites on the interaction with methylene blue. In Journal of the Chemical Society-Faraday Transactions, 1998, vol. 94, no. 23, p. 3487-3492.

Citácie:

1. [1.1] EGUCHI, Miharuru - NUGRAHA, Asep Sugih - ROWAN, Alan E. - SHAPTER, Joe - YAMAUCHI, Yusuke. Adsorption: Molecular Nanoarchitectonics at 2D Nanosheets-Old Chemistry for Advanced Chromism. In ADVANCED SCIENCE, 2021, vol. 8, no. 14, pp. Dostupné na: <https://doi.org/10.1002/advs.202100539>, Registrované v: WOS

ADCA87

BUJDÁK, Juraj - KOMADEL, Peter. Interaction of methylene blue with reduced charge montmorillonite. In Journal of Physical Chemistry B, 1997, vol. 101, no. 44, p. 9065-9068. ISSN 1520-6106.

Citácie:

1. [1.1] BELOUSOV, P. - CHUPALENKOV, N. - CHRISTIDIS, G. E. - ZAKUSINA, O. - ZAKUSIN, S. - MOROZOV, I. - CHERNOV, M. - ZAITSEVA, T. - TYUPINA, E. - KRUPSKAYA, V.

ADCA88

- Carboniferous bentonites from 10Th Khutor deposit (Russia): Composition, properties and features of genesis. In APPLIED CLAY SCIENCE, 2021, vol. 215, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106308>., Registrované v: WOS*
2. [1.1] EGUCHI, Miharū - NUGRAHA, Asep Sugih - ROWAN, Alan E. - SHAPTER, Joe - YAMAUCHI, Yusuke. Adsorchromism: Molecular Nanoarchitectonics at 2D Nanosheets-Old Chemistry for Advanced Chromism. In ADVANCED SCIENCE, 2021, vol. 8, no. 14, pp. Available on: <https://doi.org/10.1002/advs.202100539>., Registrované v: WOS
3. [1.1] ISHIDA, Yohei. Manipulation of Precise Molecular Arrangements and Their Photochemical Properties on Inorganic Surfaces via Multiple Electrostatic Interactions. In BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN, 2021, vol. 94, no. 12, pp. 2886-2897. ISSN 0009-2673. Available on: <https://doi.org/10.1246/bcsj.20210303>., Registrované v: WOS
4. [1.1] NARAYANAM, Pavan K. - MAJOR, S. S. Langmuir-Blodgett based growth of rGO wrapped TiO₂ nanostructures and their photocatalytic performance. In COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS, 2021, vol. 609, no., pp. ISSN 0927-7757. Available on: <https://doi.org/10.1016/j.colsurfa.2020.125652>., Registrované v: WOS
5. [1.1] OTAL, Eugenio H. - KIM, Manuela L. - HINESTROZA, Juan P. - KIMURA, Mutsumi. A Solid-State Pathway towards the Tunable Carboxylation of Cellulosic Fabrics: Controlling the Surface's Acidity. In MEMBRANES, 2021, vol. 11, no. 7, pp. Available on: <https://doi.org/10.3390/membranes11070514>., Registrované v: WOS
- BUJDÁKOVÁ, Helena** - BUJDÁKOVÁ, Veronika - MÁJEKOVÁ, Hyacinta - GAÁLOVÁ, Barbora - BIZOVSKÁ, Valéria - BOHÁČ, Peter - BUJDÁK, Juraj. Antimicrobial activity of organoclays based on quaternary alkylammonium and alkylphosphonium surfactants and montmorillonite. In Applied Clay Science, 2018, vol. 158, no., p. 21-28. (2017: 3.641 - IF, Q1 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2018.03.010>
- Citácie:
1. [1.1] FATIMAH, Is - HIDAYAT, Habibi - PURWIANDONO, Gani - HUSEIN, Saddam - OH, Won-Chun. Gentamicin/CTMA/Montmorillonite as Slow-Released Antibacterial Agent. In KOREAN JOURNAL OF MATERIALS RESEARCH. ISSN 1225-0562, 2021, vol. 31, no. 6, pp. 367-374. Dostupné na: <https://doi.org/10.3740/MRSK.2021.31.6.367>., Registrované v: WOS
2. [1.1] LIU, Hongyu - YANG, Jie - YAN, Xiangjie - LI, Chaoqi - ELSABAHY, Mahmoud - CHEN, Li - YANG, Ying-Wei - GAO, Hui. A dendritic polyamidoamine supramolecular system composed of pillar[5]arene and azobenzene for targeting drug-resistant colon cancer. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, 2021, vol. 9, no. 46, pp. 9594-9605. Dostupné na: <https://doi.org/10.1039/d1tb02134f>., Registrované v: WOS
3. [1.1] LIU, Renjie - LI, Sanxi - OTITOJU, Tunmise Ayode - WANG, Song - ZHANG, Ailing - ZHANG, Linnan. Exfoliation of montmorillonite using a simple and low-cost heating/gasifying method. In APPLIED NANOSCIENCE. ISSN 2190-5509, 2021, vol. 11, no. 4, pp. 1427-1436. Dostupné na: <https://doi.org/10.1007/s13204-021-01772-0>., Registrované v: WOS
4. [1.1] MADEJOVA, Jana - BARLOG, Martin - JANKOVIC, Lubos - SLANY, Michal - PALKOVA, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 200, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105894>., Registrované v: WOS
5. [1.1] MOUSTAFA, Hesham - EL-SAYED, Samah M. - YOUSSEF, Ahmed M. Synergistic impact of cumin essential oil on enhancing of UV-blocking and antibacterial activity of biodegradable poly(butylene adipate-co-terephthalate)/clay platelets nanocomposites. In JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS. ISSN 0892-7057, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1177/0892705721989771>., Registrované v: WOS
6. [1.1] ORTA, M. Mar - MAISANABA, Sara - MEDINA-CARRASCO, Santiago - JOS, Angeles. Potential Application of a Synthetic Organo-Funtionalized High Load Expandable Mica as a Drug Carrier for Controlled Release. In CURRENT DRUG DELIVERY. ISSN 1567-2018, 2021, vol. 18, no. 5, pp. 645-653. Dostupné na: <https://doi.org/10.2174/1567201817666201022122845>., Registrované v: WOS
7. [1.1] PAN, Yufeng - GAO, Yuting - HU, Jiayuan - YE, Guangyu - ZHOU, Feng - YAN, Chunjie. Montmorillonite nanosheets with enhanced photodynamic performance for synergistic bacterial ablation. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, 2021, vol. 9, no. 2, pp. 404-409. Dostupné na: <https://doi.org/10.1039/d0tb02254c>., Registrované v: WOS
8. [1.1] SOLTAN, Yosra - MORSY, Amr - HASHEM, Nesrein - ELAZAB, Mahmoud - SULTAN, Mohamed - MAREY, Haneen - EL LAIL, Goma Abo - EL-DESOKY, Nagwa - HOSNY, Nourhan - MAHDY, Ahmed - HAFEZ, Elsayed - SALLAM, Sobhy. Modified Nano-Montmorillonite and Monensin Modulate In Vitro Ruminant Fermentation, Nutrient Degradability, and Methanogenesis Differently. In ANIMALS. ISSN 2076-2615, 2021, vol. 11, no. 10, pp. Dostupné na:

- <https://doi.org/10.3390/ani11103005>, Registrované v: WOS
9. [1.1] ZHOU, Chen - AO, Hai-Yong - HAN, Xiao - JIANG, Wen-Wen - YANG, Zhi-Fei - MA, Le - DENG, Xiao-Yan - WAN, Yi-Zao. Engineering a novel antibacterial agent with multifunction: Protocatechuic acid-grafted-quaternized chitosan. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, 2021, vol. 258, no., pp. Dostupné na: <https://doi.org/10.1016/j.carbpol.2021.117683>, Registrované v: WOS
10. [1.1] ZHU, Yunyan - CUI, Yuming - SHAN, Zhihua - DAI, Rui - SHI, Lei - CHEN, Hui. Fabrication and characterization of a multi-functional and environmentally-friendly starch/organo-bentonite composite liquid dust suppressant. In POWDER TECHNOLOGY. ISSN 0032-5910, 2021, vol. 391, no., pp. 532-543. Dostupné na: <https://doi.org/10.1016/j.powtec.2021.06.050>, Registrované v: WOS
- ADCA89 BUTVINOVÁ, Beata - BUTVIN, Pavol - MAŤKO, Igor - ŠVEC, Peter - CHROMČÍKOVÁ, Mária - SITEK, J. - DEKAN, J. Magnetic and surface properties of high-induction nanocrystalline Fe-Nb-Cu-B/P-Si ribbons. In IEEE Transactions on Magnetics, 2014, vol. 50, no. 4, art. no. 2002904. (2013: 1.213 - IF, Q3 - JCR, 0.608 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0018-9464. Dostupné na: <https://doi.org/10.1109/TMAG.2013.2286905>
- Citácie:
1. [1.1] DOU, Z. X. - LI, Y. L. - LV, K. - WANG, T. - LI, F. S. - HUI, X. D. Improving the glass formation ability and magnetic properties by Nb in Fe-Si-B-P-Cu-Nb nanocrystalline alloys. In MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS. ISSN 0921-5107, 2021, vol. 264, 114942. Dostupné na: <https://doi.org/10.1016/j.mseb.2020.114942>, Registrované v: WOS
- ADCA90 BUTVINOVÁ, Beata** - BUTVIN, Pavol - BRZÓZKA, K. - KUZMINSKI, M. - MAŤKO, Igor - ŠVEC, Peter - CHROMČÍKOVÁ, Mária. Effects of surface crystallization and oxidation in nanocrystalline FeNbCuSiB(P) ribbons. In Journal of Magnetism and Magnetic Materials, 2017, vol. 424, p. 233-237. (2016: 2.630 - IF, Q2 - JCR, 0.699 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents, WOS, SCOPUS). ISSN 0304-8853. Dostupné na: <https://doi.org/10.1016/j.jmmm.2016.10.068>
- Citácie:
1. [1.1] LI, Jiawei - DING, Qian - WANG, Changjiu - HE, Aina - DONG, Yaqiang - LI, Deren. Structural and Magnetic Properties of P Microalloyed Fe76Cu0.8Nb2.2B9Si12 Alloys. In METALS, 2021, vol. 11, no. 7, 1110. Dostupné na: <https://doi.org/10.3390/met11071110>, Registrované v: WOS
2. [1.1] LI, Yuluo - SHEN, Ningning - ZHANG, Suo - WU, Yidong - CHEN, Li - LV, Kuang - HE, Zhanbing - LI, Fushan - HUI, Xidong. Crystallization behavior and soft magnetic properties of Fe-B-P-C-Cu ribbons with amorphous/alpha-Fe hierarchic structure. In INTERMETALLICS. ISSN 0966-9795, 2021, vol. 131, 107100. Dostupné na: <https://doi.org/10.1016/j.intermet.2021.107100>, Registrované v: WOS
3. [1.1] WANG, Changjiu - LI, Jiawei - ZHANG, Xuhang - WU, Jiaxin - HE, Aina - DONG, Yaqiang. Effect of P microalloying on magnetic properties and structure of FeSiBNbCu nanocrystalline alloy. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 4, pp. 4177-4184. Dostupné na: <https://doi.org/10.1007/s10854-020-05159-9>, Registrované v: WOS
- ADCA91 BYSTRICKÁ, Zuzana - BYSTRICKÝ, Roman - LEHOTAY, Jozef. Thermodynamic study of HPLC enantioseparations of some sulfur-containing amino acids on teicoplanin columns in ion-pairing reversed-phase mode. In Journal of Liquid Chromatography & Related Technologies, 2016, vol. 30, no. 16, p. 775-781. (2015: 0.669 - IF, Q4 - JCR, 0.290 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1082-6076. Dostupné na: <https://doi.org/10.1080/10826076.2016.1247715>
- Citácie:
1. [1.1] BERKECZ, Robert - TANACS, Daniel - PETER, Antal - ILISZ, Istvan. Enantioselective Liquid Chromatographic Separations Using Macrocyclic Glycopeptide-Based Chiral Selectors. In MOLECULES, 2021, vol. 26, no. 11, pp. Dostupné na: <https://doi.org/10.3390/molecules26113380>, Registrované v: WOS
- ADCA92 CAPEK, Peter - DRÁBIK, Milan - TURJAN, Jozef. Characterization of starch and its mono and hybrid derivatives by thermal analysis and FT-IR spectroscopy. In Journal of Thermal Analysis and Calorimetry, 2010, vol. 99, no. 2, p. 667-673. (2009: 1.587 - IF, Q3 - JCR, 0.529 - SJR, Q2 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-009-0194-1>
- Citácie:
1. [1.1] ATUCHUKWU, E. - ADEDOKUN, M. - EMEJE, M. Synthesis, characterization, and functional properties of a novel sodium carboxymethyl starch obtained from matured seeds of Brachystegia eurycoma. In EGYPTIAN PHARMACEUTICAL JOURNAL. ISSN 1687-4315, APR-JUN 2021, vol. 20, no. 2, p. 145-156. Dostupné na: https://doi.org/10.4103/epj.epj_61_20,

Registrované v: WOS

2. [1.1] MAHER, T. - KABBASHI, N.A. - MIRGHANI, M.E.S. - ALAM, M.Z. - DADDIOUAISSA, D. - ABDULHAFIZ, F. - REDUAN, M.F.H. - OMRAN, J.I. - RAZAB, M.K.A.A. - MOHAMMED, A. *Optimization of Ultrasound-Assisted Extraction of Bioactive Compounds from Acacia Seyal Gum Using Response Surface Methodology and Their Chemical Content Identification by Raman, FTIR, and GC-TOFMS. In ANTIOXIDANTS. OCT 2021, vol. 10, no. 10. Dostupné na: <https://doi.org/10.3390/antiox10101612>.*, Registrované v: WOS

ADCA93

CARRADO, Kathleen A. - KOMADEL, Peter. Acid activation of bentonites and polymer-clay nanocomposites. In *Elements*, 2009, vol. 5, no. 2, p. 111-116. (2008: 3.069 - IF, Q1 - JCR, 1.986 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). Dostupné na: <https://doi.org/10.2113/gselements.5.2.111>

Citácie:

1. [1.1] ERDOGAN, Burcu - ERGURHAN, Orkun - ANTER, Aslihan. Influence of acid activation on the NH₃-adsorption properties of a Turkish bentonite. In *CLAY MINERALS*, 2021, vol. 56, no. 3, pp. 178-184. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.31>, Registrované v: WOS
2. [1.1] LEANDRO, Gabriel Coelho - CAPELLO, Cristiane - KOOP, Betina Luiza - GARCEZ, Jussara - MONTEIRO, Alcilene Rodrigues - VALENCIA, German Ayala. Adsorption-desorption of anthocyanins from jambolan (*Syzygium cumini*) fruit in laponite (R) platelets: Kinetic models, physicochemical characterization, and functional properties of biohybrids. In *FOOD RESEARCH INTERNATIONAL*, 2021, vol. 140, no., pp. ISSN 0963-9969. Available on: <https://doi.org/10.1016/j.foodres.2020.109903>, Registrované v: WOS
3. [1.1] ROUHANI, Hadi - FARHADI, Fatola - KENARI, Mahsa Akbari - ESKANDARI, Effat - RAMAKRISHNA, Seeram. Selection of suitable bentonite and the influence of various acids on the preparation of a special clay for the removal of trace olefins from aromatics. In *CLAY MINERALS*, 2021, vol. 56, no. 3, pp. 185-196. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.32>, Registrované v: WOS
4. [1.1] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. Effect of acid activation on structural evolution and surface charge of different derived kaolinites. In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105997>, Registrované v: WOS

ADCA94

CASALEGNO, Valentina** - DE LA PIERRE, Stefano - CORAZZARI, Ingrid - TURCI, Francesco - TATARCO, Peter - DAMIANO, Olivier - CORNILLON, Laurence - TERENCE, Andrea - NATALI, Maurizio - PUGLIA, Deborah - TORRE, Luigi - FERRARIS, Monica. Design, realization, and characterization of advanced adhesives for joining ultra-stable C/C based components. In *Macromolecular Materials and Engineering*, 2020, vol. 305, no. 9, art. no. 2000229. (2019: 3.853 - IF, Q1 - JCR, 0.813 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1438-7492. Dostupné na: <https://doi.org/10.1002/mame.202000229>

Citácie:

1. [1.1] GIURANNO, Donatella - GAMBARO, Sofia - BRUZDA, Grzegorz - NOWAK, Rafal - POLKOWSKI, Wojciech - SOBCZAK, Natalia - DELSANTE, Simona - NOVAKOVIC, Rada. Interface Design in Lightweight SiC/TiSi₂ Composites Fabricated by Reactive Infiltration Process: Interaction Phenomena between Liquid Si-Rich Si-Ti Alloys and Glassy Carbon. In *MATERIALS*, 2021, vol. 14, no. 13, pp. Dostupné na: <https://doi.org/10.3390/ma14133746>, Registrované v: WOS

ADCA95

CASTRO, Abril C. - FLIEGL, Heike - CASCELLA, Michele - HELGAKER, Trygve - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - ÁNGELES MEDRANO, María - QUIROGA, Adoración G. - SWART, Marcel*. Four-component relativistic 31P NMR calculations for trans-platinum(II) complexes: importance of the solvent and dynamics in spectral simulations. In *Dalton Transactions*, 2019, vol. 48, no. 23, p. 8076-8083. (2018: 4.052 - IF, Q1 - JCR, 1.120 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1477-9226. Dostupné na: <https://doi.org/10.1039/c9dt00570f>

Citácie:

1. [1.1] BATISTA, Patrick R. - DUCATI, Lucas C. - AUTSCHBACH, Jochen. Solvent effect on the Pt-195 NMR properties in pyridonate-bridged Pt-III dinuclear complex derivatives investigated by ab initio molecular dynamics and localized orbital analysis. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 22, pp. 12864-12880. Dostupné na: <https://doi.org/10.1039/d0cp05849a>, Registrované v: WOS
2. [1.1] BECKER, Peter - WONGLAKHON, Tanakorn - ZAHN, Dirk - GUDAT, Dietrich - NIEWA, Rainer. Approaching Dissolved Species in Ammonoacidic GaN Crystal Growth: A Combined Solution NMR and Computational Study. In *CHEMISTRY-A EUROPEAN JOURNAL*. ISSN 0947-6539, 2020, vol. 26, no. 31, pp. 7008-7017. Dostupné na: <https://doi.org/10.1002/chem.201904657>, Registrované v: WOS

3. [1.1] MORALES-GUEVARA, Rosaly - FUENTES, Juan A. - PAEZ-HERNANDEZ, Dayan - CARRENO, Alexander. The role of substituted pyridine Schiff bases as ancillary ligands in the optical properties of a new series of fac-rhenium(i) tricarbonyl complexes: a theoretical view. In *RSC ADVANCES*, 2021, vol. 11, no. 59, pp. 37181-37193. Dostupné na: <https://doi.org/10.1039/d1ra05737e>, Registrované v: WOS
4. [1.1] PAYARD, Pierre-Adrien - PEREGO, Luca Alessandro - GRIMAUD, Laurence - CIOFINI, Ilaria. A DFT Protocol for the Prediction of P-31 NMR Chemical Shifts of Phosphine Ligands in First-Row Transition-Metal Complexes. In *ORGANOMETALLICS*. ISSN 0276-7333, 2020, vol. 39, no. 17, pp. 3121-3130. Dostupné na: <https://doi.org/10.1021/acs.organomet.0c00309>, Registrované v: WOS
5. [1.1] RAYNAUD, Christophe - NORBERT-AGAISSE, Elliott - JAMES, Brian R. - EISENSTEIN, Odile. P-31 Chemical Shifts in Ru(II) Phosphine Complexes. A Computational Study of the Influence of the Coordination Sphere. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2020, vol. 59, no. 23, pp. 17038-17048. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.0c02256>, Registrované v: WOS

ADCA96

CSANÁDI, Tamás - CHINH, Nguyen Quang - SZOMMER, Péter - DUSZA, Ján - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Deformation and fracture of β -silicon nitride micropillars. In *Journal of the American Ceramic Society*, 2015, vol. 98, no. 2, p. 374-377. (2014: 2.610 - IF, Q1 - JCR, 1.167 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.13402>

Citácie:

1. [1.1] BRACHHOLD, Nora - BEREK, Harry - FRUHSTORFER, Jens - ANEZIRIS, Christos G. Focused Ion Beam Parameters for the Preparation of Oxidic Ceramic Materials. In *ADVANCED ENGINEERING MATERIALS*. ISSN 1438-1656, 2021, vol. 23, no. 4, pp., Registrované v: WOS
2. [1.1] KARRE, Rajamallu - GUO, Dezhou - SONG, Shuangxi - HU, Yixuan - LIU, Yu - GUO, Qiang - LIU, Pan - WANG, Xiaodong - AN, Qi - REDDY, Kolan Madhav. Vacancy-driven shear localization in silicon nitride. In *SCRIPTA MATERIALIA*. ISSN 1359-6462, 2021, vol. 190, no., pp. 163-167., Registrované v: WOS
3. [1.1] XIAO, Xiaolan - DENG, Jiayun - XIONG, Qiang - YAN, Qiusheng - WU, Zhengtao - LIN, Huatay. Scratch Behaviour of Bulk Silicon Nitride Ceramics. In *MICROMACHINES*, 2021, vol. 12, no. 6, pp. Dostupné na: <https://doi.org/10.3390/mi12060707>, Registrované v: WOS

ADCA97

CSANÁDI, Tamás - NÉMETH, Dušan - DUSZA, Ján - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Nanoindentation induced deformation anisotropy in beta-Si₃N₄ ceramic crystals. In *Journal of the European Ceramic Society*, 2016, vol. 36, no. 12, p. 3059-3066. (2015: 2.933 - IF, Q1 - JCR, 1.135 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2015.11.028>

Citácie:

1. [1.1] KORNEEVA, E. A. - IBRAYEVA, A. - VUUREN, A. Janse van - KURPASKA, L. - CLOZEL, M. - MULEWSKA, K. - KIRILKIN, N. S. - SKURATOV, V. A. - NEETHLING, J. - ZDOROVETS, M. Nanoindentation testing of Si₃N₄ irradiated with swift heavy ions. In *JOURNAL OF NUCLEAR MATERIALS*. ISSN 0022-3115, 2021, vol. 555, no., pp. Dostupné na: <https://doi.org/10.1016/j.jnucmat.2021.153120>, Registrované v: WOS
2. [1.1] LI, Xiaoqiang - MALZBENDER, Juergen - YAN, Gang - GONZALEZ-JULIAN, Jesus - SCHWAIGER, Ruth. A combined experimental and modeling study revealing the anisotropic mechanical response of Ti₂AlN MAX phase. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 12, pp. 5872-5881. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.015>, Registrované v: WOS
3. [1.1] TANG, Peng - FENG, Junyuan - WAN, Zhenping - HUANG, Xiaofang - YANG, Shu - LU, Longsheng - ZHONG, Xichun. Influence of grain orientation on hardness anisotropy and dislocation behavior of AlN ceramic in nanoindentation. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 14, pp. 20298-20309. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.038>, Registrované v: WOS
4. [1.1] YAN, Gang - MALZBENDER, Juergen - FU, Shuo - GROSS, Juergen Peter - YU, Shicheng - EICHEL, Rudiger-A - SCHWAIGER, Ruth. Fracture behavior of solid electrolyte LATP material based on micro-pillar splitting method. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 10, pp. 5240-5247. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.04.026>, Registrované v: WOS

ADCA98

CSANÁDI, Tamás** - GALL, Marián - VOJTKO, Marek - KOVALČÍKOVÁ, Alexandra - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol. Micro scale fracture strength of grains and grain boundaries in polycrystalline La-doped beta-Si₃N₄ ceramics. In *Journal of the European Ceramic Society*, 2020, vol. 40, no. 14, p. 4783-4791. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.04.033>

Citácie:

1. [1.1] EMDADI, Arezoo - ZAEEM, Mohsen Asle. Phase-field modeling of crack propagation in polycrystalline materials. In COMPUTATIONAL MATERIALS SCIENCE. ISSN 0927-0256, 2021, vol. 186, no., pp. Dostupné na: <https://doi.org/10.1016/j.commatsci.2020.110057>., Registrované v: WOS
2. [1.1] LEE, Chae-Eon - KIM, Mi-Ju - PARK, Young-Jo - KO, Jae-Woong - KIM, Ha-Neul - BAE, Sunghwan. The effect of silicon particle size on the characteristics of porous sintered reaction bonded silicon nitride. In INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS. ISSN 0263-4368, 2021, vol. 101, no., pp. Dostupné na: <https://doi.org/10.1016/j.ijrmhm.2021.105647>., Registrované v: WOS
3. [1.1] YANG, Ping - WU, Shuangshuang - WU, Haonan - LU, Donglin - ZOU, Wenjing - CHU, Luojing - SHAO, Yuanzhi - WU, Shanghua. Prediction of bending strength of Si(3)N4 using machine learning. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 17, pp. 23919-23926. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.100>., Registrované v: WOS

ADCA99

CZÍMEROVÁ, Adriana - JANKOVIČ, Ľuboš - MADEJOVÁ, Jana - ČEKLOVSKÝ, Alexander. Unique photoactive nanocomposites based on rhodamine 6G/polymer/montmorillonite hybrid systems. In Journal of Polymer Science. Part B. Polymer Physics, 2013, vol. 51, no. 23, p. 1672-1679. (2012: 2.221 - IF, Q2 - JCR, 1.067 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0887-6266. Dostupné na: <https://doi.org/10.1002/polb.23382> (APVV-0291-11 : Fotoaktívne hybridné nanomateriály s luminiscenčnými a antimikrobiálnymi vlastnosťami. APVV-0362-10 : Organoily a ich kompozity s polymérmi)

Citácie:

1. [1.1] AHMED, Waqas - GUL, Sagheer - AWAIS, Muhammad - UL HASSAN, Zia - JABEEN, Saira - FAROOQ, Muhammad. A review: novel nanohybrids of epoxy/polyamide with carbon nanotube/nano-diamond. In POLYMER-PLASTICS TECHNOLOGY AND MATERIALS, 2021, vol. 60, no. 6, pp. 579-600. ISSN 2574-0881. Dostupné na: <https://doi.org/10.1080/25740881.2020.1819314>., Registrované v: WOS
2. [1.1] BARLOG, M. - PALKOVA, H. - BUJDAK, J. Luminescence of a laser dye in organically-modified layered silicate pigments. In DYES AND PIGMENTS, 2021, vol. 191, no., pp. ISSN 0143-7208. Dostupné na: <https://doi.org/10.1016/j.dyepig.2021.109380>., Registrované v: WOS

ADCA100

CZÍMEROVÁ, Adriana - JANKOVIČ, Ľuboš - BUJDAK, Juraj. Effect of the exchangeable cations on the spectral properties of methylene blue in clay dispersions. In Journal of Colloid and Interface Science, 2004, vol. 274, no. 1, p. 126-132. ISSN 0021-9797. Dostupné na: <https://doi.org/10.1016/j.jcis.2003.10.025>

Citácie:

1. [1.1] ISHIDA, Yohei. Manipulation of Precise Molecular Arrangements and Their Photochemical Properties on Inorganic Surfaces via Multiple Electrostatic Interactions. In BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN, 2021, vol. 94, no. 12, pp. 2886-2897. ISSN 0009-2673. Dostupné na: <https://doi.org/10.1246/bcsj.20210303>., Registrované v: WOS
2. [1.1] KHANSILI, Nishtha - KRISHNA, Prayaga Murali. Sensitive Metal Oxide-Clay Nanocomposite Colorimetric Sensor Development for Aflatoxin Detection in Foods: Corn and Almond. In ACS OMEGA, 2021, vol. 6, no. 23, pp. 14911-14925. ISSN 2470-1343. Dostupné na: <https://doi.org/10.1021/acsomega.1c00750>., Registrované v: WOS

ADCA101

ČÁRSKY, Petr - ČURÍK, Roman - VARGA, Štefan. Efficient evaluation of Coulomb integrals in a mixed Gaussian and plane-wave basis using the density fitting and Cholesky decomposition. In Journal of Chemical Physics, 2012, vol. 136, no. 11, p. 114105-1-114105-8. (2011: 3.333 - IF, Q1 - JCR, 1.845 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3693411>

Citácie:

1. [1.1] SKOMOROWSKI, Wojciech - KRYLOV, Anna I. Feshbach-Fano approach for calculation of Auger decay rates using equation-of-motion coupled-cluster wave functions. I. Theory and implementation. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 154, no. 8, pp. ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0036976>., Registrované v: WOS

ADCA102

ČAVAJDA, V. - UHLÍK, Peter - DERKOWSKI, Arkadiusz - ČAPLOVIČOVÁ, Mária - MADEJOVÁ, Jana - MIKULA, M. - IFKA, Tomáš. Influence of grinding and sonication on the crystal structure of talc. In Clays and Clay Minerals, 2015, vol. 63, n. 4, p. 311-327. (2014: 1.228 - IF, Q3 - JCR, 0.672 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2015.0630405>

Citácie:

1. [1.1] ZUO, Huijie - LIU, Juyang - HUANG, Dong - BAI, Yuanbin - CUI, Liang - PAN, Li - ZHANG, Kunyu - WANG, Huaiyuan. Sustainable and high-performance ternary blends from polylactide, CO₂-based polyester and microbial polyesters with different chemical structure. In

- JOURNAL OF POLYMER SCIENCE*, 2021, vol. 59, no. 14, pp. 1578-1595. ISSN 2642-4150.
Dostupné na: <https://doi.org/10.1002/pol.20210175>, Registrované v: WOS
- ADCA103 ČERNÁ, Andrea - CHROMČIKOVÁ, Mária - MACHÁČEK, Jan - HRUŠKA, Branislav - LIŠKA, Marek**. Viscosity and configuration entropy of glasses for CHROMPIC vitrification. In *Journal of Thermal Analysis and Calorimetry*, 2018, vol. 133, no. 1, p. 365-370. (2017: 2.209 - IF, Q2 - JCR, 0.587 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-017-6652-2>
Citácie:
1. [1.2] WALLING, Sam A. - GARDNER, Laura J. - PANG, H. K. Celine - MANN, Colleen - CORKHILL, Claire L. - MIKUSOVA, Alexandra - LICHVAR, Peter - HYATT, Neil C. Characterisation and durability of a vitrified wasteform for simulated chrompik iii waste. In *Journal of Nuclear Fuel Cycle and Waste Technology*, 2021-09-01, 19, 3, pp. 339-352. ISSN 17381894. Dostupné na: <https://doi.org/10.7733/jnfcwt.2021.19.3.339>, Registrované v: SCOPUS
- ADCA104 DASAN, Arish - ELSAYED, Hamada - KRAXNER, Jozef - GALUSEK, Dušan - COLOMBO, Paolo - BERNARDO, Enrico**. Engineering of silicone-based mixtures for the digital light processing of Akermanite scaffolds. In *Journal of the European Ceramic Society*, 2020, vol. 40, no. 7, p. 2566-2572. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.11.087>
Citácie:
1. [1.1] YANG, Jian - XU, Yaoyuan - JIANG, Wenhong - JIANG, Bo - HUANG, Yudong. The thermal transformation process and mechanical strength evolution of ceramifiable silicone composites. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 15, pp. 21276-21284. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.134>, Registrované v: WOS
- ADCA105 DASAN, Arish - ELSAYED, Hamada - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico**. Hierarchically porous 3D-printed akermanite scaffolds from silicones and engineered fillers. In *Journal of the European Ceramic Society*, 2019, vol. 39, no. 14, p. 4445-4449. (2018: 4.029 - IF, Q1 - JCR, 1.219 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.06.021>
Citácie:
1. [1.1] LU, Fengling - WU, Ronghuan - SHEN, Miaoda - XIE, Lijun - LIU, Mengtao - LI, Yifan - XU, Sanzhong - WAN, Li - YANG, Xianyan - GAO, Changyou - GOU, Zhongru. Rational design of bioceramic scaffolds with tuning pore geometry by stereolithography: Microstructure evaluation and mechanical evolution. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 2, pp. 1672-1682. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.002>, Registrované v: WOS
2. [1.1] MOHAMMADI, Hossein - SEPANTAFAR, Mohammadmajid - MUHAMAD, Norhamidi - ABU BAKAR SULONG. How Does Scaffold Porosity Conduct Bone Tissue Regeneration? In *ADVANCED ENGINEERING MATERIALS*. ISSN 1438-1656, 2021, vol. 23, no. 10, pp. Dostupné na: <https://doi.org/10.1002/adem.202100463>, Registrované v: WOS
3. [1.1] RAHIMNEJAD, Maedeh - REZVANINEJAD, Raziyehsadat - REZVANINEJAD, Rayehhossadat - FRANCA, Rodrigo. Biomaterials in bone and mineralized tissue engineering using 3D printing and bioprinting technologies. In *BIOMEDICAL PHYSICS & ENGINEERING EXPRESS*. ISSN 2057-1976, 2021, vol. 7, no. 6, pp. Dostupné na: <https://doi.org/10.1088/2057-1976/ac21ab>, Registrované v: WOS
- ADCA106 DECARREAU, Alain - VIGIER, Nathalie - PÁLKOVÁ, Helena - PETIT, Sabine - VIEILLARD, Philippe - FONTAINE, Claude. Partitioning of lithium between smectite and solution: An experimental approach. In *Geochimica et Cosmochimica Acta*, 2012, vol. 85, p. 314-325. (2011: 4.259 - IF, Q1 - JCR, 3.050 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0016-7037. Dostupné na: <https://doi.org/10.1016/j.gca.2012.02.018>
Citácie:
1. [1.1] COFFEY, D. M. - MUNK, L. A. - IBARRA, D. E. - BUTLER, K. L. - BOUTT, D. F. - JENCKES, J. Lithium Storage and Release From Lacustrine Sediments: Implications for Lithium Enrichment and Sustainability in Continental Brines. In *GEOCHEMISTRY GEOPHYSICS GEOSYSTEMS*, 2021, vol. 22, no. 12, pp. Dostupné na: <https://doi.org/10.1029/2021GC009916>, Registrované v: WOS
2. [1.1] GOUT, Thomas L. - BOHLIN, Madeleine S. - TIPPER, Edward T. - LAMPRONTI, Giulio I. - FARNAN, Ian. Temperature dependent lithium isotope fractionation during glass dissolution. In *GEOCHIMICA ET COSMOCHIMICA ACTA*, 2021, vol. 313, no., pp. 133-154. ISSN 0016-7037. Dostupné na: <https://doi.org/10.1016/j.gca.2021.09.005>, Registrované v: WOS
3. [1.1] HE, Mao-Yong - DONG, Ji-Bao - JIN, Zhangdong - LIU, Chun-Yao - XIAO, Jun - ZHANG, Fei - SUN, He - ZHAO, Zhi-Qi - GOU, Long-Fei - LIU, Wei-Guo - LUO, Chong-Guang - SONG, You-Gui - MA, Long - DENG, Li. Pedogenic processes in loess-paleosol sediments: Clues from Li isotopes of leachate in Luochuan loess. In *GEOCHIMICA ET COSMOCHIMICA ACTA*,

- 2021, vol. 299, no., pp. 151-162. ISSN 0016-7037. Dostupné na: <https://doi.org/10.1016/j.gca.2021.02.021>, Registrované v: WOS
4. [1.1] LINDSEY, Bruce D. - BELITZ, Kenneth - CRAVOTTA, Charles A. - TOCCALINO, Patricia L. - DUBROVSKY, Neil M. Lithium in groundwater used for drinking-water supply in the United States. In SCIENCE OF THE TOTAL ENVIRONMENT, 2021, vol. 767, no., pp. ISSN 0048-9697. Dostupné na: <https://doi.org/10.1016/j.scitotenv.2020.144691>, Registrované v: WOS
5. [1.1] SEYEDALI, M. - COOGAN, L. A. - GILLIS, K. M. Li-isotope exchange during low-temperature alteration of the upper oceanic crust at DSDP Sites 417 and 418. In GEOCHIMICA ET COSMOCHIMICA ACTA, 2021, vol. 294, no., pp. 160-173. ISSN 0016-7037. Dostupné na: <https://doi.org/10.1016/j.gca.2020.11.023>, Registrované v: WOS
- ADCA107 DRÁBIK, Milan - GÁLIKOVÁ, Ľubica - SCHOLTZOVÁ, Eva - HADZIMOVÁ, Eva. Thermoanalytical events and enthalpies of selected phases and systems of the chemistry and technology of concrete. Part I. Calcium-silicate-aluminate-sulfate hydrates. In Ceramics-Silikáty, 2014, vol. 58, no. 3, p. 184-187. (2013: 0.434 - IF, Q3 - JCR, 0.289 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] KOSTOVA, B. - PETKOVA, V. - KOSTOV-KYTIN, VI - TZVETANOVA, Y. - AVDEEV, G. TG/DTG-DSC and high temperature in-situ XRD analysis of natural thaumasite. In THERMOCHIMICA ACTA. ISSN 0040-6031, 2021, vol. 697, no., pp. Dostupné na: <https://doi.org/10.1016/j.tca.2021.178863>, Registrované v: WOS
- ADCA108 DRÁBIK, Milan - GÁLIKOVÁ, Ľubica - SCHOLTZOVÁ, Eva - HADZIMOVÁ, Eva. Thermoanalytical events and enthalpies of phases and systems of the chemistry and technology of concrete. Part II. Hydrated cements. In Ceramics-Silikáty, 2014, vol. 58, no. 4, p. 243-248. (2013: 0.434 - IF, Q3 - JCR, 0.289 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] KOSTOVA, B. - PETKOVA, V. - KOSTOV-KYTIN, VI - TZVETANOVA, Y. - AVDEEV, G. TG/DTG-DSC and high temperature in-situ XRD analysis of natural thaumasite. In THERMOCHIMICA ACTA, 2021, vol. 697, no., pp. ISSN 0040-6031. Available on: <https://doi.org/10.1016/j.tca.2021.178863>, Registrované v: WOS
- ADCA109 DRACÍNSKÝ, Martin** - BUCHTA, Michal - BUDĚŠÍNSKÝ, Miloš - VACEK-CHOCHOLOUŠOVÁ, Jana - STARÁ, Irena G. - STARÝ, Ivo - MALKINA, Oľga**. Dihydrogen contacts observed by through-space indirect NMR coupling. In Chemical Science, 2018, vol. 9, no. 38, p. 7437-7446. (2017: 9.063 - IF, Q1 - JCR, 4.508 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 2041-6520. Dostupné na: <https://doi.org/10.1039/c8sc02859a>
- Citácie:
1. [1.1] JAZWINSKI, Jaroslaw. Indirect spin-spin coupling constants across noncovalent bonds. In ANNUAL REPORTS ON NMR SPECTROSCOPY, VOL 104. ISSN 0066-4103, 2021, vol. 104, no., pp. 1-73. Dostupné na: <https://doi.org/10.1016/bs.arnmr.2021.05.002>, Registrované v: WOS
- ADCA110 DRDLÍKOVÁ, K. - KLEMENT, Róbert - DRDLÍK, Daniel - GALUSEK, Dušan - MACA, Karel**. Processing and properties of luminescent Cr³⁺ doped transparent alumina ceramics. In Journal of the European Ceramic Society, 2020, vol. 40, no. 7, p. 2573-2580. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.11.010>
- Citácie:
1. [1.1] LIU, Guiyuan - WANG, Bo - LI, Jinkai - CAO, Bingqiang - LU, Yizhong - LIU, Zongming. Research progress of gadolinium aluminum garnet based optical materials. In PHYSICA B-CONDENSED MATTER. ISSN 0921-4526, 2021, vol. 603, no., pp. Dostupné na: <https://doi.org/10.1016/j.physb.2020.412775>, Registrované v: WOS
2. [1.1] RATZKER, Barak - WAGNER, Avital - FAVELUKIS, Bar - GOLDRING, Sharone - KALABUKHOV, Sergey - FRAGE, Nachum. Optical properties of transparent polycrystalline ruby (Cr:Al₂O₃) fabricated by high-pressure spark plasma sintering. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 6, pp. 3520-3526. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.01.022>, Registrované v: WOS
3. [1.1] ROJAS-HERNANDEZ, Rocio Estefania - RUBIO-MARCOS, Fernando - FRANCISCO FERNANDEZ, Jose - HUSSAINOVA, Irina. Aluminate-Based Nanostructured Luminescent Materials: Design of Processing and Functional Properties. In MATERIALS, 2021, vol. 14, no. 16, pp. Dostupné na: <https://doi.org/10.3390/ma14164591>, Registrované v: WOS
4. [1.1] SHCHERBAKOVA, G. I. - SHAUKHIN, M. K. - KIRILIN, A. D. - STOROZHENKO, P. A. Features of the molecular structure of organochromiumoxane yttriumoxane alumoxane oligomers. In RUSSIAN CHEMICAL BULLETIN. ISSN 1066-5285, 2021, vol. 70, no. 7, pp. 1275-1280. Dostupné na: <https://doi.org/10.1007/s11172-021-3211-6>, Registrované v: WOS
5. [1.1] SHCHERBAKOVA, Galina I. - SHAUKHIN, Maxim K. - KUTINOVA, Natalia B. -

- STOROZHENKO, Pavel A. - KIRILIN, Aleksey D. - VARFOLOMEEV, Maxim S. - DRACHEV, Aleksander I. - ASHMARIN, Artem A. Condensation of Organoyttriumoxanalumoxanes with Chromium Acetylacetonate. In JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS. ISSN 1574-1443, 2021, vol. 31, no. 8, pp. 3460-3480. Dostupné na: <https://doi.org/10.1007/s10904-021-02026-w.>, Registrované v: WOS
6. [1.1] STOJADINOVIC, Stevan - CIRIC, Aleksandar. Highly enhanced green emission of Mn²⁺ in Al₂O₃ coatings formed by plasma electrolytic oxidation via efficient Eu²⁺ → Mn²⁺ and Ce³⁺ → Mn²⁺ energy transfer. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 18, pp. 23472-23485. Dostupné na: <https://doi.org/10.1007/s10854-021-06836-z.>, Registrované v: WOS
7. [1.1] XU, Dayin - ZHEN, Congmian - ZHAO, Hao. Microstructure and photoluminescence properties of anodized aluminum oxide films treated by argon ion. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 10, pp. 14382-14389. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.02.017.>, Registrované v: WOS
- ADCA111 DRDLÍKOVÁ, K. - KLEMENT, Róbert - HADRABA, Hynek - DRDLÍK, Daniel - GALUSEK, Dušan - MACA, Karel. Luminescent Eu³⁺-doped transparent alumina ceramics with high hardness. In Journal of the European Ceramic Society, 2017, vol. 37, no. 14, p. 4271-4277. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.05.007>
Citácie:
1. [1.1] OPARINA, I. B. - KOLMAKOV, A. G. Methods for Obtaining Transparent Polycrystalline Ceramics from Aluminum Oxide (Review Article). In REFRACTORIES AND INDUSTRIAL CERAMICS. ISSN 1083-4877, 2021, vol. 62, no. 2, pp. 196-201. Dostupné na: <https://doi.org/10.1007/s11148-021-00582-9.>, Registrované v: WOS
- ADCA112 DRDLÍKOVÁ, K. - KLEMENT, Róbert - DRDLÍK, Daniel - SPUSTA, Tomáš - GALUSEK, Dušan - MACA, Karel. Luminescent Er³⁺ doped transparent alumina ceramics. In Journal of the European Ceramic Society, 2017, vol. 37, no. 7, p. 2695-2703. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.02.017>
Citácie:
1. [1.1] DOBRETSOVA, Elena - ZHMYKHOV, Vadim - KUZNETSOV, Sergey - CHIKULINA, Irina - NIKOVA, Marina - TARALA, Vitaly - VAKALOV, Dmitry - KHMELNITSKY, Roman - PYNENKOV, Alexander - NISHCHEV, Konstantin - TSVETKOV, Vladimir. The influence of the Sc³⁺ dopant on the transmittance of (Y, Er)(3)Al₅O₁₂ ceramics. In DALTON TRANSACTIONS. ISSN 1477-9226, 2021, vol. 50, no. 40, pp. 14252-14256. Dostupné na: <https://doi.org/10.1039/d1dt02419a.>, Registrované v: WOS
2. [1.1] PABST, Willi - HRIBALOVA, Sona. Light scattering models for describing the transmittance of transparent and translucent alumina and zirconia ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 3, pp. 2058-2075. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.025.>, Registrované v: WOS
3. [1.1] SAFRONOVA, N. A. - YAVETSKIY, R. P. - KRYZHANOVSKA, O. S. - DOBROTVORSKA, M. V. - BALABANOV, A. E. - VORONA, I. O. - TOLMACHEV, A. V. - BAUMER, V. N. - MATOLINOVA, I. - KOSYANOV, D. Yu. - SHICHALIN, O. O. - PAPYNOV, E. K. - HAU, S. - GHEORGHE, C. A novel IR-transparent Ho³⁺ : Y₂O₃-MgO nanocomposite ceramics for potential laser applications. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 1, pp. 1399-1406. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.08.263.>, Registrované v: WOS
- ADCA113 DU, Weichao** - SLANÝ, Michal* - WANG, Xiangyun - CHEN, Gang - ZHANG, Jie. The inhibition property and mechanism of a novel low molecular weight zwitterionic copolymer for improving wellbore stability. In Polymers : Open Access Polymer Science Journal, 2020, vol. 12, no. 3, p. 708-1-708-13. (2019: 3.426 - IF, Q1 - JCR, 0.704 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2073-4360. Dostupné na: <https://doi.org/10.3390/polym12030708>
Citácie:
1. [1.1] ABOELFETOH, Eman F. - ELABEDIEN, Mohamed E. Zain - EBEID, El-Zeiny M. Effective treatment of industrial wastewater applying SBA-15 mesoporous silica modified with graphene oxide and hematite nanoparticles. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104817.>, Registrované v: WOS
2. [1.1] AHMAD, Maqsood - ALI, Imtiaz - BINS SAFRI, Muhammad Syahmi - BIN MOHAMMAD FAIZ, Mohammad Arif Izzuddin - ZAMIR, Asif. Synergetic Effects of Graphene Nanoplatelets/Tapioca Starch on Water-Based Drilling Muds: Enhancements in Rheological and Filtration Characteristics. In POLYMERS, 2021, vol. 13, no. 16, pp. Dostupné na: <https://doi.org/10.3390/polym13162655.>, Registrované v: WOS
3. [1.1] AHMAD, Munir - REHMAN, Wajid - KHAN, Mohammad Mansoob - QURESHI,

- Muhammad Tauseef - GUL, Anadil - HAQ, Sirajul - ULLAH, Rizwan - RAB, Abdur - MENAA, Farid. Phytogenic fabrication of ZnO and gold decorated ZnO nanoparticles for photocatalytic degradation of Rhodamine B. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104725>, Registrované v: WOS
4. [1.1] AKHTAR, Athar N. - MURTAZA, G. - SHAFIQUE, M. Ahsan - HAIDYRAH, Ahmed S. Effect of Cu Ions Implantation on Structural, Electronic, Optical and Dielectric Properties of Polymethyl Methacrylate (PMMA). In *POLYMERS*, 2021, vol. 13, no. 6, pp. Dostupné na: <https://doi.org/10.3390/polym13060973>, Registrované v: WOS
5. [1.1] ARIFIN, N. F. T. - YUSOF, N. - NORDIN, N. A. H. M. - BILAD, M. Roil - JAAFAR, J. - ISMAIL, A. F. - AZIZ, F. - SALLEH, W. N. W. Comparison of different activated agents on biomass-derived graphene towards the hybrid nanocomposites with zeolitic imidazolate framework-8 for room temperature hydrogen storage. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105118>, Registrované v: WOS
6. [1.1] BHAT, Akash P. - GOGATE, Parag R. Cavitation-based pre-treatment of wastewater and waste sludge for improvement in the performance of biological processes: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104743>, Registrované v: WOS
7. [1.1] CHOWDHURY, Arif - KUMARI, Sunita - KHAN, Afaq Ahmad - HUSSAIN, Sahid. Synthesis of mixed phase crystalline CoNi2S4 nanomaterial and selective mechanism for adsorption of Congo red from aqueous solution. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106554>, Registrované v: WOS
8. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>, Registrované v: WOS
9. [1.1] CUKROWICZ, Sylwia - SITARZ, Maciej - KORNAUS, Kamil - KACZMARSKA, Karolina - BOBROWSKI, Artur - GUBERNAT, Agnieszka - GRABOWSKA, Beata. Organobentonites Modified with Poly(Acrylic Acid) and Its Sodium Salt for Foundry Applications. In *MATERIALS*, 2021, vol. 14, no. 8, pp. Dostupné na: <https://doi.org/10.3390/ma14081947>, Registrované v: WOS
10. [1.1] DA COSTA, Talles Barcelos - CARLOS DA SILVA, Meuris Gurgel - ADEODATO VIEIRA, Melissa Gurgel. Lanthanum biosorption using sericin/alginate particles crosslinked by poly (vinyl alcohol): Kinetic, cation exchange, and desorption studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105551>, Registrované v: WOS
11. [1.1] DE SOUZA, Ana Paula Nazar - LICEA, Yordy E. - COLACO, Marcos V. - SENRA, Jaqueline D. - CARVALHO, Naledia M. F. Green iron oxides/amino-functionalized MCM-41 composites as adsorbent for anionic azo dye: Kinetic and isotherm studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105062>, Registrované v: WOS
12. [1.1] GONZALEZ-LOPEZ, Martin Esteban - LAUREANO-ANZALDO, Cesar Mario - PEREZ-FONSECA, Aida Alejandra - GOMEZ, Cesar - ROBLEDOR-ORTIZ, Jorge Ramon. Congo red adsorption with cellulose-graphene nanoplatelets beads by differential column batch reactor. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105029>, Registrované v: WOS
13. [1.1] HOSHYARMANESH, Parisa - MOHAMMADBAGHERI, Zahra - RAHMATI, Abbas. Synthesis and application of bisurea derivatives: Effect of structural differences on the gelation properties. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105220>, Registrované v: WOS
14. [1.1] HUO, Jin-hua - YU, Bai-song - PENG, Zhi-gang - WU, Zhan-sheng - ZHANG, Luo-hong. Thermal control effects and mechanism of slag and fly ash on heat development of cement slurry used in hydrate formation. In *JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING*. ISSN 1875-5100, 2021, vol. 91, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.103967>, Registrované v: WOS
15. [1.1] JEYASEELAN, Antonysamy - ALBAQAMI, Munirah D. - VISWANATHAN, Natrayasamy. Facile design of metal ion fabricated benzene-1,3,5-tricarboxylic acid based metal organic frameworks for defluoridation of water. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na:

- <https://doi.org/10.1016/j.jece.2020.104995>., Registrované v: WOS
16. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>., Registrované v: WOS
 17. [1.1] LA NOCE, Michele - LO FARO, Alessandro - SCIUTO, Gaetano. Clay-Based Products Sustainable Development: Some Applications. In SUSTAINABILITY, 2021, vol. 13, no. 3, pp. Dostupné na: <https://doi.org/10.3390/su13031364>., Registrované v: WOS
 18. [1.1] LI, Hongping - YANG, Lanwen - CAO, Jianxin - NIE, Chenchen - LIU, Hao - TIAN, Juan - CHEN, Wenxing - GENG, Pinglan - XIE, Guiming. Water-Preserving and Salt-Resistant Slow-Release Fertilizers of Polyacrylic Acid-Potassium Humate Coated Ammonium Dihydrogen Phosphate. In POLYMERS, 2021, vol. 13, no. 17, pp. Dostupné na: <https://doi.org/10.3390/polym13172844>., Registrované v: WOS
 19. [1.1] LIU, Zhihan - CAI, Xiunan - FAN, Songlin - ZHANG, Yanjuan - HU, Huayu - HUANG, Zuqiang - LIANG, Jing - QIN, Yuben. Preparation of a stable polyurethane sponge supported Sn-doped ZnO composite via double-template-regulated bionic mineralization for visible-light-driven photocatalytic degradation of tetracycline. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105541>., Registrované v: WOS
 20. [1.1] MISHRA, Gourav - MUKHOPADHYAY, Mausumi. Well dispersed CeO₂@HNTs nanofiller in the poly (vinyl chloride) membrane matrix and enhanced its antifouling properties and rejection performance. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104734>., Registrované v: WOS
 21. [1.1] MORAL-ZAMORANO, Maria - QUIJADA-GARRIDO, Isabel - SAN-MIGUEL, Veronica - SERRANO, Berna - BASELGA, Juan - HASHMI, Saud - STADLER, Florian J. - GARCIA-PENAS, Alberto. Concentration Effect over Thermoresponse Derived from Organometallic Compounds of Functionalized Poly(N-isopropylacrylamide-co-dopamine Methacrylamide). In POLYMERS, 2021, vol. 13, no. 22, pp. Dostupné na: <https://doi.org/10.3390/polym13223921>., Registrované v: WOS
 22. [1.1] MUHAMMED, Nasiru Salahu - OLAYIWOLA, Teslim - ELKATATNY, Salaheldin - HAQ, Bashirul - PATIL, Shirish. Insights into the application of surfactants and nanomaterials as shale inhibitors for water-based drilling fluid: A review. In JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 92, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.103987>., Registrované v: WOS
 23. [1.1] MUHAMMED, Nasiru Salahu - OLAYIWOLA, Teslim - ELKATATNY, Salaheldin. A review on clay chemistry, characterization and shale inhibitors for water-based drilling fluids. In JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING. ISSN 0920-4105, 2021, vol. 206, no., pp. Dostupné na: <https://doi.org/10.1016/j.petrol.2021.109043>., Registrované v: WOS
 24. [1.1] NONG, Yingyi - SUN, Jinlong - FU, Meng - CHEN, Huiwen - ZHANG, Zepeng. Effects of cationic modifier type on the structure and morphology of organo-montmorillonite and its application properties in a high-temperature white oil system. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105995>., Registrované v: WOS
 25. [1.1] PENG, Nian - MA, Tianshou - CHEN, Ping. Fully coupled thermal-hydro-mechanical model of pore pressure propagation around borehole with dynamic mudcake growth. In JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 96, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.104330>., Registrované v: WOS
 26. [1.1] PEREIRA, Wyllamanney da S. - DESTRO, Fabricio B. - GOZZO, Cipriano B. - LEITE, Edson R. - SCZANCOSKI, Julio C. Insight into the enhanced photocatalytic properties of AgBr/Ag₄P₂O₇ composites synthesized via in situ ion exchange reaction. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104889>., Registrované v: WOS
 27. [1.1] PIZARRO, Carmen - ESCUDEY, Mauricio - BRAVO, Camila - GACITUA, Manuel - PAVEZ, Lynda. Sulfate Kinetics and Adsorption Studies on a Zeolite/Polyammonium Cation Composite for Environmental Remediation. In MINERALS, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020180>., Registrované v: WOS
 28. [1.1] RASOULZADEH, Hassan - SHEIKHMOHAMMADI, Amir - ABTAHI, Mehrnoosh - ROSHAN, Bahram - JOKAR, Rezvan. Eco-friendly rapid removal of palladium from aqueous solutions using alginate-diatomite magnano composite. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105954>., Registrované v: WOS
 29. [1.1] REGHIOUA, Abdallah - BARKAT, Djamel - JAWAD, Ali H. - ABDULHAMEED, Ahmed

- Saud - AL-KAHTANI, Abdullah A. - ALOTHMAN, Zeid A. Parametric optimization by Box- Behnken design for synthesis of magnetic chitosan-benzil/ZnO/Fe₃O₄ nanocomposite and textile dye removal. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105166>, Registrované v: WOS
30. [1.1] SAKTI, Satya Candra Wibawa - WIJAYA, Rizki Ainuna - INDRASARI, Nindayu - FAHMI, Mochamad Zakki - WIDATI, Alfa Akustia - ABDULLOH - NURYONO - CHEN, Chun-Hu. Magnetic hollow buoyant alginate beads achieving rapid remediation of oil contamination on water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104935>, Registrované v: WOS
31. [1.1] SHAN, Wenjun - HUAN, Xinglong - DOU, Fengke - ZHANG, Hui - WANG, Wei - TAO, Shixian - SUN, Jinsheng. PROPERTIES EVALUATION OF 240 degrees C THERMOSTABLE AND RECYCLABLE FOAM DRILLING FLUIDS. In FRESSENIUS ENVIRONMENTAL BULLETIN. ISSN 1018-4619, 2021, vol. 30, no. 4A, pp. 4515-4526., Registrované v: WOS
32. [1.1] SUN, Liwei - YIN, Meilin - TANG, Shaokun. Bi-functionalized ionic liquid-grafted mesoporous alumina: Synthesis, characterization and CO₂/N₂ selectivity. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105829>, Registrované v: WOS
33. [1.1] TARASOVA, Natalia - ZANIN, Alexey - KRIVOBORODOV, Efrem - TOROPYGIN, Ilya - PASCAL, Ekaterina - MEZHUEV, Yaroslav. The New Approach to the Preparation of Polyacrylamide-Based Hydrogels: Initiation of Polymerization of Acrylamide with 1,3-Dimethylimidazolium (Phosphonooxy-)Oligosulphanide under Drying Aqueous Solutions. In POLYMERS, 2021, vol. 13, no. 11, pp. Dostupné na: <https://doi.org/10.3390/polym13111806>, Registrované v: WOS
34. [1.1] TORRES-AVALOS, Josue A. - CAJERO-ZUL, Leonardo R. - VAZQUEZ-LEPE, Milton - LOPEZ-DELLAMARY, Fernando A. - MARTINEZ-RICHA, Antonio - BARRERA-RIVERA, Karla A. - LOPEZ-SERRANO, Francisco - NUNO-DONLUCAS, Sergio M. Synthesis of Poly(methacrylic acid-co-butyl acrylate) Grafted onto Functionalized Carbon Nanotube Nanocomposites for Drug Delivery. In POLYMERS, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/polym13040533>, Registrované v: WOS
35. [1.1] WIJAYA, Karna - KURNIAWAN, Muhammad Ahan - SAPUTRI, Wahyu Dita - TRISUNARYANTI, Wega - MIRZAN, Mohammad - HARIANI, Poedji Loekitowati - TIKOALU, Alfrets Daniel. Synthesis of nickel catalyst supported on ZrO₂/SO₄ pillared bentonite and its application for conversion of coconut oil into gasoline via hydrocracking process. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105399>, Registrované v: WOS
36. [1.1] YOUSEFI, Mahmood - GHOLAMI, Mitra - OSKOEI, Vahide - MOHAMMADI, Ali Akbar - BAZIAR, Mansour - ESRAFI, Ali. Comparison of LSSVM and RSM in simulating the removal of ciprofloxacin from aqueous solutions using magnetization of functionalized multi-walled carbon nanotubes: Process optimization using GA and RSM techniques. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105677>, Registrované v: WOS
- ADCA114 DU, Weichao** - WANG, Xiangyun - CHEN, Gang - ZHANG, Jie - SLANÝ, Michal**. Synthesis, property and mechanism analysis of a novel polyhydroxy organic amine shale hydration inhibitor. In MINERALS-BASEL, 2020, vol. 10, no. 2, p. 128-1-128-14. (2019: 2.380 - IF, Q2 - JCR, 0.494 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2075-163X. Dostupné na: <https://doi.org/10.3390/min10020128>
- Citácie:
1. [1.1] ABOELFETOH, Eman F. - ELABEDIEN, Mohamed E. Zain - EBEID, El-Zeiny M. Effective treatment of industrial wastewater applying SBA-15 mesoporous silica modified with graphene oxide and hematite nanoparticles. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104817>, Registrované v: WOS
2. [1.1] AHMAD, Munir - REHMAN, Wajid - KHAN, Mohammad Mansoor - QURESHI, Muhammad Tauseef - GUL, Anadil - HAQ, Sirajul - ULLAH, Rizwan - RAB, Abdur - MENAA, Farid. Phytogenic fabrication of ZnO and gold decorated ZnO nanoparticles for photocatalytic degradation of Rhodamine B. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104725>, Registrované v: WOS
3. [1.1] ARIFIN, N. F. T. - YUSOF, N. - NORDIN, N. A. H. M. - BILAD, M. Roil - JAAFAR, J. - ISMAIL, A. F. - AZIZ, F. - SALLEH, W. N. W. Comparison of different activated agents on biomass-derived graphene towards the hybrid nanocomposites with zeolitic imidazolate framework-8 for room temperature hydrogen storage. In JOURNAL OF ENVIRONMENTAL

- CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105118>, Registrované v: WOS*
4. [1.1] CRISTIANI, Cinzia - BELLOTTO, Maurizio - DOTELLI, Giovanni - LATORRATA, Saverio - RAMIS, Gianguido - GALLO STAMPINO, Paola - ZUBIANI, Elena Maria Iannicelli - FINOCCHIO, Elisabetta. Rare Earths (La, Y, and Nd) Adsorption Behaviour towards Mineral Clays and Organoclays: Monoionic and Trionic Solutions. In *MINERALS*, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.3390/min11010030>, Registrované v: WOS
 5. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>, Registrované v: WOS*
 6. [1.1] DE SOUZA, Ana Paula Nazar - LICEA, Yordy E. - COLACO, Marcos V. - SENRA, Jaqueline D. - CARVALHO, Naledia M. F. Green iron oxides/amino-functionalized MCM-41 composites as adsorbent for anionic azo dye: Kinetic and isotherm studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105062>, Registrované v: WOS*
 7. [1.1] HOSHYARMANESH, Parisa - MOHAMMADBAGHERI, Zahra - RAHMATI, Abbas. Synthesis and application of bisurea derivatives: Effect of structural differences on the gelation properties. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105220>, Registrované v: WOS*
 8. [1.1] HUO, Jin-hua - YU, Bai-song - PENG, Zhi-gang - WU, Zhan-sheng - ZHANG, Luo-hong. Thermal control effects and mechanism of slag and fly ash on heat development of cement slurry used in hydrate formation. In *JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 91, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.103967>, Registrované v: WOS*
 9. [1.1] JEYASEELAN, Antonysamy - ALBAQAMI, Munirah D. - VISWANATHAN, Natrayasamy. Facile design of metal ion fabricated benzene-1,3,5-tricarboxylic acid based metal organic frameworks for defluoridation of water. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104995>, Registrované v: WOS*
 10. [1.1] LA NOCE, Michele - LO FARO, Alessandro - SCIUTO, Gaetano. Clay-Based Products Sustainable Development: Some Applications. In *SUSTAINABILITY*, 2021, vol. 13, no. 3, pp. Dostupné na: <https://doi.org/10.3390/su13031364>, Registrované v: WOS
 11. [1.1] MISHRA, Gourav - MUKHOPADHYAY, Mausumi. Well dispersed CeO₂@HNTs nanofiller in the poly (vinyl chloride) membrane matrix and enhanced its antifouling properties and rejection performance. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104734>, Registrované v: WOS*
 12. [1.1] MUHAMMED, Nasiru Salahu - OLAYIWOLA, Teslim - ELKATATNY, Salaheldin - HAQ, Bashirul - PATIL, Shirish. Insights into the application of surfactants and nanomaterials as shale inhibitors for water-based drilling fluid: A review. In *JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 92, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.103987>, Registrované v: WOS*
 13. [1.1] MUHAMMED, Nasiru Salahu - OLAYIWOLA, Teslim - ELKATATNY, Salaheldin. A review on clay chemistry, characterization and shale inhibitors for water-based drilling fluids. In *JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING. ISSN 0920-4105, 2021, vol. 206, no., pp. Dostupné na: <https://doi.org/10.1016/j.petrol.2021.109043>, Registrované v: WOS*
 14. [1.1] NONG, Yingyi - SUN, Jinlong - FU, Meng - CHEN, Huiwen - ZHANG, Zepeng. Effects of cationic modifier type on the structure and morphology of organo-montmorillonite and its application properties in a high-temperature white oil system. In *APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105995>, Registrované v: WOS*
 15. [1.1] PENG, Nian - MA, Tianshou - CHEN, Ping. Fully coupled thermal-hydro-mechanical model of pore pressure propagation around borehole with dynamic mudcake growth. In *JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 96, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.104330>, Registrované v: WOS*
 16. [1.1] PEREIRA, Wyllamanney da S. - DESTRO, Fabricio B. - GOZZO, Cipriano B. - LEITE, Edson R. - SCZANCOSKI, Julio C. Insight into the enhanced photocatalytic properties of AgBr/Ag₄P₂O₇ composites synthesized via in situ ion exchange reaction. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na:*

<https://doi.org/10.1016/j.jece.2020.104889>., Registrované v: WOS

17. [1.1] PIZARRO, Carmen - ESCUDEY, Mauricio - BRAVO, Camila - GACITUA, Manuel - PAVEZ, Lynda. Sulfate Kinetics and Adsorption Studies on a Zeolite/Polyammonium Cation Composite for Environmental Remediation. In MINERALS, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020180>., Registrované v: WOS

18. [1.1] RAHMAN, Muhammad M. - LAW, David W. - PATNAIKUNI, Indubhushan - GUNASEKARA, Chamila - YAMCHELOU, Morteza Tahmasebi. Low-Grade Clay as an Alkali-Activated Material. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/app11041648>., Registrované v: WOS

19. [1.1] RANA, Azeem - SALEH, Tawfik A. - ARFAJ, Mohammed K. Nanosilica modified with moringa extracts to get an efficient and cost-effective shale inhibitor in water-based drilling muds. In CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION. ISSN 0255-2701, 2021, vol. 168, no., pp. Dostupné na: <https://doi.org/10.1016/j.cep.2021.108589>., Registrované v: WOS

20. [1.1] REGHIOUA, Abdallah - BARKAT, Djamel - JAWAD, Ali H. - ABDULHAMEED, Ahmed Saud - AL-KAHTANI, Abdullah A. - ALOTHMAN, Zeid A. Parametric optimization by Box-Behnken design for synthesis of magnetic chitosan-benzil/ZnO/Fe₃O₄ nanocomposite and textile dye removal. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105166>., Registrované v: WOS

21. [1.1] SAKTI, Satya Candra Wibawa - WIJAYA, Rizki Ainuna - INDRASARI, Nindayu - FAHMI, Mochamad Zakki - WIDATI, Alfa Akustia - ABDULLOH - NURYONO - CHEN, Chun-Hu. Magnetic hollow buoyant alginate beads achieving rapid remediation of oil contamination on water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104935>., Registrované v: WOS

22. [1.1] SHAN, Wenjun - HUAN, Xinglong - DOU, Fengke - ZHANG, Hui - WANG, Wei - TAO, Shixian - SUN, Jinsheng. PROPERTIES EVALUATION OF 240 degrees C THERMOSTABLE AND RECYCLABLE FOAM DRILLING FLUIDS. In FRESENIUS ENVIRONMENTAL BULLETIN. ISSN 1018-4619, 2021, vol. 30, no. 4A, pp. 4515-4526., Registrované v: WOS

23. [1.1] SHEN, Xiulun - JIANG, Guancheng - LI, Xinliang - HE, Yinbo - YANG, Lili - CUI, Kaixiao - LI, Wuquan. Application of carboxylated cellulose nanocrystals as eco-friendly shale inhibitors in water-based drilling fluids. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 627, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127182>., Registrované v: WOS

24. [1.1] WIJAYA, Karna - KURNIAWAN, Muhammad Ahan - SAPUTRI, Wahyu Dita - TRISUNARYANTI, Wega - MIRZAN, Mohammad - HARIANI, Poedji Loekitowati - TIKOALU, Alfrets Daniel. Synthesis of nickel catalyst supported on ZrO₂/SO₄ pillared bentonite and its application for conversion of coconut oil into gasoline via hydrocracking process. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105399>., Registrované v: WOS

ADCA115 DUAN, Yusen** - ZHANG, Jingxian** - LI, Xiaoguang - BAI, Hainan - ŠAJGALÍK, Pavol - JIANG, Dongliang. High thermal conductivity silicon nitride ceramics prepared by pressureless sintering with ternary sintering additives. In International Journal of Applied Ceramic Technology, 2019, vol. 16, no. 4, p. 1399-1406. (2018: 1.074 - IF, Q2 - JCR, 0.371 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/ijac.13220>

Citácie:

1. [1.1] KONG, Jung Hoon - MA, Ho Jin - JUNG, Wook Ki - HONG, Juseop - JUN, Kisoo - KIM, Do Kyung. Self-reinforced and high-thermal conductivity silicon nitride by tailoring ?-? phase ratio with pressureless multi-step sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 13057-13064. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.169>., Registrované v: WOS

2. [1.1] WANG, Weide - YAO, Dongxu - LIANG, Hanqin - XIA, Yongfeng - ZUO, Kaihui - YIN, Jinwei - ZENG, Yu-Ping. Enhanced thermal conductivity in Si₃N₄ ceramics prepared by using ZrH₂ as an oxygen getter. In JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 855, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2020.157451>., Registrované v: WOS

ADCA116 DUSZA, Ján - KOVALČÍK, Jozef - HVIZDOŠ, Pavol - ŠAJGALÍK, Pavol - HNATKO, Miroslav - REECE, Michael J. Creep behavior of a carbon-derived Si₃N₄/SiC nanocomposite. In Journal of the European Ceramic Society, 2004, vol. 24, p. 3307-3315. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeuroceramsoc.2003.10.046>

Citácie:

1. [1.1] COULON, Antoine - FILHOL, Alexandre - PILLET, Gerard. Evaluation of ceramic mechanical properties by Impulse Excitation Techniques: Effects of heating temperature and

- cooling rate. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 7, pp. 9203-9213., Registrované v: WOS*
2. [1.2] YANG, Hailing - LI, Qinggang - WANG, Zhi - WU, Hao - WU, Yuying - HOU, Pengkun - CHENG, Xin. *Effect of Graphene on Microstructure and Mechanical Properties of Si₃N₄/SiC Ceramics. In ES Materials and Manufacturing, 2021-06-01, 12, pp. 29-34. ISSN 25780611. Dostupné na: <https://doi.org/10.30919/esmm5f418>., Registrované v: SCOPUS*
- ADCA117 DUSZA, Ján - CSANÁDI, Tamás** - MEDVEĎ, Dávid - SEDLÁK, Richard - VOJTKO, Marek - IVOR, Michal - ÜNSAL, Hakan - TATARKO, Peter - TATARKOVÁ, Monika - ŠAJGALÍK, Pavol. Nanoindentation and tribology of a (Hf-Ta-Zr-Nb-Ti)C high-entropy carbide. In Journal of the European Ceramic Society, 2021, vol. 41, no. 11, p. 5417-5426. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.002> (VEGA 2/0118/20 : Vysokoteplotné vlastnosti boridových MeB₂ (Me=Ti, Zr, Hf) keramických kompozitných materiálov. VEGA 2/0174/21 : Nanomechanické skúšanie a deformovateľnosť vysokoentropických ultra vysokoteplotných keramických materiálov. VEGA 2/0175/21 : Vývoj vysokoteplotných kompozitných materiálov na báze boridov a karbidov s prídavkom grafénových platničiek pripravených progresívnymi metódami spekania. APVV-17-0328 : Vývoj žiaruvzdorných pyrochlórnych fáz pre vysokoteplotné aplikácie neoxidovej keramiky. APVV-19-0497 : Nové vysokoentropické keramické materiály pre pokročilé aplikácie)
- Citácie:
1. [1.1] AKRAMI, Saeid - EDALATI, Parisa - FUJI, Masayoshi - EDALATI, Kaveh. *High-entropy ceramics: Review of principles, production and applications. In MATERIALS SCIENCE & ENGINEERING R-REPORTS. ISSN 0927-796X, 2021, vol. 146, no., pp. Dostupné na: <https://doi.org/10.1016/j.mser.2021.100644>., Registrované v: WOS*
2. [1.1] SIMONENKO, E. P. - SIMONENKO, N. P. - NAGORNOV, I. A. - SHICHALIN, O. O. - BELOV, A. A. - SHLYK, D. H. - PAPYNOV, E. K. - MOKRUSHIN, A. S. - SEVASTYANOV, V. G. - KUZNETSOV, N. T. *Influence of Carbon Deficiency and Hafnium Oxide Doping on Reactive Spark Plasma Sintering of the Ta₂O₅-C System. In RUSSIAN JOURNAL OF INORGANIC CHEMISTRY. ISSN 0036-0236, 2021, vol. 66, no. 12, pp. 1887-1894. Dostupné na: <https://doi.org/10.1134/S0036023621120172>., Registrované v: WOS*
3. [1.2] LU, Peipei - WU, Meiping - LIU, Xin - SHI, Xiaojie - XIE, Ziwen - MIAO, Xiaojin. *Synergistic enhancement of Re/B<inf>C on cobalt-based composite coatings: Evolution of microstructure, microhardness and tribological properties. In Surface and Coatings Technology. ISSN 02578972, 2021-10-25, 424, pp. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2021.127663>., Registrované v: SCOPUS*
- ADCA118 DŽUNDA, Róbert** - FIDES, Martin - HNATKO, Miroslav - HVIŽDOŠ, Pavol - MÚDRA, Erika - MEDVEĎ, Dávid - KOVALČÍKOVÁ, Alexandra - MILKOVIČ, Ondrej. Mechanical, physical properties and tribological behaviour of silicon carbide composites with addition of carbon nanotubes. In International Journal of Refractory Metals and Hard Materials, 2019, vol. 81, p. 272-280. (2018: 2.794 - IF, Q1 - JCR, 1.062 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0263-4368. Dostupné na: <https://doi.org/10.1016/j.ijrmhm.2019.03.003>
- Citácie:
1. [1.1] SUN, Yani - CHENG, Kai-yuan - MIKA, Mariusz - MATHEW, Mathew - MCNALLAN, Michael. *A novel synthesis method of carbide-derived carbon (CDC) in open air for hip implants. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, 2021, vol. 428, no., pp. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2021.127857>., Registrované v: WOS*
2. [1.1] WANG, Xiulei - GAO, Xiaodong - ZHANG, Zhenghe - CHENG, Lisheng - MA, Haopeng - YANG, Weimin. *Advances in modifications and high-temperature applications of silicon carbide ceramic matrix composites in aerospace: A focused review. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 9, pp. 4671-4688., Registrované v: WOS*
- ADCA119 EGGER, David A. - RUIZ, Victor G. - SAID, Wissam A. - BUČKO, Tomáš - TKATCHENKO, Alexandre - ZOJER, Egbert. Understanding structure and bonding of multilayered metal-organic nanostructures. In Journal of Physical Chemistry C, 2013, vol. 117, no. 6, p. 3055-3061. (2012: 4.814 - IF, Q1 - JCR, 2.529 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp309943k>
- Citácie:
1. [1.1] FORKER, Roman - GRUENEWALD, Marco - KIRCHHUEBEL, Tino - FRITZ, Torsten. *Recent Progress in the Consistent Interpretation of Complementary Spectroscopic Results Obtained on Molecular Systems. In ADVANCED OPTICAL MATERIALS, 2021, vol. 9, no. 14, pp. ISSN 2195-1071. Available on: <https://doi.org/10.1002/adom.202100200>., Registrované v: WOS*
2. [1.1] YANG, Jiacheng - WANG, Qi - WAN, Shanshan - WU, Di - CHEN, Mengting - KASHTANOV, Stepan - DUHM, Steffen. *Photoelectron spectroscopy reveals molecular diffusion through physisorbed template layers on Au(111). In ELECTRONIC STRUCTURE, 2021, vol. 3,*

- no. 2, pp. ISSN 2516-1075. Available on: <https://doi.org/10.1088/2516-1075/abe4c6>,
Registrované v: WOS
- ADCA120 ELSAYED, Hamada - PICICCO, Martiniano - DASAN, Arish - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico**. Glass powders and reactive silicone binder: Interactions and application to additive manufacturing of bioactive glass-ceramic scaffolds. In *Ceramics International*, 2019, vol. 45, no. 11, p. 13740-13746. (2018: 3.450 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2019.04.070>
Citácie:
1. [1.1] DEL-MAZO-BARBARA, Laura - GINEBRA, Maria-Pau. Rheological characterisation of ceramic inks for 3D direct ink writing: A review. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 16, pp. 18-33. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.08.031>, Registrované v: WOS
2. [1.1] HAO, Liang - TANG, Danna - SUN, Tao - XIONG, Wei - FENG, Zuying - EVANS, Ken E. - LI, Yan. Direct Ink Writing of Mineral Materials: A review. In *INTERNATIONAL JOURNAL OF PRECISION ENGINEERING AND MANUFACTURING-GREEN TECHNOLOGY*. ISSN 2288-6206, 2021, vol. 8, no. 2, pp. 665-685. Dostupné na: <https://doi.org/10.1007/s40684-020-00222-6>, Registrované v: WOS
- ADCA121 ELSAYED, Hamada - PICICCO, Martiniano - DASAN, Arish - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico**. Glass powders and reactive silicone binder: Application to digital light processing of bioactive glass-ceramic scaffolds. In *Ceramics International*, 2020, vol. 46, no. 16, p. 25299-25305. (2019: 3.830 - IF, Q1 - JCR, 0.891 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.06.323>
Citácie:
1. [1.1] AL RASHID, Ans - AHMED, Waqas - KHALID, Muhammad Yasir - KOC, Muammer. Vat photopolymerization of polymers and polymer composites: Processes and applications. In *ADDITIVE MANUFACTURING*, 2021, vol. 47, no., pp. ISSN 2214-8604. Available on: <https://doi.org/10.1016/j.addma.2021.102279>, Registrované v: WOS
2. [1.1] DENG, Leibo - YAO, Bin - WANG, Shuo - LI, Hao - FU, Zhe - CHEN, Hua. Effect of on structural and magnetic properties of SiO₂-B₂O₃-Fe₂O₃-Al₂O₃-Na₂O glass-ceramics. In *MATERIALS CHEMISTRY AND PHYSICS*, 2021, vol. 273, no., pp. ISSN 0254-0584. Available on: <https://doi.org/10.1016/j.matchemphys.2021.125104>, Registrované v: WOS
3. [1.1] KAMBOJ, Nikhil - RESSLER, Antonia - HUSSAINOVA, Irina. Bioactive Ceramic Scaffolds for Bone Tissue Engineering by Powder Bed Selective Laser Processing: A Review. In *MATERIALS*, 2021, vol. 14, no. 18, pp. Available on: <https://doi.org/10.3390/ma14185338>, Registrované v: WOS
- ADCA122 FIDES, Martin - HVIŽDOŠ, Pavol - BYSTRICKÝ, Roman - KOVALČÍKOVÁ, Alexandra - SEDLÁK, Richard - SEDLÁČEK, Jaroslav - DŽUNDA, Róbert. Microstructure, fracture, electrical properties and machinability of SiC-TiNbC composites. In *Journal of the European Ceramic Society*, 2017, vol. 37, p. 4315-4322. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.05.004>
Citácie:
1. [1.1] CHEN, Wenhui - CHEN, Jian - ZHU, Ming - ZHENG, Jiaqi - MA, Ning-ning - LIU, Xuejian - CHEN, Zhongming - HUANG, Zhengren. Fabrication of SiC ceramics with invariable value resistivity in the range of 20-400 degrees C using MAX phase- Ti₃AlC₂ additives. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 13, pp. 6248-6254., Registrované v: WOS
2. [1.1] ZHENG, Jiaqi - LU, Kathy. Electrically conductive and thermally stable SiC-TiC containing nanocomposites via flash pyrolysis. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. ISSN 0002-7820, 2021, vol. 104, no. 6, pp. 2460-2471., Registrované v: WOS
- ADCA123 FIDES, Martin - KOVALČÍKOVÁ, Alexandra - HVIŽDOŠ, Pavol - BYSTRICKÝ, Roman - DŽUNDA, Róbert - BALKO, Ján - SEDLÁČEK, Jaroslav. Mechanical and tribological properties of electrically conductive SiC based cermets. In *International Journal of Refractory Metals and Hard Materials*, 2017, vol. 65, p. 76-82. (2016: 2.155 - IF, Q1 - JCR, 1.055 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0263-4368. Dostupné na: <https://doi.org/10.1016/j.jrmhm.2016.12.017>
Citácie:
1. [1.1] KESKIN, Yasemin - UNVERDI, Ozhan - ERBAHAR, Dogan - KAYA, Ismet Inonu - CELEBI, Cem. The role of charge distribution on the friction coefficients of epitaxial graphene grown on the Si-terminated and C-terminated faces of SiC. In *CARBON*. ISSN 0008-6223, 2021, vol. 178, no., pp. 125-132., Registrované v: WOS
- ADCA124 FRAJKOROVÁ, Františka - HNATKO, Miroslav - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol.

Electrically conductive silicon carbide with the addition of Ti-NbC. In Journal of the European Ceramic Society, 2012, vol. 32, no. 10, p. 2513-2518. (2011: 2.353 - IF, Q1 - JCR, 1.343 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2012.02.049>

Citácie:

1. [1.1] DENG, Jiayun - LU, Jiabin - ZENG, Shuai - YAN, Qiusheng - PAN, Jisheng. Processing properties for the Si-face of the 4H-SiC substrates using the magnetically-controlled abrasive solidification orientation-solid-phase Fenton reaction for the fabrication of the lapping-polishing plate. In DIAMOND AND RELATED MATERIALS. ISSN 0925-9635, 2021, vol. 120, no., pp.

Dostupné na: <https://doi.org/10.1016/j.diamond.2021.108652>, Registrované v: WOS

2. [1.2] HVIZDOŠ, Pavol. Wear and erosion resistant ceramic materials. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 416-424. Available on: <https://doi.org/10.1016/B978-0-12-818542-1.00056-4>, Registrované v: SCOPUS

ADCA125 FRIDRICHOVÁ, Jana - BAČÍK, Peter - BIZOVSKÁ, Valéria - LIBOWITZKY, Eugen - ŠKODA, Radek - UHER, Pavel - OZDÍN, Daniel - ŠTEVKO, Martin. Spectroscopic and bond-topological investigation of interstitial volatiles in beryl from Slovakia. In Physics and chemistry of minerals, 2016, vol. 43, no. 6, p. 419-437. (2015: 1.585 - IF, Q2 - JCR, 0.608 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0342-1791. Dostupné na: <https://doi.org/10.1007/s00269-016-0806-9>

Citácie:

1. [1.1] SURTEES, Alexander P. H. - TELFORD, Richard - EDWARDS, Howell G. M. - BENOY, Timothy J. Raman spectroscopic study of the pigments in a putative John Constable oil sketch. In JOURNAL OF RAMAN SPECTROSCOPY. ISSN 0377-0486, 2021, vol. 52, no. 12, pp. 2228-2233. Dostupné na: <https://doi.org/10.1002/jrs.6192>, Registrované v: WOS

2. [1.2] WANG, Ping - GRAY, Thomas P. - LI, Zhe - ANDERSON, Evan J.D. - ALLAZ, Julien - SMYTH, Joseph R. - KOENIG, Alan E. - QI, Lijian - ZHOU, Yan - RASCHKE, Markus B. Mineralogical classification and crystal water characterisation of beryl from the W-Sn-Be occurrence of Xuebaoding, Sichuan province, western China. In Mineralogical Magazine. ISSN 0026461X, 2021-04-01, 85, 2, pp. 172-188. Dostupné na: <https://doi.org/10.1180/mgm.2021.13>, Registrované v: SCOPUS

ADCA126 FRIDRICHOVÁ, Jana - BAČÍK, Peter - RUSINOVÁ, Petra - ANTAL, Peter - ŠKODA, Radek - BIZOVSKÁ, Valéria - MIGLIERINI, Marcel. Optical and crystal-chemical changes in aquamarines and yellow beryls from Thanh Hoa province, Vietnam induced by heat treatment. In Physics and chemistry of minerals, 2015, vol. 42, p. 287-302. (2014: 1.538 - IF, Q2 - JCR, 0.769 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0342-1791. Dostupné na: <https://doi.org/10.1007/s00269-014-0719-4>

Citácie:

1. [1.1] WANG, Ping - GRAY, Thomas P. - LI, Zhe - ANDERSON, Evan J. D. - ALLAZ, Julien - SMYTH, Joseph R. - KOENIG, Alan E. - QI, Lijian - ZHOU, Yan - RASCHKE, Markus B. Mineralogical classification and crystal water characterisation of beryl from the W-Sn-Be occurrence of Xuebaoding, Sichuan province, western China. In MINERALOGICAL MAGAZINE, 2021, vol. 85, no. 2, pp. 172-188. ISSN 0026-461X. Available on: <https://doi.org/10.1180/mgm.2021.13>, Registrované v: WOS

ADCA127 GAÁLOVÁ, Barbora - VYLETELOVÁ, Ivana - POKORNÁ, Katarína - KIKHNEY, Judith - MOTER, Annette - BUJDÁK, Juraj - BUJDÁKOVÁ, Helena**. Decreased vitality and viability of Escherichia coli isolates by adherence to saponite particles. In Applied Clay Science, 2019, vol. 183, p. 105316-1-105316-9. (2018: 3.890 - IF, Q1 - JCR, 0.990 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2019.105316>

Citácie:

1. [1.1] MENDES, G. P. - KLUSKENS, L. D. - LANCEROS-MENDEZ, S. - MOTA, M. Magnesium aminoclay as plasmid delivery agents for non-competent Escherichia coli JM109 transformation. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 204, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106010>, Registrované v: WOS

ADCA128 GALUSEK, Dušan - GHILLÁNYOVÁ, Katarína - SEDLÁČEK, Jaroslav - KOZÁNKOVÁ, Jana - ŠAJGALÍK, Pavol. The influence of additives on microstructure of sub-micron alumina ceramics prepared by two-stage sintering. In Journal of the European Ceramic Society, 2012, vol. 32, no. 9, p. 1965-1970. (2011: 2.353 - IF, Q1 - JCR, 1.343 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2011.11.038>

Citácie:

1. [1.1] DMITRIEVSKII, A. A. - ZHIGACHEVA, D. G. - ZHIGACHEV, A. O. - OVCHINNIKOV, P. N. Strength Properties of Zirconium Ceramics with Silica Additives Hardened with Alumina. In PHYSICS OF THE SOLID STATE. ISSN 1063-7834, 2021, vol. 63, no. 2, pp. 295-299. Dostupné

na: <https://doi.org/10.1134/S1063783421020050>., Registrované v: WOS

2. [1.1] DMITRIEVSKIY, A. A. - ZHIGACHEVA, D. G. - GRIGORIEV, G. - OVCHINNIKOV, P. N. Change in the Microhardness of Composite Ceramics at the CaO-ZrO₂/CaO-ZrO₂ + Al₂O₃ Interface. In JOURNAL OF SURFACE INVESTIGATION. ISSN 1027-4510, 2021, vol. 15, no. SUPPL 1, pp. S137-S140. Dostupné na: <https://doi.org/10.1134/S1027451022020264>., Registrované v: WOS

3. [1.1] HU YAN-JUN - YIN ZI-QIANG - GONG YU-BO - YANG ZHI-GANG - YANG ZHAN-PING - LIANG YIN-CHUN - DONG DE-JUN - ZHAO JIN-JIN. Enhancing microstructural properties of alumina ceramics via binary sintering aids. In JOURNAL OF CENTRAL SOUTH UNIVERSITY. ISSN 2095-2899, 2021, vol. 28, no. 12, pp. 3705-3713. Dostupné na: <https://doi.org/10.1007/s11771-021-4889-1>., Registrované v: WOS

4. [1.1] NIE, Guanglin - LI, Yehua - SHENG, Pengfei - ZUO, Fei - WU, Haolin - LIU, Leiren - DENG, Xin - BAO, Yiwang - WU, Shanghua. Microstructure refinement-homogenization and flexural strength improvement of Al₂O₃ ceramics fabricated by DLP-stereolithography integrated with chemical precipitation coating process. In JOURNAL OF ADVANCED CERAMICS. ISSN 2226-4108, 2021, vol. 10, no. 4, pp. 790-808. Dostupné na: <https://doi.org/10.1007/s40145-021-0473-2>., Registrované v: WOS

5. [1.1] STASTNY, Premysl - CHLUP, Zdenek - CASTKOVA, Klara - TRUNEC, Martin. High strength alumina tapes prepared by gel-tape casting method. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 5, pp. 6988-6995. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.11.048>., Registrované v: WOS

6. [1.1] WANG, Xiaoyang - LIU, Guihua - QI, Tianguai - HUANG, Wenqiang - LI, Xiaobin - ZHOU, Qiusheng - PENG, Zhihong. Quantitative relationship between the density and structural unit of alpha alumina prepared from gibbsite and boehmite. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 10, pp. 14464-14474. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.02.025>., Registrované v: WOS

7. [1.1] ZADOROZHNYA, O. Yu. - KHASBAS, T. A. - KAMYSHNAYA, K. S. - KUTUGIN, V. A. - MALYKHIN, S. E. Effects of sintering curves on microstructure, physical and mechanical properties and on low temperature degradation of zirconia-toughened alumina. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 16, pp. 274-281. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.009>., Registrované v: WOS

ADCA129

GALUSEK, Dušan - GALUSKOVÁ, Dagmar. Alumina matrix composites with non-oxide nanoparticle addition and enhanced functionalities. In NANOMATERIALS-BASEL, 2015, vol. 5, no. 1, p. 115-143. (2014: 2.076 - IF, Q2 - JCR, karentované - CCC). (2015 - Current Contents). ISSN 2079-4991. Dostupné na: <https://doi.org/10.3390/nano5010115>

Citácie:

1. [1.1] CHIZHIKOV, A. P. - KONSTANTINOV, A. S. PRODUCTION OF CERAMIC PLATES BASED ON Al₂O₃-TiB₂ BY FREE SHS COMPRESSION. In REFRACTORIES AND INDUSTRIAL CERAMICS, 2021, vol. 62, no. 1, pp. 94-97. ISSN 1083-4877. Dostupné na: <https://doi.org/10.1007/s11148-021-00565-w>., Registrované v: WOS

2. [1.1] DUNTU, Solomon Hanson - TETTEH, Francis - AHMAD, Iftikhar - ISLAM, Mohammad - BOAKYE-YIADOM, Solomon. Characterization of the structure and properties of processed alumina-graphene and alumina-zirconia composites. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 1, pp. 367-380. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.08.142>., Registrované v: WOS

3. [1.2] KHALIQ, Jibran. Ceramic Matrix Composites (CMCs). In Engineering Materials, 2021-01-01, pp. 285-309. ISSN 16121317. Dostupné na: https://doi.org/10.1007/978-3-030-71438-3_11., Registrované v: SCOPUS

ADCA130

GALUSEK, Dušan - KLEMENT, Róbert - SEDLÁČEK, Jaroslav - BALOG, Miroslav - FASEL, Claudia - ZHANG, Jun - CRIMP, M.A. - RIEDEL, Ralf. Al₂O₃-SiC composites prepared by infiltration of pre-sintered alumina with a poly(allyl)carbosilane. In Journal of the European Ceramic Society, 2011, vol. 31, no. 1-2, p. 111-119. (2010: 2.575 - IF, Q1 - JCR, 1.383 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2010.09.013>

Citácie:

1. [1.1] LEE, Jimin - LIM, Minseob - KIM, Tae Sung - PARK, Kee-Ryung - LEE, Jong-Sik - CHO, Hong-Baek - PARK, Joo Hyun - CHOA, Yong-Ho. Design, synthesis, and characterization of a porous ceramic-supported CeO₂ nanocatalyst for CO_x-free H₂ evolution. In APPLIED SURFACE SCIENCE, 2021, vol. 548, no., pp. ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2021.149198>., Registrované v: WOS

2. [1.1] YOUSEFI, Majid - GHATEE, Mojtaba - REZAKAZEMI, Mashallah - GHADERI, Seyed Hadi. The effects of adding nano-alumina filler on the properties of polymer-derived SiC coating. In INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY, 2021, vol. 18, no. 6,

- pp. 2197-2206. ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13828>., Registrované v: WOS
- ADCA131 GALUSEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČÁREK, Peter - RIEDEL, Ralf - SATET, R. - HOFFMANN, M.J. The influence of post-sintering HIP on the microstructure, hardness and indentation fracture toughness of polymer-derived Al₂O₃-SiC nanocomposites. In Journal of the European Ceramic Society, 2007, vol. 27, no. 2-3, p. 1237-1245. (2006: 1.576 - IF, Q1 - JCR, 1.220 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2006.04.028>
- Citácie:
1. [1.1] MIRKHALAF, Mohammad - SARVESTANI, Hamidreza Yazdani - YANG, Qi - JAKUBINEK, Michael B. - ASHRAFI, Behnam. A comparative study of nano-fillers to improve toughness and modulus of polymer-derived ceramics. In SCIENTIFIC REPORTS, 2021, vol. 11, no. 1, pp. ISSN 2045-2322. Dostupné na: <https://doi.org/10.1038/s41598-021-82365-3>., Registrované v: WOS
- ADCA132 GALUSEK, Dušan - RESCHKE, S. - RIEDEL, Ralf - DRESSLER, W. - MAJLING, J. - ŠAJGALÍK, Pavol - LENČEŠ, Zoltán. In-situ carbon content adjustment in polysilazane derived amorphous SiCN bulk ceramics. In Journal of the European Ceramic Society, 1999, vol. 19, no. 10, p. 1911-1921.
- Citácie:
1. [1.1] LI, Mingxing - CHENG, Laifei - YE, Fang - ZHANG, Conglin - ZHOU, Jie. Formation of nanocrystalline graphite in polymer-derived SiCN by polymer infiltration and pyrolysis at a low temperature. In JOURNAL OF ADVANCED CERAMICS. ISSN 2226-4108, 2021, vol. 10, no. 6, pp. 1256-1272. Dostupné na: <https://doi.org/10.1007/s40145-021-0501-2>., Registrované v: WOS
- ADCA133 GALUSEK, Dušan - TWIGG, P.C. - RILEY, F.L. Wet erosion of liquid phase sintered alumina. In Wear : an international journal on the science and technology of friction, lubrication and wear, 1999, vol. 233-235, p. 588-595. ISSN 0043-1648. Dostupné na: [https://doi.org/10.1016/S0043-1648\(99\)00236-7](https://doi.org/10.1016/S0043-1648(99)00236-7)
- Citácie:
1. [1.1] HUANG, Baoteng - LI, Changhe - ZHANG, Yanbin - DING, Wenfeng - YANG, Min - YANG, Yuying - ZHAI, Han - XU, Xuefeng - WANG, Dazhong - DEBNATH, Sujana - JAMIL, Muhammad - LI, Hao Nan - ALI, Hafiz Muhammad - GUPTA, Munish Kumar - SAID, Zafar. Advances in fabrication of ceramic corundum abrasives based on sol-gel process. In CHINESE JOURNAL OF AERONAUTICS, 2021, vol. 34, no. 6, pp. 1-17. ISSN 1000-9361. Dostupné na: <https://doi.org/10.1016/j.cja.2020.07.004>., Registrované v: WOS
- ADCA134 GALUSEK, Dušan - RILEY, F.L. - RIEDEL, Ralf. Nanoindentation of a polymer-derived amorphous silicon carbonitride ceramic. In Journal of the American Ceramic Society, 2001, vol. 84, no. 5, p. 1164-1166. (2000: 2.017 - IF, karentované - CCC). (2001 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1151-2916.2001.tb00806.x>
- Citácie:
1. [1.1] SUJITH, Ravindran - JOTHI, Sudagar - ZIMMERMANN, Andre - ALDINGER, Fritz - KUMAR, Ravi. Mechanical behaviour of polymer derived ceramics a review. In INTERNATIONAL MATERIALS REVIEWS, 2021, vol. 66, no. 6, pp. 426-449. ISSN 0950-6608. Dostupné na: <https://doi.org/10.1080/09506608.2020.1784616>., Registrované v: WOS
- ADCA135 GALUSEK, Dušan - SEDLÁČEK, Jaroslav - RIEDEL, Ralf. Al₂O₃-SiC composites prepared by warm pressing and sintering of an organosilicon polymer-coated alumina powder. In Journal of the European Ceramic Society, 2007, vol. 27, no. 6, p. 2385-2392. (2006: 1.576 - IF, Q1 - JCR, 1.220 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2006.09.007>
- Citácie:
1. [1.1] ETERIGHO-IKELEGBE, Orevaoghene - TRAMMELL, Ryan - BADA, Samson. Preparation and characterization of ceramic composites from South Africa coal discard. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 302, no., pp. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.124164>., Registrované v: WOS
2. [1.1] TOROSYAN, Karen S. - SEDEGOV, Alexey S. - KUSKOV, Kirill - ABEDI, Mohammad - ARKHIPOV, Dmitry O. - KIRYUKHANTSEV-KORNEEV, Philipp - VOROTILO, Stepan - MOSKOVSKIY, Dmitry O. - MUKASYAN, Alexander S. Reactive, nonreactive, and flash spark plasma sintering of Al₂O₃/SiC composites-A comparative study. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2020, vol. 103, no. 1, pp. 520-530. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.16734>., Registrované v: WOS
3. [1.1] YOUSEFI, Majid - GHATEE, Mojtaba - REZAKAZEMI, Mashallah - GHADERI, Seyed Hadi. The effects of adding nano-alumina filler on the properties of polymer-derived SiC coating. In INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY, 2021, vol. 18, no. 6, pp. 2197-2206. ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13828>., Registrované v: WOS

- ADCA136 GALUSKOVÁ, Dagmar - KAŠIAROVÁ, Monika - HNATKO, Miroslav - GALUSEK, Dušan - DUSZA, Ján - ŠAJGALÍK, Pavol. Hydrothermal corrosion and flexural strength of Si₃N₄-based ceramics. In *Corrosion Science*, 2014, vol. 85, p. 94-100. (2013: 3.686 - IF, Q1 - JCR, 1.592 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2014.04.005>
Citácie:
1. [1.1] CITAK, Betul - KIRSEVER, Derya - AYDAY, Aysun - BOUSSEBHA, Hamza - DEMIRKIRAN, A. Sukran. The corrosion kinetics of cordierite-based ZrO₂ composites obtained from natural zeolite in dilute HCl acid solution. In *JOURNAL OF COMPOSITE MATERIALS*. ISSN 0021-9983, 2021, vol. 55, no. 20, pp. 2751-2763. Dostupné na: <https://doi.org/10.1177/0021998321996751>, Registrované v: WOS
- ADCA137 GALUSKOVÁ, Dagmar - HNATKO, Miroslav - GALUSEK, Dušan - ŠAJGALÍK, Pavol. Corrosion of structural ceramics under subcritical conditions in aqueous sodium chloride solution and in deionized water. Part I: Dissolution of Si₃N₄-based ceramics. In *Journal of the American Ceramic Society*, 2011, vol. 94, no. 9, p. 3035-3043. (2010: 2.169 - IF, Q1 - JCR, 1.449 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2011.04553.x>
Citácie:
1. [1.1] SCHADE, Christoph - PHAN, Alex - JOSLIN, Kevin - TALKE, Frank E. Material loss of silicon nitride thin films in a simulated ocular environment. In *MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS*. ISSN 0946-7076, 2021, vol. 27, no. 6, pp. 2263-2268. Dostupné na: <https://doi.org/10.1007/s00542-020-05096-x>, Registrované v: WOS
- ADCA138 GALUSKOVÁ, Dagmar - GALUSEK, Dušan - ŠAJGALÍK, Pavol. Evaluation of corrosion of engineering ceramics by atomic emission spectrometry in inductively coupled plasma. In *Ceramics-Silikáty*, 2014, vol. 58, no. 1, p. 39-45. (2013: 0.434 - IF, Q3 - JCR, 0.289 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0862-5468.
Citácie:
1. [1.2] HERRMANN, Mathias. Corrosion of ceramics in aqueous environments. In *Encyclopedia of Materials: Technical Ceramics and Glasses*, 2021-05-24, 1-3, pp. 921-931. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00049-7>, Registrované v: SCOPUS
- ADCA139 GAMBA, Martina - FLORES, Federico M. - MADEJOVÁ, Jana - TORRES SÁNCHEZ, Rosa M. Comparison of imazalil removal onto montmorillonite and nanomontmorillonite and adsorption surface sites involved: an approach for agricultural wastewater treatment. In *Industrial & Engineering Chemistry Research*, 2015, vol. 54, no. 5, p. 1529-1538. (2014: 2.587 - IF, Q1 - JCR, 1.009 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0888-5885. Dostupné na: <https://doi.org/10.1021/ie5035804>
Citácie:
1. [1.1] MERINO, Danila - IGLESIAS, Maria J. - MANSILLA, Andrea Y. - CASALONGUE, Claudia A. - ALVAREZ, Vera A. FIGHTING AGAINST PLANT SALINE STRESS: DEVELOPMENT OF A NOVEL BIOACTIVE COMPOSITE BASED ON BENTONITE AND L-PROLINE. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 2, pp. 232-242. ISSN 0009-8604. Available on: <https://doi.org/10.1007/s42860-021-00120-1>, Registrované v: WOS
2. [1.1] YANG, Xuetong - ZHOU, Jianhang - HUO, Tangran - LV, Yufeng - PAN, Juejun - CHEN, Liming - TANG, Xi - ZHAO, Yunpeng - LIU, Hailong - GAO, Qiang - LIU, Sitong. Metabolic insights into the enhanced nitrogen removal of anammox by montmorillonite at reduced temperature. In *CHEMICAL ENGINEERING JOURNAL*, 2021, vol. 410, no., pp. ISSN 1385-8947. Available on: <https://doi.org/10.1016/j.cej.2020.128290>, Registrované v: WOS
- ADCA140 GATES, W.P. - KOMADEL, Peter - MADEJOVÁ, Jana - BUJDÁK, Juraj - STUCKI, Joseph W. - KIRKPATRICK, R.J. Electronic and structural properties of reduced-charge montmorillonites. In *Applied Clay Science*, 2000, vol. 16, no. 5-6, p. 257-271. Dostupné na: [https://doi.org/10.1016/S0169-1317\(99\)00057-5](https://doi.org/10.1016/S0169-1317(99)00057-5)
Citácie:
1. [1.1] ABUTALEB, Ahmed - ELDOMA, Mubarak A. - IMRAN, Mohd - TAHA, Kamal K. - BAKATHER, Omer Y. - ZOULI, Nasser - HEGAZI, Salah Eldeen F. - HASSAN, Mohamed. Active adsorption performance of planetary ball milled Saudi Arabian bentonite clay for the removal of copper ions from aqueous solution. In *EPL*, 2021, vol. 135, no. 3, pp. ISSN 0295-5075. Dostupné na: <https://doi.org/10.1209/0295-5075/ac1960>, Registrované v: WOS
2. [1.1] CZLONKA, Sylwia - KAIRYTE, Agne - MIEDZINSKA, Karolina - STRAKOWSKA, Anna - ADAMUS-WŁODARCZYK, Agnieszka. Mechanically Strong Polyurethane Composites Reinforced with Montmorillonite-Modified Sage Filler (*Salvia officinalis* L.). In *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, 2021, vol. 22, no. 7, pp. Dostupné na: <https://doi.org/10.3390/ijms22073744>, Registrované v: WOS

- ADCA141 GEDEON, Ondrej - LIŠKA, Marek - MACHÁČEK, Jan. Connectivity of Q-species in binary sodium-silicate glasses. In *Journal of Non-Crystalline Solids*, 2008, vol. 354, no. 12-13, p. 1133-1136. (2007: 1.319 - IF, Q1 - JCR, 0.947 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents, SCOPUS). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2006.11.028>
Citácie:
1. [1.1] *OJOVAN, Michael I. The Modified Random Network (MRN) Model within the Configuron Percolation Theory (CPT) of Glass Transition. In CERAMICS-SWITZERLAND. ISSN 2571-6131, 2021, vol. 4, no. 2, pp. 121-134. Dostupné na: https://doi.org/10.3390/ceramics4020011., Registrované v: WOS*
- ADCA142 GEORGIEVA, I. - BENCO, Ľubomír - TUNEGA, Daniel - TRENDAFILOVA, N. - HAFNER, Jürgen - LISCHKA, H. Multiple adsorption of NO on cobalt-exchanged chabazite, mordenite, and ferrierite zeolites: A periodic density functional theory study. In *Journal of Chemical Physics*, 2009, vol. 131, no. 5, p. 054101-1-054101-18. (2008: 3.149 - IF, Q1 - JCR, 2.270 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3182850>
Citácie:
1. [1.1] *DIMOWA, Louiza - TZVETANOVA, Yana - PETROV, Ognyan - PIROEVA, Iskra - UBLEKOV, Filip. Powder XRD Structural Study of Ba2+ Modified Clinoptilolite at Different Stages of the Ion Exchange Process Conducted at Two Temperature Regimes-Room Temperature and 90 degrees C. In MINERALS, 2020, vol. 10, no. 11, pp. Dostupné na: https://doi.org/10.3390/min10110938., Registrované v: WOS*
- ADCA143 GEŠVANDTNEROVÁ, Monika** - ROCCA, Dario - BUČKO, Tomáš**. Methanol carbonylation over acid mordenite: Insights from ab initio molecular dynamics and machine learning thermodynamic perturbation theory. In *Journal of Catalysis*, 2021, vol. 396, p. 166-178. (2020: 7.920 - IF, Q1 - JCR, 2.337 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2021.02.011>
Citácie:
1. [1.1] *CHEN, Wei - LI, Guangchao - YI, Xianfeng - DAY, Sarah J. - TARACH, Karolina A. - LIU, Zhiqiang - LIU, Shang-Bin - TSANG, Shik Chi Edman - GORA-MAREK, Kinga - ZHENG, Anmin. Molecular Understanding of the Catalytic Consequence of Ketene Intermediates under Confinement. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 2021, vol. 143, no. 37, pp. 15440-15452. ISSN 0002-7863. Available on: https://doi.org/10.1021/jacs.1c08036., Registrované v: WOS*
2. [1.2] *WANG, Haifeng - HU, P. - LAI, Zhuangzhuang - SUN, Ningling - JIN, Jiamin - CHEN, Jianfu. Resolving the intricate mechanism and selectivity of syngas conversion on reduced ZnCrIn2/infOinf/inf: A quantitative study from DFT and microkinetic simulations. In ACS Catalysis, 2021-11-05, 11, 21, pp. 12977-12988. Available on: https://doi.org/10.1021/acscatal.1c03579., Registrované v: SCOPUS*
- ADCA144 GÖLTL, Florian - GRÜNEIS, Andreas - BUČKO, Tomáš - HAFNER, Jürgen. Van der Waals interactions between hydrocarbon molecules and zeolites: Periodic calculations at different levels of theory, from density functional theory to the random phase approximation and Møller-Plesset perturbation theory. In *Journal of Chemical Physics*, 2012, vol. 137, no. 11, art. no. 114111. (2011: 3.333 - IF, Q1 - JCR, 1.845 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4750979>
Citácie:
1. [1.1] *ACHARYA, Debdipto - ULMAN, Kanchan - NARASIMHAN, Shobhana. Leveraging Polar Discontinuities to Tune the Binding of Methanol on BCN and Graphene-BN Lateral Heterostructures. In JOURNAL OF PHYSICAL CHEMISTRY C, 2021, vol. 125, no. 27, pp. 15012-15024. ISSN 1932-7447. Available on: https://doi.org/10.1021/acs.jpcc.1c03142., Registrované v: WOS*
2. [1.1] *CAPA-COBOS, Luis Fernando - JARAMILLO-FIERRO, Ximena - GONZALEZ, Silvia. Computational Study of the Adsorption of Phosphates as Wastewater Pollutant Molecules on Faujasites. In PROCESSES, 2021, vol. 9, no. 10, pp. Available on: https://doi.org/10.3390/pr9101821., Registrované v: WOS*
3. [1.1] *HESSOU, Etienne P. - BEDE, Lucie A. - JABRAOUI, Hicham - SEMMEQ, Abderrahmane - BADAWI, Michael - VALTCHEV, Valentin. Adsorption of Toluene and Water over Cationic-Exchanged Y Zeolites: A DFT Exploration. In MOLECULES, 2021, vol. 26, no. 18, pp. Available on: https://doi.org/10.3390/molecules26185486., Registrované v: WOS*
4. [1.1] *LANGE, Malte F. - BERKELBACH, Timothy C. Improving MP2 bandgaps with low-scaling approximations to EOM-CCSD. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 155, no. 8, pp. ISSN 0021-9606. Available on: https://doi.org/10.1063/5.0061242., Registrované v: WOS*
5. [1.1] *SCHWALBE-KODA, Daniel - GOMEZ-BOMBARELLI, Rafael. Benchmarking binding*

- energy calculations for organic structure-directing agents in pure-silica zeolites. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 154, no. 17, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0044927>, Registrované v: WOS
- ADCA145 GOULD, Tim - BUČKO, Tomáš. C6 coefficients and dipole polarizabilities for all atoms and many ions in rows 1-6 of the periodic table. In *Journal of Chemical Theory and Computation*, 2016, vol. 12, no. 8, p. 3603-3613. (2015: 5.301 - IF, Q1 - JCR, 2.702 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.6b00361>
- Citácie:
- [1.1] BURROWS, Antony - COOPER, Shaun - SCHWERTFEGGER, Peter. Instability of the body-centered cubic lattice within the sticky hard sphere and Lennard-Jones model obtained from exact lattice summations. In *PHYSICAL REVIEW E*. ISSN 2470-0045, 2021, vol. 104, no. 3, pp. Dostupné na: <https://doi.org/10.1103/PhysRevE.104.035306>, Registrované v: WOS
 - [1.1] CASSAR, Daniel R. ViscNet: Neural network for predicting the fragility index and the temperature-dependency of viscosity. In *ACTA MATERIALIA*. ISSN 1359-6454, 2021, vol. 206, no., pp. Dostupné na: <https://doi.org/10.1016/j.actamat.2020.116602>, Registrované v: WOS
 - [1.1] HELLGREN, Maria - BAGUET, Lucas. Random phase approximation with exchange for an accurate description of crystalline polymorphism. In *PHYSICAL REVIEW RESEARCH*, 2021, vol. 3, no. 3, pp. Dostupné na: <https://doi.org/10.1103/PhysRevResearch.3.033263>, Registrované v: WOS
 - [1.1] IRIKURA, Karl K. Polarizability of atomic Pt, Pt⁺, and Pt⁻. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 154, no. 17, pp. Dostupné na: <https://doi.org/10.1063/5.0044996>, Registrované v: WOS
 - [1.1] KAUR, Harpreet - SHUKLA, Neelam - SRIVASTAVA, Rajesh - ARORA, Bindiya. Dispersion C-3 coefficients for physisorption of heavy ions and atoms with graphene and carbon nanotubes. In *PHYSICAL REVIEW A*. ISSN 2469-9926, 2021, vol. 104, no. 1, pp. Dostupné na: <https://doi.org/10.1103/PhysRevA.104.012806>, Registrované v: WOS
 - [1.1] KOOL, Derk P. - WECKMAN, Timo - GORI-GIORGI, Paola. Dispersion without Many-Body Density Distortion: Assessment on Atoms and Small Molecules. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 4, pp. 2283-2293. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00102>, Registrované v: WOS
 - [1.1] ROUSE, Ian - POWER, David - BRANDT, Erik G. - SCHNEEMILCH, Matthew - KOTSIS, Konstantinos - QUIRKE, Nick - LYUBARTSEV, Alexander P. - LOBASKIN, Vladimir. First principles characterisation of bio-nano interface. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 24, pp. 13473-13482. Dostupné na: <https://doi.org/10.1039/d1cp01116b>, Registrované v: WOS
 - [1.1] VACCARELLI, Ornella - FEDOROV, Dmitry - STOHR, Martin - TKATCHENKO, Alexandre. Quantum-mechanical force balance between multipolar dispersion and Pauli repulsion in atomic van der Waals dimers. In *PHYSICAL REVIEW RESEARCH*, 2021, vol. 3, no. 3, pp. Dostupné na: <https://doi.org/10.1103/PhysRevResearch.3.033181>, Registrované v: WOS
 - [1.1] WELSH, Ivan D. - CRITTENDEN, Deborah L. New atoms-in-molecules dispersion models for use in ab initio derived force fields. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 154, no. 9, pp. Dostupné na: <https://doi.org/10.1063/5.0037157>, Registrované v: WOS
- ADCA146 GOULD, Tim - LEBÈGUE, Sébastien - ÁNGYÁN, János G. - BUČKO, Tomáš. A fractionally ionic approach to polarizability and van der Waals many-body dispersion calculations. In *Journal of Chemical Theory and Computation*, 2016, vol. 12, no. 12, p. 5920-5930. (2015: 5.301 - IF, Q1 - JCR, 2.702 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.6b00925>
- Citácie:
- [1.1] ANNIES, Simon - PANOSSETTI, Chiara - VORONENKO, Maria - MAUTH, Dario - RAHE, Christiane - SCHEURER, Christoph. Accessing Structural, Electronic, Transport and Mesoscale Properties of Li-GICs via a Complete DFTB Model with Machine-Learned Repulsion Potential. In *MATERIALS*, 2021, vol. 14, no. 21, pp. Dostupné na: <https://doi.org/10.3390/ma14216633>, Registrované v: WOS
 - [1.1] HOFMANN, Oliver T. - ZOJER, Egbert - HOERMANN, Lukas - JEINDL, Andreas - MAURER, Reinhard J. First-principles calculations of hybrid inorganic-organic interfaces: from state-of-the-art to best practice. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 14, pp. 8132-8180. Dostupné na: <https://doi.org/10.1039/d0cp06605b>, Registrované v: WOS
 - [1.1] JANA, Subrata - MYNENI, Hemanadhan - SMIGA, Szymon - CONSTANTIN, Lucian A. - SAMAL, Prasanjit. Benchmark test of a dispersion corrected revised Tao-Mo semilocal functional for thermochemistry, kinetics, and noncovalent interactions of molecules and solids. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 155, no. 11, pp. Dostupné na: <https://doi.org/10.1063/5.0060538>, Registrované v: WOS

4. [1.1] OUYANG, Wengen - SOFER, Reut - GAO, Xiang - HERMANN, Jan - TKATCHENKO, Alexandre - KRONIK, Leeor - URBACH, Michael - HOD, Oded. Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 11, pp. 7237-7245. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00782>, Registrované v: WOS
 5. [1.1] PRICE, Alastair J. A. - BRYENTON, Kyle R. - JOHNSON, Erin R. Requirements for an accurate dispersion-corrected density functional. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 23, pp. Dostupné na: <https://doi.org/10.1063/5.0050993>, Registrované v: WOS
 6. [1.1] ROSSI, Mariana. Progress and challenges in ab initio simulations of quantum nuclei in weakly bonded systems. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 17, pp. Dostupné na: <https://doi.org/10.1063/5.0042572>, Registrované v: WOS
 7. [1.1] VAZQUEZ-FERNANDEZ, Isabel - DRUZBICKI, Kacper - FERNANDEZ-ALONSO, Felix - MUKHOPADHYAY, Sanghamitra - NOCKEMANN, Peter - PARKER, Stewart F. - RUDIC, Svemir - STANA, Simona-Maria - TOMKINSON, John - YEADON, Darius J. - SEDDON, Kenneth R. - PLECHKOVA, Natalia. Spectroscopic Signatures of Hydrogen-Bonding Motifs in Protic Ionic Liquid Systems: Insights from Diethylammonium Nitrate in the Solid State. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 44, pp. 24463-24476. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c05137>, Registrované v: WOS
 8. [1.1] WELSH, Ivan D. - CRITTENDEN, Deborah L. New atoms-in-molecules dispersion models for use in ab initio derived force fields. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 9, pp. Dostupné na: <https://doi.org/10.1063/5.0037157>, Registrované v: WOS
- ADCA147 GRISHINA, Svetlana** - KODĚRA, Peter - GORYAINOV, Sergey - ORESHONKOV, Aleksandr - SERYOTKIN, Yurii - ŠIMKO, František - POLOZOV, Alexander G. Application of Raman spectroscopy for identification of rinneite (K₃NaFeCl₆) in inclusions in minerals. In Journal of Raman Spectroscopy, 2020, vol. 51, no. 12, p. 2501-2516. (2019: 2.000 - IF, Q2 - JCR, 0.759 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0377-0486. Dostupné na: <https://doi.org/10.1002/jrs.6005>
Citácie:
1. [1.1] LI, Min - HU, Weiguo - WANG, Lingyu - WEI, Jiahao - SUN, Jingjing - LI, Jiahui - HAN, Dandan - GONG, Junbo. Study on the formation mechanism of isoniazid crystal defects and defect elimination strategy based on ultrasound. In ULTRASONICS SONOCHEMISTRY, 2021, vol. 77, no., pp. ISSN 1350-4177. Available on: <https://doi.org/10.1016/j.ultsonch.2021.105674>, Registrované v: WOS
- ADCA148 GRISHINA, Svetlana - KODĚRA, Peter** - URIARTE, Lucas M. - DUBESSY, Jean - ORESHONKOV, Aleksandr - GORYAINOV, Sergey - ŠIMKO, František - YAKOVLEV, Igor - ROGINSKII, Evgenii M. Identification of anhydrous CaCl₂ and KCaCl₃ in natural inclusions by Raman spectroscopy. In Chemical Geology, 2018, vol. 493, p. 532-543. (2017: 3.570 - IF, Q1 - JCR, 1.755 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0009-2541. Dostupné na: <https://doi.org/10.1016/j.chemgeo.2018.07.017>
Citácie:
1. [1.1] HAQ, Muhtasim Ali - SAIDUZZAMAN, Md - ASIF, Tariqul Islam - SHUVO, Ismile Khan - HOSSAIN, Khandaker Monower. Ultra-violet to visible band gap engineering of cubic halide KCaCl₃ perovskite under pressure for optoelectronic applications: insights from DFT. In RSC ADVANCES, 2021, vol. 11, no. 58, pp. 36367-36378. Dostupné na: <https://doi.org/10.1039/d1ra06430d>, Registrované v: WOS
- ADCA149 GRYBOS, Robert - HAFNER, Jürgen - BENCO, Ľubomír - RAYBAUD, Pascal. Adsorption of NO on PD exchanged mordenite: Ab-initio DFT modeling. In Journal of Physical Chemistry C, 2008, vol. 112, no. 32, p. 12349-12362. (2007: Q4 - JCR, karentované - CCC). (2008 - Current Contents, WOS, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp8009723>
Citácie:
1. [1.1] YASUMURA, Shunsaku - UEDA, Taihei - IDE, Hajime - OTSUBO, Katsumasa - LIU, Chong - TSUNOJI, Nao - TOYAO, Takashi - MAENO, Zen - SHIMIZU, Ken-ichi. Local structure and NO adsorption/desorption property of Pd²⁺ cations at different paired Al sites in CHA zeolite. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 39, pp. 22273-22282. Dostupné na: <https://doi.org/10.1039/d1cp02668b>, Registrované v: WOS
- ADCA150 GRYBOS, Robert - HAFNER, Jürgen - BENCO, Ľubomír - TOULHOAT, H. Structure of active sites in Pd-exchanged mordenite: A density functional investigation. In Journal of Physical Chemistry C, 2007, vol. 111, no. 17, p. 6454-6464. (2007 - Current Contents, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp0662606>
Citácie:
1. [1.1] RIMSZA, Jessica M. - CHAPMAN, Karena W. - NENOFF, Tina M. Influence of Al location on formation of silver clusters in mordenite. In MICROPOROUS AND MESOPOROUS

- MATERIALS. ISSN 1387-1811, 2021, vol. 327, no., pp. Dostupné na: <https://doi.org/10.1016/j.micromeso.2021.111401>, Registrované v: WOS*
- ADCA151 HAASE, Pi A. B. - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - BENDIX, Jesper - SAUER, Stephan P. A. **. Relativistic DFT calculations of hyperfine coupling constants in 5d hexafluorido complexes: [ReF₆]²⁻ and [IrF₆]²⁻. In *Chemistry - A European Journal*, 2018, vol. 24, no. 20, p. 5124-5133. (2017: 5.160 - IF, Q1 - JCR, 2.265 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.201704653>
- Citácie:
- [1.1] GIBBONS, Daire J. - FARAWAR, Aram - MAZZELLA, Paul - LEROY-LHEZ, Stephanie - WILLIAMS, Rene M. Making triplets from photo-generated charges: observations, mechanisms and theory. In *PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES. ISSN 1474-905X, 2020, vol. 19, no. 2, pp. 136-158. Dostupné na: <https://doi.org/10.1039/c9pp00399a>, Registrované v: WOS*
 - [2.1] SIMUNKOVA, Miriama - MALCEK, Michal. Dimethyl sulfoxide as a strongly coordinating solvent: 3',4'-dihydroxyflavone-Cu(II)-DMSO system case study. In *ACTA CHIMICA SLOVACA. ISSN 1337-978X, 2020, vol. 13, no. 2, pp. Dostupné na: <https://doi.org/10.2478/acs-2020-0022>, Registrované v: WOS*
- ADCA152 HALIAKOVÁ, Anna - PRNOVÁ, Anna - KLEMENT, Róbert - GALUSEK, Dušan - TUAN, Wei-Hsing. Flame-spraying synthesis of aluminate glasses in the Al₂O₃-La₂O₃ system. In *Ceramics International*, 2012, vol. 38, no. 7, p. 5543-5549. (2011: 1.751 - IF, Q1 - JCR, 0.918 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2012.03.071>
- Citácie:
- [1.1] XU, Tianzhao - LI, Qin - SHI, Yun - FANG, Jinghong - WANG, Hui - WANG, Chaoyue - HE, Huan - NI, Jinqi - YU, Jianding. The enhancement of hardness and anti-corrosion of ZrO₂ to the LaO₃/2-AlO₃/2-ZrO₂ glasses. In *JOURNAL OF NON-CRYSTALLINE SOLIDS, 2021, vol. 572, no., pp. ISSN 0022-3093. Available on: <https://doi.org/10.1016/j.jnoncrysol.2021.121118>, Registrované v: WOS*
- ADCA153 HANZEL, Ondrej - LOFAJ, František - SEDLÁČEK, Jaroslav - KABÁTOVÁ, Margita - KAŠIAROVÁ, Monika - ŠAJGALÍK, Pavol. Mechanical and tribological properties of alumina-MWCNTs composites sintered by rapid hot-pressing. In *Journal of the European Ceramic Society*, 2017, vol. 37, no. 15, p. 4821-4831. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.05.047>
- Citácie:
- [1.1] MUSTAFA, Tufail - HUANG, Jilong - GAO, Jie - YAN, Peng - LIU, Yongping - RUIZ, Karla Hernandez - SUN, Shikuan - DU, Jishi - FAN, Yuchi - JIANG, Wan. Nanoplates forced alignment of multi-walled carbon nanotubes in alumina composite with high strength and toughness. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 11, pp. 5541-5547. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.004>, Registrované v: WOS*
 - [1.1] NALON, Gustavo Henrique - LOPES RIBEIRO, Jose Carlos - PEDROTI, Leonardo Goncalves - DUARTE DE ARAUJO, Eduardo Nery - FRANCO DE CARVALHO, Jose Maria - SOARES DE LIMA, Gustavo Emilio - GUIMARAES, Luciano de Moura. Residual piezoresistive properties of mortars containing carbon nanomaterials exposed to high temperatures. In *CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2021, vol. 121, no., pp. Dostupné na: <https://doi.org/10.1016/j.cemconcomp.2021.104104>, Registrované v: WOS*
 - [1.1] RAMACHANDRAN, Karthikeyan - SUBRAMANI, R. Ram - ARUNKUMAR, T. - BOOPALAN, Vignesh. Mechanical and thermal properties of spark plasma sintered Alumina-MWCNTs nanocomposites prepared via improvised colloidal route. In *MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 272, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.125034>, Registrované v: WOS*
 - [1.1] ZHANG, Xi - HAN, Xiaoyu - ZHANG, Yuedan - LIANG, Jinglong - WANG, Chuang - LIANG, Jinsheng. Effect of holding time and pressure on the densification, microstructure and mechanical properties of hot pressed Al₂O₃-Ca₆-ZrO₂/Ni multi-phase composites. In *JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 850, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2020.156783>, Registrované v: WOS*
 - [1.2] AHMED, Hadeer Sh - MAJEED, Sadeer M. - AHMED, Duha S. Effect of Variation MWCNTs in Synthesis Zirconia Prepared by Uniaxial Pressed Technique. In *Journal of Physics: Conference Series. ISSN 1742-6596, 2021-12-30, 2114, 1, pp. Dostupné na: <https://doi.org/10.1088/1742-6596/2114/1/012064>, Registrované v: SCOPUS*
- ADCA154 HANZEL, Ondrej - SEDLÁČEK, Jaroslav - HADZIMOVA, Eva - ŠAJGALÍK, Pavol. Thermal properties of alumina-MWCNTs composites. In *Journal of the European Ceramic Society*, 2015, vol.

35, no. 5, p. 1559-1567. (2014: 2.947 - IF, Q1 - JCR, 1.163 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2014.11.032>

Citácie:

1. [1.1] ALOTAIBI, Mohammed S. - ALMOUSA, Norah H. - ASAKER, Mohammed A. - ALKASMOUL, Fahad S. - KHDARY, Nezar H. - KHAYYAT, Maha. Morphological: Optical, and Mechanical Characterizations of Non-Activated and Activated Nanocomposites of SG and MWCNTs. In CRYSTALS, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/cryst11111280>., Registrované v: WOS
2. [1.1] MARTIN ABRAHAM-EKEROTH, Ricardo - DE ANGELIS, Francesco. Radioplasmonics: Plasmonic Transducers in the Radiofrequency Regime for Resonant Thermo-acoustic Imaging in Deep Tissues. In ACS PHOTONICS. ISSN 2330-4022, 2021, vol. 8, no. 1, pp. 238-246. Dostupné na: <https://doi.org/10.1021/acsphotonics.0c01381>., Registrované v: WOS
3. [1.1] RAMACHANDRAN, Karthikeyan - SUBRAMANI, R. Ram - ARUNKUMAR, T. - BOOPALAN, Vignesh. Mechanical and thermal properties of spark plasma sintered Alumina-MWCNTs nanocomposites prepared via improvised colloidal route. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 272, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.125034>., Registrované v: WOS
4. [1.1] ROVINSKY, Lev - BARICK, Barun Kumar - LIEBERMAN, Elnatan - AVRAHAM, Efrat Shawat - NESSIM, Gilbert Daniel - SEGAL-PERETZ, Tamar - LACHMAN, Noa. Alumina Thin-Film Deposition on Rough Topographies Comprising Vertically Aligned Carbon Nanotubes: Implications for Membranes, Sensors, and Electrodes. In ACS APPLIED NANO MATERIALS. ISSN 2574-0970, 2021, vol. 4, no. 1, pp. 322-330. Dostupné na: <https://doi.org/10.1021/acsanm.0c02681>., Registrované v: WOS

ADCA155

HANZEL, Ondrej** - SINGH, Meinam Annebushan - MARLA, Deepak - SEDLÁK, Richard - ŠAJGALÍK, Pavol. Wire electrical discharge machinable SiC with GNPs and GO as the electrically conducting filler. In Journal of the European Ceramic Society, 2019, vol. 39, no. 8, p. 2626-2633. (2018: 4.029 - IF, Q1 - JCR, 1.219 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.03.012>

Citácie:

1. [1.1] MUNOX-FERREIRO, Carmen - LOPEZ-PERNIA, Cristina - GALLARDO-LOPEZ, Angela - POYATO, Rosalia. Unravelling the optimization of few-layer graphene crystallinity and electrical conductivity in ceramic composites by Raman spectroscopy. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 16, pp. 290-298. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.025>., Registrované v: WOS
2. [1.1] TOKARSKY, Jonas - KUTLAKOVA, Katerina Mamulova - PEIKERTOVA, Pavlina - REHACKOVA, Lenka - KORMUNDA, Martin - MATEJKOVA, Petra - STUDENTOVA, Sona - KULHANKOVA, Lenka. Polypyrrole/montmorillonite and polypyrrole/ghassoul intercalates as a source of graphite and multi-layer graphene: Preparation of nanocomposites exhibiting strongly anisotropic electrical conductivity. In MATERIALS RESEARCH BULLETIN. ISSN 0025-5408, 2021, vol. 142, no., pp. Dostupné na: <https://doi.org/10.1016/j.materresbull.2021.111429>., Registrované v: WOS

ADCA156

HANZEL, Ondrej - SEDLÁK, Richard - SEDLÁČEK, Jaroslav - BIZOVSKÁ, Valéria - BYSTRICKÝ, Roman - GIRMAN, Vladimír - KOVALČÍKOVÁ, Alexandra - DUSZA, Ján - ŠAJGALÍK, Pavol. Anisotropy of functional properties of SiC composites with GNPs, GO and in-situ formed graphene. In Journal of the European Ceramic Society, 2017, vol. 37, p. 3731-3739. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.03.060>

Citácie:

1. [1.1] BAI, Yuhang - ZHANG, Baoxi - DU, Huiling - CHENG, Laifei. Efficient multiscale strategy for toughening HfB₂ ceramics: A heterogeneous ceramic-metal layered architecture. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN 0002-7820, 2021, vol. 104, no. 4, pp. 1841-1851., Registrované v: WOS
2. [1.1] BUKHARI, Syed Zaighum Abbas - ANWAR, Muhammad Shoaib - NASEER, Danyal - HA, Jang-Hoon - LEE, Jongman - SONG, In-Hyuck. Effect of graphite and Mn₃O₄ on clay-bonded SiC ceramics for the production of electrically conductive heatable filter. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 16, pp. 23045-23052. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.019>., Registrované v: WOS
3. [1.1] LOPEZ-PERNIA, Cristina - MORALES-RODRIGUEZ, Ana - GALLARDO-LOPEZ, Angela - POYATO, Rosalia. Enhancing the electrical conductivity of in-situ reduced graphene oxide-zirconia composites through the control of the processing routine. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 7, pp. 9382-9391., Registrované v: WOS
4. [1.1] MUNOX-FERREIRO, Carmen - LOPEZ-PERNIA, Cristina - GALLARDO-LOPEZ,

- Angela - POYATO, Rosalia. Unravelling the optimization of few-layer graphene crystallinity and electrical conductivity in ceramic composites by Raman spectroscopy. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 16, pp. 290-298. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.025>, Registrované v: WOS*
5. [1.1] ZHANG, Ruiyu - YU, Xin - YANG, Qiwu - CUI, Gan - LI, Zili. The role of graphene in anti-corrosion coatings: A review. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2021, vol. 294, no., pp. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.123613>, Registrované v: WOS
- ADCA157 HANZEL, Ondrej - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. New approach for distribution of carbon nanotubes in alumina matrix. In Journal of the European Ceramic Society, 2014, vol. 34, no. 7, p. 1845-1851. (2013: 2.307 - IF, Q1 - JCR, 1.122 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2014.01.020>
- Citácie:
1. [1.1] TAN, Songlin - ZHUANG, Yongqi - YI, Jianhong. Preparation and mechanic properties of multi-wall carbon nanotube reinforced alumina matrix composites by spray drying and hot-pressing sintering. In MATERIALS RESEARCH EXPRESS, 2021, vol. 8, no. 6, pp. Dostupné na: <https://doi.org/10.1088/2053-1591/ac0a01>, Registrované v: WOS
2. [1.1] ZHANG, Wei. A review of tribological properties for boron carbide ceramics. In PROGRESS IN MATERIALS SCIENCE. ISSN 0079-6425, 2021, vol. 116, no., pp. Dostupné na: <https://doi.org/10.1016/j.pmatsci.2020.100718>, Registrované v: WOS
- ADCA158 HANZEL, Ondrej** - LENČEŠ, Zoltán - KIM, Young-Wook - FEDOR, Ján - ŠAJGALÍK, Pavol. Highly electrically and thermally conductive silicon carbide-graphene composites with yttria and scandia additives. In Journal of the European Ceramic Society, 2020, vol. 40, no. 2, p. 241-250. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.10.001>
- Citácie:
1. [1.1] ANWAR, Muhammad Shoaib - BUKHARI, Syed Zaighum Abbas - HA, Jang-Hoon - LEE, Jongman - SONG, In-Hyuck. Effect of Ni content and its particle size on electrical resistivity and flexural strength of porous SiC ceramic sintered at low-temperature using clay additive. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 22, pp. 31536-31547. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.032>, Registrované v: WOS
2. [1.1] BUKHARI, Syed Zaighum Abbas - ANWAR, Muhammad Shoaib - NASEER, Danyal - HA, Jang-Hoon - LEE, Jongman - SONG, In-Hyuck. Effect of graphite and Mn3O4 on clay-bonded SiC ceramics for the production of electrically conductive heatable filter. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 16, pp. 23045-23052. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.019>, Registrované v: WOS
3. [1.1] ZHENG, Yinong - LI, Ke - HUANG, Wenyan - HAN, Yuchen - LAN, Siqi - HU, Jiahao - HUANG, Zhenguo - JIN, Chao - ZHANG, Yinggan - YAO, Rongqian. Using graphene networks to build SiC(rGO, Gx) bulk ceramics from polymeric precursors. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 13, pp. 18466-18476. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.170>, Registrované v: WOS
- ADCA159 HARTMANOVÁ, Mária - THURZO, Ilja - JERGEL, Matej - BARTOŠ, J. - KADLEC, K. - ŽELEZNÝ, V. - TUNEGA, Daniel - KUNDRACIK, F. - CHROMIK, Štefan - BRUNEL, M. Characterization of yttria-stabilized zirconia thin films deposited by electron beam evaporation on silicon substrates. In Journal of Materials Science, 1998, vol. 33, no. 4, p. 969-975. (1997: 0.670 - IF). Dostupné na: <https://doi.org/10.1023/A:1004359727737>
- Citácie:
1. [1.1] LE THU LAM - VU VAN HUNG - DANG THANH HAI - HO KHAC HIEU. Theoretical investigation of diffusion and electrical properties of yttria-stabilized zirconia thin film. In THIN SOLID FILMS. ISSN 0040-6090, 2021, vol. 732, 138787. Dostupné na: <https://doi.org/10.1016/j.tsf.2021.138787>, Registrované v: WOS
- ADCA160 HARTMANOVÁ, Mária - HANIC, František - TUNEGA, Daniel - PUTYERA, K. Structural and electro-optical properties of Co-doped yttria-stabilized zirconia. In Chemical Papers - Chemické zvesti, 1998, vol. 52, no. 1, p. 12-15. (1997: 0.150 - IF, karentované - CCC). (1998 - Current Contents). ISSN 0366-6352.
- Citácie:
1. [1.1] WONGSAWATGUL, Nicharee - CHAIANANSUTCHARIT, Soamwadee - YAMAMOTO, Kazuhiro - NANKO, Makoto - SATO, Kazunori. Cobalt Alloying Effect on Improvement of Ni/YSZ Anode-Supported Solid Oxide Fuel Cell Operating with Dry Methane. In MATERIALS TRANSACTIONS. ISSN 1345-9678, 2021, vol. 62, no. 10, pp. 1541-1548. Dostupné na: <https://doi.org/10.2320/matertrans.MT-M2020355>, Registrované v: WOS
- ADCA161 HESABI, Z. Razavi - HAGHIGHATZADEH, M. - MAZAHARI, Mehdi - GALUSEK, Dušan -

SADRNEZHAAD, S.K. Suppression of grain growth in sub-micrometer alumina via two-step sintering method. In *Journal of the European Ceramic Society*, 2009, vol. 29, no. 8, p. 1371-1377. (2008: 1.580 - IF, Q1 - JCR, 1.139 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2008.08.027>

Citácie:

1. [1.1] DE BONA, E. - BALICE, L. - COGNINI, L. - HOLZHAUSER, M. - POPA, K. - WALTER, O. - COLOGNA, M. - PRIEUR, D. - WISS, T. - BALDINOZZI, G. Single-step, high pressure, and two-step spark plasma sintering of UO₂ nanopowders. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 6, pp. 3655-3663. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.01.020>., Registrované v: WOS
2. [1.1] HE, Deng - LIU, Fangming - GUAN, Shixue - HE, Duanwei. High-pressure work hardening of alumina. In *CERAMICS INTERNATIONAL*, 2021, vol. 47, no. 14, pp. 19989-19994. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.009>., Registrované v: WOS
3. [1.1] RAJU, Kati - KIM, Seyoung - KANG, Eun Jung - YUN, Kyong Sik - SEONG, Young-Hoon - HAN, In-Sub - LEE, Hyun-Kwuon - YU, Ji Haeng. Two-step sintering technique for enhancing mechanical and oxygen permeation properties of dual-phase oxygen transport membranes. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 9, pp. 4884-4895. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.03.050>., Registrované v: WOS
4. [1.1] ROWTHU, Sriharitha - DESHPANDE, Pushkar - ANNAMALAI, Adithyan - HOFFMANN, Patrik. Harnessing nano oil reservoir network for generating low friction and wear in self-mating alumina. In *MATERIALS & DESIGN*, 2021, vol. 206, no., pp. ISSN 0264-1275. Dostupné na: <https://doi.org/10.1016/j.matdes.2021.109821>., Registrované v: WOS
5. [1.1] XU, Haiyue - ZOU, Ji - WANG, Weimin - WANG, Hao - JI, Wei - FU, Zhengyi. Densification mechanism and microstructure characteristics of nano- and micro-crystalline alumina by high-pressure and low temperature sintering. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 1, pp. 635-645. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.08.018>., Registrované v: WOS
6. [1.1] YANG, Hongbing - LI, Lu - LI, Yuanyuan - SHEN, Bing - KANG, Yueming - ZHAO, Libin - LI, Jiajie - DONG, Yanhao - LI, Jiangong. Unveiling exceptional sinterability of ultrafine alpha-Al₂O₃ nanopowders. In *JOURNAL OF MATERIALS*, 2021, vol. 7, no. 4, pp. 837-844. ISSN 2352-8478. Dostupné na: <https://doi.org/10.1016/j.jmat.2020.12.011>., Registrované v: WOS
7. [1.1] ZADOROZHNYA, O. Yu. - KHABAS, T. A. - KAMYSHNAYA, K. S. - KUTUGIN, V. A. - MALYKHIN, S. E. Effects of sintering curves on microstructure, physical and mechanical properties and on low temperature degradation of zirconia-toughened alumina. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 16, pp. 274-281. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.09.009>., Registrované v: WOS
8. [1.2] ZHAO, Pengfei - WANG, Shibin - TANG, Hui - JIAN, Xiaodong - ZHAO, Xiaobo - YAO, Yingbang - TAO, Tao - LIANG, Bo - LU, Sheng Guo. Superior energy storage density and giant negative electrocaloric effects in (Pb_{0.98}Bi_{0.02})(Zr, Sn)O₃ antiferroelectric ceramics. In *Scripta Materialia*, 2021-07-15, 200, pp. ISSN 13596462. Dostupné na: <https://doi.org/10.1016/j.scriptamat.2021.113920>., Registrované v: SCOPUS

ADCA162 HNATKO, Miroslav - ŠAJGALÍK, Pavol - LENČEŠ, Zoltán - SALAMON, D. - MONTEVERDE, F. Carbon reduction reaction in the Y₂O₃-SiO₂ glass system at high temperature. In *Journal of the European Ceramic Society*, 2001, vol. 21, no. 16, p. 2797-2801. ISSN 0955-2219. Dostupné na: [https://doi.org/10.1016/S0955-2219\(01\)00231-X](https://doi.org/10.1016/S0955-2219(01)00231-X)

Citácie:

1. [1.1] LIAO, Zhongquan - STANDKE, Yvonne - GLUCH, Juergen - BALAZSI, Katalin - PATHAK, Onkar - HOEHN, Soeren - HERRMANN, Mathias - WERNER, Stephan - DUSZA, Jan - BALAZSI, Csaba - ZSCHECH, Ehrenfried. Microstructure and Fracture Mechanism Investigation of Porous Silicon Nitride-Zirconia-Graphene Composite Using Multi-Scale and In-Situ Microscopy. In *NANOMATERIALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/nano11020285>., Registrované v: WOS

ADCA163 HNATKO, Miroslav - GALUSEK, Dušan - ŠAJGALÍK, Pavol. Low-cost preparation of Si₃N₄-SiC micro/nano composites by in-situ carbothermal reduction of silica in silicon nitride matrix. In *Journal of the European Ceramic Society*, 2004, vol. 24, no. 2, p. 189-195. ISSN 0955-2219. Dostupné na: [https://doi.org/10.1016/S0955-2219\(03\)00604-6](https://doi.org/10.1016/S0955-2219(03)00604-6)

Citácie:

1. [1.1] LIAO, Zhongquan - STANDKE, Yvonne - GLUCH, Juergen - BALAZSI, Katalin - PATHAK, Onkar - HOEHN, Soeren - HERRMANN, Mathias - WERNER, Stephan - DUSZA, Jan - BALAZSI, Csaba - ZSCHECH, Ehrenfried. Microstructure and Fracture Mechanism Investigation of Porous Silicon Nitride-Zirconia-Graphene Composite Using Multi-Scale and In-Situ

- ADCA164 *Microscopy. In NANOMATERIALS, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/nano11020285>, Registrované v: WOS*
HNATKO, Miroslav** - HICÁK, Michal - LABUDOVÁ, Martina - GALUSKOVÁ, Dagmar - SEDLÁČEK, Jaroslav - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Bioactive silicon nitride by surface thermal treatment. In Journal of the European Ceramic Society, 2020, vol. 41, no. 54, p. 1848-1858. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.12.053>
 Citácie:
 1. [1.1] BOZKURT, Dilan - AKARSU, Melis Kaplan - AKIN, Ipek - GOLLER, Gultekin. Phase analysis, mechanical properties and in vitro bioactivity of graphene nanoplatelet-reinforced silicon nitride-caidum phosphate composites. In JOURNAL OF ASIAN CERAMIC SOCIETIES. ISSN 2187-0764, 2021, vol. 9, no. 2, pp. 471-486. Dostupné na: <https://doi.org/10.1080/21870764.2021.1891664>, Registrované v: WOS
 2. [1.1] SUBRAMANIAM, Shankar - NITHYAPRAKASH, R. - ABBAS, G. - PRAMANIK, A. - BASAK, Animesh Kumar. Tribological behavior of silicon nitride-based ceramics A review. In JURNAL TRIBOLOGI. ISSN 2289-7232, 2021, vol. 29, no., pp. 57-71., Registrované v: WOS
 3. [1.1] YANG, Li - MAO, Zuli. Effect of SiC Particle Contents and Size on the Microstructure and Dissolution of SiC-Hydroxyapatite Coatings. In COATINGS, 2021, vol. 11, no. 10, pp. Dostupné na: <https://doi.org/10.3390/coatings11101166>, Registrované v: WOS
- ADCA165 HNATKO, Miroslav - KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - SEDLÁČEK, Jaroslav - BYSTRICKÝ, Roman - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Corrosion of engineering ceramic materials by molten iron Part II: Alumina. In Corrosion Science, 2016, vol. 109, p. 230-237. (2015: 5.154 - IF, Q1 - JCR, 1.907 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2016.04.007>
 Citácie:
 1. [1.1] WANG XIN - XUE ZHAOLU - NI ZHENHANG - LIU XIA - ZHANG SHIHONG. Plasma-Sprayed YSZ/NiCrAlY Protective Coating and Its Resistance Property to Molten Al-Si Corrosion. In RARE METAL MATERIALS AND ENGINEERING. ISSN 1002-185X, 2021, vol. 50, no. 1, pp. 291-298., Registrované v: WOS
- ADCA166 HOLEŠOVÁ, Sylva - VALÁŠKOVÁ, Marta - HLAVÁČ, Dominik - MADEJOVÁ, Jana - SAMLÍKOVÁ, Magda - TOKARSKÝ, Jonáš - PAZDZIORA, Erich. Antibacterial kaolinite/urea/chlorhexidine nanocomposites: Experiment and molecular modelling. In Applied Surface Science, 2014, vol. 305, p. 783-791. (2013: 2.538 - IF, Q1 - JCR, 0.965 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2014.04.008>
 Citácie:
 1. [1.1] DING, Mingtao - SU, Hao - YANG, Kuo - LI, Ye - LI, Fangfei - XUE, Bing. Preparation and characterization of an aluminosilicate material with layer expansion structure. In APPLIED CLAY SCIENCE, 2021, vol. 211, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106179>, Registrované v: WOS
 2. [1.1] DONG, Jiani - CHENG, Zeneng - TAN, Songwen - ZHU, Qubo. Clay nanoparticles as pharmaceutical carriers in drug delivery systems. In EXPERT OPINION ON DRUG DELIVERY, 2021, vol. 18, no. 6, pp. 695-714. ISSN 1742-5247. Available on: <https://doi.org/10.1080/17425247.2021.1862792>, Registrované v: WOS
 3. [1.1] KOWALCZUK, Dorota - GLADYSZ, Agata - PITUCHA, Monika - KAMINSKI, Daniel M. - BARANSKA, Agnieszka - DROP, Bartłomiej. Spectroscopic Study of the Molecular Structure of the New Hybrid with a Potential Two-Way Antibacterial Effect. In MOLECULES, 2021, vol. 26, no. 5, pp. Available on: <https://doi.org/10.3390/molecules26051442>, Registrované v: WOS
 4. [1.1] ZHANG, Zhifang - GUI, Wenjun - WEI, Jia - CUI, Yanjun - LI, Ping - JIA, Zhilong - KONG, Peng. Functionalized Attapulgite for the Adsorption of Methylene Blue: Synthesis, Characterization, and Adsorption Mechanism. In ACS OMEGA, 2021, vol. 6, no. 30, pp. 19586-19595. ISSN 2470-1343. Available on: <https://doi.org/10.1021/acsomega.1c02111>, Registrované v: WOS
 5. [1.1] ZHONG, Zhaoping - LI, Jiefei - MA, Yangyang - YANG, Yuxuan. The adsorption mechanism of heavy metals from coal combustion by modified kaolin: Experimental and theoretical studies. In JOURNAL OF HAZARDOUS MATERIALS, 2021, vol. 418, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2021.126256>, Registrované v: WOS
- ADCA167 HRACHOVÁ, Jana - KOMADEL, Peter - JOCHEC - MOŠKOVÁ, Daniela - KRAJČI, Juraj - JANIGOVÁ, Ivica - ŠLOUF, Miroslav - CHODÁK, Ivan. Properties of organo-clay/natural rubber nanocomposites: Effects of organophilic modifiers. In Journal of Applied Polymer Science, 2013, vol. 127, p. 3447 - 3455. (2012: 1.395 - IF, Q2 - JCR, 0.658 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0021-8995. Dostupné na: <https://doi.org/10.1002/app.37602>
 Citácie:

- ADCA168 1. [1.2] MADEJOVA, Jana - BARLOG, Martin - JANKOVIC, Lubos - SLANY, Michal - PALKOVA, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In *APPLIED CLAY SCIENCE*, 2021, vol. 200, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105894>, Registrované v: WOS
- ADCA168 HRACHOVÁ, Jana - KOMADEL, Peter - CHODÁK, Ivan. Natural rubber nanocomposites with organo-modified bentonite. In *Clays and Clay Minerals*, 2009, vol. 57, no. 4, p. 444-451. (2008: 1.171 - IF, Q2 - JCR, 0.731 - SJR, Q1 - SJR). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2009.0570405>
- Citácie:
1. [1.1] FURKA, Samuel - FURKA, Daniel - DADI, Nitin Chandra Teja Chandra Teja - PALACKA, Patrik - HROMNIKOVA, Dominika - DUENAS SANTANA, Julio Ariel - PINEDA, Javier Diaz - CASAS, Saul Duenas - BUJDAK, Juraj. Novel antimicrobial materials designed for the 3D printing of medical devices used during the COVID-19 crisis. In *RAPID PROTOTYPING JOURNAL*, 2021, vol. 27, no. 5, pp. 890-904. ISSN 1355-2546. Dostupné na: <https://doi.org/10.1108/RPJ-09-2020-0219>, Registrované v: WOS
2. [1.1] SURYA, Indra - MUNIYADI, Mathialagan - ISMAIL, Hanafi. A review on clay-reinforced ethylene propylene diene terpolymer composites. In *POLYMER COMPOSITES*, 2021, vol. 42, no. 4, pp. 1698-1711. ISSN 0272-8397. Dostupné na: <https://doi.org/10.1002/pc.25956>, Registrované v: WOS
- ADCA169 HRACHOVÁ, Jana - MADEJOVÁ, Jana - BILLIK, Peter - KOMADEL, Peter - FAJNOR, Vladimír Štefan. Dry grinding of Ca and octadecyltrimethylammonium montmorillonite. In *Journal of Colloid and Interface Science*, 2007, vol. 316, no. 2, p. 589-595. (2006: 2.233 - IF, Q2 - JCR, 1.005 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0021-9797. Dostupné na: <https://doi.org/10.1016/j.jcis.2007.07.085>
- Citácie:
1. [1.1] SHANG, Hong - SUN, Zhihui. Laboratory evaluation of PAHs removal by multi-functional green pervious concrete (MGPC) pavement. In *JOURNAL OF CLEANER PRODUCTION*, 2021, vol. 315, no., pp. ISSN 0959-6526. Available on: <https://doi.org/10.1016/j.jclepro.2021.128032>, Registrované v: WOS
2. [1.1] VALERA-ZARAGOZA, Mario - AGUERO-VALDEZ, Diana - LOPEZ-MEDINA, Margarita - DEHESA-BLAS, Shunashi - KARIN NAVARRO-MTZ, A. - AVALOS-BORJA, Miguel - JUAREZ-ARELLANO, Erick A. Controlled modification of sodium montmorillonite clay by a planetary ball-mill as a versatile tool to tune its properties. In *ADVANCED POWDER TECHNOLOGY*, 2021, vol. 32, no. 2, pp. 591-599. ISSN 0921-8831. Available on: <https://doi.org/10.1016/j.appt.2021.01.004>, Registrované v: WOS
- ADCA170 HRDÁ, Marcela - KULICH, Tomáš - REPISKÝ, Michal - NOGA, Jozef - MALKINA, Oľga - MALKIN, Vladimír. Implementation of the diagonalization-free algorithm in the self-consistent field procedure within the four-component relativistic scheme. In *Journal of Computational Chemistry*, 2014, vol. 35, no. 23, p. 1725-1737. (2013: 3.601 - IF, Q1 - JCR, 1.449 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0192-8651. Dostupné na: <https://doi.org/10.1002/jcc.23674>
- Citácie:
1. [1.1] DESMARAIS, Jacques K. - ERBA, Alessandro - FLAMENT, Jean-Pierre - KIRTMAN, Bernard. Perturbation Theory Treatment of Spin-Orbit Coupling, Part I: Double Perturbation Theory Based on a Single-Reference Initial Approximation. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 8, pp. 4697-4711. ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00343>, Registrované v: WOS
- ADCA171 HRICOVÍNI, Michal - ASHER, James Richard - HRICOVÍNI, Miloš**. Photochemical anti-syn isomerization around the -N-N=bond in heterocyclic imines. In *RSC Advances*, 2020, vol. 10, no. 10, p. 5540-5550. (2019: 3.119 - IF, Q2 - JCR, 0.736 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2046-2069. Dostupné na: <https://doi.org/10.1039/c9ra10730d>
- Citácie:
1. [1.1] JARRAHI, Mahbube - TAYEBEE, Reza - MALEKI, Behrooz - SALIMI, Alireza. One-pot multicomponent green LED photoinduced synthesis of chromeno[4,3-b]chromenes catalyzed by a new nanophotocatalyst histaminium tetrachlorozincate. In *RSC ADVANCES*, 2021, vol. 11, no. 32, pp. 19723-19736. Available on: <https://doi.org/10.1039/d1ra00189b>, Registrované v: WOS
- ADCA172 HRICOVÍNI, Miloš - DRIGUEZ, Pierre-Alexandre - MALKINA, Oľga. NMR and DFT analysis of trisaccharide from heparin repeating sequence. In *Journal of Physical Chemistry B*, 2014, vol. 118, no. 41, p. 11931-11942. (2013: 3.377 - IF, Q2 - JCR, 1.494 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS). ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp508045n>
- Citácie:
1. [1.1] GORLE, Anil K. - HASELHORST, Thomas - KATNER, Samantha J. - EVEREST-DASS, Arun - HAMPTON, James D. - PETERSON, Erica J. - KOBLINSKI, Jennifer E. - KATSUTA,

Eriko - TAKABE, Kazuaki - VON ITZSTEIN, Mark - BERNERS-PRICE, Susan J. - FARRELL, Nicholas P. Conformational Modulation of Iduronic Acid-Containing Sulfated Glycosaminoglycans by a Polynuclear Platinum Compound and Implications for Development of Antimetastatic Platinum Drugs. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2021, vol. 60, no. 6, pp. 3283-3289. ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.202013749>., Registrované v: WOS

2. [1.1] KRIVDIN, Leonid B. Computational NMR of Carbohydrates: Theoretical Background, Applications, and Perspectives. In *MOLECULES*, 2021, vol. 26, no. 9, pp. Dostupné na: <https://doi.org/10.3390/molecules26092450>., Registrované v: WOS

3. [1.2] JAZWIŃSKI, Jarosław. Theoretical and practical aspects of indirect spin-spin couplings. In *Nuclear Magnetic Resonance*, 2021-01-01, 46, pp. 34-75. ISSN 03059804. Dostupné na: <https://doi.org/10.1039/9781788010665-00034>., Registrované v: SCOPUS

ADCA173 HRICOVÍNI, Miloš - SCHOLTZOVA, Eva - BÍZIK, F. B3LYP/6-311++G** study of structure and spin-spin coupling constant in heparin disaccharide. In *Carbohydrate Research*, 2007, vol. 342, no. 10, p. 1350-1356. (2006: 1.703 - IF, Q2 - JCR, 0.643 - SJR, Q2 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0008-6215. Dostupné na: <https://doi.org/10.1016/j.carres.2007.03.020>

Citácie:

1. [1.1] GORLE, Anil K. - HASELHORST, Thomas - KATNER, Samantha J. - EVEREST-DASS, Arun - HAMPTON, James D. - PETERSON, Erica J. - KOBLINSKI, Jennifer E. - KATSUTA, Eriko - TAKABE, Kazuaki - VON ITZSTEIN, Mark - BERNERS-PRICE, Susan J. - FARRELL, Nicholas P. Conformational Modulation of Iduronic Acid-Containing Sulfated Glycosaminoglycans by a Polynuclear Platinum Compound and Implications for Development of Antimetastatic Platinum Drugs. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2021, vol. 60, no. 6, pp. 3283-3289. ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.202013749>., Registrované v: WOS

2. [1.1] KRIVDIN, Leonid B. Computational NMR of Carbohydrates: Theoretical Background, Applications, and Perspectives. In *MOLECULES*, 2021, vol. 26, no. 9, pp. Dostupné na: <https://doi.org/10.3390/molecules26092450>., Registrované v: WOS

ADCA174 HROBÁRIK, Peter - HROBÁRIKOVÁ, Veronika - MEIER, Florian - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - KAUPP, Martin. Relativistic four-component DFT calculations of ¹H NMR chemical shifts in transition-metal hydride complexes: unusual high-field shifts beyond the Buckingham-Stephens model. In *Journal of Physical Chemistry A*, 2011, vol. 115, no. 22, p. 5654-5659. (2010: 2.732 - IF, Q2 - JCR, 1.489 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/jp202327z>

Citácie:

1. [1.1] CHAMKIN, Aleksandr A. Benchmarking DFT Calculations of ¹H and ¹³C Chemical Shifts in Monosubstituted Ferrocenes. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*. ISSN 0020-7608, 2021, vol. 121, no. 4, pp. Dostupné na: <https://doi.org/10.1002/qua.26456>., Registrované v: WOS

2. [1.1] FOROUTAN-NEJAD, Cina - VÍCHA, Jan - GHOSH, Abhik. Relativity or aromaticity? A first-principles perspective of chemical shifts in osmabenzene and osmapentalene derivatives. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2020, vol. 22, no. 19, pp. 10863-10869. Dostupné na: <https://doi.org/10.1039/d0cp01481h>., Registrované v: WOS

3. [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCpT] Complexes. In *ORGANOMETALLICS*. ISSN 0276-7333, 2021, vol. 40, no. 10, pp. 1443-1453. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>., Registrované v: WOS

4. [1.1] HOLTOMO, Olivier - MOTAPON, Ousmanou - NSANGOU, Mama. Insight and performance of LC-DFT vs DFT in the NMR shielding and chemical shift calculations: Case of CHCl₃(*sic*)-CH₃CF₃. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*. ISSN 0020-7608, 2020, vol. 120, no. 24, pp. Dostupné na: <https://doi.org/10.1002/qua.26408>., Registrované v: WOS

5. [1.1] KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - GANUSHEVICH, Yulia S. - LATYPOV, Shamil K. DFT Approach for Predicting C-13 NMR Shifts of Atoms Directly Coordinated to Nickel. In *ORGANOMETALLICS*. ISSN 0276-7333, 2021, vol. 40, no. 11, pp. 1614-1625. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00074>., Registrované v: WOS

6. [1.1] LATYPOV, Shamil K. - KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - SINYASHIN, Oleg G. Quantum Chemical Calculations of P-31 NMR Chemical Shifts in Nickel Complexes: Scope and Limitations. In *ORGANOMETALLICS*. ISSN 0276-7333, 2020, vol. 39, no. 8, pp. 1413-1422. Dostupné na: <https://doi.org/10.1021/acs.organomet.0c00127>., Registrované v: WOS

7. [1.1] LOPEZ-ESTRADA, Omar - ZUNIGA-GUTIERREZ, Bernardo - SELENIUS, Elli - MALOLA, Sami - HAEKKINEN, Hannu. Magnetically induced currents and aromaticity in ligand-

stabilized Au and AuPt superatoms. In *NATURE COMMUNICATIONS*. ISSN 2041-1723, 2021, vol. 12, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41467-021-22715-x>, Registrované v: WOS

8. [1.1] ROA, Diego A. - GARCIA, Juventino J. Mild reduction with silanes and reductive amination of levulinic acid using a simple manganese catalyst. In *INORGANICA CHIMICA ACTA*. ISSN 0020-1693, 2021, vol. 516, no., pp. Dostupné na: <https://doi.org/10.1016/j.ica.2020.120167>, Registrované v: WOS

9. [1.1] ROY, Matthew M. D. - OMANA, Alvaro A. - WILSON, Andrew S. S. - HILL, Michael S. - ALDRIDGE, Simon - RIVARD, Eric. Molecular Main Group Metal Hydrides. In *CHEMICAL REVIEWS*. ISSN 0009-2665, 2021, vol. 121, no. 20, pp. 12784-12965. Dostupné na: <https://doi.org/10.1021/acs.chemrev.1c00278>, Registrované v: WOS

10. [1.1] ZHENG, Rongfeng - BEVACQUA, Gianna M. - YOUNG, Nicholas R. - ALLISON, Thomas C. - TONG, YuYe J. Site-Dependent Spin Delocalization and Evidence of Ferrimagnetism in Atomically Precise Au-25(SR)(18)(0) Clusters as Seen by Solution C-13 NMR Spectroscopy. In *JOURNAL OF PHYSICAL CHEMISTRY A*. ISSN 1089-5639, 2020, vol. 124, no. 37, pp. 7464-7469. Dostupné na: <https://doi.org/10.1021/acs.jpca.0c02915>, Registrované v: WOS

ADCA175 HROBÁRIK, Peter - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - HROBÁRIKOVÁ, Veronika - KAUPP, Martin. Assessment of higher-order spin-orbit effects on electronic g-tensors of d1 transition-metal complexes by relativistic two- and four-component methods. In *Theoretical Chemistry Accounts*, 2011, vol. 129, no 3-5, p. 715-725. (2010: 2.903 - IF, Q2 - JCR, 1.320 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 1432-881X. Dostupné na: <https://doi.org/10.1007/s00214-011-0951-7>

Citácie:

1. [1.1] MARTIN, Inocencio - MARTIN, Leo - DAS, Anwesh - GROOTVELD, Martin - RADU, Valentin - MATHERC, Melissa L. - WILSON, Philippe B. Electron Spin Resonance for the Detection of Paramagnetic Species: From Fundamentals to Computational Methods for Simulation and Interpretation. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 335-361., Registrované v: WOS
2. [1.1] SUN, Qiming - ZHANG, Xing - BANERJEE, Samragni - BAO, Peng - BARBRY, Marc - BLUNT, Nick S. - BOGDANOV, Nikolay A. - BOOTH, George H. - CHEN, Jia - CUI, Zhi-Hao - ERIKSEN, Janus Juul - GAO, Yang - GUO, Sheng - HERMANN, Jan - HERMES, Matthew R. - KOH, Kevin - KOVAL, Peter - LEHTOLA, Susi - LI, Zhendong - LIU, Junzi - MARDIROSSIAN, Narbe - MCCLAIN, James D. - MOTTA, Mario - MUSSARD, Bastien - PHAM, Hung Q. - PULKIN, Artem - PURWANTO, Wirawan - ROBINSON, Paul J. - RONCA, Enrico - SAYFUTYAROVA, Elvira - SCHEURER, Maximilian - SCHURKUS, Henry F. - SMITH, James E. T. - SUN, Chong - SUN, Shi-Ning - UPADHYAY, Shiv - WAGNER, Lucas K. - WANG, Xiao - WHITE, Alec - WHITFIELD, James Daniel - WILLIAMSON, Mark J. - WOUTERS, Sebastian - YANG, Jun - YU, Jason M. - ZHU, Tianyu - BERKELBACH, Timothy C. - SHARMA, Sandeep - SOKOLOV, Alexander - CHAN, Garnet Kin-Lic. Recent developments in the PySCF program package. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2020, vol. 153, no. 2, pp. Dostupné na: <https://doi.org/10.1063/5.0006074>, Registrované v: WOS

ADCA176 HROBÁRIK, Peter - REVIKINE, Roman - ARBUZNIKOV, Alexei V. - MALKINA, Oľga - MALKIN, Vladimír - KÖHLER, Frank H. - KAUPP, Martin. Density functional calculations of NMR shielding tensors for paramagnetic systems with arbitrary spin multiplicity: Validation on 3d metallocenes. In *Journal of Chemical Physics*, 2007, vol. 126, no. 2, art. no. 024107. (2006: 3.166 - IF, Q1 - JCR, 2.254 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.2423003>

Citácie:

1. [1.1] AUTILLO, Matthieu - ISLAM, Md. Ashraful - HERON, Julie - GUERIN, Laetitia - ACHER, Eleonor - TAMAIN, Christelle - ILLY, Marie-Claire - MOISY, Philippe - COLINEAU, Eric - GRIVEAU, Jean-Christophe - BERTHON, Claude - BOLVIN, Helene. Temperature Dependence of H-1 Paramagnetic Chemical Shifts in Actinide Complexes, Beyond Bleaney's Theory: The An(IV)O(2)(2+)-Dipicolinic Acid Complexes (An = Np, Pu) as an Example. In *CHEMISTRY-A EUROPEAN JOURNAL*, 2021, vol. 27, no. 24, pp. 7138-7153. ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202005147>, Registrované v: WOS
2. [1.1] CASTRO, Abril C. - SWART, Marcel. Recent Advances in Computational NMR Spectrum Prediction. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS
3. [1.1] CRESPI, Ayelen F. - SANCHEZ, Veronica M. - VEGA, Daniel - PEREZ, Ana L. - BRONDINO, Carlos D. - LINCK, Yamila Garro - HODGKINSON, Paul - RODRIGUEZ-CASTELLON, Enrique - LAZARO-MARTINEZ, Juan M. Paramagnetic solid-state NMR assignment and novel chemical conversion of the aldehyde group to dihydrogen ortho ester and hemiacetal moieties in copper(ii)- and cobalt(ii)-pyridinecarboxaldehyde complexes. In *RSC*

- ADVANCES*, 2021, vol. 11, no. 33, pp. 20216-20231. Dostupné na: <https://doi.org/10.1039/d1ra02512k>, Registrované v: WOS
4. [1.1] MALI, Gregor - MAZAJ, Matjaz. Hyperfine Coupling Constants in Cu-Based Crystalline Compounds: Solid-State NMR Spectroscopy and First-Principles Calculations with Isolated-Cluster and Extended Periodic-Lattice Models. In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 8, pp. 4655-4664. ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.0c09651>, Registrované v: WOS
5. [1.1] NOVOTNY, Jan - JEREMIAS, Lukas - NIMAX, Patrick - KOMOROVSKY, Stanislav - HEINMAA, Ivo - MAREK, Radek. Crystal and Substituent Effects on Paramagnetic NMR Shifts in Transition-Metal Complexes. In *INORGANIC CHEMISTRY*, 2021, vol. 60, no. 13, pp. 9368-9377. ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c00204>, Registrované v: WOS
- ADCA177 HRUŠKA, Branislav** - DAGUPATI, Rajesh - CHROMČÍKOVÁ, Mária - NOWICKA, Aleksandra - MICHÁLKOVÁ, J. - PETERSON, Jacob A. - LIŠKA, Marek - MUNOZ, Francisco. Structure and Raman spectra of binary barium phosphate glasses. In *Journal of Thermal Analysis and Calorimetry*, 2020, vol. 142, no. 2, p. 937-942. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09328-0>
- Citácie:
1. [1.2] TAHA, Mohammed A. - YOUNESS, Rasha A. - EL-BASSYOUNI, Gehan T. - AZOOZ, M. A. FTIR Spectral Characterization, Mechanical and Electrical Properties of $\text{PnF}_2/\text{infOinf}_5/\text{infLiinf}_2/\text{infO}$ -CuO Glass-Ceramics. In *Silicon*, 2021-09-01, 13, 9, pp. 3075-3084. ISSN 1876990X. Dostupné na: <https://doi.org/10.1007/s12633-020-00661-5>, Registrované v: SCOPUS
- ADCA178 HRUŠKA, Branislav** - OSIPOV, Armenak A. - OSIPOVA, Leyla M. - CHROMČÍKOVÁ, Mária - MACHÁČEK, Jan. Thermodynamic model and Raman spectra of BaO-B₂O₃ glasses. In *Vibrational Spectroscopy*, 2019, vol. 105, art. no. 102970. (2018: 1.861 - IF, Q3 - JCR, 0.440 - SJR, Q3 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2019.102970>
- Citácie:
1. [1.1] KOITABASHI, Ryota - NEMOTO, Taira - YAMASHITA, Yudai - MESUDA, Masami - TOKO, Kaoru - SUEMASU, Takashi. Formation of high-photoresponsivity BaSi₂ films on glass substrate by radio-frequency sputtering for solar cell applications. In *JOURNAL OF PHYSICS D-APPLIED PHYSICS*. ISSN 0022-3727, 2021, vol. 54, no. 13, pp. Dostupné na: <https://doi.org/10.1088/1361-6463/abd434>, Registrované v: WOS
2. [1.1] YAN, Hao - YAO, Shuang - ZHAO, Siming - LIU, Mengyuan - ZHANG, Wenxiang - ZHOU, Xin - ZHANG, Guangyu - JIN, Xin - LIU, Yibin - FENG, Xiang - CHEN, Xiaobo - CHEN, De - YANG, Chaohe. Insight into the basic strength-dependent catalytic performance in aqueous phase oxidation of glycerol to glyceric acid. In *CHEMICAL ENGINEERING SCIENCE*. ISSN 0009-2509, 2021, vol. 230, no., pp. Dostupné na: <https://doi.org/10.1016/j.ces.2020.116191>, Registrované v: WOS
- ADCA179 HUANG, Yu Li - WRUSS, Elisabeth - EGGER, David A. - KERA, Satoshi - UENO, Nobuo - SAIDI, Wissam A. - BUČKO, Tomáš - WEE, Andrew T.S. - ZOJER, Egbert. Understanding the adsorption of CuPc and ZnPc on noble metal surfaces by combining quantum-mechanical modelling and photoelectron spectroscopy. In *Molecules*, 2014, vol. 19, no. 3, p. 2969-2992. (2013: 2.095 - IF, Q3 - JCR, 0.707 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1420-3049. Dostupné na: <https://doi.org/10.3390/molecules19032969>
- Citácie:
1. [1.1] BELSER, Axel - GREULICH, Katharina - GRUNINGER, Peter - KARSTENS, Reimer - OVSYANNIKOV, Ruslan - GIANGRISOSTOMI, Erika - NAGEL, Peter - MERZ, Michael - SCHUPPLER, Stefan - CHASSE, Thomas - PEISERT, Heiko. Perfluorinated Phthalocyanines on Cu(110) and Cu(110)-(2 x 1)O: The Special Role of the Central Cobalt Atom. In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 16, pp. 8803-8814. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c01215>, Registrované v: WOS
2. [1.1] FERNANDEZ, Laura - THUSSING, Sebastian - BRION-RIOS, Anton X. - SANCHEZ-PORTAL, Daniel - JAKOB, Peter. Lateral Interactions and Order-Disorder Phase Transitions of Metal Phthalocyanines on Ag(111). In *JOURNAL OF PHYSICAL CHEMISTRY C*, 2021, vol. 125, no. 28, pp. 15623-15635. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c03948>, Registrované v: WOS
3. [1.1] MABROUK, Manel - MAJEWSKI, Jacek A. Stability, electronic structure, and magnetic moment of vanadium phthalocyanine grafted to the Au(111) surface. In *COMPUTATIONAL AND THEORETICAL CHEMISTRY*, 2021, vol. 1202, no., pp. ISSN 2210-271X. Available on: <https://doi.org/10.1016/j.comptc.2021.113319>, Registrované v: WOS
- ADCA180 HUJOVÁ, Miroslava** - RABELO MONICH, Patricia - SEDLÁČEK, Jaroslav - HNATKO,

Miroslav - KRAXNER, Jozef - GALUSEK, Dušan - BERNARDO, Enrico. Glass-ceramic foams from alkali-activated vitrified bottom ash and waste glasses. In *Applied Sciences-Basel*, 2020, vol. 10, no. 16, art. no. 5714. (2019: 2.474 - IF, Q2 - JCR, 0.418 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2076-3417. Dostupné na: <https://doi.org/10.3390/app10165714>

Citácie:

1. [1.1] BRESTOVIC, Tomas - LAZAR, Marian - JASMINSKA, Natalia - ZIVCAK, Jozef - TOTH, Lukas - DOBAKOVA, Romana - DUDA, Filip - KMET', OVA, L';ubomira - BEDNAROVA, L';ubomira. Analysis of the Heat Balance of a Metal Hydride Separator Used for the Separation of Hydrogen from Syngas. In *PROCESSES*, 2021, vol. 9, no. 2, pp. Available on: <https://doi.org/10.3390/pr9020251>., Registrované v: WOS

2. [1.1] VOLLPRECHT, Daniel - MACHIELS, Lieven - JONES, Peter Tom. The EU Training Network for Resource Recovery through Enhanced Landfill Mining-A Review. In *PROCESSES*, 2021, vol. 9, no. 2, pp. Available on: <https://doi.org/10.3390/pr9020394>., Registrované v: WOS

ADCA181

CHALMERS, Brian A. - NEJMAN, Phillip S. - LLEWELLYN, Alice V. - FELAR, Adrian M. - GRIFFITHS, Ben L. - PORTMAN, Eden I. - GORDON, Emma-Jane L. - FAN, Kenny J. H. - WOOLINS, J.D. - BÜHL, Michael - MALKINA, Olga - CORDES, David B. - SLAWIN, A.M.Z. - KILIAN, Petr*. A study of through-space and through-bond Jpp coupling in a rigid nonsymmetrical bis(phosphine) and its metal complexes. In *Inorganic Chemistry*, 2018, vol. 57, no. 6, 3387-3398. (2017: 4.700 - IF, Q1 - JCR, 1.892 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.8b00162>

Citácie:

1. [1.1] AYYAPPAN, Ramaraj - COPPEL, Yannick - VENDIER, Laure - GHOSH, Sundargopal - SABO-ETIENNE, Sylviane - BONTEMPS, Sebastien. Synthesis and reactivity of phosphine borohydride compounds. In *CHEMICAL COMMUNICATIONS*. ISSN 1359-7345, 2021, vol. 57, no. 3, pp. 375-378. Dostupné na: <https://doi.org/10.1039/d0cc07072f>., Registrované v: WOS

2. [1.1] HANNIGAN, Matthew D. - MCNEIL, Anne J. - ZIMMERMAN, Paul M. Using J(PP) to Identify Ni Bidentate Phosphine Complexes In Situ. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 17, pp. 13400-13408. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c01720>., Registrované v: WOS

3. [1.1] KUMAR, Vikas - GONNADE, Rajesh G. - YILDIZ, Cem B. - MAJUMDAR, Moumita. Stabilization of the Elusive Antimony(I) Cation and Its Coordination Complexes with Transition Metals. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*. ISSN 1433-7851, 2021, vol. 60, no. 48, pp. 25522-25529. Dostupné na: <https://doi.org/10.1002/anie.202111339>., Registrované v: WOS

4. [1.1] NGUYEN, Tuan-Anh - PENOUILH, Marie-Jose - CATTEY, Helene - PIRIO, Nadine - FLEURAT-LESSARD, Paul - HIERSON, Jean-Cyrille - ROGER, Julien. Unsymmetrically Substituted Bis(phosphino)Ferrocenes Triggering Through-Space (31)(P, P '-)-Nuclear Spin Couplings and Encapsulating Coinage Metal Cations. In *ORGANOMETALLICS*. ISSN 0276-7333, 2021, vol. 40, no. 21, pp. 3571-3584. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00465>., Registrované v: WOS

ADCA182

CHEHAIBOU, Bilal - BADAWI, Michael - BUČKO, Tomáš - BAZHIROV, Timur - ROCCA, Dario*. Computing RPA adsorption enthalpies by machine learning thermodynamic perturbation theory. In *Journal of Chemical Theory and Computation*, 2019, vol. 15, no. 11, p. 6333-6342. (2018: 5.313 - IF, Q1 - JCR, 2.236 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.9b00782>

Citácie:

1. [1.1] CUI, Weiyong - CHEN, Jianhua. Insight into mineral flotation fundamentals through the DFT method. In *INTERNATIONAL JOURNAL OF MINING SCIENCE AND TECHNOLOGY*. ISSN 2095-2686, 2021, vol. 31, no. 6, pp. 983-994. Dostupné na: <https://doi.org/10.1016/j.ijmst.2021.10.001>., Registrované v: WOS

2. [1.1] PIAGGI, Pablo M. - PANAGIOTOPOULOS, Athanassios Z. - DEBENEDETTI, Pablo G. - CAR, Roberto. Phase Equilibrium of Water with Hexagonal and Cubic Ice Using the SCAN Functional. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 5, pp. 3065-3077. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00041>., Registrované v: WOS

3. [1.1] RIZZI, Andrea - CARLONI, Paolo - PARRINELLO, Michele. Targeted Free Energy Perturbation Revisited: Accurate Free Energies from Mapped Reference Potentials. In *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*. ISSN 1948-7185, 2021, vol. 12, no. 39, pp. 9449-9454. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c02135>., Registrované v: WOS

4. [1.1] RYBKIN, Vladimir V. Formulation and Implementation of Density Functional Embedding Theory Using Products of Basis Functions. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 7, pp. 3995-4005. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00175>., Registrované v: WOS

5. [1.1] XU, Jiayan - CAO, Xiao-Ming - HU, P. *Accelerating Metadynamics-Based Free-Energy Calculations with Adaptive Machine Learning Potentials*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 7, pp. 4465-4476. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00261>., Registrované v: WOS
6. [1.2] ROBERTS, Josiah - BURSTEN, Julia R.S. - RISKÓ, Chad. *Genetic Algorithms and Machine Learning for Predicting Surface Composition, Structure, and Chemistry: A Historical Perspective and Assessment*. In *Chemistry of Materials*, 2021-09-14, 33, 17, pp. 6589-6615. ISSN 08974756. Available on: <https://doi.org/10.1021/acs.chemmater.1c00538>., Registrované v: SCOPUS

ADCA183

CHEN, Si** - MICHÁLEK, Martin - GALUSKOVÁ, Dagmar - MICHÁLKOVÁ, Monika - ŠVANČÁREK, Peter - TALIMIAN, Ali - KAŇKOVÁ, Hana - KRAXNER, Jozef - ZHNEG, Kai - LIVERANI, Liliana - GALUSEK, Dušan - BOCCACCINI, Aldo**. Multi-targeted B and Co co-doped 45S5 bioactive glasses with angiogenic potential for bone regeneration. In *Materials Science and Engineering C: Materials for Biological Applications*, 2020, vol. 112, art. no. 110909. (2019: 5.880 - IF, Q1 - JCR, 1.149 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0928-4931. Dostupné na: <https://doi.org/10.1016/j.msec.2020.110909>

Citácie:

1. [1.1] ARAB-AHMADI, Samira - IRANI, Shiva - BAKHSHI, Hadi - ATYABI, Fatemeh - GHALANDARI, Behafarid. *Immobilization of cobalt-loaded laponite/carboxymethyl chitosan on polycaprolactone nanofiber for improving osteogenesis and angiogenesis activities*. In *POLYMERS FOR ADVANCED TECHNOLOGIES*, 2021, vol. 32, no. 11, pp. 4362-4372. ISSN 1042-7147. Available on: <https://doi.org/10.1002/pat.5438>., Registrované v: WOS
2. [1.1] EL-FIQI, Ahmed - KIM, Hae-Won. *Sol-gel synthesis and characterization of novel cobalt ions-containing mesoporous bioactive glass nanospheres as hypoxia and ferroptosis-inducing nanotherapeutics*. In *JOURNAL OF NON-CRYSTALLINE SOLIDS*, 2021, vol. 569, no., pp. ISSN 0022-3093. Available on: <https://doi.org/10.1016/j.jnoncrysol.2021.120999>., Registrované v: WOS
3. [1.1] MABROUK, Mostafa - MOUSA, Sahar M. - ABD ELGHANY, W. A. - ABO-ELFADL, Mahmoud T. - EL-BASSYOUNI, Gehan T. *Bioactivity and cell viability of Ag⁺- and Zr⁴⁺-co-doped biphasic calcium phosphate*. In *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*, 2021, vol. 127, no. 12, pp. ISSN 0947-8396. Available on: <https://doi.org/10.1007/s00339-021-05051-1>., Registrované v: WOS
4. [1.1] MAJUMDAR, Shreyasi - GUPTA, Smriti - KRISHNAMURTHY, Sairam. *Multifarious applications of bioactive glasses in soft tissue engineering*. In *BIOMATERIALS SCIENCE*, 2021, vol. 9, no. 24, pp. 8111-8147. ISSN 2047-4830. Available on: <https://doi.org/10.1039/d1bm01104a>., Registrované v: WOS
5. [1.2] KARGOZAR, Saeid - MOZAFARI, Masoud - GHODRAT, Sara - FIUME, Elisa - BAINO, Francesco. *Copper-containing bioactive glasses and glass-ceramics: From tissue regeneration to cancer therapeutic strategies*. In *Materials Science and Engineering C*, 2021-02-01, 121, pp. ISSN 09284931. Available on: <https://doi.org/10.1016/j.msec.2020.111741>., Registrované v: SCOPUS
6. [1.2] URSINO, Heather L. - JAMES, Bryan D. - LUDTKA, Christopher M. - ALLEN, Josephine B. *Bone tissue engineering*. In *Tissue Engineering Using Ceramics and Polymers, Third Edition*, 2021-01-01, pp. 587-644. Available on: <https://doi.org/10.1016/B978-0-12-820508-2.00018-0>., Registrované v: SCOPUS

ADCA184

CHEN, Si** - GALUSKOVÁ, Dagmar - KAŇKOVÁ, Hana - ZHENG, Kai - MICHÁLEK, Martin - LIVERANI, Liliana - GALUSEK, Dušan - BOCCACCINI, Aldo**. Electrospun PCL fiber mats incorporating multi-targeted B and Co Co-doped bioactive glass nanoparticles for angiogenesis. In *Materials*, 2020, vol. 13, no. 18, art. no. 4010. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13184010>

Citácie:

1. [1.1] AKTURK, Aysen - EROL-TAYGUN, Melek - GOLLER, Gultekin - KUCUKBAYRAK, Sadriye. *Optimization and characterization of poly(epsilon-caprolactone) nanofiber mats doped with bioactive glass and copper metal nanoparticles*. In *CHEMICAL PAPERS*. ISSN 0366-6352, 2021, vol. 75, no. 11, pp. 5929-5943. Dostupné na: <https://doi.org/10.1007/s11696-021-01777-7>., Registrované v: WOS
2. [1.2] RIVERO, Guadalupe - POPOV PEREIRA DA CUNHA, Matthäus D. - CARACCILO, Pablo C. - ABRAHAM, Gustavo A. *Nanofibrous scaffolds for skin tissue engineering and wound healing applications*. In *Tissue Engineering Using Ceramics and Polymers, Third Edition*, 2021-01-01, pp. 645-681. Available on: <https://doi.org/10.1016/B978-0-12-820508-2.00020-9>., Registrované v: SCOPUS

ADCA185

CHERRY, Peter - KOMOROVSKÝ, Stanislav - MALKIN, Vladimír - MALKINA, Olga**. Calculations of the EPR g-tensor using unrestricted two- and four-component relativistic approaches within the HF and DFT frameworks. In *Molecular Physics*, 2017, vol. 115, no. 1-2, p. 75-89. (2016:

1.870 - IF, Q2 - JCR, 0.820 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0026-8976. Dostupné na: <https://doi.org/10.1080/00268976.2016.1191688>

Citácie:

1. [1.1] ZHOU, Chen - WU, Dihua - GAGLIARDI, Laura - TRUHLAR, Donald G. Calculation of the Zeeman Effect for Transition-Metal Complexes by Multiconfiguration Pair-Density Functional Theory. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 8, pp. 5050-5063. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00208>, Registrované v: WOS

ADCA186

CHIBANI, Siwar - CHEBBI, Mouheb - LEBÈGUE, Sébastien - BUČKO, Tomáš - BADAWI, Michael. A DFT investigation of the adsorption of iodine compounds and water in H-, Na-, Ag-, and Cu-mordenite. In Journal of Chemical Physics, 2016, vol. 144, no. 24, p. 244705-1-244705-10. (2015: 2.894 - IF, Q2 - JCR, 1.255 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4954659>

Citácie:

1. [1.1] JUNG, Young-Eun - KANG, Seong-Woo - YIM, Man-Sung. Feasibility Study of Using Bi-mna Metal-Organic Frameworks as Adsorbents for Radioiodine Capture at High Temperature. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, 2021, vol. 60, no. 16, pp. 5964-5975. Dostupné na: <https://doi.org/10.1021/acs.iecr.1c00450>, Registrované v: WOS
2. [1.1] RATHI, Aanchal - BASU, Soumen - BARMAN, Sanghamitra. Structural framework effect of various CeO₂-loaded zeolites on the adsorptive removal of fipronil. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105167>, Registrované v: WOS
3. [1.1] TONG, Dayin - ZHAO, Yaolin - CHEN, Zhongcun - WANG, Yuqi - JIA, Ziqi - NIE, Xiaomeng - XIAO, Songtao. Theoretical insights into volatile iodine adsorption onto COF-DL229. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 44, pp. 25365-25373. Dostupné na: <https://doi.org/10.1039/d1cp04390k>, Registrované v: WOS
4. [1.1] WANG, Wei - QIAN, Weixing - MA, Hongfang - YING, Weiyong - ZHANG, Haitao. A theoretical study on the feed ratio of dimethyl ether carbonylation on H-MOR zeolites. In MOLECULAR PHYSICS. ISSN 0026-8976, 2021, vol. 119, no. 9, pp. Dostupné na: <https://doi.org/10.1080/00268976.2021.1896044>, Registrované v: WOS
5. [1.2] WANG, Wei - QIAN, Weixing - MA, Hongfang - YING, Weiyong - ZHANG, Haitao. A theoretical study on adsorption-diffusion of dimethyl ether carbonylation on pyridine-modified H-MOR. In Huagong Xuebao/CIESC Journal. ISSN 04381157, 2021-09-01, 72, 9, pp. 4786-4795. Dostupné na: <https://doi.org/10.11949/0438-1157.20201921>, Registrované v: SCOPUS

ADCA187

CHITU, Livia - CHUSHKIN, Jurij - LUBY, Štefan - MAJKOVÁ, Eva - ŠATKA, A. - IVAN, Jozef - SMRČOK, Ľubomír - BUCHAL, Antonín - GIERSIG, Michael - HILGENDORFF, M. Structure and self-assembling of Co nanoparticles. In Materials Science and Engineering C - Biomimetic and Supramolecular Systems, 2007, vol. 27, no. 1, p. 23-28. (2006: 1.325 - IF, Q2 - JCR, 0.720 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents, WOS, SCOPUS). ISSN 0928-4931. Dostupné na: <https://doi.org/10.1016/j.msec.2005.12.001>

Citácie:

1. [1.1] CASTILLO, Carolina A. - SANTANA, Paula A. SUPERPARAMAGNETIC COBALT NANOCOMPOSITES SYNTHESIZED BY SOLVOTHERMAL SYNTHESIS IN A SINGLE STEP. In JOURNAL OF THE CHILEAN CHEMICAL SOCIETY, 2021, vol. 66, no. 4, pp. 5312-5315. ISSN 0717-9707, Registrované v: WOS

ADCA188

CHOVANEC, Jozef** - SVOBODA, Roman - KRAXNER, Jozef - ČERNÁ, Andrea - GALUSEK, Dušan. Crystallization kinetics of the Y3Al5O12 glass. In Journal of Alloys and Compounds, 2017, vol. 725, p. 792-799. (2016: 3.133 - IF, Q1 - JCR, 0.954 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0925-8388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2017.07.191>

Citácie:

1. [1.1] ABD, Husnen R. - HASSAN, Z. - AHMED, Naser M. - OMAR, A. F. - THAHAB, S. M. - LAU, Khai Shenn. Rapid synthesis of Ce³⁺:YAG via CO₂ laser irradiation combustion method: Influence of Ce doping and thickness of phosphor ceramic on the performance of a white LED device. In JOURNAL OF SOLID STATE CHEMISTRY. ISSN 0022-4596, 2021, vol. 294, no., pp. Dostupné na: <https://doi.org/10.1016/j.jssc.2020.121866>, Registrované v: WOS
2. [1.1] SHCHERBAKOVA, Galina I. - SHAIKHIN, Maxim K. - KUTINOVA, Natalia B. - STOROZHENKO, Pavel A. - KIRILIN, Aleksey D. - VARFOLOMEEV, Maxim S. - DRACHEV, Aleksander I. - ASHMARIN, Artem A. Condensation of Organoyttriumoxanalumoxanes with Chromium Acetylacetonate. In JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS. ISSN 1574-1443, 2021, vol. 31, no. 8, pp. 3460-3480. Dostupné na: <https://doi.org/10.1007/s10904-021-02026-w>, Registrované v: WOS
3. [1.1] ZHANG, Ying - MA, Xiaoguang - LI, Xiaoyu - YANG, Lixia - GE, Binghui - ALLIX, Mathieu - LI, Jianqiang. Crystallization kinetics of Al₂O₃-26mol%Y₂O₃ glass and full crystallized

- transparent Y3Al5O12-based nanoceramic. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 2, pp. 1557-1563. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.09.036>, Registrované v: WOS*
- ADCA189 CHOVANEC, Jozef - GALUSEK, Dušan - RÁHEL, Jozef - ŠAJGALÍK, Pavol. Low loss alumina dielectrics by aqueous tape casting: The influence of composition on the loss tangent. In *Ceramics International*, 2012, vol. 38, no. 5, p. 3747-3755. (2011: 1.751 - IF, Q1 - JCR, 0.918 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2012.01.020>
- Citácie:
1. [1.1] STASTNY, Premysl - CHLUP, Zdenek - CASTKOVA, Klara - TRUNEC, Martin. High strength alumina tapes prepared by gel-tape casting method. In *CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 5, pp. 6988-6995. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.11.048>, Registrované v: WOS*
- ADCA190 CHOVANEC, Jozef - GHILLÁNYOVÁ, Katarína - RÁHEL, Jozef - ŠAJGALÍK, Pavol - GALUSEK, Dušan. The influence of dopants on loss tangent of polycrystalline alumina ceramics. In *Ceramics International*, 2012, vol. 38, no. 3, p. 2043-2049. (2011: 1.751 - IF, Q1 - JCR, 0.918 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2011.10.040>
- Citácie:
1. [1.2] GHAZANFARI, S. - TORKI, M. - SHAFEIEY, A. - MILANI, M. - EMADI, R. The influence of Ysup3+/sup and Mgsup2+/sup dopants on the transparency behavior of alumina ceramics. In *Materials Chemistry and Physics, 2020-06-01, 247, pp. ISSN 02540584. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2020.122905>, Registrované v: SCOPUS*
- ADCA191 CHROMČÍKOVÁ, Mária - LIŠKA, Marek - GAVENDA, Tadeáš - MACHÁČEK, Jan. Structure of Na2O-MgO-CaO-SiO2 glasses by combined Raman spectroscopy and thermodynamic modeling approach. In *Journal of Thermal Analysis and Calorimetry*, 2014, vol. 118, no. 2, p. 835-840. (2013: 2.206 - IF, Q2 - JCR, 0.458 - SJR, Q3 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-014-3714-6>
- Citácie:
1. [1.1] ZHANG, Lingxi - CHEN, Min - WANG, Ning - HUANG, Mingyuan. Evolution of Viscosity and Structure Property of Vanadium Slag during Iron-Extracting Reduction Process. In *STEEL RESEARCH INTERNATIONAL, 2021, vol. 92, no. 4, pp. ISSN 1611-3683. Dostupné na: <https://doi.org/10.1002/srin.202000501>, Registrované v: WOS*
- ADCA192 CHROMČÍKOVÁ, Mária - LIŠKA, Marek - MACHÁČEK, Jan - CHOVANEC, Jozef. Thermodynamic model and viscosity of Na2O-MgO-CaO-SiO2 glasses. In *Journal of Non-Crystalline Solids*, 2014, vol. 401, p. 237-240. (2013: 1.716 - IF, Q1 - JCR, 0.822 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2014.01.021>
- Citácie:
1. [1.1] BALUEVA, K. - PLEKHOVICH, A. D. - KUT'IN, A. M. - SUKHANOV, M. Thermodynamic Analysis of the Crystallization Resistance of the Ge-S-Bi Glasses. In *RUSSIAN JOURNAL OF INORGANIC CHEMISTRY. ISSN 0036-0236, 2021, vol. 66, no. 8, pp. 1153-1160. Dostupné na: <https://doi.org/10.1134/S0036023621080027>, Registrované v: WOS*
- ADCA193 CHROMČÍKOVÁ, Mária - HOLUBOVÁ, Jana - LIŠKA, Marek - ČERNOŠEK, Zdeněk - ČERNOŠKOVÁ, Eva. Modeling of the reversible part of stepscan DSC measurement of the glass transition. In *Ceramics-Silikáty*, 2005, vol. 49, no. 2, p. 91-96. (2004: 0.385 - IF, karentované - CCC). (2005 - Current Contents, WOS, SCOPUS). ISSN 0862-5468.
- Citácie:
1. [1.1] STURM, Karl Guenter. Microscopic-Phenomenological Model of Glass Transition and Temperature Dependence of Viscosity-Part I: Foundations of the Model. In *CERAMICS-SWITZERLAND, 2021, vol. 4, no. 2, pp. 302-330. ISSN 2571-6131. Dostupné na: <https://doi.org/10.3390/ceramics4020024>, Registrované v: WOS*
- ADCA194 CHROMČÍKOVÁ, Mária - LIŠKA, Marek - MACHÁČEK, Jan - ŠULCOVÁ, Jana. Thermodynamic model and structure of CaO-P2O5 glasses. In *Journal of Thermal Analysis and Calorimetry*, 2013, vol. 114, no. 2, p. 785-789. (2012: 1.982 - IF, Q2 - JCR, 0.596 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-013-2988-4> (Vega 1/0006/12 : Štruktúra a vlastnosti oxidových skiel - molekulová dynamika, termodynamické modely, kryštalizácia, vibračné a impedančné spektrá. APVV-0487-11 : Štruktúra a vlastnosti oxidových skiel určených na aplikácie v jadrovej energetike. ITMS 26220120056 : Centrum excelentnosti pre keramiku, sklo a silikátové materiály)
- Citácie:
1. [1.1] LOPEZ-GRANDE, Alberto - DAGUPATI, Rajesh - GALAN DEL SASTRE, Pedro - MUNOZ, Francisco. Ionic conductivity of Li2O-P2O5 glasses from thermodynamic modeling of

- their chemical structure. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2021, vol. 104, no. 11, pp. 5625-5635. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.17962>., Registrované v: WOS*
- ADCA195 IBRAHIM, Ismail - LENČEŠ, Zoltán - BENCO, Ľubomír - ŠAJGALÍK, Pavol. Lanthanide-doped LaSi₃N₅ based phosphors: Ab initio study of electronic structures, band gaps, and energy level locations. In Journal of Luminescence, 2016, vol. 172, p. 83-91. (2015: 2.693 - IF, Q1 - JCR, 0.763 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0022-2313. Dostupné na: <https://doi.org/10.1016/j.jlumin.2015.11.033>
- Citácie:
- [1.1] WU, Bing - YANG, Meng-Lin - YAN, Yan-Ci - MA, Chong-Geng - ZHANG, Hong-Wu - BRIK, Mikhail G. - DRAMICANIN, Miroslav D. - VALIEV, Uygur V. - PIASECKI, Michal. Effects of chemical composition on the structural stability, elastic, vibrational, and electronic properties of Cs(2)NaLnX(6) (Ln = La horizontal ellipsis Lu, X = F, Cl, Br, I) elpasolites. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN 0002-7820, 2021, vol. 104, no. 3, pp. 1489-1500. Dostupné na: <https://doi.org/10.1111/jace.17565>., Registrované v: WOS
 - [1.1] YU, Jinying - FAN, Yufan - WU, Lina - SUN, Bei - WU, Yelong. First-Principles Investigation of Electronic Structure and Energy Level Scheme of Phosphors: The Lanthanide-Doped Sr₂P₂O₇. In ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY. ISSN 2162-8769, 2021, vol. 10, no. 5, pp. Dostupné na: <https://doi.org/10.1149/2162-8777/abfc27>., Registrované v: WOS
- ADCA196 IBRAHIM, Ismail - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol - BENCO, Ľubomír. Electronic structure and energy level schemes of RE³⁺:LaSi₃N₅ and RE²⁺:LaSi₃N₅-xO_x phosphors (RE=Ce, Pr, ND, Pm, Sm, Eu) from first principles. In Journal of Luminescence, 2015, vol. 164, p. 131-137. (2014: 2.719 - IF, Q1 - JCR, 0.802 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0022-2313. Dostupné na: <https://doi.org/10.1016/j.jlumin.2015.03.035>
- Citácie:
- [1.1] EDDINE, Oumaima Jamal - BOYER, Damien - EL BOUCHTI, Mehdi - BOUKHRISS, Aicha - CHERKAOUI, Omar - MAHIOU, Rachid - HANNACHE, Hassan - GMOUH, Said. Effect of Eu³⁺ and Tb³⁺ ions concentration on the mechanical, structural, and photoluminescence properties of phosphate glass fibers. In OPTICAL MATERIALS. ISSN 0925-3467, 2021, vol. 122, no., pp. Dostupné na: <https://doi.org/10.1016/j.optmat.2021.111664>., Registrované v: WOS
 - [1.1] RASTOGI, Chandresh Kumar - SHARMA, Shilendra Kumar - SASMAL, Sayantan - PALA, Raj Ganesh S. - KUMAR, Jitendra - SIVAKUMAR, Sri. Terbium Ion-Mediated Energy Transfer in W_{0.3}Tb_{0.7} and Eu³⁺ Phosphors for UV-Sensitized White Light Emission. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 11, pp. 6163-6175. Dostupné na: <https://doi.org/10.1021/acs.jpcc.0c10294>., Registrované v: WOS
 - [1.1] YU, Jinying - FAN, Yufan - WU, Lina - SUN, Bei - WU, Yelong. First-Principles Investigation of Electronic Structure and Energy Level Scheme of Phosphors: The Lanthanide-Doped Sr₂P₂O₇. In ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY. ISSN 2162-8769, 2021, vol. 10, no. 5, pp. Dostupné na: <https://doi.org/10.1149/2162-8777/abfc27>., Registrované v: WOS
- ADCA197 JANÍK, R. - JÓNA, Eugen - PAVLÍK, Viliam - LIZÁK, P. - MOJUMDAR, Subhash Chandra. Interactions of 2,5- and 3,5-dimethylphenols with co-exchanged montmorillonite : Thermal, IR-spectral and X-ray studies. In Journal of Thermal Analysis and Calorimetry, 2013, vol. 112, no. 2, p. 1083-1087. (2012: 1.982 - IF, Q2 - JCR, 0.596 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-013-3012-8>
- Citácie:
- [1.1] ZHANG, Ao - KANG, Langlang - ZHANG, Yinmin - DING, Daqian - ZHANG, Yongfeng. Thermal behaviors and kinetic analysis of two natural kaolinite samples selected from Qingshuihe region in Inner Mongolia in China. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2021, vol. 145, no. 6, pp. 3281-3291. Dostupné na: <https://doi.org/10.1007/s10973-020-09869-4>., Registrované v: WOS
- ADCA198 JANKOVIČ, Ľuboš - MADEJOVÁ, Jana - KOMADEL, Peter - JOCHEC MOŠKOVÁ, Daniela - CHODÁK, Ivan. Characterization of systematically selected organo-montmorillonites for polymer nanocomposites. In Applied Clay Science, 2011, vol. 51, p. 438 - 444. (2010: 2.303 - IF, Q1 - JCR, 1.103 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2011.01.006>
- Citácie:
- [1.1] QIU, Jun - CUI, Kaibo - WU, Peng - CHEN, Guowei - WANG, Yueting - LIU, Dongliang - JIANG, Shan - WANG, Guifang. The adsorption characteristics and mechanism of montmorillonite with different layer charge density for alkyl ammonium with different carbon chain length. In NEW JOURNAL OF CHEMISTRY, 2021, vol. 45, no. 23, pp. 10331-10339. ISSN 1144-0546. Dostupné na: <https://doi.org/10.1039/d1nj01683k>., Registrované v: WOS

- ADCA199 JANKOVIČ, Ľuboš - DIMOS, Konstantinos - BUJDÁK, Juraj - KOUTSELAS, Ioannis - MADEJOVÁ, Jana - GOURNIS, Dimitrios - KARAKASSIDES, M.A. - KOMADEL, Peter. Synthesis and characterization of low dimensional ZnS- and PbS-semiconductor particles on a montmorillonite template. In Physical Chemistry Chemical Physics, 2010, vol. 12, no. 42, p. 14236-14244. (2009: 4.116 - IF, 2.147 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/c002891f>
Citácie:
1. [1.1] LV, Zheng - MAN, Zhongwei - XU, Zhenzhen - LI, Shuai - LIAO, Qing - FU, Hongbing. Highly emissive near-infrared solid organic fluorophores for visualization of latent fingerprints based on the powder dusting method. In JOURNAL OF MATERIALS CHEMISTRY C, 2021, vol. 9, no. 23, pp. 7345-7350. ISSN 2050-7526. Dostupné na: <https://doi.org/10.1039/d1tc01183a>., Registrované v: WOS
- ADCA200 JANKOVIČ, Ľuboš** - ŠKORŇA, Peter - MORENO RODRÍGUEZ, Daniel - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Preparation, characterization and adsorption properties of tetraalkylphosphonium organobeidellites. In Applied Clay Science, 2021, vol. 204, art. no. 105989. (2020: 5.467 - IF, Q1 - JCR, 1.062 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105989>
Citácie:
1. [1.1] PLEVOVA, Eva - VALLOVA, Silvie - VACULIKOVA, Lenka - HUNDAKOVA, Marianna - GABOR, Roman - SMUTNA, Katerina - ZEBRAK, Radim. Organobeidellites for Removal of Anti-Inflammatory Drugs from Aqueous Solutions. In NANOMATERIALS, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/nano11113102>., Registrované v: WOS
- ADCA201 JANKOVIČ, Ľuboš - VÉGSO, Karol - ŠIFFALOVICH, Peter - ŠAUŠA, Ondrej - ČAPLOVIČ, Ľubomír - ČAPLOVIČOVÁ, Mária - MEDLÍN, Rostislav - UHLÍK, Peter - NÓGELLOVÁ, Zuzana. XRD, SAXS, and PALS investigations of three different polymers reinforced with tetraoctylammonium exchanged montmorillonite. In International Journal of Polymer Analysis and Characterization, 2016, vol. 21, no. 6, p. 524-536. (2015: 1.515 - IF, Q3 - JCR, 0.478 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1023-666X. Dostupné na: <https://doi.org/10.1080/1023666X.2016.1176760>
Citácie:
1. [1.1] BARLOG, M. - PALKOVA, H. - BUJDAK, J. Luminescence of a laser dye in organically-modified layered silicate pigments. In DYES AND PIGMENTS. ISSN 0143-7208, 2021, vol. 191, no., pp. Dostupné na: <https://doi.org/10.1016/j.dyepig.2021.109380>., Registrované v: WOS
- ADCA202 JANKOVIČ, Ľuboš - KOMADEL, Peter. Metal cation-exchanged montmorillonite catalyzed protection of aromatic aldehydes with Ac2O. In Journal of Catalysis, 2003, vol. 218, no. 1, p. 227-233. ISSN 0021-9517. Dostupné na: [https://doi.org/10.1016/S0021-9517\(03\)00138-6](https://doi.org/10.1016/S0021-9517(03)00138-6)
Citácie:
1. [1.1] HUANG, Wei Jun - LIU, Jia Hui - SHE, Qi Ming - ZHONG, Jian Qiang - CHRISTIDIS, George E. - ZHOU, Chun Hui. Recent advances in engineering montmorillonite into catalysts and related catalysis. In CATALYSIS REVIEWS-SCIENCE AND ENGINEERING, 2021, vol., no., pp. ISSN 0161-4940. Available on: <https://doi.org/10.1080/01614940.2021.1995163>., Registrované v: WOS
- ADCA203 JANOTKA, Ivan - MADEJOVÁ, Jana - ŠTEVULA, Ladislav - FRŤALOVÁ, D.M. Behaviour of Ca(OH)₂ in the presence of the set styrene-acrylate dispersion. In Cement and Concrete Research, 1996, vol. 26, no. 11, p. 1727-1735. Dostupné na: [https://doi.org/10.1016/S0008-8846\(96\)00156-1](https://doi.org/10.1016/S0008-8846(96)00156-1)
Citácie:
1. [1.1] HAFSHEJANI, Tahereh Mohammadi - FENG, Chao - WOHLGEMUTH, Jonas - KRAUSE, Felix - BOGNER, Andreas - DEHN, Frank - THISSEN, Peter. Effect of polymer-coated silica particles in a Portland cement matrix via in-situ infrared spectroscopy. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, 2021, vol. 55, no. 4, pp. 475-487. Dostupné na: <https://doi.org/10.1177/0021998320952152>., Registrované v: WOS
- ADCA204 JEREMIAS, Lukáš - NOVOTNÝ, Jan - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - MAREK, Radek**. Interplay of through-bond hyperfine and substituent effects on the NMR chemical shifts in Ru(III) complexes. In Inorganic Chemistry, 2018, vol. 57, no. 15, p. 8748-8759. (2017: 4.700 - IF, Q1 - JCR, 1.892 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.8b00073>
Citácie:
1. [1.1] ANDERSEN, Anders B. A. - PYYKKONEN, Ari - JENSEN, Hans Jorgen Aa. - MCKEE, Vickie - VAARA, Juha - NIELSEN, Ulla Gro. Remarkable reversal of C-13-NMR assignment in d(1), d(2) compared to d(8), d(9) acetylacetonate complexes: analysis and explanation based on solid-state MAS NMR and computations. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2020, vol. 22, no. 15, pp. 8048-8059. Dostupné na: <https://doi.org/10.1039/d0cp00980f>., Registrované v: WOS

2. [1.1] BONDI, Luca - GARDEN, Anna L. - JERABEK, Paul - TOTTI, Federico - BROOKER, Sally. Quantitative and Chemically Intuitive Evaluation of the Nature of M-L Bonds in Paramagnetic Compounds: Application of EDA-NOCV Theory to Spin Crossover Complexes. In CHEMISTRY-A EUROPEAN JOURNAL. ISSN 0947-6539, 2020, vol. 26, no. 60, pp. 13677-13685. Dostupné na: <https://doi.org/10.1002/chem.202002146>., Registrované v: WOS
 3. [1.1] CASTRO, Abril C. - SWART, Marcel. Recent Advances in Computational NMR Spectrum Prediction. In COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS
 4. [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCp] Complexes. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 10, pp. 1443-1453. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>., Registrované v: WOS
- ADCA205 JOCHEC MOŠKOVÁ, Daniela - JANIGOVÁ, Ivica - NÓGELLOVÁ, Zuzana - SEDNIČKOVÁ, Michaela - JANKOVIČ, Ľuboš - KOMADEL, Peter - ŠLOUF, Miroslav - CHODÁK, Ivan**. Prediction of compatibility of organomodified clay with various polymers using rheological measurements. In Polymer Testing, 2018, vol. 69, p. 359-365. (2017: 2.247 - IF, Q2 - JCR, 0.669 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0142-9418. Dostupné na: <https://doi.org/10.1016/j.polymertesting.2018.05.035>
- Citácie:
1. [1.1] HAO, X.L. - XU, J.J. - ZHOU, H.Y. - TANG, W. - LI, W.J. - WANG, Q.W. - OU, R.X. Interfacial adhesion mechanisms of ultra-highly filled wood fiber/polyethylene composites using maleic anhydride grafted polyethylene as a compatibilizer. In MATERIALS & DESIGN. ISSN 0264-1275, DEC 15 2021, vol. 212., Registrované v: WOS
 2. [1.1] LIU, R.J. - LI, S.X. - OTITOJU, T.A. - WANG, S. - ZHANG, A.L. - ZHANG, L.N. Exfoliation of montmorillonite using a simple and low-cost heating/gasifying method. In APPLIED NANOSCIENCE. ISSN 2190-5509, APR 2021, vol. 11, no. 4, p. 1427-1436., Registrované v: WOS
 3. [1.1] PAN, Y. - YANG, B. - JIA, N. - YU, Y.N. - XU, X. - WANG, Y.Y. - WU, B. - QIAN, J.S. - XIA, R. - WANG, C.J. - SUN, A.Q. - SHI, Y. Enhanced thermally conductive and thermomechanical properties of polymethyl methacrylate (PMMA)/graphene nanoplatelets (GNPs) nanocomposites for radiator of electronic components. In POLYMER TESTING. ISSN 0142-9418, SEP 2021, vol. 101., Registrované v: WOS
 4. [1.1] SPIRIDONOV, A.M. - SOKOLOVA, M.D. - FEDOSEEVA, V.I. - NIKIFOROV, L.A. - OKHLOPKOVA, A.A. Adsorption complexes "zeolite-cationic surfactant"; properties and surface activity in a polymer composite material based on ultra-high-molecular-weight polyethylene. In MATERIALS TODAY CHEMISTRY. ISSN 2468-5194, JUN 2021, vol. 20., Registrované v: WOS
 5. [1.1] YU, Y.N. - YANG, B. - PAN, Y. - JIA, N. - WANG, S. - YANG, Y.D. - ZHENG, Z.Z. - SU, L.F. - MIAO, J.B. - QIAN, J.S. - XIA, R. - SHI, Y. Understanding thermal and rheological behaviors of bimodal polymethyl methacrylate (BPMMA) fabricated via solution blending. In JOURNAL OF POLYMER ENGINEERING. ISSN 0334-6447, SEP 2021, vol. 41, no. 8, p. 637-645., Registrované v: WOS
- ADCA206 KAMAN, O. - SMRČOK, Ľubomír - GYEPES, Róbert - HAVLÍČEK, David. Anilinium dihydrogen phosphate. In Acta Crystallographica Section C.Crystal Structure Communications, 2012, vol. 68, no. 2, p. o57-o60. (2011: 0.518 - IF, Q4 - JCR, 0.320 - SJR, Q3 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0108-2701. Dostupné na: <https://doi.org/10.1107/S0108270111054874>
- Citácie:
1. [1.1] MRAD, Mohamed Habib - AYARI, Chaima - LEFEBVRE, Frederic - FERRETTI, Valeria - NASR, Cherif Ben. Crystal structure, Hirshfeld surfaces computational study and physicochemical characterization of 2,5-di-tert-butylanilinium chloride: [C14H24N]Cl. In CHEMICAL PAPERS. ISSN 2585-7290, 2021, vol. 75, no. 5, pp. 1893-1905. Dostupné na: <https://doi.org/10.1007/s11696-020-01438-1>., Registrované v: WOS
- ADCA207 KARELL, Radovan - KRAXNER, Jozef - CHROMČÍKOVÁ, Mária. Properties of selected zirconia containing silicate glasses. In Ceramics-Silikáty, 2006, vol. 50, no. 2, p. 78-82. (2005: 0.463 - IF, Q2 - JCR, 0.220 - SJR, Q2 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] CHEN, Bo-Wen - NI, De-Wei - LU, Jun - CAI, Fei-Yan - ZOU, Xue-Gang - ZHOU, Hai-Jun - DONG, Shao-Ming. Multi-cycle and long-term ablation behavior of Cf/ZrB2-SiC composites at 2500°C. In CORROSION SCIENCE, 2021, vol. 184, no., pp. ISSN 0010-938X. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.109385>., Registrované v: WOS
 2. [1.1] DENG, W. - CHRISTOPOULOU, G. - MODARRESIFAR, F. - JONES, A. H. - BINGHAM, P. A. Effects of ZrO2 on thermal stability and crystallisation of K2O-Al2O3-SiO2 glasses. In PHYSICS AND CHEMISTRY OF GLASSES-EUROPEAN JOURNAL OF GLASS SCIENCE AND TECHNOLOGY PART B, 2021, vol. 62, no. 5, pp. 137-148. ISSN 1753-3562. Dostupné na: <https://doi.org/10.13036/17533562.62.5.06>., Registrované v: WOS

3. [1.1] THEERAPAPVISETPONG, Apirat - KWANPANNGAM, Phraethong - TAMRONGWONGWIT, Thanapat. Improvement of alkali resistance of glass fiber from basalt and lignite bottom ash mixture by addition of ZrO₂ content. In JOURNAL OF METALS MATERIALS AND MINERALS, 2021, vol. 31, no. 2, pp. 147-153. ISSN 0857-6149. Dostupné na: <https://doi.org/10.14456/jmmm.2021.32.>, Registrované v: WOS
4. [1.2] KANG, Tae Yun - SEO, Ji Young - RYU, Jeong Hyun - KIM, Kwang Mahn - KWON, Jae Sung. Improvement of the mechanical and biological properties of bioactive glasses by the addition of zirconium oxide (ZrO₂) as a synthetic bone graft substitute. In Journal of Biomedical Materials Research Part A, 2021-07-01, 109, 7, pp. 1196-1208. ISSN 15493296. Dostupné na: <https://doi.org/10.1002/jbm.a.37113.>, Registrované v: SCOPUS
5. [1.2] LI, Yong - ZHANG, Yuxin - CHEN, Qiuling. Surface plasmon resonance effect, nonlinearity and faraday rotation properties of magneto optical glass: Influence of diamagnetic Ag@ZrO₂ nanoparticles. In Journal of Non-Crystalline Solids, 2021-02-01, 553, pp. ISSN 00223093. Dostupné na: <https://doi.org/10.1016/j.jnoncrsol.2020.120498.>, Registrované v: SCOPUS
6. [1.2] PELOSI, A. G. - SANTOS, S. N. C. - DIPOLD, J. - ANDRADE, M. B. - HERNANDES, A. C. - ALMEIDA, J. M. P. - MENDONÇA, C. R. Effects of modifier oxides in the nonlinear refractive index of niobium-borotellurite glasses. In Journal of Alloys and Compounds, 2021-10-15, 878, pp. ISSN 09258388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.160382.>, Registrované v: SCOPUS
7. [1.2] WAHAB, E. A. Abdel - ABORAIA, A. M. - SHAFEEY, A. M. El - SHAABAN, Kh. S. - SOLDATOV, Alexander V. The effect of ZrO₂ on the linear and non-linear optical properties of sodium silicate glass. In Optical and Quantum Electronics, 2021-09-01, 53, 9, pp. ISSN 03068919. Dostupné na: <https://doi.org/10.1007/s11082-021-03164-8.>, Registrované v: SCOPUS

ADCA208 KARELL, Radovan - KRAKNER, Jozef - CHROMČÍKOVÁ, Mária - LIŠKA, Marek. Properties of selected zirconia containing silicate glasses II. In Ceramics-Silikáty, 2007, vol. 51, no. 3, p. 125-130. (2006: 0.597 - IF, Q2 - JCR, 0.343 - SJR, Q2 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0862-5468. Dostupné na: <https://doi.org/10.1021/acs.jpcc.8b11108>

Citácie:

1. [1.1] KANG, Tae-Yun - SEO, Ji-Young - RYU, Jeong-Hyun - KIM, Kwang-Mahn - KWON, Jae-Sung. Improvement of the mechanical and biological properties of bioactive glasses by the addition of zirconium oxide (ZrO₂) as a synthetic bone graft substitute. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, 2021, vol. 109, no. 7, pp. 1196-1208. Dostupné na: <https://doi.org/10.1002/jbm.a.37113.>, Registrované v: WOS
2. [1.1] LI, Yong - ZHANG, Yuxin - CHEN, Qiuling. Surface plasmon resonance effect, nonlinearity and faraday rotation properties of magneto optical glass: Influence of diamagnetic Ag@ZrO₂ nanoparticles. In JOURNAL OF NON-CRYSTALLINE SOLIDS. ISSN 0022-3093, 2021, vol. 553, no., pp. Dostupné na: <https://doi.org/10.1016/j.jnoncrsol.2020.120498.>, Registrované v: WOS
3. [1.1] WAHAB, E. A. Abdel - ABORAIA, A. M. - SHAFEEY, A. M. El - SHAABAN, Kh. S. - SOLDATOV, Alexander V. The effect of ZrO₂ on the linear and non-linear optical properties of sodium silicate glass. In OPTICAL AND QUANTUM ELECTRONICS. ISSN 0306-8919, 2021, vol. 53, no. 9, pp. Dostupné na: <https://doi.org/10.1007/s11082-021-03164-8.>, Registrované v: WOS

ADCA209 KARELL, Radovan - CHROMČÍKOVÁ, Mária - LIŠKA, Marek. Properties of selected zirconia containing silicate glasses III. In Ceramics-Silikáty, 2008, vol. 52, no. 2, p. 102-108. (2007: 0.488 - IF, Q2 - JCR, 0.393 - SJR, Q2 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0862-5468.

Citácie:

1. [1.1] PELOSI, A. G. - SANTOS, S. N. C. - DIPOLD, J. - ANDRADE, M. B. - HERNANDES, A. C. - ALMEIDA, J. M. P. - MENDONÇA, C. R. Effects of modifier oxides in the nonlinear refractive index of niobium-borotellurite glasses. In JOURNAL OF ALLOYS AND COMPOUNDS, 2021, vol. 878, no., pp. ISSN 0925-8388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.160382.>, Registrované v: WOS

ADCA210 KAŠIAROVÁ, Monika - RUDNAYOVÁ, Emöke - KOVALČÍK, Jozef - DUSZA, Ján - HNATKO, Miroslav - ŠAJGALÍK, Pavol - MERSTALLINGER, A. Wear and creep characteristics of a carbon-derived Si₃N₄/SiC micro/nanocomposite. In Materialswissenschaft und Werkstofftechnik, 2003, vol. 34, p. 338-342. (2003 - Current Contents). ISSN 0933-5137. Dostupné na: <https://doi.org/10.1002/mawe.200390071>

Citácie:

1. [1.1] KANTH, Y. Ravi - MURTHY, I. Narasimha - NAGAPPA, S. - RAO, J. Babu. Influence of mould materials on wear behavior of A356 alloy. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2021, vol. 45, no., pp. 5177-5182. Dostupné na:

- <https://doi.org/10.1016/j.matpr.2021.01.696>, Registrované v: WOS
- ADCA211 KAŠIAROVÁ, Monika - TATARKO, Peter - BURIK, Peter - DUSZA, Ján - ŠAJGALÍK, Pavol. Thermal shock resistance of Si₃N₄ and Si₃N₄-SiC ceramics with rare-earth oxide sintering additives. In Journal of the European Ceramic Society, 2014, vol. 34, no. 14, p. 3301-3308. (2013: 2.307 - IF, Q1 - JCR, 1.122 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2014.04.034>
- Citácie:
- [1.1] LI, Yinsheng - KIM, Ha-Neul - WU, Haibo - KIM, Mi-Ju - KO, Jae-Woong - PARK, Young-Jo - HUANG, Zhengren - KIM, Hai-Doo. Microstructure and thermal conductivity of gas-pressure-sintered Si₃N₄ ceramic: the effects of Y₂O₃ additive content. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 1, pp. 274-283., Registrované v: WOS
 - [1.1] MEKURIA, Tadele Daniel - WANG, Lei - ZHANG, Chunhong - YANG, Ming - LV, Qingtao - FOUAD, Diaa Eldin. Synthesis and characterization of high strength polyimide/silicon nitride nanocomposites with enhanced thermal and hydrophobic properties. In CHINESE JOURNAL OF CHEMICAL ENGINEERING. ISSN 1004-9541, 2021, vol. 32, no., pp. 446-453. Dostupné na: <https://doi.org/10.1016/j.cjche.2020.09.066>, Registrované v: WOS
 - [1.1] QIU, Baofu - DUAN, Xiaoming - ZHANG, Zhuo - CAI, Delong - LIAO, Ning - HE, Peigang - JIA, Dechang - ZHOU, Yu. Cyclic thermal shock resistance of h-BN composite ceramics with La₂O₃-Al₂O₃-SiO₂ addition. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 1, pp. 73-79., Registrované v: WOS
 - [1.1] WU, Jianfeng - ZHANG, Chen - XU, Xiaohong - LIU, Xing - ZHOU, Shixiang - WU, Changhu. Enhanced thermal shock resistance of ZrO₂-reinforced Al₂O₃/CaAl₁₂O₁₉ composites prepared from ferrotitanium slag: Crack propagation resistance mechanisms. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 10, pp. 14540-14550., Registrované v: WOS
- ADCA212 KAUPP, Martin - REVIKINE, Roman - MALKINA, Oľga - ARBUZNIKOV, Alexei V. - SCHIMMELPFENNIG, Bernd - MALKIN, Vladimír. Calculation of electronic g-tensors for transition metal complexes using hybrid density functionals and atomic meanfield spin-orbit operators. In Journal of Computational Chemistry, 2002, vol. 23, no. 8, p. 794-803. ISSN 0192-8651. Dostupné na: <https://doi.org/10.1002/jcc.10049>
- Citácie:
- [1.1] POKHILKO, Pavel - ISKAKOV, Sergei - YEH, Chia-Nan - ZGID, Dominika. Evaluation of two-particle properties within finite-temperature self-consistent one-particle Green's function methods: Theory and application to GW and GF2. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 155, no. 2, pp. ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0054661>, Registrované v: WOS
- ADCA213 KAUPP, Martin - REMENYI, Christian - VAARA, Juha - MALKINA, Oľga - MALKIN, Vladimír. Density functional calculations of electronic g-tensors for semiquinone radical anions. The role of hydrogen bonding and substituent effects. In Journal of American Chemical Society, 2002, vol. 124, no. 11, p. 2709-2722. Dostupné na: <https://doi.org/10.1021/ja0162764>
- Citácie:
- [1.1] SHAO, Bin - CHEN, Hongshuo - CUI, Chuanjin - LI, Jing - GONGE, Ruikun. Research Progress on Improvement of Conductivity of MOFs and Their Application in Biosensors: A Review. In CHEMISTRY LETTERS, 2021, vol. 50, no. 4, pp. 714-723. ISSN 0366-7022. Dostupné na: <https://doi.org/10.1246/cl.200808>, Registrované v: WOS
 - [1.1] WITWICKI, Maciej - LEWINSKA, Agnieszka - OZAROWSKI, Andrew. o-Semiquinone radical anion isolated as an amorphous porous solid. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 32, pp. 17408-17419. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp01596f>, Registrované v: WOS
 - [1.1] ZAPP, Christopher - OBARSKA-KOSINSKA, Agnieszka - RENNEKAMP, Benedikt - KURTH, Markus - HUDSON, David M. - MERCADANTE, Davide - BARAYEU, Uldzimir - DICK, Tobias P. - DENYSENKOV, Vasyl - PRISNER, Thomas - BENNATI, Marina - DADAY, Csaba - KAPPL, Reinhard - GRAETER, Frauke. Mechanoradicals in tensed tendon collagen as a source of oxidative stress. In NATURE COMMUNICATIONS, 2020, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41467-020-15567-4>, Registrované v: WOS
- ADCA214 KAUPP, Martin - MALKINA, Oľga - MALKIN, Vladimír - PYYKKÖ, Pekka. How do spin-orbit-induced heavy-atom effects on NMR chemical shifts function? Validation of a simple analogy to spin-spin coupling by density functional theory (DFT) calculations on some iodo compounds. In Chemistry - A European Journal, 1998, vol. 4, no. 1, p. 118-126. ISSN 0947-6539.
- Citácie:
- [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged

- [RuCpT] Complexes. In *ORGANOMETALLICS*, 2021, vol. 40, no. 10, pp. 1443-1453. ISSN 0276-7333. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>, Registrované v: WOS
2. [1.1] JIMMINK, Bono - SETHIO, Daniel - TURUNEN, Lotta - VON DER HEIDEN, Daniel - ERDELYI, Mate. Probing Halogen Bonds by Scalar Couplings. In *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2021, vol. 143, no. 28, pp. 10695-10699. ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.1c04477>, Registrované v: WOS
3. [1.1] MIRZAEVA, I. V. Large relativistic effects in ^{119}Sn NMR parameters: A case study of complex anions $[\text{Cp}^*\text{M}(\text{SnCl}_3)_n\text{Cl}_{3-n}]^-$, where $\text{M} = \text{Rh}, \text{Ir}$; $n = 1, 2, 3$. In *COMPUTATIONAL AND THEORETICAL CHEMISTRY*, 2021, vol. 1205, no., pp. ISSN 2210-271X. Dostupné na: <https://doi.org/10.1016/j.comptc.2021.113432>, Registrované v: WOS
4. [1.1] PARK, Sungjin - RYU, Byungki - PARK, SuDong. Structural Analysis, Phase Stability, Electronic Band Structures, and Electric Transport Types of $(\text{Bi-2})(\text{m})(\text{Bi}_2\text{Te}_3)_n$ by Density Functional Theory Calculations. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 23, pp. Dostupné na: <https://doi.org/10.3390/app112311341>, Registrované v: WOS
5. [1.1] REANT, Benjamin L. L. - BERRYMAN, Victoria E. J. - BASFORD, Annabel R. - NODARAKI, Lydia E. - WOOLLES, Ashley J. - TUNA, Floriana - KALTSOYANNIS, Nikolas - MILLS, David P. - LIDDLE, Stephen T. Si-29 NMR Spectroscopy as a Probe of s- and f-Block Metal(II)-Silanide Bond Covalency. In *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2021, vol. 143, no. 26, pp. 9813-9824. ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.1c03236>, Registrované v: WOS
6. [1.1] SARR, Serigne - GRATON, Jerome - RAHALI, Seyfeddine - MONTAVON, Gilles - GALLAND, Nicolas. Delocalized relativistic effects, from the viewpoint of halogen bonding. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 7, pp. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d0cp05840h>, Registrované v: WOS
7. [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. Current density and molecular magnetic properties. In *CHEMICAL COMMUNICATIONS*, 2021, vol. 57, no. 93, pp. 12362-12378. ISSN 1359-7345. Dostupné na: <https://doi.org/10.1039/d1cc03350f>, Registrované v: WOS
8. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. Inverse halogen dependence in anion C-13 NMR. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 4, pp. 3019-3030. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d0cp05891b>, Registrované v: WOS
9. [1.1] WIESINGER, Michael - KNUPFER, Christian - ELSER, Holger - MAI, Jonathan - LANGER, Jens - HARDER, Sjoerd. Heterometallic Mg-Ba Hydride Clusters in Hydrogenation Catalysis. In *CHEMCATCHEM*, 2021, vol. 13, no. 21, pp. 4567-4577. ISSN 1867-3880. Dostupné na: <https://doi.org/10.1002/cctc.202101071>, Registrované v: WOS
10. [1.2] GAO, Peng - ZHANG, Jie - CHEN, Hongming. A systematic benchmarking of $\text{sup}31/\text{sup}P$ and $\text{sup}19/\text{sup}F$ NMR chemical shift predictions using different DFT/GIAO methods and applying linear regression to improve the prediction accuracy. In *International Journal of Quantum Chemistry*, 2021-03-05, 121, 5, pp. ISSN 00207608. Dostupné na: <https://doi.org/10.1002/qua.26482>, Registrované v: SCOPUS
11. [1.2] KUPKA, Teobald. Theory and computation of nuclear shielding. In *Nuclear Magnetic Resonance*, 2021-01-01, 46, pp. 1-33. ISSN 03059804. Dostupné na: <https://doi.org/10.1039/9781788010665-00001>, Registrované v: SCOPUS
12. [1.2] NAZNIN, Hafsa - MALLIK, Abul K. - HOSSAIN, Khandker S. - SHAHRUZZAMAN, Md - HAQUE, Papia - RAHMAN, Mohammed Mizanur. Enhancement of thermal and mechanical properties of PMMA composites by incorporating mesoporous micro-silica and GO. In *Results in Materials*, 2021-09-01, 11, pp. Dostupné na: <https://doi.org/10.1016/j.rinma.2021.100203>, Registrované v: SCOPUS
13. [1.2] TAKAHASHI, Shintaro - SEKIGUCHI, Jueri - NAKAYA, Kazuki - ISHII, Akihiko - NAKATA, Norio. Halogen-Exchange Reactions of Iminophosphonamido-Chlorosilylenes with Alkali Halides: Convenient Synthesis of Heavier Halosilylenes. In *Inorganic Chemistry*, 2021-01-01, pp. ISSN 00201669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c03869>, Registrované v: SCOPUS

ADCA215

KAUPP, Martin - AUBAUER, Christoph - ENGELHARDT, Günter - KLAPÖTKE, Thomas M. - MALKINA, Olga. The PI_4^+ cation has an extremely large negative ^{31}P nuclear magnetic resonance chemical shift, due to spin-orbit coupling: A quantum-chemical prediction and its confirmation by solid-state nuclear magnetic resonance spectroscopy. In *Journal of Chemical Physics*, 1999, vol. 110, no. 8, p. 3897-3902. ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.478243>

Citácie:

1. [1.1] ALVAREZ, M. Angeles - CASADO-RUANO, Melodie - GARCIA, M. Esther - GARCIA-VIVO, Daniel - GUERRA, Ana M. - RUIZ, Miguel A. Electronic Structure and Donor Ability of an Unsaturated Triphosphorus-Bridged Dimolybdenum Complex. In *INORGANIC CHEMISTRY*, 2021, vol. 60, no. 15, pp. 11548-11561. ISSN 0020-1669. Dostupné na:

- <https://doi.org/10.1021/acs.inorgchem.1c01552>, Registrované v: WOS
- ADCA216 KAVECKÝ, Štefan - VALÚCHOVÁ, Jana - ČAPLOVIČOVÁ, Mária - HEISLER, Stefan - ŠAJGALÍK, Pavol - JANEK, Marián. Nontronites as catalyst for synthesis of carbon nanotubes by catalytic chemical vapor deposition. In *Applied Clay Science*, 2015, vol. 114, p. 170-178. (2014: 2.467 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2015.06.001>
- Citácie:
- [1.1] ONYANCHI, Robert Birundu - UKHUREBOR, Kingsley Eghonghon - AIGBE, Uyiosa Osagie - OSIBOTE, Otolorin Adelaja - KUSUMA, Heri Septya - DARMOKOESOEMO, Handoko - BALOGUN, Vincent Aizebeoje. A systematic review on the detection and monitoring of toxic gases using carbon nanotube-based biosensors. In *SENSING AND BIO-SENSING RESEARCH*, 2021, vol. 34, no., pp. Dostupné na: <https://doi.org/10.1016/j.sbsr.2021.100463>, Registrované v: WOS
 - [1.1] TIAN, Ying - GUO, Ning - WANG, Wen-Yi - GENG, Wenming - JING, Li-Chao - WANG, Tao - YUAN, Xiao-Tong - ZHU, Zeru - MA, Yicheng - GENG, Hong-Zhang. Bilayer and three dimensional conductive network composed by SnCl₂ reduced rGO with CNTs and GO applied in transparent conductive films. In *SCIENTIFIC REPORTS*. ISSN 2045-2322, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41598-021-89305-1>, Registrované v: WOS
- ADCA217 KAVECKÝ, Štefan - JANEKOVA, Beata - MADEJOVA, Jana - ŠAJGALÍK, Pavol. Silicon carbide powder synthesis by chemical vapour deposition from silane/acetylene reaction system. In *Journal of the European Ceramic Society*, 2000, vol. 20, no.12, p. 1939-1946. Dostupné na: [https://doi.org/10.1016/S0955-2219\(00\)00071-6](https://doi.org/10.1016/S0955-2219(00)00071-6)
- Citácie:
- [1.1] DE VRIES, Mitchell O. - SATO, Shin-ichiro - OHSHIMA, Takeshi - GIBSON, Brant C. - BLUET, Jean-Marie - CASTELLETTO, Stefania - JOHNSON, Brett C. - REINECK, Philipp. Fluorescent Silicon Carbide Nanoparticles. In *ADVANCED OPTICAL MATERIALS*. ISSN 2195-1071, 2021, vol. 9, no. 20, pp. Dostupné na: <https://doi.org/10.1002/adom.202100311>, Registrované v: WOS
 - [1.1] ZERAATI, Malihe - ALIZADEH, Vali - SARGAZI, Ghasem - KAZEMIAN, Hossein. Sol-gel synthesis of silicon carbide on silicon pyramids: a promising candidate for supercapacitor electrodes. In *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS*. ISSN 0957-4522, 2021, vol. 32, no. 17, pp. 22319-22329. Dostupné na: <https://doi.org/10.1007/s10854-021-06718-4>, Registrované v: WOS
- ADCA218 KIM, Young-Wook - KULTAYEVA, Shynar - SEDLÁČEK, Jaroslav - HANZEL, Ondrej - TATARKO, Peter - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol**. Thermal and electrical properties of additive-free rapidly hot-pressed SiC ceramics. In *Journal of the European Ceramic Society*, 2020, vol. 40, no. 2, p. 234-240. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.10.015>
- Citácie:
- [1.1] GRINCHUK, P. S. - KIYASHKO, M. V. - ABUHIMID, H. M. - ALSHAHRANI, M. S. - SOLOVEI, D. V. - STEPKIN, M. O. - AKULICH, A. V. - SHASHKOV, M. D. - KUZNETSOVA, T. A. - DANILOVA-TRETIK, S. M. - EVSEVA, L. E. - NIKOLAEVA, K. V. Advanced technology for fabrication of reaction-bonded SiC with controlled composition and properties. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 12, pp. 5813-5824. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.017>, Registrované v: WOS
 - [1.1] ZENG, Xiaojun - SONG, Hanbin - SHEN, Zong-Yang - MOSKOVITS, Martin. Progress and challenges of ceramics for supercapacitors. In *JOURNAL OF MATERIMICS*. ISSN 2352-8478, 2021, vol. 7, no. 6, pp. 1198-1224. Dostupné na: <https://doi.org/10.1016/j.jmat.2021.03.001>, Registrované v: WOS
 - [1.1] ZHENG, Yinong - LI, Ke - HUANG, Wenyan - HAN, Yuchen - LAN, Siqi - HU, Jiahao - HUANG, Zhenguo - JIN, Chao - ZHANG, Yinggan - YAO, Rongqian. Using graphene networks to build SiC(rGO, Gx) bulk ceramics from polymeric precursors. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 13, pp. 18466-18476. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.170>, Registrované v: WOS
 - [1.2] SUN, Xiangyun - CHEN, Hao - WANG, Shunqin - YANG, Hui - HAI, Wenjing - QIN, Falian - LUO, Tuansheng - HAI, Wanxiu - CHEN, Yuhong. Preparation and thermal conductivity of SiC-diamond ceramics. In *Naihuo Cailiao/Refractories*, 2021-01-01, 55, 2, pp. 131-134. ISSN 10011935. Dostupné na: <https://doi.org/10.3969/j.issn.1001-1935.2021.02.009>, Registrované v: SCOPUS
- ADCA219 KITYK, Anna** - PROTSENKO, V. - DANILOV, F.I. - PAVLÍK, Viliam - HNATKO, Miroslav - ŠOLTÝS, Ján. Enhancement of the surface characteristics of Ti-based biomedical alloy by electropolishing in environmentally friendly deep eutectic solvent (Ethaline). In *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2021, vol. 613, p. 126125-1-126125-14. (2020: 4.539 -

IF, Q2 - JCR, 0.762 - SJR, Q2 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.126125>

Citácie:

1. [1.1] LEBEDEVA, Olga - KULTIN, Dmitry - ZAKHAROV, Alexandre - KUSTOV, Leonid. *Advantages of Electrochemical Polishing of Metals and Alloys in Ionic Liquids*. In METALS, 2021, vol. 11, no. 6, pp. Available on: <https://doi.org/10.3390/met11060959>., Registrované v: WOS
2. [1.1] OLADOSU, Temidayo L. - AL-KAYIEM, Hussain H. - GILANI, Syed I. U. - BAHETA, Aklilu T. *Dehumidification and thermal regeneration characterization of binary deep eutectic solvents in liquid desiccant air conditioning systems*. In JOURNAL OF BUILDING ENGINEERING, 2021, vol. 42, no., pp. Available on: <https://doi.org/10.1016/j.jobbe.2021.103056>., Registrované v: WOS

ADCA220

KITYK, Anna** - DANILOV, F.I. - PROTSSENKO, V. - PAVLÍK, Viliam - BOČA, Miroslav - HALAHOVETS, Yuriy. Electropolishing of two kinds of bronze in a deep eutectic solvent (Ethaline). In Surface & Coatings Technology, 2020, vol. 397, p. 126060-1-126060-9. (2019: 3.784 - IF, Q1 - JCR, 0.938 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2020.126060>

Citácie:

1. [1.1] DI PIETRO, Maria Enrica - MELE, Andrea. *Deep eutectics and analogues as electrolytes in batteries*. In JOURNAL OF MOLECULAR LIQUIDS. ISSN 0167-7322, 2021, vol. 338, 116597. Dostupné na: <https://doi.org/10.1016/j.molliq.2021.116597>., Registrované v: WOS
2. [1.1] LEBEDEVA, Olga - KULTIN, Dmitry - ZAKHAROV, Alexandre - KUSTOV, Leonid. *Advantages of Electrochemical Polishing of Metals and Alloys in Ionic Liquids*. In METALS, 2021, vol. 11, no. 6, 959. Dostupné na: <https://doi.org/10.3390/met11060959>., Registrované v: WOS
3. [1.1] YUZA, Nitao - SERIZAWA, Nobuyuki - KATAYAMA, Yasushi. *Electropolishing of Tin in an Amide-Type Ionic Liquid*. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2021, vol. 168, no. 3, 036509. Dostupné na: <https://doi.org/10.1149/1945-7111/abe9ce>., Registrované v: WOS

ADCA221

KITYK, Anna** - HNATKO, Miroslav - PAVLÍK, Viliam - BOČA, Miroslav. Electrochemical surface treatment of manganese stainless steel using several types of deep eutectic solvents. In Materials Research Bulletin, 2021, vol. 141, art. no. 111348. (2020: 4.641 - IF, Q2 - JCR, 0.861 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0025-5408. Dostupné na: <https://doi.org/10.1016/j.materresbull.2021.111348>

Citácie:

1. [1.1] WU, Jiedu - LIU, Shuai - TAN, Zhuo - GUO, Yuting - ZHOU, Jianzhang - MAO, Bingwei - YAN, Jiawei. *Effect of hydrogen bond donor molecules ethylene glycerol and lactic acid on electrochemical interfaces in choline chloride based-deep eutectic solvents*. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 155, no. 24, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0073792>., Registrované v: WOS

ADCA222

KLEMENT, Róbert** - DRDLÍKOVÁ, K. - KACHLÍK, M. - DRDLÍK, Daniel - GALUSEK, Dušan - MACA, Karel. Photoluminescence and optical properties of Eu³⁺/Eu²⁺-doped transparent Al₂O₃ ceramics. In Journal of the European Ceramic Society, 2021, vol. 41, no. 9, p. 4896-4906. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.03.029>

Citácie:

1. [1.1] STOJADINOVIC, Stevan - CIRIC, Aleksandar. *Effect of Eu²⁺ doping on photoluminescence of Al₂O₃:Tb³⁺ functional coatings formed by plasma electrolytic oxidation*. In JOURNAL OF LUMINESCENCE, 2021, vol. 239, no., pp. ISSN 0022-2313. Available on: <https://doi.org/10.1016/j.jlumin.2021.118323>., Registrované v: WOS
2. [1.1] ZENG, Jianjun - ZHANG, Kuibao - CHEN, Daimeng - DENG, Ting - GUO, Haiyan - LUO, Baozhu. *Preparation of non-stoichiometric Gd_{2+x}Zr₂O_{7+3x/2} transparent ceramics by vacuum sintering*. In OPTICAL MATERIALS, 2021, vol. 121, no., pp. ISSN 0925-3467. Available on: <https://doi.org/10.1016/j.optmat.2021.111575>., Registrované v: WOS
3. [1.1] ZUO, Chuandong - TANG, Wei - LI, Yingkui - MA, Chaoyang - YUAN, Xuanyi - WEN, Zicheng - CAO, Yongge. *Fabrication and optical properties of Eu³⁺-doped Ba(Zr, Mg, Ta)O₃ transparent fluorescent ceramics*. In JOURNAL OF LUMINESCENCE, 2021, vol. 240, no., pp. ISSN 0022-2313. Available on: <https://doi.org/10.1016/j.jlumin.2021.118408>., Registrované v: WOS

ADCA223

KOETTGEN, Julius** - SCHMIDT, Peter C. - BUČKO, Tomáš - MARTIN, Manfred**. Ab initio calculation of the migration free energy of oxygen diffusion in pure and samarium-doped ceria. In Physical Review B, 2018, vol. 97, no. 2, art. no. 024305. (2017: 3.813 - IF, Q2 - JCR, 1.176 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 1550-235X. Dostupné na: <https://doi.org/10.1103/PhysRevB.97.024305>

Citácie:

1. [1.1] ACHARYA, Smita - SHIRBHATE, Shraddha - YADAV, Ashok. Spectroscopic tools to probe multiple dopant induced elastic strain effect in doped ceria matrix: As electrolyte for ITSOFCs. In JOURNAL OF MOLECULAR STRUCTURE. ISSN 0022-2860, 2021, vol. 1235, no., pp. Dostupné na: <https://doi.org/10.1016/j.molstruc.2021.130258>., Registrované v: WOS
2. [1.1] CHEN, Ronghan - XU, Zhenming - LIN, Yuechuan - LV, Buyao - BO, Shou-Hang - ZHU, Hong. Influence of Structural Distortion and Lattice Dynamics on Li-Ion Diffusion in Li3OCl1-xBrx Superionic Conductors. In ACS APPLIED ENERGY MATERIALS. ISSN 2574-0962, 2021, vol. 4, no. 3, pp. 2107-2114. Dostupné na: <https://doi.org/10.1021/acsaem.0c02519>., Registrované v: WOS
3. [1.1] HAN, Xiaoping - AMRANE, Noureddine - QAMHIEH, Naser - BENKRAOUDA, Maamar. Enhanced optoelectronic functionality of N plus H codoped monoclinic WO3: A hybrid functional study. In CHEMICAL PHYSICS. ISSN 0301-0104, 2021, vol. 549, no., pp. Dostupné na: <https://doi.org/10.1016/j.chemphys.2021.111283>., Registrované v: WOS
4. [1.1] HEELWEG, Henrik J. - DE SOUZA, Roger A. Metadynamics simulations of strontium-vacancy diffusion in SrTiO3. In PHYSICAL REVIEW MATERIALS. ISSN 2475-9953, 2021, vol. 5, no. 1, pp. Dostupné na: <https://doi.org/10.1103/PhysRevMaterials.5.013804>., Registrované v: WOS

ADCA224

KOMADEL, Peter. Acid activated clays: Materials in continuous demand. In Applied Clay Science, 2016, vol. 131, p. 84-99. (2015: 2.586 - IF, Q1 - JCR, 0.806 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2016.05.001>

Citácie:

1. [1.1] AITUGAN, Aizat - TANIRBERGENOVA, Sandugash - TILEUBERDI, Yerbol - YUCEL, Onuralp - TUGELBAYEVA, Dildara - MANSUROV, Zulkhair - ONGARBAYEV, Yerdos. A carbonized cobalt catalyst supported by acid-activated clay for the selective hydrogenation of acetylene. In REACTION KINETICS MECHANISMS AND CATALYSIS. ISSN 1878-5190, 2021, vol. 133, no. 1, pp. 277-292. Dostupné na: <https://doi.org/10.1007/s11144-021-01993-y>., Registrované v: WOS
2. [1.1] AL-REYAH, Anas Yousef - AL-DEGS, Yahya Salem - ISSA, Ayman Abdulla - KHATTARI, Ziad Yousef - ABU AL SAYYED, Mohammed. Assessment of Structure, Dielectric and Gamma-Shielding Properties of Chemically Treated Natural Kaolinite Clay. In IRANIAN JOURNAL OF MATERIALS SCIENCE AND ENGINEERING. ISSN 1735-0808, 2021, vol. 18, no. 4, pp. Dostupné na: <https://doi.org/10.22068/ijmse.2114>., Registrované v: WOS
3. [1.1] AZIZ, Bakhtyar K. The impact of acidic spring water on Gwrgay natural clay and its adsorption efficiency: a kinetic, equilibrium and thermodynamic comparison. In REACTION KINETICS MECHANISMS AND CATALYSIS. ISSN 1878-5190, 2021, vol. 133, no. 1, pp. 467-481. Dostupné na: <https://doi.org/10.1007/s11144-021-01998-7>., Registrované v: WOS
4. [1.1] BAYRAM, Hale - USTUNISIK, Gokce - ONAL, Muserref - SARIKAYA, Yuksel. Optimization of bleaching power by sulfuric acid activation of bentonite. In CLAY MINERALS. ISSN 0009-8558, 2021, vol. 56, no. 2, pp. 148-155. Dostupné na: <https://doi.org/10.1180/clm.2021.28>., Registrované v: WOS
5. [1.1] BENK, Ayse. The affects of heat and/or acid treatment on bleaching properties of serpentine to be utilized in reclaiming waste engine oil. In FUEL. ISSN 0016-2361, 2021, vol. 290, no., pp. Dostupné na: <https://doi.org/10.1016/j.fuel.2020.120022>., Registrované v: WOS
6. [1.1] BHATTI, Umair H. - SULTAN, Haider - MIN, Gwan Hong - NAM, Sung Chan - BAEK, Il Hyun. Ion-exchanged montmorillonite as simple and effective catalysts for efficient CO2 capture. In CHEMICAL ENGINEERING JOURNAL. ISSN 1385-8947, 2021, vol. 413, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.127476>., Registrované v: WOS
7. [1.1] DILL, Lais P. - KOCHPEKA, Debora M. - LIMA, Larissa L. - LEITAO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian Mineral Clays: Classification, Acid Activation and Application as Catalysts for Methyl Esterification Reactions. In JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY. ISSN 0103-5053, 2021, vol. 32, no. 1, pp. 145-157. Dostupné na: <https://doi.org/10.21577/0103-5053.20200164>., Registrované v: WOS
8. [1.1] ERDOGAN, Burcu - ERGURHAN, Orkun - ANTER, Aslihan. Influence of acid activation on the NH3-adsorption properties of a Turkish bentonite. In CLAY MINERALS. ISSN 0009-8558, 2021, vol. 56, no. 3, pp. 178-184. Dostupné na: <https://doi.org/10.1180/clm.2021.31>., Registrované v: WOS
9. [1.1] FRIESEM, David E. - SHAHACK-GROSS, Ruth - WEINSTEIN-EVRON, Mina - TEUTSCH, Nadya - WEISSBROD, Lior - SHIMELMITZ, Ron. High-resolution study of Middle Palaeolithic deposits and formation processes at Tabun Cave, Israel: Guano-rich cave deposits and detailed stratigraphic appreciation of Layer C. In QUATERNARY SCIENCE REVIEWS. ISSN 0277-3791, 2021, vol. 274, no., pp. Dostupné na: <https://doi.org/10.1016/j.quascirev.2021.107203>., Registrované v: WOS
10. [1.1] JIANG, Jinfeng - AYAZ, Tehreem - JIANG, Zhanru - LEI, Ming. Green Remediation of

- Heavy Metal Polluted Water and Soil Using Clay Minerals: A Review. In 2020 ASIA CONFERENCE ON GEOLOGICAL RESEARCH AND ENVIRONMENTAL TECHNOLOGY. ISSN 1755-1307, 2021, vol. 632, no., pp. Dostupné na: <https://doi.org/10.1088/1755-1315/632/5/052079>., Registrované v: WOS*
11. [1.1] KASA, Eszter - SZABADOS, Marton - BAAN, Kornelia - KONYA, Zoltan - KUKOVECZ, Akos - KUTUS, Bence - PALINKO, Istvan - SIPOS, Pal. The dissolution kinetics of raw and mechanochemically treated kaolinites in industrial spent liquor? The effect of the physico-chemical properties of the solids. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105994>., Registrované v: WOS
12. [1.1] KWON, Sunki - KIM, Yumi - ROH, Yul. Cesium removal using acid- and base-activated biotite and illite. In *JOURNAL OF HAZARDOUS MATERIALS*. ISSN 0304-3894, 2021, vol. 401, no., pp. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2020.123319>., Registrované v: WOS
13. [1.1] LEANDRO, Gabriel Coelho - CAPELLO, Cristiane - KOOP, Betina Luiza - GARCEZ, Jussara - MONTEIRO, Alcilene Rodrigues - VALENCIA, German Ayala. Adsorption-desorption of anthocyanins from jambolan (*Syzygium cumini*) fruit in laponite (R) platelets: Kinetic models, physicochemical characterization, and functional properties of biohybrids. In *FOOD RESEARCH INTERNATIONAL*. ISSN 0963-9969, 2021, vol. 140, no., pp. Dostupné na: <https://doi.org/10.1016/j.foodres.2020.109903>., Registrované v: WOS
14. [1.1] LIU, Jiacheng - MICHALSKI, Joseph R. - ZHOU, Mei-Fu. Intense subaerial weathering of eolian sediments in Gale crater, Mars. In *SCIENCE ADVANCES*. ISSN 2375-2548, 2021, vol. 7, no. 32, pp. Dostupné na: <https://doi.org/10.1126/sciadv.abh2687>., Registrované v: WOS
15. [1.1] MA, Teng - SUN, Hongjuan - PENG, Tongjiang - ZHANG, Qi. Transformation process from phlogopite to vermiculite under hydrothermal conditions. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 208, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106094>., Registrované v: WOS
16. [1.1] NAGENDRAPPA, Gopalpur - CHOWREDDY, Ravindra Reddy. Organic Reactions Using Clay and Clay-Supported Catalysts: A Survey of Recent Literature. In *CATALYSIS SURVEYS FROM ASIA*. ISSN 1571-1013, 2021, vol. 25, no. 3, pp. 231-278. Dostupné na: <https://doi.org/10.1007/s10563-021-09333-9>., Registrované v: WOS
17. [1.1] NOORI, Farzaneh - NEREE, Armelle Tchoumi - MEGOURA, Meriem - MATEESCU, Mircea Alexandru - AZZOUZ, Abdelkrim. Insights into the metal retention role in the antibacterial behavior of montmorillonite and cellulose tissue-supported copper and silver nanoparticles. In *RSC ADVANCES*, 2021, vol. 11, no. 39, pp. 24156-24171. Dostupné na: <https://doi.org/10.1039/d1ra02854e>., Registrované v: WOS
18. [1.1] PLUANGKLANG, Chutima - RANGSRIWATANANON, Kunwadee. Facile Method by Bentonite Treated with Heat and Acid to Enhance Pesticide Adsorption. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/app11115147>., Registrované v: WOS
19. [1.1] RAPA, Maria - TURCANU, Anca Andreea - MATEI, Ecaterina - PREDESCU, Andra Mihaela - PANTILIMON, Mircea Cristian - COMAN, George - PREDESCU, Cristian. Adsorption of Copper (II) from Aqueous Solutions with Alginate/Clay Hybrid Materials. In *MATERIALS*, 2021, vol. 14, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ma14237187>., Registrované v: WOS
20. [1.1] SEROURI, Abdelhak - TALEB, Zoubida - MANNU, Alberto - GARRONI, Sebastiano - SENES, Nina - TALEB, Safia - BRINI, Sara - ABDOUN, Sabrine Kawther. Variation of Used Vegetable Oils; Composition upon Treatment with Algerian Clays. In *RECYCLING*, 2021, vol. 6, no. 4, pp. Dostupné na: <https://doi.org/10.3390/recycling6040068>., Registrované v: WOS
21. [1.1] SHAKERIAN, Farid - ZHAO, Jing - LI, Shao-Ping. Evaluation of amylase immobilization on nanoclay by size exclusion chromatography and its application for starch removal from plant extracts of herbal medicines. In *PROCESS BIOCHEMISTRY*. ISSN 1359-5113, 2021, vol. 101, no., pp. 36-41. Dostupné na: <https://doi.org/10.1016/j.procbio.2020.11.003>., Registrované v: WOS
22. [1.1] SIDORENKO, A. Yu - KURBAN, Yu M. - AHO, A. - IHNATOVICH, Zh - KUZNETSOVA, T. F. - HEINMAA, I - MURZIN, D. Yu - AGABEKOV, V. E. Solvent-free synthesis of tetrahydropyran alcohols over acid-modified clays. In *MOLECULAR CATALYSIS*. ISSN 2468-8231, 2021, vol. 499, no., pp. Dostupné na: <https://doi.org/10.1016/j.mcat.2020.111306>., Registrované v: WOS
23. [1.1] TEGIN, Ibrahim - SAKA, Cafer. Chemical and thermal activation of clay sample for improvement adsorption capacity of methylene blue. In *INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY*. ISSN 0306-7319, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1080/03067319.2021.1928105>., Registrované v: WOS
24. [1.1] TENEQJA, Valdet - KORPA, Arjan - DRUSHKU, Spiro - XHAXHIU, Kledi - SKENDULI, Enkeleida. PROPERTIES COMPARISON OF TWO ACID-ACTIVATED

- BENTONITES OF KOSOVO TO BE USED AS BLEACHING AGENTS. In INTERNATIONAL JOURNAL OF ECOSYSTEMS AND ECOLOGY SCIENCE-IJEES. ISSN 2224-4980, 2021, vol. 11, no. 2, pp. 321-326. Dostupné na: <https://doi.org/10.31407/ijeess11.217>., Registrované v: WOS*
25. [1.1] WU, Lian - DAI, Yongqiang - ZENG, Wei - HUANG, Jintao - LIAO, Bing - PANG, Hao. *Effective ion pathways and 3D conductive carbon networks in bentonite host enable stable and high-rate lithium-sulfur batteries. In NANOTECHNOLOGY REVIEWS. ISSN 2191-9089, 2021, vol. 10, no. 1, pp. 20-33. Dostupné na: <https://doi.org/10.1515/ntrev-2021-0005>., Registrované v: WOS*
26. [1.1] YANG, Jianping - XU, Hong - ZHAO, Yongchun - LI, Hailong - ZHANG, Junying. *Mercury Removal from Flue Gas by Noncarbon Sorbents. In ENERGY & FUELS. ISSN 0887-0624, 2021, vol. 35, no. 5, pp. 3581-3610. Dostupné na: <https://doi.org/10.1021/acs.energyfuels.0c04207>., Registrované v: WOS*
27. [1.1] ZHOU, Lvshan - PENG, Tongjiang - SUN, Hongjuan - FU, Dong - LAI, Chuan. *A novel separation method of the valuable components for activated clay production wastewater. In OPEN CHEMISTRY. ISSN 2391-5420, 2021, vol. 19, no. 1, pp. 530-540. Dostupné na: <https://doi.org/10.1515/chem-2021-0052>., Registrované v: WOS*
28. [1.1] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. *Effect of acid activation on structural evolution and surface charge of different derived kaolinites. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105997>., Registrované v: WOS*
29. [1.2] BUNTIN, Artem E. *Influence of nano-modification on structural, mechanical and physico-chemical characteristics of bentonite. In Solid State Phenomena. ISSN 10120394, 2021-01-01, 316 SSP, pp. 34-39., Registrované v: SCOPUS*
30. [1.2] FENG, Ya Song - ZHOU, Shi Ji - XIA, Wei Yi - DU, Yan Jun. *Solidify/stabilise a heavy metal-contaminated soil using a novel steel slag-based binder. In Environmental Geotechnics, 2021-01-01, pp. Dostupné na: <https://doi.org/10.1680/jenge.19.00226>., Registrované v: SCOPUS*
31. [1.2] SOETAREDJO, Felicia Edi - LAYSANDRA, Livy - PUTRO, Jindrayani Nyoo - SANTOSO, Shella Permatasari - ANGKAWIJAYA, Artik Elisa - YULIANA, Maria - JU, Yi Hsu - ZHOU, Chun Hui - ISMADJI, Suryadi. *Ecological-safe and low-cost activated-bleaching earth: Preparation, characteristics, bleaching performance, and scale-up production. In Journal of Cleaner Production. ISSN 09596526, 2021-01-10, 279, pp. Dostupné na: <https://doi.org/10.1016/j.jclepro.2020.123793>., Registrované v: SCOPUS*
32. [1.2] YANG, Jie - WANG, Yajun - TIAN, Changan - LAI, Shikang - LIU, Yang - SI, Xiaoqiang - ZHANG, Qing. Ba. *Co modified activated clay and their adsorption performance characterization. In IOP Conference Series: Earth and Environmental Science. ISSN 17551307, 2021-05-13, 768, 1, pp. Dostupné na: <https://doi.org/10.1088/1755-1315/768/1/012024>., Registrované v: SCOPUS*
33. [1.2] YONAR, Selma - UGWU, Emmanuel lkechukwu - SABAH, Eyup. *Modelling and Optimization of Sepiolite Activation with Citric Acid Using Factorial Experimental Design and Response Surface Methodology. In Silicon. ISSN 1876990X, 2021-07-01, 13, 7, pp. 2185-2194. Dostupné na: <https://doi.org/10.1007/s12633-020-00717-6>., Registrované v: SCOPUS*

ADCA225

KOMADEL, Peter - MADEJOVÁ, Jana - BUJDÁK, Juraj. Preparation and properties of reduced-charge smectites - A review. In *Clays and Clay Minerals*, 2005, vol. 53, no. 4, p. 313-334. (2004: 1.116 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2005.0530401>

Citácie:

- [1.1] ABDESSAMAD, M. - KHARROUBI, M. - BELBEL, A. *Dielectric behavior of dehydrated homoionic alkali-cations-exchanged montmorillonite. In SPECTROSCOPY LETTERS, 2021, vol. 54, no. 3, pp. 195-203. ISSN 0038-7010. Available on: <https://doi.org/10.1080/00387010.2021.1884576>., Registrované v: WOS*
- [1.1] DING, Fan - GAO, Manglai. *Pore wettability for enhanced oil recovery, contaminant adsorption and oil/water separation: A review. In ADVANCES IN COLLOID AND INTERFACE SCIENCE, 2021, vol. 289, no., pp. ISSN 0001-8686. Available on: <https://doi.org/10.1016/j.cis.2021.102377>., Registrované v: WOS*
- [1.1] MENDEL, Niels - SIRETANU, Diana - SIRETANU, Igor - BRILMAN, Derk W. F. - MUGELE, Frieder. *Interlayer Cation-Controlled Adsorption of Carbon Dioxide in Anhydrous Montmorillonite Clay. In JOURNAL OF PHYSICAL CHEMISTRY C, 2021, vol. 125, no. 49, pp. 27159-27169. ISSN 1932-7447. Available on: <https://doi.org/10.1021/acs.jpcc.1c06746>., Registrované v: WOS*
- [1.1] ZEYEN, Nina - BENZERARA, Karim - BEYSSAC, Olivier - DAVAL, Damien - MULLER, Elodie - THOMAZO, Christophe - TAVERA, Rosaluz - LOPEZ-GARCIA, Purificacion - MOREIRA, David - DUPRAT, Elodie. *Integrative analysis of the mineralogical and chemical composition of modern microbialites from ten Mexican lakes: What do we learn about their formation? In GEOCHIMICA ET COSMOCHIMICA ACTA, 2021, vol. 305, no., pp. 148-184.*

- ADCA226 *ISSN 0016-7037. Available on: <https://doi.org/10.1016/j.gca.2021.04.030>., Registrované v: WOS*
KOMADEL, Peter - MADEJOVÁ, Jana - LAIRD, D.A. - XIA, Y. - STUCKI, Joseph W. Reduction of Fe(III) in griffithite. In *Clay Minerals*, 2000, vol. 35, no. 4, p. 625-634. (1999: 1.090 - IF). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/000985500547089>
 Citácie:
 1. [1.1] NODA, Natsumi - YAMASHITA, Shohei - TAKAHASHI, Yoshio - MATSUMOTO, Megumi - ENOKIDO, Yuma - AMANO, Kana - KAWAI, Takahiro - SAKUMA, Hiroshi - FUKUSHI, Keisuke - SEKINE, Yasuhito - NAKAMURA, Tomoki. Anaerobic Microscopic Analysis of Ferrous Saponite and Its Sensitivity to Oxidation by Earth's Air: Lessons Learned for Analysis of Returned Samples from Mars and Carbonaceous Asteroids. In *MINERALS*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/min1111244>., Registrované v: WOS
- ADCA227 KOMADEL, Peter - MADEJOVÁ, Jana - JANEK, Marián - GATES, W.P. - KIRKPATRICK, R.J. - STUCKI, Joseph W. Dissolution of hectorite in inorganic acids. In *Clays and Clay Minerals*, 1996, vol. 44, no. 2, p. 228-236. ISSN 0009-8604.
 Citácie:
 1. [1.1] ZHAO, Qun - HE, Jiangtao - YAN, Xinrui - LI, Chen - LI, Jie - LI, YingJie - TIAN, Senlin - HUANG, Jianhong - NING, Ping. Formation Process of Silicate-Iron Oxyhydroxide Complex and Its Influence on the Distribution of Heavy Metals in Mining Area. In *BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY*, 2021, vol. 107, no. 6, pp. 990-995. ISSN 0007-4861. Dostupné na: <https://doi.org/10.1007/s00128-021-03300-w>., Registrované v: WOS
 2. [1.2] PARK, Chan Woo - KIM, Ilgook - YOON, In Ho - YANG, Hee Man - SEO, Bum Kyung. Behaviors of desorption agents during removal of cs from clay minerals and actual soil. In *Journal of Nuclear Fuel Cycle and Waste Technology*, 2021-03-01, 19, 1, pp. 39-49. ISSN 17381894. Dostupné na: <https://doi.org/10.7733/jnfcwt.2021.19.1.39>., Registrované v: SCOPUS
- ADCA228 KOMADEL, Peter - MADEJOVÁ, Jana - STUCKI, Joseph W. Reduction and reoxidation of nontronite: Questions of reversibility. In *Clays and Clay Minerals*, 1995, vol. 43, no. 1, p. 105-110. ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.1995.0430112>
 Citácie:
 1. [1.1] GOMEZ SAMUS, Mauro - COMERIO, Marcos - LUCIANA MONTES, Maria - BOFF, Laura - LOFFLER, Julia - CARLOS MERCADER, Roberto - CARLOS BIDEGAIN, Juan. The origin of gley colors in hydromorphic vertisols: the study case of the coastal plain of the Rio de la Plata estuary. In *ENVIRONMENTAL EARTH SCIENCES*, 2021, vol. 80, no. 3, pp. 1866-6280. Dostupné na: <https://doi.org/10.1007/s12665-021-09391-2>., Registrované v: WOS
 2. [1.1] HONTY, Miroslav - FREDERICKX, Lander - BANERJEE, Dipanjan - HOVING, Alwina. Fe distribution, redox state and electrochemical activity in Boom Clay. In *APPLIED GEOCHEMISTRY*, 2021, vol. 125, no., pp. ISSN 0883-2927. Dostupné na: <https://doi.org/10.1016/j.apgeochem.2020.104857>., Registrované v: WOS
- ADCA229 KOMADEL, Peter - MADEJOVÁ, Jana - STUCKI, Joseph W. Partial stabilization of Fe(II) in reduced ferruginous smectite by Li fixation. In *Clays and Clay Minerals*, 1999, vol. 47, no. 4, p. 458-465. (1998: 1.010 - IF). Dostupné na: <https://doi.org/10.1346/CCMN.1999.0470407>
 Citácie:
 1. [1.1] POONI, J. - ROBERT, D. - GUNASEKARA, C. - GIUSTOZZI, F. - SETUNGE, S. Mechanism of Enzyme Stabilization for Expansive Soils Using Mechanical and Microstructural Investigation. In *INTERNATIONAL JOURNAL OF GEOMECHANICS*, 2021, vol. 21, no. 10, pp. ISSN 1532-3641. Dostupné na: [https://doi.org/10.1061/\(ASCE\)GM.1943-5622.0002164](https://doi.org/10.1061/(ASCE)GM.1943-5622.0002164)., Registrované v: WOS
- ADCA230 KOMADEL, Peter - MADEJOVÁ, Jana - STUCKI, Joseph W. Structural Fe(III) reduction in smectites. In *Applied Clay Science*, 2006, vol. 34, no. 1-4, p. 88-94. (2005: 1.324 - IF, Q2 - JCR, 0.986 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2005.10.016>
 Citácie:
 1. [1.1] HAYNES, Haydn M. - BAILEY, Matthew T. - LLOYD, Jonathan R. Bentonite barrier materials and the control of microbial processes: Safety case implications for the geological disposal of radioactive waste. In *CHEMICAL GEOLOGY*, 2021, vol. 581, no., pp. ISSN 0009-2541. Available on: <https://doi.org/10.1016/j.chemgeo.2021.120353>., Registrované v: WOS
 2. [1.1] HUANG, Jianzhi - JONES, Adele - WAITE, T. David - CHEN, Yiling - HUANG, Xiaopeng - ROSSO, Kevin M. - KAPPLER, Andreas - MANSOR, Muammar - TRATNYEK, Paul G. - ZHANG, Huichun. Fe(II) Redox Chemistry in the Environment. In *CHEMICAL REVIEWS*, 2021, vol. 121, no. 13, pp. 8161-8233. ISSN 0009-2665. Available on: <https://doi.org/10.1021/acs.chemrev.0c01286>., Registrované v: WOS
 3. [1.1] YANG, Ran - CAI, Jun - YANG, Hu. Enhanced reactivity of zero-valent aluminum/O-2 by using Fe-bearing clays in 4-chlorophenol oxidation. In *SCIENCE OF THE TOTAL*

- ENVIRONMENT*, 2021, vol. 773, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.145661>., Registrované v: WOS
4. [1.1] ZHANG, Na - TONG, Man - YUAN, Songhu. Redox transformation of structural iron in nontronite induced by quinones under anoxic conditions. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 801, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.149637>., Registrované v: WOS
5. [1.1] ZHAO, Ziwang - MENG, Ying - WANG, Yahua - LIN, Leiming - XIE, Fuyu - LUAN, Fubo. Anaerobic oxidation of arsenite by bioreduced nontronite. In *JOURNAL OF ENVIRONMENTAL SCIENCES*, 2021, vol. 110, no., pp. 21-27. ISSN 1001-0742. Available on: <https://doi.org/10.1016/j.jes.2021.03.011>., Registrované v: WOS
- ADCA231 KOMADEL, Peter - BUJDAK, Juraj - MADEJOVÁ, Jana - ŠUCHA, Vladimír - ELSASS, Francoise. Effect of non-swelling layers on the dissolution of reduced-charge montmorillonite in hydrochloric acid. In *Clay Minerals*, 1996, vol. 31, no. 3, p. 333-345. ISSN 0009-8558.
- Citácie:
1. [1.1] MEJRI, Chadha - OUESLATI, Walid - AMARA, Abdesslem Ben Haj. How the Solid/Liquid Ratio Affects the Cation Exchange Process and Porosity in the Case of Dioctahedral Smectite: Structural Analysis? In *ADSORPTION SCIENCE & TECHNOLOGY*, 2021, vol. 2021, no., pp. ISSN 0263-6174. Dostupné na: <https://doi.org/10.1155/2021/9732092>., Registrované v: WOS
- ADCA232 KOMADEL, Peter - JANEK, Marián - MADEJOVÁ, Jana - WEEKES, A. - BREEN, Christopher. Acidity and catalytic activity of mildly acid-treated Mg-rich montmorillonite and hectorite. In *Journal of the Chemical Society-Faraday Transactions*, 1997, vol. 93, no. 23, p. 4207-4210.
- Citácie:
1. [1.1] CHAARI, Islem - MEDHIOUB, Mounir - JAMOSSI, Fakher - HAMZAOU, Ahmed Hichem. Acid-treated clay materials (Southwestern Tunisia) for removing sodium leuco-vat dye : Characterization, adsorption study and activation mechanism. In *JOURNAL OF MOLECULAR STRUCTURE*, 2021, vol. 1223, no., pp. ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2020.128944>., Registrované v: WOS
- ADCA233 KOMADEL, Peter. Chemically modified smectites. In *Clay Minerals*, 2003, vol. 38, no. 1, p. 127-138. (2002: 0.966 - IF, karentované - CCC). (2003 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/0009855033810083>
- Citácie:
1. [1.1] BAHOU, Abdelmoujib - TAHA, Yassine - EL KHESSAIMI, Yassine - HAKKOU, Rachid - TAGNIT-HAMOU, Arezki - BENZAAZOUA, Mostafa. Using Calcined Marls as Non-Common Supplemental Cementitious Materials-A Critical Review. In *MINERALS*, 2021, vol. 11, no. 5, pp. Available on: <https://doi.org/10.3390/min11050517>., Registrované v: WOS
2. [1.1] BARAKAN, Shima - AGHAZADEH, Valeh. The advantages of clay mineral modification methods for enhancing adsorption efficiency in wastewater treatment: a review. In *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*. ISSN 0944-1344, 2021, vol. 28, no. 3, pp. 2572-2599. Dostupné na: <https://doi.org/10.1007/s11356-020-10985-9>., Registrované v: WOS
3. [1.1] BAYRAM, Hale - USTUNISIK, Gokce - ONAL, Muserref - SARIKAYA, Yuksel. Optimization of bleaching power by sulfuric acid activation of bentonite. In *CLAY MINERALS*, 2021, vol. 56, no. 2, pp. 148-155. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.28>., Registrované v: WOS
4. [1.1] COSTA, Thiago G. - MANGRICH, Antonio Salvio - HUBNER, Morgana H. Z. - CORREIA, Marcelino D. de M. - MULLER, Isabela da Silva - REIS, Lucas Bond - DOS SANTOS, Sailer S. - MACHADO, Juliana Salles - BUENO, Lucas - DOS SANTOS, Felipe Rodrigues - LOPES, Fabio. Cultural and technology elucidation of the Tupi-Guarani tradition through analysis of potsherds from Travessa similar to o do Rio Vermelho site (Santa Catarina-Brazil) by spectroscopy, SEM-EDS and chemometrics. In *APPLIED RADIATION AND ISOTOPES*, 2021, vol. 178, no., pp. ISSN 0969-8043. Available on: <https://doi.org/10.1016/j.apradiso.2021.109957>., Registrované v: WOS
5. [1.1] ERDOGAN, Burcu - ESENLI, Fahri. Sepiolite as an efficient adsorbent for ethylene gas. In *CLAY MINERALS*, 2021, vol. 56, no. 3, pp. 222-228. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.36>., Registrované v: WOS
6. [1.1] GIL, A. - SANTAMARIA, L. - KORILI, S. A. - VICENTE, M. A. - BARBOSA, L. V. - DE SOUZA, S. D. - MARCAL, L. - DE FARIA, E. H. - CIUFFI, K. J. A review of organic-inorganic hybrid clay based adsorbents for contaminants removal: Synthesis, perspectives and applications. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 5, pp. ISSN 2213-2929. Available on: <https://doi.org/10.1016/j.jece.2021.105808>., Registrované v: WOS
7. [1.1] HOJATI, Mohammad - NOROUZIAN, Mohammad Ali - ALAMOUTI, Ali Assadi - AFZALZADEH, Ahmad. In vitro evaluation of binding capacity of different binders to adsorb aflatoxin. In *VETERINARY RESEARCH FORUM*, 2021, vol. 12, no. 2, pp. 211-214. ISSN 2008-

8140. Available on: <https://doi.org/10.30466/vrf.2019.99431.2369>., Registrované v: WOS
8. [1.1] PALOMO, A. - MALTSEVA, O. - GARCIA-LODEIRO, I. - FERNANDEZ-JIMENEZ, A. Portland Versus Alkaline Cement: Continuity or Clean Break: "A Key Decision for Global Sustainability". In *FRONTIERS IN CHEMISTRY*, 2021, vol. 9, no., pp. ISSN 2296-2646. Available on: <https://doi.org/10.3389/fchem.2021.705475>., Registrované v: WOS
9. [1.1] PAULO, Carlos - POWER, Ian M. - STUBBS, Amanda R. - WANG, Baolin - ZEYEN, Nina - WILSON, Siobhan A. Evaluating feedstocks for carbon dioxide removal by enhanced rock weathering and CO₂ mineralization. In *APPLIED GEOCHEMISTRY*, 2021, vol. 129, no., pp. ISSN 0883-2927. Available on: <https://doi.org/10.1016/j.apgeochem.2021.104955>., Registrované v: WOS
10. [1.1] ROUHANI, Hadi - FARHADI, Fatola - KENARI, Mahsa Akbari - ESKANDARI, Effat - RAMAKRISHNA, Seeram. Selection of suitable bentonite and the influence of various acids on the preparation of a special clay for the removal of trace olefins from aromatics. In *CLAY MINERALS*, 2021, vol. 56, no. 3, pp. 185-196. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.32>., Registrované v: WOS
11. [1.1] TODEA, M. - SIMON, V. - MURESAN-POP, M. - VULPOI, A. - RUSU, M. M. - SIMION, A. - VASILESCU, M. - DAMIAN, G. - PETRISOR, D. M. - SIMON, S. Silica-based microspheres with aluminum-iron oxide shell for diagnosis and cancer treatment. In *JOURNAL OF MOLECULAR STRUCTURE*, 2021, vol. 1246, no., pp. ISSN 0022-2860. Available on: <https://doi.org/10.1016/j.molstruc.2021.131149>., Registrované v: WOS
12. [1.1] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. Effect of acid activation on structural evolution and surface charge of different derived kaolinites. In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105997>., Registrované v: WOS

ADCA234

KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - RUUD, Kenneth - MALKINA, Oľga - MALKIN, Vladimír. Four-component relativistic density functional theory calculations of NMR shielding tensors for paramagnetic systems. In *Journal of Physical Chemistry A: Molecules, spectroscopy, kinetics, environment, and general theory*, 2013, vol. 117, no. 51, p. 14209-14219. (2012: 2.771 - IF, Q2 - JCR, 1.513 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/jp408389h>

Citácie:

1. [1.1] CASTRO, Abril C. - SWART, Marcel. Recent Advances in Computational NMR Spectrum Prediction. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS
2. [1.1] GILLHUBER, Sebastian - FRANZKE, Yannick J. - WEIGEND, Florian. Paramagnetic NMR Shielding Tensors and Ring Currents: Efficient Implementation and Application to Heavy Element Compounds. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 44, pp. 9707-9723. ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.1c07793>., Registrované v: WOS
3. [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. Current density and molecular magnetic properties. In *CHEMICAL COMMUNICATIONS*, 2021, vol. 57, no. 93, pp. 12362-12378. ISSN 1359-7345. Dostupné na: <https://doi.org/10.1039/d1cc03350f>., Registrované v: WOS

ADCA235

KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - MALKINA, Oľga - MALKIN, Vladimír. Fully relativistic calculations of NMR shielding tensors using restricted magnetically balanced basis and gauge including atomic orbitals. In *Journal of Chemical Physics*, 2010, vol. 132, no. 15, art. no. 154101. (2009: 3.093 - IF, 2.040 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3359849>

Citácie:

1. [1.1] CHAMKIN, Aleksandr A. Benchmarking DFT Calculations of (1)H and (13)C Chemical Shifts in Monosubstituted Ferrocenes. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*, 2021, vol. 121, no. 4, pp. ISSN 0020-7608. Available on: <https://doi.org/10.1002/qua.26456>., Registrované v: WOS
2. [1.1] GILLHUBER, Sebastian - FRANZKE, Yannick J. - WEIGEND, Florian. Paramagnetic NMR Shielding Tensors and Ring Currents: Efficient Implementation and Application to Heavy Element Compounds. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 44, pp. 9707-9723. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c07793>., Registrované v: WOS
3. [1.1] JAKUBOWSKA, Katarzyna - PECUL, Magdalena. Nuclear magnetic resonance parameters in Zn-2, Cd-2 and Hg-2 dimers: relativistic calculations. In *THEORETICAL CHEMISTRY ACCOUNTS*, 2021, vol. 140, no. 3, pp. ISSN 1432-881X. Available on: <https://doi.org/10.1007/s00214-021-02720-5>., Registrované v: WOS
4. [1.1] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of Se-77 and

- Te-125 nuclear magnetic resonance spectral parameters and their structural applications. In MAGNETIC RESONANCE IN CHEMISTRY, 2021, vol. 59, no. 4, pp. 359-407. ISSN 0749-1581. Available on: <https://doi.org/10.1002/mrc.5111>., Registrované v: WOS*
5. [1.1] SCHATTENBERG, Caspar Jonas - KAUPP, Martin. Extended Benchmark Set of Main-Group Nuclear Shielding Constants and NMR Chemical Shifts and Its Use to Evaluate Modern DFT Methods. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION, 2021, vol. 17, no. 12, pp. 7602-7621. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.1c00919>., Registrované v: WOS
6. [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. Current density and molecular magnetic properties. In CHEMICAL COMMUNICATIONS, 2021, vol. 57, no. 93, pp. 12362-12378. ISSN 1359-7345. Available on: <https://doi.org/10.1039/d1cc03350f>., Registrované v: WOS
7. [1.1] VALENTINE, Andrew J. - GEER, Ana M. - TAYLOR, Laurence J. - TEALE, Andrew M. - WOOD, Katherine E. - WILLIAMS, Huw E. L. - LEWIS, William - ARGENT, Stephen P. - MCMASTER, Jonathan - KAYS, Deborah L. Structural and electronic studies of substituted *m*-terphenyl lithium complexes. In DALTON TRANSACTIONS, 2021, vol. 50, no. 2, pp. 722-728. ISSN 1477-9226. Available on: <https://doi.org/10.1039/d0dt03972a>., Registrované v: WOS
8. [1.1] VELASQUEZ, Angie - CHAMORRO, Yuly - MALDONADO, Alejandro - AUCAR, Gustavo - RESTREPO, Albeiro. Microsolvation of Sr^{2+} , Ba^{2+} : Structures, energies, bonding, and nuclear magnetic shieldings. In INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, 2021, vol. 121, no. 18, pp. ISSN 0020-7608. Available on: <https://doi.org/10.1002/qua.26753>., Registrované v: WOS

ADCA236

KOMOROVSKÝ, Stanislav - CHERRY, Peter - REPISKÝ, Michal.** Four-component relativistic time-dependent density-functional theory using a stable noncollinear DFT ansatz applicable to both closed- and open-shell systems. In Journal of Chemical Physics, 2019, vol. 151, no. 18, p. 184111-1-184111-14. (2018: 2.997 - IF, Q2 - JCR, 1.159 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.5121713>

Citácie:

1. [1.1] Belpassi, Leonardo - De Santis, Matteo - Quiney, Harry M. - Tarantelli, Francesco - Storch, Lorian. BERTHA: Implementation of a four-component Dirac-Kohn-Sham relativistic framework. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2020, vol. 152, no. 16, pp. Dostupné na: <https://doi.org/10.1063/5.0002831>., Registrované v: WOS
2. [1.1] De Santis, Matteo - Storch, Lorian - Belpassi, Leonardo - Quiney, Harry M. - Tarantelli, Francesco. PyBERTHART: A Relativistic Real-Time Four-Component TDDFT Implementation Using Prototyping Techniques Based on Python. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2020, vol. 16, no. 4, pp. 2410-2429. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00053>., Registrované v: WOS
3. [1.1] Desmarais, Jacques K. - Erba, Alessandro - Flament, Jean-Pierre - Kirtman, Bernard. Perturbation Theory Treatment of Spin-Orbit Coupling II: A Coupled Perturbed Kohn-Sham Method. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 8, pp. 4712-4732. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00460>., Registrované v: WOS
4. [1.1] Desmarais, Jacques K. - Flament, Jean-Pierre - Erba, Alessandro. Spin-orbit coupling in periodic systems with broken time-reversal symmetry: Formal and computational aspects. In PHYSICAL REVIEW B. ISSN 2469-9950, 2020, vol. 101, no. 23, pp. Dostupné na: <https://doi.org/10.1103/PhysRevB.101.235142>., Registrované v: WOS
5. [1.1] Ghiasi, Reza - Zandiyeh, Zohreh. Theoretical study of the influence of solvent polarity on the P-31 and C-13 NMR parameters of the $\text{Ru}(\text{PH}_3)_4(\eta^2\text{-benzynes})$ complex. In INORGANIC CHEMISTRY COMMUNICATIONS. ISSN 1387-7003, 2021, vol. 124, no., pp. Dostupné na: <https://doi.org/10.1016/j.inoche.2020.108412>., Registrované v: WOS
6. [1.1] Holzer, Christof - Pausch, Ansgar - Kloppe, Wim. The GW/BSE Method in Magnetic Fields. In FRONTIERS IN CHEMISTRY. ISSN 2296-2646, 2021, vol. 9, no., pp. Dostupné na: <https://doi.org/10.3389/fchem.2021.746162>., Registrované v: WOS
7. [1.1] Li, Zhendong. Structured Eigenvalue Problems in Electronic Structure Methods from a Unified Perspective. In CHINESE JOURNAL OF CHEMICAL PHYSICS. ISSN 1674-0068, 2021, vol. 34, no. 5, pp. 525-531. Dostupné na: <https://doi.org/10.1063/1674-0068/cjcp2107119>., Registrované v: WOS
8. [1.1] Mell, Bernd - Rust, Joerg - Lehmann, Christian W. - Berger, Raphael J. F. - Otte, Daniela - Ertl, Martin - Monkowijs, Uwe - Mohr, Fabian. Arylamidoethyl-Functionalized Imidazolium Salts: Precursors for Dianionic $[\text{C},\text{N},\text{C}](2-)$ Carbene Ligands at a Platinum Center. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 7, pp. 890-898. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00013>., Registrované v: WOS
9. [1.1] Moitra, Torsha - Karak, Pijush - Chakraborty, Sayantani - Ruud, Kenneth -

- CHAKRABARTI, Swapan. *Behind the scenes of spin-forbidden decay pathways in transition metal complexes*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 1, pp. 59-81. Dostupné na: <https://doi.org/10.1039/d0cp05108j>, Registrované v: WOS
- ADCA237 [1.1] SUN, Shichao - LI, Xiaosong. *Relativistic Effects in Magnetic Circular Dichroism: Restricted Magnetic Balance and Temperature Dependence*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2020, vol. 16, no. 7, pp. 4533-4542. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00287>, Registrované v: WOS
- KOMOROVSKÝ, Stanislav** - JAKUBOWSKA, Katarzyna - ŚWIDER, Paweł - REPISKÝ, Michal - JASZUŃSKI, Michał**. *NMR spin-spin coupling constants derived from relativistic four-component DFT theory - Analysis and visualization*. In *Journal of Physical Chemistry A: Molecules, spectroscopy, kinetics, environment, and general theory*, 2020, vol. 124, no. 25, p. 5157-5169. (2019: 2.600 - IF, Q2 - JCR, 0.749 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.0c02807>
- Citácie:
- [1.1] FLIEGL, Heike - DIMITROVA, Maria - BERGER, Raphael J. F. - SUNDHOLM, Dage. *Spatial Contributions to H-1 NMR Chemical Shifts of Free-Base Porphyrinoids*. In *CHEMISTRY-SWITZERLAND*, 2021, vol. 3, no. 3, pp. 1005-1021. Dostupné na: <https://doi.org/10.3390/chemistry3030072>, Registrované v: WOS
 - [1.1] GHIASI, Reza - ZANDIYEH, Zohreh. *Theoretical study of the influence of solvent polarity on the P-31 and C-13 NMR parameters of the Ru(PH3)(4)(eta(2)-benzyne) complex*. In *INORGANIC CHEMISTRY COMMUNICATIONS*. ISSN 1387-7003, 2021, vol. 124, no., pp. Dostupné na: <https://doi.org/10.1016/j.inoche.2020.108412>, Registrované v: WOS
 - [1.1] MIRZAEVA, I. V. *Large relativistic effects in 119Sn NMR parameters: A case study of complex anions [Cp*M(SnCl3)(n)Cl3-n]-, where M = Rh, Ir; n=1, 2, 3*. In *COMPUTATIONAL AND THEORETICAL CHEMISTRY*. ISSN 2210-271X, 2021, vol. 1205, no., pp. Dostupné na: <https://doi.org/10.1016/j.comptc.2021.113432>, Registrované v: WOS
 - [1.1] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. *Quantum chemical calculations of Se-77 and Te-125 nuclear magnetic resonance spectral parameters and their structural applications*. In *MAGNETIC RESONANCE IN CHEMISTRY*. ISSN 0749-1581, 2021, vol. 59, no. 4, pp. 359-407. Dostupné na: <https://doi.org/10.1002/mrc.5111>, Registrované v: WOS
 - [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. *Current density and molecular magnetic properties*. In *CHEMICAL COMMUNICATIONS*. ISSN 1359-7345, 2021, vol. 57, no. 93, pp. 12362-12378. Dostupné na: <https://doi.org/10.1039/d1cc03350f>, Registrované v: WOS
- ADCA238 KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - MALKINA, Oľga - MALKIN, Vladimír - MALKIN, Irina - KAUPP, Martin. *Resolution of identity Dirac-Kohn-Sham method using the large component only: Calculations of g-tensor and hyperfine tensor*. In *Journal of Chemical Physics*, 2006, vol. 124, no. 8, art. no. 084108. (2005: 3.138 - IF, Q1 - JCR, 2.323 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.2173995>
- Citácie:
- [1.1] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. *Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 1, pp. 255-268. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.0c01005>, Registrované v: WOS
- ADCA239 KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - MALKINA, Oľga - MALKIN, Vladimír - MALKIN-ONDÍK, Irina - KAUPP, Martin. *A fully relativistic method for calculation of nuclear magnetic shielding tensors with a restricted magnetically balanced basis in the framework of the matrix Dirac-Kohn-Sham equation*. In *Journal of Chemical Physics*, 2008, vol. 128, no. 10, art. no. 104101. (2007: 3.044 - IF, Q1 - JCR, 2.245 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.2837472>
- Citácie:
- [1.1] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. *Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 1, pp. 255-268. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.0c01005>, Registrované v: WOS
 - [1.1] FRANZKE, Yannick J. - MACK, Fabian - WEIGEND, Florian. *NMR Indirect Spin-Spin Coupling Constants in a Modern QuasiRelativistic Density Functional Framework*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 7, pp. 3974-3994. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.1c00167>, Registrované v: WOS
 - [1.1] GILLHUBER, Sebastian - FRANZKE, Yannick J. - WEIGEND, Florian. *Paramagnetic NMR Shielding Tensors and Ring Currents: Efficient Implementation and Application to Heavy*

- Element Compounds. In JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 44, pp. 9707-9723. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c07793>., Registrované v: WOS
4. [1.1] JAKUBOWSKA, Katarzyna - PECUL, Magdalena. Nuclear magnetic resonance parameters in Zn-2, Cd-2 and Hg-2 dimers: relativistic calculations. In *THEORETICAL CHEMISTRY ACCOUNTS*, 2021, vol. 140, no. 3, pp. ISSN 1432-881X. Available on: <https://doi.org/10.1007/s00214-021-02720-5>., Registrované v: WOS
5. [1.1] NAKAI, Hiromi. Development of Linear-Scaling Relativistic Quantum Chemistry Covering the Periodic Table. In *BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN*, 2021, vol. 94, no. 6, pp. 1664-1681. ISSN 0009-2673. Available on: <https://doi.org/10.1246/bcsj.20210091>., Registrované v: WOS
6. [1.1] OLEJNICZAK, Malgorzata - ANTUSEK, Andrej - JASZUNSKI, Michal. Relativistic frozen density embedding calculations of solvent effects on the nuclear magnetic resonance shielding constants of transition metal nuclei. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*, 2021, vol. 121, no. 22, pp. ISSN 0020-7608. Available on: <https://doi.org/10.1002/qua.26789>., Registrované v: WOS
7. [1.1] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of Se-77 and Te-125 nuclear magnetic resonance spectral parameters and their structural applications. In *MAGNETIC RESONANCE IN CHEMISTRY*, 2021, vol. 59, no. 4, pp. 359-407. ISSN 0749-1581. Available on: <https://doi.org/10.1002/mrc.5111>., Registrované v: WOS
8. [1.1] SUN, Shichao - STETINA, Torin F. - ZHANG, Tianyuan - HU, Hang - VALEEV, Edward F. - SUN, Qiming - LI, Xiaosong. Efficient Four-Component Dirac-Coulomb-Gaunt Hartree-Fock in the Pauli Spinor Representation. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 6, pp. 3388-3402. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.1c00137>., Registrované v: WOS
9. [1.1] VALENTINE, Andrew J. - GEER, Ana M. - TAYLOR, Laurence J. - TEALE, Andrew M. - WOOD, Katherine E. - WILLIAMS, Huw E. L. - LEWIS, William - ARGENT, Stephen P. - MCMASTER, Jonathan - KAYS, Deborah L. Structural and electronic studies of substituted m-terphenyl lithium complexes. In *DALTON TRANSACTIONS*, 2021, vol. 50, no. 2, pp. 722-728. ISSN 1477-9226. Available on: <https://doi.org/10.1039/d0dt03972a>., Registrované v: WOS
10. [1.1] VELASQUEZ, Angie - CHAMORRO, Yuly - MALDONADO, Alejandro - AUCAR, Gustavo - RESTREPO, Albeiro. Microsolvation of Sr²⁺, Ba²⁺: Structures, energies, bonding, and nuclear magnetic shieldings. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*, 2021, vol. 121, no. 18, pp. ISSN 0020-7608. Available on: <https://doi.org/10.1002/qua.26753>., Registrované v: WOS
11. [1.2] DANIEL, C. Density functional theories and coordination chemistry. In *Comprehensive Coordination Chemistry III*, 2021-07-21, 1-9, pp. 256-275. Dostupné na: <https://doi.org/10.1016/B978-0-12-409547-2.14828-0>., Registrované v: SCOPUS
12. [1.2] NAKAI, Hiromi. Development of Linear-Scaling Relativistic Quantum Chemistry Covering the Periodic Table. In *Bulletin of the Chemical Society of Japan*, 2021-06-01, 94, 6, pp. 1664-1681. ISSN 00092673. Dostupné na: <https://doi.org/10.1246/bcsj.20210091>., Registrované v: SCOPUS

ADCA240

KONEČNÝ, Lukáš - KÁDEK, Marius - KOMOROVSKÝ, Stanislav - MALKINA, Oľga - RUUD, Kenneth - REPISKÝ, Michal. Acceleration of relativistic electron dynamics by means of X2C transformation: Application to the calculation of nonlinear optical properties. In *Journal of Chemical Theory and Computation*, 2016, vol. 12, no. 12, p. 5823-5833. (2015: 5.301 - IF, Q1 - JCR, 2.702 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.6b00740>

Citácie:

1. [1.1] GROFE, Adam - GAO, Jiali - LI, Xiaosong. Exact-two-component block-localized wave function: A simple scheme for the automatic computation of relativistic Delta SCF. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 155, no. 1, pp. Dostupné na: <https://doi.org/10.1063/5.0054227>., Registrované v: WOS
2. [1.1] JENKINS, Andrew J. - HU, Hang - LU, Lixin - FRISCH, Michael J. - LI, Xiaosong. Two-Component Multireference Restricted Active Space Configuration Interaction for the Computation of L-Edge X-ray Absorption Spectra. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00564>., Registrované v: WOS
3. [1.1] POTOTSCHNIG, Johann - DYALL, Kenneth G. - VISSCHER, Lucas - GOMES, Andre Severo Pereira. Electronic spectra of ytterbium fluoride from relativistic electronic structure calculations. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 39, pp. 22330-22343. Dostupné na: <https://doi.org/10.1039/d1cp03701c>., Registrované v: WOS

- ADCA241 KONEČNÝ, Lukáš - KÁDEK, Marius - KOMOROVSKÝ, Stanislav - RUUD, Kenneth - REPISKÝ, Michal. Resolution-of-identity accelerated relativistic two- and four-component electron dynamics approach to chiroptical spectroscopies. In *Journal of Chemical Physics*, 2018, vol. 149, no. 20, art. no. 204104, p. 1-9. (2017: 2.843 - IF, Q2 - JCR, 1.252 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.5051032>
- Citácie:
- [1.1] Belpassi, Leonardo - De Santis, Matteo - Quiney, Harry M. - Tarantelli, Francesco - Storchi, Lorian. *BERTHA: Implementation of a four-component Dirac-Kohn-Sham relativistic framework*. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2020, vol. 152, no. 16, pp. Dostupné na: <https://doi.org/10.1063/5.0002831>, Registrované v: WOS
 - [1.1] De Santis, Matteo - Belpassi, Leonardo - Jacob, Christoph R. - Gomes, Andre Severo Pereira - Tarantelli, Francesco - Visscher, Lucas - Storchi, Lorian. *Environmental Effects with Frozen-Density Embedding in Real-Time Time-Dependent Density Functional Theory Using Localized Basis Functions*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2020, vol. 16, no. 9, pp. 5695-5711. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00603>, Registrované v: WOS
 - [1.1] De Santis, Matteo - Storchi, Lorian - Belpassi, Leonardo - Quiney, Harry M. - Tarantelli, Francesco. *PyBERTHART: A Relativistic Real-Time Four-Component TDDFT Implementation Using Prototyping Techniques Based on Python*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2020, vol. 16, no. 4, pp. 2410-2429. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00053>, Registrované v: WOS
 - [1.1] Liu, Junzi - Cheng, Lan. *Relativistic coupled-cluster and equation-of-motion coupled-cluster methods*. In *WILEY INTERDISCIPLINARY REVIEWS-COMPUTATIONAL MOLECULAR SCIENCE*. ISSN 1759-0876, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.1002/wcms.1536>, Registrované v: WOS
 - [1.1] Mattiat, Johann - Luber, Sandra. *Recent Progress in the Simulation of Chiral Systems with Real Time Propagation Methods*. In *HELVETICA CHIMICA ACTA*. ISSN 0018-019X, 2021, vol. 104, no. 12, pp. Dostupné na: <https://doi.org/10.1002/hlca.202100154>, Registrované v: WOS
 - [1.2] Sun, Shichao - Stetina, Torin F. - Zhang, Tianyuan - Li, Xiaosong. *On the Finite Nuclear Effect and Gaussian Basis Sets for Four-Component Dirac Hartree-Fock Calculations*. In *ACS Symposium Series*, 2021-01-01, 1388, pp. 207-218. ISSN 00976156. Dostupné na: <https://doi.org/10.1021/bk-2021-1388.ch010>, Registrované v: SCOPUS
- ADCA242 KONEČNÝ, Lukáš** - REPISKÝ, Michal - RUUD, Kenneth - KOMOROVSKÝ, Stanislav**. Relativistic four-component linear damped response TDDFT for electronic absorption and circular dichroism calculations. In *Journal of Chemical Physics*, 2019, vol. 151, no. 19, art. no. 194112. (2018: 2.997 - IF, Q2 - JCR, 1.159 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.5128564>
- Citácie:
- [1.1] Fedotov, Daniil A. - Coriani, Sonia - Haettig, Christof. *Damped (linear) response theory within the resolution-of-identity coupled cluster singles and approximate doubles (RI-CC2) method*. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 154, no. 12, pp. Dostupné na: <https://doi.org/10.1063/5.0042759>, Registrované v: WOS
 - [1.1] Niemeyer, Niklas - Toelle, Johannes - Neugebauer, Johannes. *Approximate versus Exact Embedding for Chiroptical Properties: Reconsidering Failures in Potential and Response*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2020, vol. 16, no. 5, pp. 3104-3120. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00125>, Registrované v: WOS
- ADCA243 KONETSCHNY, Christoph - GALUSEK, Dušan - RESCHKE, S. - FASEL, Claudia - RIEDEL, Ralf. Dense silicon carbonitride ceramics by pyrolysis of cross-linked and warm pressed polysilazane powders. In *Journal of the European Ceramic Society*, 1999, vol. 19, no. 16, p. 2789-2796. ISSN 0955-2219.
- Citácie:
- [1.1] Li, Mingxing - Cheng, Laifei - Ye, Fang - Zhang, Conglin - Zhou, Jie. *Formation of nanocrystalline graphite in polymer-derived SiCN by polymer infiltration and pyrolysis at a low temperature*. In *JOURNAL OF ADVANCED CERAMICS*. ISSN 2226-4108, 2021, vol. 10, no. 6, pp. 1256-1272. Dostupné na: <https://doi.org/10.1007/s40145-021-0501-2>, Registrované v: WOS
- ADCA244 KONTRÍK, Martin - ŠIMKO, František** - GALUSKOVÁ, Dagmar - NOSKO, Martin - BIZOVSKÁ, Valéria - HÍČÁK, Michal - GALUSEK, Dušan - RAKHMATULLIN, Aydar - KORENKO, Michal. A corrosion mechanism of titanium diboride in KF-AlF₃-Al₂O₃ melt. In *Journal of the European Ceramic Society*, 2018, vol. 38, no. 4, p. 1143-1151. (2017: 3.794 - IF, Q1 - JCR, 1.068 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.11.030>
- Citácie:

1. [1.1] LIN, Ming - HU, Xianwei - YU, Jiangyu - YANG, Youjian - LIU, Aimin - SHI, Zhongning - WANG, Zhaowen. Raman spectroscopy and quantum theory calculations on complexes in the $\text{KF-AlF}_3\text{-Al}_2\text{O}_3$ system. In *JOURNAL OF MOLECULAR LIQUIDS*. ISSN 0167-7322, 2021, vol. 326, no., pp. Dostupné na: <https://doi.org/10.1016/j.molliq.2020.115267>., Registrované v: WOS
 2. [1.1] WANG, Zengjie - LI, Haipeng - ZHANG, Cheng - XUE, Jilai - LIU, Xuan - LI, Xiang - HE, Dingyong. The role of TiB_2 particles in the creep and penetrating resistance of graphite-based composite. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 12096-12103. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.054>., Registrované v: WOS
- ADCA245 KORENKO, Michal** - STRAKA, Martin - SZATMÁRY, Lórant - AMBROVÁ, Marta - UHLÍŘ, J. Electrochemical separation of uranium in the molten system LiF-NaF-KF-UF_4 . In *Journal of Nuclear Materials*, 2013, vol. 440, no. 1-3, p. 332-337. (2012: 1.211 - IF, Q1 - JCR, 0.845 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0022-3115. Dostupné na: <https://doi.org/10.1016/j.jnucmat.2013.04.078>
- Citácie:
1. [1.1] ASLANI, Ceren Kutahyali - AMIK, Onur. Active Carbon/PAN composite adsorbent for uranium removal: Modeling adsorption isotherm data, thermodynamic and kinetic studies. In *APPLIED RADIATION AND ISOTOPES*. ISSN 0969-8043, 2021, vol. 168, no., pp. Available on: <https://doi.org/10.1016/j.apradiso.2020.109474>., Registrované v: WOS
 2. [1.1] STULOV, Yu - KUZNETSOV, S. A. Electrochemical Behavior of SmF_3 in Alkali Chloride Melts. In *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*. ISSN 0013-4651, 2021, vol. 168, no. 5, pp. Available on: <https://doi.org/10.1149/1945-7111/abf694>., Registrované v: WOS
- ADCA246 KORENKO, Michal - LARSON, Carol - BLOOD, K. - PALUMBO, Robert - NUDEHI, S. - DIVER, R. - BLOOD, D. - ŠIMKO, František - VENSTROM, Luke J.**. Technical and economic evaluation of a solar thermal MgO electrolysis process for magnesium production. In *Energy*, 2017, vol. 135, p. 182-194. (2016: 4.520 - IF, Q1 - JCR, 1.974 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1873-6785. Dostupné na: <https://doi.org/10.1016/j.energy.2017.06.044>
- Citácie:
1. [1.1] LEE, Tae-Hyuk - OKABE, Toru H. - LEE, Jin-Young - KIM, Young Min - KANG, Jungshin. Development of a novel electrolytic process for producing high-purity magnesium metal from magnesium oxide using a liquid tin cathode. In *JOURNAL OF MAGNESIUM AND ALLOYS*. ISSN 2213-9567, 2021, vol. 9, no. 5, pp. 1644-1655. Dostupné na: <https://doi.org/10.1016/j.jma.2021.01.0042213-9567>., Registrované v: WOS
 2. [1.1] LI, Na - PENG, Yaru - CHEN, Zeng - XIONG, Wenjuan - SUN, Jiaqi - CHEN, Yiming - ZHANG, Putao - LIU, Meiyue - LI, Shengjun. Preparation of Mg-Zr alloys through direct electro-deoxidation of MgO-ZrO_2 in $\text{CaCl}_2\text{-NaCl}$ molten salt. In *ELECTROCHIMICA ACTA*. ISSN 0013-4686, 2021, vol. 372, no., pp. Dostupné na: <https://doi.org/10.1016/j.electacta.2021.137816>., Registrované v: WOS
 3. [1.1] SUN JIAQI - PENG YARU - CHEN ZENG. Corrosion Behavior of the Nickel Electrode in LiCl-KCl-MgCl_2 Molten Salt in Ni-Mg Alloy formation process. In *INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE*. ISSN 1452-3981, 2021, vol. 16, no. 3, pp. Dostupné na: <https://doi.org/10.20964/2021.03.65>., Registrované v: WOS
- ADCA247 KORENKO, Michal** - ŠIMKO, František - MLYNÁRIKOVÁ, Jarmila - LARSON, Carol - MIKŠÍKOVÁ, Eva - PRIŠČÁK, Jozef - AMBROVÁ, Marta - PALUMBO, Robert. Physico-chemical properties of $(\text{MgF}_2\text{-CaF}_2\text{-(LiF)})\text{eut-MgO}$ system as a molten electrolyte for Mg electrowinning. In *Journal of Molecular Liquids*, 2019, vol. 275, p. 535-543. (2018: 4.561 - IF, Q1 - JCR, 0.862 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2018.11.066>
- Citácie:
1. [1.1] ZHANG, Qinghua - XI, Xiaoli - ZHANG, Liwen - NIE, Zhuanghua - NIE, Zuoren. Efficient Dissolution of Tungsten Carbide Using an Oxygen-Containing Molten Salt. In *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*. ISSN 0013-4651, 2021, vol. 168, no. 5, pp. Dostupné na: <https://doi.org/10.1149/1945-7111/abfe7a>., Registrované v: WOS
- ADCA248 KORENKO, Michal** - STRAKA, Martin - UHLÍŘ, J. - SZATMÁRY, Lórant - AMBROVÁ, Marta - ŠIMURDA, Michal. Phase analysis of the solidified $\text{KF-(LiF-NaF-UF}_4\text{)-ZrF}_4$ molten electrolytes for the electrowinning of uranium. In *Journal of Radioanalytical and Nuclear Chemistry*, 2014, vol. 302, no. 1, p. 549-554. (2013: 1.415 - IF, Q1 - JCR, 0.503 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0236-5731. Dostupné na: <https://doi.org/10.1007/s10967-014-3219-6>
- Citácie:
1. [1.1] CHEN, Xiuting - FU, Haiying - WANG, Chenyang. Influence of oxide ions on the speciation in molten KF-ZrF_4 and KF-HfF_4 : A Raman spectroscopic and theoretical investigation. In *JOURNAL OF MOLECULAR LIQUIDS*. ISSN 0167-7322, 2021, vol. 342, no., pp. Available on: <https://doi.org/10.1016/j.molliq.2021.117476>., Registrované v: WOS

2. [1.1] PENG, Hao - SONG, Yulong - JI, Nan - XIE, Leidong - HUANG, Wei - GONG, Yu. Inhibition effect of ZrF₄ on UO₂ precipitation in the LiF-BeF₂ molten salt. In RSC ADVANCES, 2021, vol. 11, no. 31, pp. 18708-18716. Available on: <https://doi.org/10.1039/d1ra02332b>, Registrované v: WOS
 3. [1.1] SONG, Yulong - SHEN, Miao - ZHAO, Sufang - TANG, Rui - XIE, Leidong - QIAN, Yuan. Interactions between Oxide and LiF-BeF₂-ZrF₄-UF₄ System through Electrochemical Techniques. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2021, vol. 168, no. 3, pp. Available on: <https://doi.org/10.1149/1945-7111/abec93>, Registrované v: WOS
- ADCA249 KORENKO, Michal - VASKOVÁ, Zuzana** - PRIŠČÁK, Jozef - ŠIMKO, František - AMBROVÁ, Marta - SHI, Zhongning. Density, viscosity and electrical conductivity of the molten cryolite electrolytes (Na₃AlF₆-SiO₂) for solar grade silicon (Si-SoG) electrowinning. In Silicon, 2015, vol. 7, no. 3, p. 261-267. (2014: 1.069 - IF, Q3 - JCR, 0.353 - SJR, Q3 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1876-990X. Dostupné na: <https://doi.org/10.1007/s12633-014-9214-2>
- Citácie:
1. [1.1] FENG, Yuan - LI, Mao - HOU, Wenyuan - CHENG, Benjun - WANG, Jiaoru - LI, Hesong. First-Principles Molecular Dynamics Simulation on High Silica Content Na₃AlF₆-Al₂O₃-SiO₂ Molten Salt. In ACS OMEGA. ISSN 2470-1343, 2021, vol. 6, no. 5, pp. 3745-3751. Dostupné na: <https://doi.org/10.1021/acsomega.0c05339>, Registrované v: WOS
- ADCA250 KORENKO, Michal** - ŠIMKO, František. Measurement of interfacial tension in liquid-liquid high-temperature systems. In Journal of Chemical and Engineering Data, 2010, vol. 55, no. 11, p. 4561-4573. (2009: 1.695 - IF, Q2 - JCR, 1.308 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). Dostupné na: <https://doi.org/10.1021/jc1004752>
- Citácie:
1. [1.2] CHERNETCKIY, Ihor - SLIPUKHINA, Iryna - KURYLENKO, Nataliia - MIENIAILOV, Sergii - OPACHKO, Magdalyna. The Application of Tracker Video Analysis for Distance Learning of Physics. In CEUR Workshop Proceedings, 2021-01-01, 3013, pp. 182-192. ISSN 16130073, Registrované v: SCOPUS
 2. [1.2] SUARDI, Muslim - PUTRA, Purnawan P. - WAHYUNIT, Nafrah - LUCIDA, Henny. Evaluation of physicochemical and antifungal properties of microemulsions of lemongrass oil (Cymbopogon citratus) and clove oil (syzygium aromaticum). In Tropical Journal of Natural Product Research, 2021-01-01, 5, 2, pp. 294-298. ISSN 26160684. Dostupné na: <https://doi.org/10.26538/tjnpr/v5i2.13>, Registrované v: SCOPUS
- ADCA251 KOSA, Ladislav - MACKOVÁ, Iveta. Determination of the enthalpy of fusion of K₃TaF₈ and K₃TaOF₆. In Thermochimica Acta, 2006, vol. 447, no. 2, p. 209-211. (2005: 1.230 - IF, Q3 - JCR, 0.626 - SJR, Q1 - SJR). ISSN 0040-6031. Dostupné na: <https://doi.org/10.1016/j.tca.2006.04.006>
- Citácie:
1. [1.1] WU, Jiao - WANG, Bo - LIU, Zhiyuan - ZHANG, Kang - ZENG, Qingguang. Mn⁴⁺-activated oxyfluoride K₃TaOF₆ red phosphor with intense zero phonon line for warm white light-emitting diodes. In RSC ADVANCES, 2021, vol. 11, no. 42, pp. 26120-26126. Dostupné na: <https://doi.org/10.1039/d1ra05174a>, Registrované v: WOS
- ADCA252 KOVÁČOVÁ, Zuzana** - OROVČÍK, Ľubomír - SEDLÁČEK, Jaroslav - BAČA, Ľuboš - DOBROČKA, Edmund - KITZMANTEL, M. - NEUBAUER, Erich. The effect of YB₄ addition in ZrB₂-SiC composites on the mechanical properties and oxidation performance tested up to 2000 °C. In Journal of the European Ceramic Society, 2020, vol. 40, p. 3829-3843. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.03.060>
- Citácie:
1. [1.1] LIN, J. - JIN, H. - GE, X.H. - YANG, Y.H. - HUANG, G.M. - WANG, J.H. - LI, F.Q. - LI, H. - WANG, S. Comparison of carbon nanotube deposition on HfB₂, ZrB₂, and TiB₂ by chemical vapor decomposition. In MATERIALS TODAY COMMUNICATIONS. SEP 2021, vol. 28, Registrované v: WOS
 2. [1.1] MONTEVERDE, F. - SARAGA, F. - REIMER, T. - SCITI, D. Thermally stimulated self-healing capabilities of ZrB₂-SiC ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, DEC 2021, vol. 41, no. 15, p. 7423-7433, Registrované v: WOS
 3. [1.1] SIMONENKO, E.P. - SIMONENKO, N.P. - GORDEEV, A.N. - KOLESNIKOV, A.F. - CHAPLYGIN, A.V. - LYSENKOV, A.S. - NAGORNOV, I.A. - SEVASTYANOV, V.G. - KUZNETSOV, N.T. Oxidation of HfB₂-SiC-Ta₄HfC₅ ceramic material by a supersonic flow of dissociated air. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, FEB 2021, vol. 41, no. 2, p. 1088-1098, Registrované v: WOS
- ADCA253 KOVALČIKOVÁ, Alexandra - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of the heat treatment on mechanical properties and oxidation resistance of SiC-Si₃N₄ composites. In Ceramics International, 2013, vol. 39, no. 7, p. 7951-7957. (2012: 1.789 - IF, Q1 - JCR, 0.810 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na:

<https://doi.org/10.1016/j.ceramint.2013.03.059>

Citácie:

1. [1.1] MA, Haiqiang - BAO, Chonggao. Preparation, oxidation property and mechanism of $\text{Si}_3\text{N}_4/\text{O}^-/\text{SiAlON}$ composite ceramics. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 11, pp. 15383-15391., Registrované v: WOS
2. [1.1] WANG, Yuhua - LIU, Wen - GUO, Jingxia - LI, Mingliang - FAN, Bingbing - WANG, Hailong - XU, Hongliang - LU, Hongxia - SHAO, Gang - ZHANG, Rui - AN, Linan. In situ formation of $\text{Si}_3\text{N}_4\text{-SiC}$ nanocomposites through polymer-derived SiAlCN ceramics and spark plasma sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 15, pp. 22049-22054. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.225>., Registrované v: WOS

ADCA254

KOVALČÍKOVÁ, Alexandra - DUSZA, Ján - ŠAJGALÍK, Pavol. Thermal shock resistance and fracture toughness of liquid-phase-sintered SiC-based ceramics. In Journal of the European Ceramic Society, 2009, vol. 29, p. 2387-2394. (2008: 1.580 - IF, Q1 - JCR, 1.139 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2009.01.021>

Citácie:

1. [1.1] HAO, Wei - NI, Na - LIU, Tianyu - ZHOU, Lei - YAO, Yao - LI, Ling - JIANG, Juan - SHI, Yinchun - ZHAO, Xiaofeng - XIAO, Ping. Ablation resistance of $\text{HfC}(\text{Si}, \text{O})\text{-HfB}_2(\text{Si}, \text{O})$ composites fabricated by one-step reactive spark plasma sintering. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 4, pp. 2226-2238., Registrované v: WOS
2. [1.1] NI, Xiuying - ZHAO, Jun - GONG, Feng - LI, Gang. Thermal shock and thermal fatigue resistance of $\text{Al}_2\text{O}_3/(\text{W}, \text{Ti})\text{C}/\text{TiN}/\text{Mo}/\text{Ni}$ multidimensional graded ceramics. In INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY. ISSN 1546-542X, 2021, vol. 18, no. 3, pp. 972-980., Registrované v: WOS
3. [1.1] WANG, Huiqiang - ZHANG, Haijun - BI, Yubao - LI, Haisheng - LV, Lihua - YANG, Haiqing - JIANG, Wei. Effects of different catalysts on performance of self-bonded SiC refractories. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 19, pp. 27863-27872. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.215>., Registrované v: WOS
4. [1.1] XIE, Yupeng - XU, Jun. Fabrication and mechanical properties of (SiCw. In FUNCTIONAL MATERIALS. ISSN 1027-5495, 2021, vol. 28, no. 2, pp. 275-278. Dostupné na: <https://doi.org/10.15407/fm28.02.275>., Registrované v: WOS
5. [1.1] ZHANG, Zhigang - ZU, Guoyin - CAO, Zhuokun - XU, Jianrong. Fabrication and properties of U-shaped NiFe_2O_4 ceramic tube produced by slip casting and pressureless sintering. In JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY. ISSN 2510-1560, 2021, vol. 57, no. 2, pp. 459-467., Registrované v: WOS
6. [1.1] ZHAO, Cheng-Cai - LIN, Rui-Lin - DAI, Min-Min - XU, Xin - ZHU, Lin-Lin - XUE, Jia-Xiang - ZHAI, Jian-Han - MA, Hai-Bin - GUO, Wei-Ming - LIN, Hua-Tay - REN, Qi-Sen - LIAO, Ye-Hong. Facile joining of SiC ceramics with screen-printed polycarbosilane without pressure. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 3, pp. 2157-2161., Registrované v: WOS
7. [1.1] ZHU, Ming - CHEN, Jian - CHEN, Wen-hui - ZHENG, Jia-qi - MA, Ning-ning - LIU, Xue-jian - CHEN, Zhong-ming - HUANG, Zheng-ren. Electrical properties of SiC-AlN ceramics pressureless sintered under N_2 atmosphere. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 5, pp. 7272-7277., Registrované v: WOS
8. [1.2] FANTOZZI, Gilbert - SAÁDAOUI, Malika. Thermal shock and thermal fatigue behavior of ceramics: Microstructural effects. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 1-3, pp. 879-890. Dostupné na: <https://doi.org/10.1016/B978-0-12-803581-8.12136-8>., Registrované v: SCOPUS

ADCA255

KOVALČÍKOVÁ, Alexandra - SEDLÁČEK, Jaroslav - LENČEŠ, Zoltán - BYSTRICKÝ, Roman - DUSZA, Ján - ŠAJGALÍK, Pavol. Oxidation resistance of SiC ceramics prepared by different processing routes. In Journal of the European Ceramic Society, 2016, vol. 36, p. 3783-3793. (2015: 2.933 - IF, Q1 - JCR, 1.135 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2016.03.016>

Citácie:

1. [1.1] ANWAR, Muhammad Shoaib - BUKHARI, Syed Zaighum Abbas - HA, Jang-Hoon - LEE, Jongman - SONG, In-Hyuck. Effect of Ni content and its particle size on electrical resistivity and flexural strength of porous SiC ceramic sintered at low-temperature using clay additive. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 22, pp. 31536-31547. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.032>., Registrované v: WOS
2. [1.1] BAZHIN, Pavel - CHIZHIKOV, Andrey - STOLIN, Alexander - ANTIPOV, Mikhail - KONSTANTINOV, Alexander. Long-sized rods of $\text{Al}_2\text{O}_3\text{-SiC-TiB}_2$ ceramic composite material

- obtained by SHS-extrusion: Microstructure, X-ray analysis and properties. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 28444-28448. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.262>, Registrované v: WOS
3. [1.1] DENG, Yu-Chen - ZHANG, Nan-Long - ZHI, Qiang - WANG, Bo - YANG, Jian-Feng. Preparation and Characterization of Pure SiC Ceramics by HTPVT Induced by Seeding with SiC Nanoarrays. In *MATERIALS*, 2021, vol. 14, no. 21, pp. Dostupné na: <https://doi.org/10.3390/ma14216317>, Registrované v: WOS
4. [1.1] LEE, Kyung-Jin - YI, Eun-Jeong - KANG, Yanggu - HWANG, Haejin. A novel method of silicon carbide coating to protect porous carbon against oxidation. In *INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS*. ISSN 0263-4368, 2021, vol. 99, no., pp. Dostupné na: <https://doi.org/10.1016/j.jrmhm.2021.105596>, Registrované v: WOS
5. [1.1] LI, Zhijian - GUO, Ruru - LI, Lu - ZHENG, Ruixiao - MA, Chaoli. Improvement in high-temperature oxidation resistance of SiC nanocrystalline ceramics by doping AlN. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 21, pp. 30999-31003. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.276>, Registrované v: WOS
6. [1.1] WANG, Xiulei - GAO, Xiaodong - ZHANG, Zhenghe - CHENG, Lisheng - MA, Haopeng - YANG, Weimin. Advances in modifications and high-temperature applications of silicon carbide ceramic matrix composites in aerospace: A focused review. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 9, pp. 4671-4688, Registrované v: WOS
- ADCA256 KOVALČÍKOVÁ, Alexandra - KUREK, Pavel - BALKO, Ján - DUSZA, Ján - ŠAJGALÍK, Pavol - MIHALIKOVÁ, Mária, Ing., PhD. Effect of the counterpart material on wear characteristics of silicon carbide ceramics. In *International Journal of Refractory Metals and Hard Materials*, 2014, vol. 44, p. 12-18. (2013: 1.764 - IF, Q1 - JCR, 1.057 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0263-4368. Dostupné na: <https://doi.org/10.1016/j.jrmhm.2014.01.006>
- Citácie:
1. [1.1] ZHANG, Wei - CHEN, Xiaoyu - YAMASHITA, Seiji - KUBOTA, Mitsuhiro - KITA, Hideki. Tribological behaviour of B4C-SiC composite ceramics under water lubrication: influence of counterpart. In *MATERIALS SCIENCE AND TECHNOLOGY*. ISSN 0267-0836, 2021, vol. 37, no. 9, pp. 863-876. Dostupné na: <https://doi.org/10.1080/02670836.2021.1961365>, Registrované v: WOS
2. [1.1] ZHANG, Wei - YAMASHITA, Seiji - KITA, Hideki. A study of B4C-SiC composite for self-lubrication. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. ISSN 0002-7820, 2021, vol. 104, no. 5, pp. 2325-2336, Registrované v: WOS
3. [1.1] ZHANG, Yanhu - FU, Yonghong - HUA, Xijun - QUAN, Li - QU, Jianjun. Characteristics and attenuation mechanism of linear standing-wave piezoelectric motors with ceramics-mated friction couples. In *TRIBOLOGY INTERNATIONAL*. ISSN 0301-679X, 2021, vol. 153, no., pp., Registrované v: WOS
- ADCA257 KOVALČÍKOVÁ, Alexandra - TATARKO, Peter - SEDLÁK, Richard** - MEDVEĎ, Dávid - CHLUP, Zdeněk - MÚDRA, Erika - DUSZA, Ján. Mechanical and tribological properties of TiB2-SiC and TiB2-SiC-GNPs ceramic composites. In *Journal of the European Ceramic Society*, 2020, vol. 40, no. 14, p. 4860-4871. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.04.045>
- Citácie:
1. [1.1] BAZHIN, Pavel - CHIZHIKOV, Andrey - STOLIN, Alexander - ANTIPOV, Mikhail - KONSTANTINOV, Alexander. Long-sized rods of Al2O3-SiC-TiB2 ceramic composite material obtained by SHS-extrusion: Microstructure, X-ray analysis and properties. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 28444-28448. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.262>, Registrované v: WOS
2. [1.1] CHEN, Benshuai - XIAO, Guangchun - YI, Mingdong - ZHANG, Jingjie - CHEN, Hui - ZHOU, Tingting - CHEN, Zhaoqiang - XU, Chonghai. Structural design and toughening mechanism of laminated graphene ceramic tool materials. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 22, pp. 32264-32275. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.121>, Registrované v: WOS
3. [1.1] DERAKHSHANDEH, Mohammad Reza - FAZILI, Ali - GOLENJI, Raouf Behjat - ALIPOUR, Fardin - ESHRAGHI, Mohammad Javad - NIKZAD, Leila. Fabrication of (TixZr1-x)B-2-(ZrxTi1-x)N composites by reactive spark plasma sintering of ZrB2-TiN. In *JOURNAL OF ALLOYS AND COMPOUNDS*. ISSN 0925-8388, 2021, vol. 887, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.161403>, Registrované v: WOS
4. [1.1] GUO, Wenchao - HE, Qianglong - WANG, Aiyang - TIAN, Tian - LIU, Chun - HU, Lanxin - WANG, Hao - WANG, Weimin - FU, Zhengyi. Effects of ball milling on the densification behavior, microstructure, and mechanical properties of TiB2-SiC ceramics. In *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*. ISSN 2238-7854, 2021, vol. 15, no., pp.

- 6700-6712. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.11.106>., Registrované v: WOS
5. [1.1] LIN, Jia - JIN, Hua - GE, Xiaohong - YANG, Yihang - HUANG, Guimei - WANG, Jinhua - LI, Fenqiang - LI, Hui - WANG, Shuai. Comparison of carbon nanotube deposition on HfB₂, ZrB₂, and TiB₂ by chemical vapor decomposition. In MATERIALS TODAY COMMUNICATIONS, 2021, vol. 28, no., pp. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2021.102540>., Registrované v: WOS
6. [1.1] NAYEBI, Behzad - ASL, Mehdi Shahedi - AKHLAGHI, Maryam - AHMADI, Zohre - TAYEBIFARD, Seyed Ali - SALAH, Esmaeil - SHOKOUHIMEHR, Mohammadreza - MOHAMMADI, Mohsen. Spark plasma sintering of TiB₂-based ceramics with Ti₃AlC₂. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 11929-11934., Registrované v: WOS
7. [1.1] NGUYEN, Van-Huy - DELBARI, Seyed Ali - NAMINI, Abbas Sabahi - AHMADI, Zohre - LE, Quyet Van - SHOKOUHIMEHR, Mohammadreza - ASL, Mehdi Shahedi - MOHAMMADI, Mohsen. Microstructural evolution of TiB₂-SiC composites empowered with Si₃N₄, BN or TiN: A comparative study. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 1, pp. 1002-1011., Registrované v: WOS
8. [1.1] SONG, Bin - YANG, Wei - LIU, Xiaoming - CHEN, Haiyan - AKHLAGHI, Maryam. Microstructural characterization of TiB₂-SiC-BN ceramics prepared by hot pressing. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 29174-29182. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.080>., Registrované v: WOS
9. [1.1] WANG, Wen. Effects of TiN content on the properties of hot pressed TiB₂-SiC ceramics. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 12, pp. 16762-16769. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.02.248>., Registrované v: WOS
10. [1.1] XU, Haiyue - QI, Qian - JI, Wei - WANG, Weimin - ZHANG, Jinyong - FU, Zhengyi. In-situ synthesis and low-temperature fabrication of B₄C/TiB₂-based multilayer graded composites with B₄C and Ti-Al intermetallics mixtures through transient liquid phase sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 17, pp. 24384-24392. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.152>., Registrované v: WOS
11. [1.1] ZHAO, Jun - LI, Qinggui - CAO, Weixiao - LIU, Zetan - DENG, Xiangong - DING, Xiang - RAN, Songlin. Influences of B₄C content and particle size on the mechanical properties of hot pressed TiB₂-B₄C composites. In JOURNAL OF ASIAN CERAMIC SOCIETIES. ISSN 2187-0764, 2021, vol. 9, no. 3, pp. 1239-1247. Dostupné na: <https://doi.org/10.1080/21870764.2021.1953759>., Registrované v: WOS
12. [1.2] HVIZDOŠ, Pavol. Wear and erosion resistant ceramic materials. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 416-424. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00056-4>., Registrované v: SCOPUS

ADCA258

KRAXNER, Jozef** - MICHÁLEK, Martin - ROMERO, Acacio Rincon - ELSAYED, Hamada - BERNARDO, Enrico - BOCCACCINI, Aldo - GALUSEK, Dušan. Porous bioactive glass microspheres prepared by flame synthesis process. In Materials Letters, 2019, vol. 256, art. no. 126625. (2018: 3.019 - IF, Q2 - JCR, 0.771 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0167-577X. Dostupné na: <https://doi.org/10.1016/j.matlet.2019.126625>

Citácie:

1. [1.1] GOGAJEH, Narges Nasehi - JAVADPOUR, Jafar - YEKTA, Bijan Eftekhari. Low-temperature synthesis of bioactive glass-ceramic microspheres: Effect of processing parameters on the size and morphology. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 14, pp. 19895-19905. ISSN 0272-8842. Available on: <https://doi.org/10.1016/j.ceramint.2021.04.004>., Registrované v: WOS
2. [1.1] MOUSAVI NEJAD, Zohre - ZAMANIAN, Ali - SAEIDIFAR, Maryam - VANAEI, Hamid Reza - SALAR AMOLI, Mehdi. 3D Bioprinting of Polycaprolactone-Based Scaffolds for Pulp-Dentin Regeneration: Investigation of Physicochemical and Biological Behavior. In POLYMERS, 2021, vol. 13, no. 24, pp. Available on: <https://doi.org/10.3390/polym13244442>., Registrované v: WOS
3. [1.1] VOLLPRECHT, Daniel - MACHIELS, Lieven - JONES, Peter Tom. The EU Training Network for Resource Recovery through Enhanced Landfill Mining-A Review. In PROCESSES, 2021, vol. 9, no. 2, pp. Available on: <https://doi.org/10.3390/pr9020394>., Registrované v: WOS
4. [1.2] NEJAD, Zohre Mousavi - ZAMANIAN, Ali - SAEIDIFAR, Maryam - VANAEI, Hamid Reza - AMOLI, Mehdi Salar. 3D Bioprinting of Polycaprolactone-Based Scaffolds for Pulp-Dentin Regeneration: Investigation of Physicochemical and Biological Behavior. In Polymers, 2021-12-01, 13, 24, pp. Available on: <https://doi.org/10.3390/polym13244442>., Registrované v: SCOPUS

ADCA259

KRAXNER, Jozef - CHOVANEC, Jozef - HALADEJOVÁ, Katarína - PETRIKOVÁ, I. - GALUSEK, Dušan. Hollow polycrystalline YAG microspheres by flame synthesis. In Materials Letters, 2017, vol. 204, p. 181-183. (2016: 2.572 - IF, Q2 - JCR, 0.754 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0167-577X. Dostupné na:

<https://doi.org/10.1016/j.matlet.2017.05.108>

Citácie:

1. [1.1] MA BENYUAN - PU CHUNYING - HE JUNBAO - ZHOU DAWEI - FU YU - WEI NIAN - LU TIECHENG. Formation Mechanism of Impure Phases and Crystallinity Investigation of YAG Powders Synthesized via the Co-precipitation Method. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, 2021, vol. 36, no. 4, pp. 517-525. Dostupné na: <https://doi.org/10.1007/s11595-021-2439-1>, Registrované v: WOS

2. [1.2] LIU, Yue - CHEN, Lin - SONG, Jieguang - LUO, Huihui - WEI, Chenhui - HE, Chunyan - SUN, Jiamin - GUAN, Zhiqiang. The sintering process and mechanism of yag pore gradient ceramics. In Key Engineering Materials, 2020-01-01, 861 KEM, pp. 238-243. ISSN 10139826. Dostupné na: <https://doi.org/10.4028/www.scientific.net/KEM.861.238>, Registrované v: SCOPUS

ADCA260

KRONEK, Juraj** - NEDBAL, Jan - VALENTOVÁ, Helena - NEUBERT, Milan - JANIGOVÁ, Ivica - PETRENČÍKOVÁ, Nadežda - ŠRÁMKOVÁ, Petra - CSOMOROVÁ, Katarína - PETRA, Lukáš. Thermal stability and structural anisotropy of semiaromatic poly(ester amides) from aromatic bis(2-oxazolines) and aliphatic dicarboxylic acids. In Polymer Testing, 2018, vol. 68, p. 1-7. (2017: 2.247 - IF, Q2 - JCR, 0.669 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0142-9418. Dostupné na: <https://doi.org/10.1016/j.polymertesting.2018.02.005>

Citácie:

1. [1.1] HE, T.W. - LIU, T. - HUANG, J.Y. - WANG, X.L. - HE, Y. - MA, B.M. Synthesis of alternating semi-aromatic poly(ester amide)s and the amide transesterification. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, AUG 2021, vol. 28, no. 8., Registrované v: WOS

ADCA261

KŘÍSTKOVÁ, Anežka - KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - MALKIN, Vladimír - MALKINA, Olga. Relativistic four-component calculations of indirect nuclear spin-spin couplings with efficient evaluation of the exchange-correlation response kernel. In Journal of Chemical Physics, 2015, vol. 142, no. 11, art. no. 114102. (2014: 2.952 - IF, Q1 - JCR, 1.446 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4913639>

Citácie:

1. [1.1] KRIVDIN, Leonid B. Computational NMR of heavy nuclei involving Ag-109, Cd-113, Sn-119, Te-125, Pt-195, Hg-199, Tl-205, and Pb-207. In RUSSIAN CHEMICAL REVIEWS, 2021, vol. 90, no. 9, pp. 1166-1212. ISSN 0036-021X. Available on: <https://doi.org/10.1070/RCR4976>, Registrované v: WOS

2. [1.2] JAZWIŃSKI, Jarosław. Theoretical and practical aspects of indirect spin-spin couplings. In Nuclear Magnetic Resonance, 2021-01-01, 46, pp. 34-75. ISSN 03059804. Available on: <https://doi.org/10.1039/9781788010665-00034>, Registrované v: SCOPUS

ADCA262

KUBÍKOVÁ, Blanka - MLYNÁRIKOVÁ, Jarmila - BENEŠ, Ondřej - MIKŠÍKOVÁ, Eva - PRIŠČÁK, Jozef - TOSOLIN, Alberto - BOČA, Miroslav**. Physico-chemical properties of the system (LiF-NaF)eut-LaF3 - Phase equilibria, density and volume properties, electrical conductivity and surface tension. In Journal of Molecular Liquids, 2018, vol. 268, p. 754-761. (2017: 4.513 - IF, Q1 - JCR, 0.849 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2018.07.114>

Citácie:

1. [1.1] MUSHNIKOV, Peter - TKACHEVA, Olga - VORONIN, Vladimir - SHISHKIN, Vladimir - ZAIKOV, Yuriy. Investigation of the Quasi-Binary Phase Diagram FLiNaK-NdF3. In MATERIALS, 2021, vol. 14, no. 21, pp. Dostupné na: <https://doi.org/10.3390/ma14216428>, Registrované v: WOS

2. [1.1] YU, Dongkun - XUE, Zhimin - MU, Tiancheng. Eutectics: formation, properties, and applications. In CHEMICAL SOCIETY REVIEWS. ISSN 0306-0012, 2021, vol. 50, no. 15, pp. 8596-8638. Dostupné na: <https://doi.org/10.1039/d1cs00404b>, Registrované v: WOS

ADCA263

KUBÍKOVÁ, Blanka - DANĚK, Vladimír. Surface tension of melts of the system KF+K2NbF7+Na2O5. In Journal of Chemical and Engineering Data, 2005, vol. 50, no. 4, p. 1434-1437. Dostupné na: <https://doi.org/10.1021/jc050095q>

Citácie:

1. [1.1] SINGH, Gurpreet - SHARMA, Moolchand - VAISH, Rahul. Emerging trends in glass-ceramic photocatalysts. In CHEMICAL ENGINEERING JOURNAL. ISSN 1385-8947, 2021, vol. 407, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.126971>, Registrované v: WOS

ADCA264

KUBÍKOVÁ, Blanka - TOMÁŠKOVÁ, Z. - PRIŠČÁK, Jozef. Surface tension of the NaF + AlF3 + AlPO4 and NaF + AlF3 + NaVO3 molten systems. In Journal of Chemical and Engineering Data, 2010, vol. 55, no. 9, p. 3174-3178. (2009: 1.695 - IF, Q2 - JCR, 1.308 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). Dostupné na: <https://doi.org/10.1021/jc901079k>

Citácie:

1. [1.1] LV, Xiaojun - CHEN, Chang - HAN, Zexun - GUAN, Chaohong - XU, Zhenming. Shear viscosities and thermal conductivity of NaF-AlF3 molten salts: A non-equilibrium molecular

- ADCA265 *dynamics study. In JOURNAL OF FLUORINE CHEMISTRY. ISSN 0022-1139, 2021, vol. 241, no., pp. Dostupné na: <https://doi.org/10.1016/j.jfluchem.2020.109675>, Registrované v: WOS*
KUBOTA, Yoshiyuki - OHNUMA, Toshiharu - BUČKO, Tomáš. Carbon dioxide capture in 2-aminoethanol aqueous solution from ab initio molecular dynamics simulations. In Journal of Chemical Physics, 2016, vol. 146, no. 9, 094303-1-094303-9. (2015: 2.894 - IF, Q2 - JCR, 1.255 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4977093>
Citácie:
1. [1.1] GOVONI, Marco - WHITMER, Jonathan - DE PABLO, Juan - GYGI, Francois - GALLI, Giulia. Code interoperability extends the scope of quantum simulations. In NPJ COMPUTATIONAL MATERIALS, 2021, vol. 7, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41524-021-00501-z>, Registrované v: WOS
- ADCA266 KUCHARÍK, Marián** - VASILJEV, Roman. Surface tension of the system NaF-AlF(3)-Al₂O₃ and surface adsorption of Al₂O₃. In Zeitschrift für Naturforschung A, 2006, vol. 61, no. 7-8, p. 389-398. (2005: 1.007 - IF, Q3 - JCR, 0.433 - SJR, Q3 - SJR). ISSN 0932-0784. Dostupné na: <https://doi.org/10.1515/zna-2006-7-813>
Citácie:
1. [1.1] KASZAS, Csilla - KISS, Laszlo I. - PONCSAK, Sandor - GUERARD, Sebastien - ALARIE, Jonathan - ROGER, Thomas. Flotation of Alumina on the Surface of the Electrolyte in an Aluminum Electrolysis Cell. In METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE. ISSN 1073-5615, 2020, vol. 51, no. 4, pp. 1824-1835. Available on: <https://doi.org/10.1007/s11663-020-01836-6>, Registrované v: WOS
2. [1.1] KUBIKOVA, Blanka - MLYNARIKOVA, Jarmila - WU, Shuang - MIKSIKOVA, Eva - PRISCAK, Jozef - BOCA, Miroslav - KORENKO, Michal. Physicochemical Investigation of the Ternary (LiF + MgF₂)(eut) + LaF₃ Molten System. In JOURNAL OF CHEMICAL AND ENGINEERING DATA. ISSN 0021-9568, 2020, vol. 65, no. 10, pp. 4815-4826. Available on: <https://doi.org/10.1021/acs.jced.0c00315>, Registrované v: WOS
- ADCA267 KUCHARÍK, Marián - KORENKO, Michal - JANIČKOVIČ, Dušan - KADLEČÍKOVÁ, M. - BOČA, Miroslav - OBOŇA, Jozef Vincenc. Rapid solidification of cryolite and cryolite-alumina melts. In Monatshefte für Chemie, 2010, vol. 141, no. 1, p. 7-13. (2009: 1.312 - IF, Q2 - JCR, 0.479 - SJR, Q2 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0026-9247. Dostupné na: <https://doi.org/10.1007/s00706-009-0229-0>
Citácie:
1. [1.1] BUMAJDAD, Ali - NAHAR, Shamsun - ZAKI, Mohamed I. Na-Influenced Bulk and Surface Properties of the So-Called Iota(iota)-Alumina: Spectroscopy and Microscopy Studies. In FRONTIERS IN CHEMISTRY. ISSN 2296-2646, 2021, vol. 9, 633877. Dostupné na: <https://doi.org/10.3389/fchem.2021.633877>, Registrované v: WOS
- ADCA268 KUCHARÍK, Marián - BOČA, Miroslav - BESSADA, Catherine - FUESS, H. Do sodium oxofluoroaluminates exist at room temperature? In European Journal of Inorganic Chemistry, 2005, no. 9, p. 1781-1786. ISSN 1434-1948. Dostupné na: <https://doi.org/10.1002/ejic.200400814>
Citácie:
1. [1.1] LIN, Ming - HU, Xianwei - YU, Jiangyu - YANG, Youjian - LIU, Aimin - SHI, Zhongning - WANG, Zhaowen. Raman spectroscopy and quantum theory calculations on complexes in the KF-AlF₃-Al₂O₃ system. In JOURNAL OF MOLECULAR LIQUIDS. ISSN 0167-7322, 2021, vol. 326, no., pp. Dostupné na: <https://doi.org/10.1016/j.molliq.2020.115267>, Registrované v: WOS
- ADCA269 BIZOVSKÁ, Valéria - PÁLKOVÁ, Helena - MADEJOVÁ, Jana. Near-infrared study of water adsorption on homo-ionic forms of montmorillonite. In Clays and Clay Minerals, 2016, vol. 64, no. 5, p. 571-585. (2015: 1.222 - IF, Q3 - JCR, 0.492 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2016.064037>
Citácie:
1. [1.1] RODRIGUES, Andreia - ANGELICA, Romulo - PAZ, Simone. CATIONIC DIFFERENTIATION OF BENTONITES BY INFRARED: A STUDY OF THE HYDRATION EFFECTS OF EXCHANGEABLE CATIONS. In QUIMICA NOVA. ISSN 0100-4042, 2021, vol. 44, no. 3, pp. 272-277. Dostupné na: <https://doi.org/10.21577/0100-4042.20170705>, Registrované v: WOS
2. [1.1] WANG, Gaofeng - RAN, Lingyu - XU, Jie - WANG, Yuanyuan - MA, Lingya - ZHU, Runliang - WEI, Jingming - HE, Hongping - XI, Yunfei - ZHU, Jianxi. Technical development of characterization methods provides insights into clay mineral-water interactions: A comprehensive review. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 206, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106088>, Registrované v: WOS
3. [1.2] OKAWARA, M. - SAITO, Y. - ISHIGURO, K. - HOTTA, Y. Mineralogical Study on the Consistency Property of Bentonite Mixed Soil. In IOP Conference Series: Earth and

- ADCA270 *Environmental Science*, 2021-09-27, 849, 1, pp. ISSN 17551307. Dostupné na: <https://doi.org/10.1088/1755-1315/849/1/012005>, Registrované v: SCOPUS
KUREKOVÁ, Valéria - BELUŠÁKOVÁ, Silvia - BOHÁČ, Peter - BUJDÁK, Juraj**. Resonance energy transfer in the systems of smectite modified with a fluorescent cationic polymer and a photosensitizer. In *Applied Clay Science*, 2019, vol. 183, art. no. 105326. (2018: 3.890 - IF, Q1 - JCR, 0.990 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2019.105326>
Citácie:
1. [1.1] GIOVANNINI, Giorgia - ROSSI, Rene M. - BOESEL, Luciano F. Changes in Optical Properties upon Dye-Clay Interaction: Experimental Evaluation and Applications. In *NANOMATERIALS*, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.3390/nano11010197>, Registrované v: WOS
- ADCA271 BIZOVSKÁ, Valéria** - JANKOVIČ, Ľuboš - MADEJOVÁ, Jana. Montmorillonite modified with unconventional surfactants from the series of octylammonium-based cations: Structural characterization and hydration properties. In *Applied Clay Science*, 2018, vol. 158, p. 102-112. (2017: 3.641 - IF, Q1 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2018.03.013>
Citácie:
1. [1.1] DE OLIVEIRA, Luis H. - TRIGUEIRO, Pollyana - RIGAUD, Baptiste - DA SILVA-FILHO, Edson C. - OSAJIMA, Josy A. - FONSECA, Maria G. - LAMBERT, JeanFrancois - GEORGELIN, Thomas - JABER, Maguy. When RNA meets montmorillonite: Influence of the pH and divalent cations. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 214, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106234>, Registrované v: WOS
2. [1.1] QIU, Jun - CUI, Kaibo - CHEN, Guowei - WANG, Yueting - LIU, Dongliang - JIANG, Shan - WANG, Yaqi - WU, Peng - LIU, Xiaodong - WANG, Guifang - LYU, Xianjun. Micro-structure and gel performance of octadecyl trimethyl ammonium chloride intercalated montmorillonite. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*. ISSN 0927-7757, 2021, vol. 610, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.125710>, Registrované v: WOS
- ADCA272 KURTULDU, Fatih - MUTLU, Nurshen - MICHÁLEK, Martin - ZHENG, Kai - MASAR, Milan - LIVERANI, Liliana - CHEN, Si - GALUSEK, Dušan** - BOCCACCINI, Aldo**. Cerium and gallium containing mesoporous bioactive glass nanoparticles for bone regeneration: Bioactivity, biocompatibility and antibacterial activity. In *Materials Science and Engineering C*, 2021, vol. 124, art. no. 112050. (2020: 7.328 - IF, Q1 - JCR, 1.234 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0928-4931. Dostupné na: <https://doi.org/10.1016/j.msec.2021.112050>
Citácie:
1. [1.1] EL-FIQI, Ahmed - ALLAM, Rasha - KIM, Hae-Won. Antioxidant cerium ions-containing mesoporous bioactive glass ultrasmall nanoparticles: Structural, physico-chemical, catalase-mimic and biological properties. In *COLLOIDS AND SURFACES B-BIOINTERFACES*, 2021, vol. 206, no., pp. ISSN 0927-7765. Available on: <https://doi.org/10.1016/j.colsurfb.2021.111932>, Registrované v: WOS
2. [1.1] EL-FIQI, Ahmed - KIM, Hae-Won. Sol-gel synthesis and characterization of novel cobalt ions-containing mesoporous bioactive glass nanospheres as hypoxia and ferroptosis-inducing nanotherapeutics. In *JOURNAL OF NON-CRYSTALLINE SOLIDS*, 2021, vol. 569, no., pp. ISSN 0022-3093. Available on: <https://doi.org/10.1016/j.jnoncrysol.2021.120999>, Registrované v: WOS
3. [1.1] TSAMESIDIS, Ioannis - GKILIOPOULOS, Dimitrios - POUROUTZIDOU, Georgia K. - LYMPERAKI, Evgenia - PAPOULIA, Chrysanthi - REYBIER, Karine - PERIO, Pierre - PARASKEVOPOULOS, Konstantinos M. - KONTONASAKI, Eleana - THEOCHARIDOU, Anna. Effect of Artemisinin-Loaded Mesoporous Cerium-Doped Calcium Silicate Nanopowder on Cell Proliferation of Human Periodontal Ligament Fibroblasts. In *NANOMATERIALS*, 2021, vol. 11, no. 9, pp. Available on: <https://doi.org/10.3390/nano11092189>, Registrované v: WOS
4. [1.1] VALLET-REGI, M. - SALINAS, A. J. Mesoporous bioactive glasses for regenerative medicine. In *MATERIALS TODAY BIO*, 2021, vol. 11, no., pp. ISSN 2590-0064. Available on: <https://doi.org/10.1016/j.mtbio.2021.100121>, Registrované v: WOS
5. [1.1] ZAMBON, Alfonso - MALAVASI, Gianluca - PALLINI, Annalisa - FRAULINI, Francesca - LUSVARDI, Gigliola. Cerium Containing Bioactive Glasses: A Review. In *ACS BIOMATERIALS SCIENCE & ENGINEERING*, 2021, vol. 7, no. 9, pp. 4388-4401. ISSN 2373-9878. Available on: <https://doi.org/10.1021/acsbiomaterials.1c00414>, Registrované v: WOS
- ADCA273 KUZIELOVÁ, Eva** - SLANÝ, Michal - ŽEMLIČKA, Matúš - MÁSLIKO, Jiří - PALOU, Martin T. Phase Composition of Silica Fume-Portland Cement Systems Formed under Hydrothermal Curing Evaluated by FTIR, XRD, and TGA. In *Materials*, 2021, vol. 14, art. no. 2786. (2020: 3.623 - IF, Q1 - JCR, 0.682 - SJR, Q2 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma14112786> (APVV-15-0631 : Výskum vysokohodnotných

cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. APVV-19-0490 : Výskum a vývoj mnohózložkových cementových zmesí pre špeciálne konštrukčné materiály. VEGA 2/0032/21 : Štúdium degradácie viaczložkových cementových materiálov v dôsledku uhlíkovej korózie v podmienkach simulujúcich geotermálne vrty. VEGA 2/0017/21 : Materiálové zloženie a vlastnosti samozhutniteľných ťažkých betónov)

Citácie:

1. [1.1] CHENG, Zhanqi - YAN, Wenhao - SUI, Zhibo - TANG, Jiyu - YUAN, Chengfang - CHU, Liusheng - FENG, Hu. Effect of Fiber Content on the Mechanical Properties of Engineered Cementitious Composites with Recycled Fine Aggregate from Clay Brick. In MATERIALS, 2021, vol. 14, no. 12, art. no. 3272. Dostupné na: <https://doi.org/10.3390/ma14123272>., Registrované v: WOS

2. [1.1] RUTKOWSKA, Gabriela - ZOLTOWSKI, Mariusz - LISS, Michal. The Use of Modal Analysis in Addition Percentage Differentiation, and Mechanical Properties of Ordinary Concretes with the Addition of Fly Ash from Sewage Sludge. In MATERIALS, 2021, vol. 14, no. 17, art. no. 5039. Dostupné na: <https://doi.org/10.3390/ma14175039>., Registrované v: WOS

ADCA274 LACKOVIČOVÁ, Monika - ŠIMONOVÁ, Tímea - BUJDÁK, Juraj**. The chemical stabilization of methylene blue in colloidal dispersions of smectites. In Applied Clay Science, 2019, vol. 181, p. 105222-1-105222-8. (2018: 3.890 - IF, Q1 - JCR, 0.990 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2019.105222>

Citácie:

1. [1.1] JARAMILLO-FIERRO, Ximena - GONZALEZ, Silvia - MONTESDEOCA-MENDOZA, Fernando - MEDINA, Francesc. Structuring of ZnTiO₃/TiO₂ Adsorbents for the Removal of Methylene Blue, Using Zeolite Precursor Clays as Natural Additives. In NANOMATERIALS, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/nano11040898>., Registrované v: WOS

2. [1.1] WANG, Fushuai - PAN, Fei - YU, Shunyang - PAN, Dawei - ZHANG, Peiqing - WANG, Ning. Towards mass production of a spherical montmorillonite@covalent organic framework@gold nanoparticles heterostructure as a high-efficiency catalyst for reduction of methylene blue. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106007>., Registrované v: WOS

ADCA275 LANGER, Vratislav - SMRČOK, Ľubomír - BOČA, Miroslav. Dipotassium heptafluorotantalate(V), beta-K₂TaF₇, at 509 K. In Acta Crystallographica Section E, 2006, vol. 62, p. i91-i93. (2005: 0.581 - IF, Q4 - JCR, 0.261 - SJR, Q2 - SJR). ISSN 1600-5368. Dostupné na: <https://doi.org/10.1107/S1600536806009147>

Citácie:

1. [1.1] TANG, Ru-Ling - LIAN, Xin - YAO, Wen-Dong - LIU, Wenlong - GUO, Sheng-Ping. K₃Na(TaF₇)(SiF₆): a mixed-anion pentanary fluoride with zero-dimensional anions exhibiting a large band gap. In DALTON TRANSACTIONS, 2021, vol. 50, no. 45, pp. 16562-16567. ISSN 1477-9226. Available on: <https://doi.org/10.1039/d1dt03320d>., Registrované v: WOS

ADCA276 LÁZÁR, Marián** - HNATKO, Miroslav - SEDLÁČEK, Jaroslav - ČARNOGURSKÁ, M. - BRESTOVIČ, Tomáš. Upgrading the glassy slag from waste disposal by thermal plasma treatment. In Waste Management, 2018, vol. 78, p. 173-182. (2017: 4.723 - IF, Q1 - JCR, 1.456 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0956-053X. Dostupné na: <https://doi.org/10.1016/j.wasman.2018.05.042>

Citácie:

1. [1.1] HAO, Cuicui - HUANG, Wenzong - ZHANG, Jia - WU, Jianzhong - YUE, Yang - QIAN, Guangren. Producing a monolithic catalyst by manganese slag and its industrial application in catalytic oxidization of volatile organic compounds. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 5, pp. ISSN 2213-2929. Available on: <https://doi.org/10.1016/j.jece.2021.106145>., Registrované v: WOS

2. [1.1] JORDANOV, Nicolai B. - GEORGIEV, Ivan - KARAMANOV, Alexander. Sintered Glass-Ceramics, Self-Glazed Materials and Foams from Metallurgical Waste Slag. In MATERIALS, 2021, vol. 14, no. 9, pp. Available on: <https://doi.org/10.3390/ma14092263>., Registrované v: WOS

3. [1.1] MA, Wenchao - SHI, Wenbo - SHI, Yajun - CHEN, Dongmei - LIU, Bin - CHU, Chu - LI, Dan - LI, Yanlong - CHEN, Guanyi. Plasma vitrification and heavy metals solidification of MSW and sewage sludge incineration fly ash. In JOURNAL OF HAZARDOUS MATERIALS, 2021, vol. 408, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2020.124809>., Registrované v: WOS

4. [1.1] ZHANG, Jin - ZENG, Jiachen - WU, Jianzhong - YUE, Yang - ZHANG, Jia - QIAN, Guangren. A plasma thermal slag-derived from hazardous waste has a born hydrothermal stability. In JOURNAL OF HAZARDOUS MATERIALS, 2021, vol. 401, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2020.123444>., Registrované v: WOS

5. [1.2] GUAN, Yanmei - CHEN, Wei - SUN, Daosheng - LIU, Kaiwei - LI, Ping. Effect of calcium carbonate on the preparation of porous glass-ceramics from phosphorus slag and coal gangue. In

- Gongneng Cailiao/Journal of Functional Materials*, 2021-04-30, 52, 4, pp. 04105-04109. ISSN 10019731. Available on: <https://doi.org/10.3969/j.issn.1001-9731.2021.04.015>., Registrované v: SCOPUS
6. [1.2] LEŠ, Dominika - BARTUSIK-AEBISHER, Dorota - AEBISHER, David. *Laser analysis of the chemical composition of ceramics. In Characterization of Archaeological Materials by the Use of Light*, 2021-04-07, pp. 71-98., Registrované v: SCOPUS
- ADCA277 LAZAR, Petr - BUČKO, Tomáš - HAFNER, Jürgen. Negative thermal expansion of ScF₃: Insights from density-functional molecular dynamics in the isothermal-isobaric ensemble. In *Physical Review B*, 2015, vol. 92, no. 22, p. 224302-1-224302. (2014: 3.736 - IF, Q1 - JCR, 0.123 - SJR, Q4 - SJR, karentované - CCC). (2015 - Current Contents, WOS, SCOPUS). ISSN 1550-235X. Dostupné na: <https://doi.org/10.1103/PhysRevB.92.224302>
- Citácie:
1. [1.1] REN, Biyun - CHEN, Bing - ZHAO, Jianxiong - GUO, Yang - ZHANG, Xin - CHEN, Xian - DU, Yangyang - DENG, Zhiqin - ZHU, Guangyu - WANG, Feng. *Synthesis of Core-Shell ScF₃ Nanoparticles for Thermal Enhancement of Upconversion. In CHEMISTRY OF MATERIALS*, 2021, vol. 33, no. 1, pp. 158-163. ISSN 0897-4756. Available on: <https://doi.org/10.1021/acs.chemmater.0c03124>., Registrované v: WOS
2. [1.1] TKACHENKO, Alexei - ZALIZNYAK, Igor A. Empty perovskites as Coulomb floppy networks: Entropic elasticity and negative thermal expansion. In *PHYSICAL REVIEW B*, 2021, vol. 103, no. 13, pp. ISSN 2469-9950. Available on: <https://doi.org/10.1103/PhysRevB.103.134106>., Registrované v: WOS
- ADCA278 LEE, Ching-Huan - LIU, Hao-Chih - LU, Horng-Hwa - GOTO, Takashi - TU, Rong - WANG, Chang-An - ŠAJGALÍK, Pavol - NAYAK, Pramoda K. - CHEN, Jian-Horn - CHEN, Qing-Yu - HUANG, J.-L.**. Indentation deformation and microcracking in beta-Si₃N₄-based nanoceramic. In *Journal of the American Ceramic Society*, 2012, vol. 95, no. 4, p. 1421-1428. (2011: 2.272 - IF, Q1 - JCR, 0.958 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2012.05080.x>
- Citácie:
1. [1.1] FALAK, Muhammad Zulqarnain - AHMED, Bilal Anjum - SAEED, Hasan Aftab - BUTT, Sajid Ullah - HAKEEM, Abbas Saeed - AKBAR, Usman Ali. *Spark Plasma Sintering of SiAlON Ceramics Synthesized via Various Cations Charge Stabilizers and Their Effect on Thermal and Mechanical Characteristics. In CRYSTALS*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/cryst11111378>., Registrované v: WOS
2. [1.1] HAKEEM, Abbas Saeed - KHAN, Majid - AHMED, Bilal Anjum - AL GHANIM, Ahmed - PATEL, Faheemuddin - EHSAN, Muhammad Ali - ALI, Sadaqat - LAOUI, Tahar - ALI, Sharafat. *Synthesis and characterization of alkaline earth and rare earth doped sialon Ceramics by spark plasma sintering. In INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS*. ISSN 0263-4368, 2021, vol. 97, no., pp. Dostupné na: <https://doi.org/10.1016/j.ijrmhm.2021.105500>., Registrované v: WOS
- ADCA279 LENČEŠ, Zoltán - HIRAO, Kiyoshi - KANZAKI, Shuzo - HOFFMANN, M.J. - ŠAJGALÍK, Pavol. Reaction sintering of fluorine-doped MgSiN₂. In *Journal of the European Ceramic Society*, 2004, vol. 24, no. 12, p. 3367-3375. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2003.10.022>
- Citácie:
1. [1.1] CHEN, Yang - WANG, Xing - DENG, Chengji - YU, Chao - DING, Jun - ZHU, Hongxi. *Growth mechanism of in situ MgSiN₂ and its synergistic effect on the properties of MgO-C refractories. In CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2021, vol. 289, no., pp. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.123032>., Registrované v: WOS
- ADCA280 LENČEŠ, Zoltán - HIRAO, Kiyoshi - YAMAUCHI, Yukihiko - KANZAKI, Shuzo. Reaction synthesis of magnesium silicon nitride powder. In *Journal of the American Ceramic Society*, 2003, vol. 86, no. 7, p. 1088-1093. (2002: 1.796 - IF, karentované - CCC). (2003 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1151-2916.2003.tb03429.x>
- Citácie:
1. [1.1] LI, Yinsheng - KIM, Ha-Neul - WU, Haibo - KIM, Mi-Ju - KO, Jae-Woong - PARK, Young-Jo - HUANG, Zhengren - KIM, Hai-Doo. *Microstructure and thermal conductivity of gas-pressure-sintered Si₃N₄ ceramic: the effects of Y₂O₃ additive content. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 1, pp. 274-283. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.08.035>., Registrované v: WOS
2. [1.1] NAKASHIMA, Yuki - OZEKI, Yuki - ZHOU, You - HYUGA, Hideki - HASHIMOTO, Shinobu. *Synthesis of MgSiN₂ under 0.1 MPa of nitrogen pressure via combustion. In CERAMICS INTERNATIONAL*, 2021, vol. 47, no. 22, pp. 31383-31388. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.012>., Registrované v: WOS

- ADCA281 LENČEŠ, Zoltán - GUICCIARDI, S. - MELANDRI, C. - BELLOSI, Alida. Preparation, microstructure and mechanical property relationships in silicon nitride based ceramics. In British Ceramic Transactions, 1995, vol. 94, p. 138-145. ISSN 0967-9782.
Citácie:
1. [1.1] MIR, Aqib Hussain - AHMAD, S. N. A study on fabrication of silicon nitride-based advanced ceramic composite materials via spark plasma sintering. In PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS. ISSN 1464-4207, 2021, vol. 235, no. 8, pp. 1739-1756. Dostupné na: <https://doi.org/10.1177/14644207211013560>., Registrované v: WOS
- ADCA282 LENČEŠ, Zoltán - PENTRÁKOVÁ, Linda - HRABALOVÁ, Monika - ŠAJGALÍK, Pavol - HIRAO, Kiyoshi. Decomposition of MgSiN₂ in nitrogen atmosphere. In Journal of the European Ceramic Society, 2011, vol. 31, no. 8, p. 1473-1480. (2010: 2.575 - IF, Q1 - JCR, 1.383 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2011.02.023>
Citácie:
1. [1.1] KOHAMA, Kazuyuki. Interfacial microstructure characterization and strength evaluation of Si₃N₄/Si₃N₄ joints with Si-Mg composite filler for high-temperature applications. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 16, pp. 22424-22434. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.252>., Registrované v: WOS
- ADCA283 LENČEŠ, Zoltán - BENCO, Ľubomír - MADEJOVÁ, Jana - ZHOU, You - KIPSOVÁ, Linda - HIRAO, Kiyoshi. Reaction synthesis and characterisation of lanthanum silicon nitride. In Journal of the European Ceramic Society, 2008, vol. 28, no. 9, p.1917-1922. (2007: 1.562 - IF, Q1 - JCR, 1.212 - SJR, Q1 - SJR). (2008 - WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2007.11.017>
Citácie:
1. [1.1] DAI, Wen-Shuai - YANG, Bin - YAN, Shuai-Ting - XU, Hong-Guang - XU, Xi-Ling - ZHENG, Wei-Jun. Structural and Electronic Properties of LaSi_n(-f0)(n=2-6) Clusters: Anion Photoelectron Spectroscopy and Density Functional Calculations. In JOURNAL OF PHYSICAL CHEMISTRY A, 2021, vol. 125, no. 49, pp. 10557-10567. ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.1c08487>., Registrované v: WOS
- ADCA284 LENZ LEITE, Mateus - BARROSO, G. - PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - IONESCU, Emanuel - KRENKEL, Walter - MOTZ, Günter**. Synthesis and characterization of yttrium and ytterbium silicates from their oxides and an oligosilazane by the PDC route for coating applications to protect Si₃N₄ in hot gas environments. In Journal of the European Ceramic Society, 2017, vol. 37, no. 16, p. 5177-5191. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.04.034>
Citácie:
1. [1.1] RAO, R. Ramachandra - DANGE, Enos - UDAYAKUMAR, A. Synthesis and slurry spray coating of barium strontium alumino silicate on SiC substrate. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 10, pp. 14913-14922. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.06.311>., Registrované v: WOS
2. [1.1] YANG, Feiyue - YAO, Yiwen - YANG, Zichun - ZHAO, Shuang - CHEN, Guobing - LI, Kunfeng. Fabrication of in-situ self-reinforced Si₃N₄ ceramic foams for high-temperature thermal insulation by protein foaming method. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 13, pp. 18351-18357. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.156>., Registrované v: WOS
- ADCA285 LEONARD, N. - KORENKO, Michal - LARSON, Carol - BLOOD, K. - VENSTROM, Luke J. - NUDEHI, S. - DUNCAN, S. - DIVER, R. - ŠIMKO, František - PRIŠČÁK, Jozef - SCHOER, J. - KISSINGER, P.T. - PALUMBO, Robert**. The thermal electrolytic production of Mg from MgO: A discussion of the electrochemical reaction kinetics and requisite mass transport processes. In Chemical Engineering Science, 2016, vol. 148, p. 155-169. (2015: 2.750 - IF, Q1 - JCR, 1.022 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0009-2509. Dostupné na: <https://doi.org/10.1016/j.ces.2016.03.030>
Citácie:
1. [1.1] LEE, Dong-Hee - JEOUNG, Hyeong-Jun - LEE, Tae-Hyuk - YI, Kyung-Woo - LEE, Jin-Young - KIM, Young Min - OKABE, Toru H. - KANG, Jungshin. Scale-Up Study of Molten Salt Electrolysis using Cu or Ag Cathode and Vacuum Distillation for the Production of High-Purity Mg Metal from MgO. In JOURNAL OF SUSTAINABLE METALLURGY. ISSN 2199-3823, 2021, vol. 7, no. 3, pp. 883-897. Dostupné na: <https://doi.org/10.1007/s40831-021-00367-x>., Registrované v: WOS
2. [1.1] LEE, Tae-Hyuk - PARK, HyungKyu - LEE, Jin-Young - KIM, Young Min - KANG, Jungshin. Investigation of Electrowinning of Mg from MgO Using a Liquid Metal Cathode in

- MgF₂-CaF₂-NaF or MgF₂-LiF Molten Salt. In KOREAN JOURNAL OF METALS AND MATERIALS. ISSN 1738-8228, 2021, vol. 59, no. 6, pp. 392-403. Dostupné na: <https://doi.org/10.3365/KJMM.2021.59.6.392>, Registrované v: WOS*
3. [1.1] LI, Na - PENG, Yaru - CHEN, Zeng - XIONG, Wenjuan - SUN, Jiaqi - CHEN, Yiming - ZHANG, Putao - LIU, Meiyue - LI, Shengjun. Preparation of Mg-Zr alloys through direct electro-deoxidation of MgO-ZrO₂ in CaCl₂-NaCl molten salt. In ELECTROCHIMICA ACTA. ISSN 0013-4686, 2021, vol. 372, no., pp. Dostupné na: <https://doi.org/10.1016/j.electacta.2021.137816>, Registrované v: WOS
4. [1.1] SUN JIAQI - PENG YARU - CHEN ZENG. Corrosion Behavior of the Nickel Electrode in LiCl-KCl-MgCl₂ Molten Salt in Ni-Mg Alloy formation process. In INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE. ISSN 1452-3981, 2021, vol. 16, no. 3, pp. Dostupné na: <https://doi.org/10.20964/2021.03.65>, Registrované v: WOS
- ADCA286 LICHVÁR, Peter - LIŠKA, Marek - GALUSEK, Dušan. What is the true Kramers-Kronig transform? In Ceramics - Silikáty. - Praha : Institut of Chemical Technology : Institute of Inorganic Chemistry (Academy of Sciences ČR), 2002, vol. 46, no. 1, p. 25-27. (2001: 0.259 - IF). ISSN 0862-5468.
Citácie:
1. [1.1] CURTIS, Neville J. - GASCOOKE, Jason R. - PRING, Allan. Silicon-Oxygen Region Infrared and Raman Analysis of Opals: The Effect of Sample Preparation and Measurement Type. In MINERALS, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020173>, Registrované v: WOS
2. [1.1] MAYERHOEFER, Thomas G. - IVANOVSKI, Vladimir - POPP, Juergen. Infrared Refraction Spectroscopy. In APPLIED SPECTROSCOPY, 2021, vol. 75, no. 12, pp. 1526-1531. ISSN 0003-7028. Dostupné na: <https://doi.org/10.1177/00037028211036761>, Registrované v: WOS
- ADCA287 LICHVÁR, Peter - ŠAJGALÍK, Pavol - LIŠKA, Marek - GALUSEK, Dušan. CaO-SiO₂-Al₂O₃-Y₂O₃ glasses as model grain boundary phases for Si₃N₄ ceramics. In Journal of the European Ceramic Society, 2007, vol. 27, no. 1, p. 429-436. (2006: 1.576 - IF, Q1 - JCR, 1.220 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2006.02.029>
Citácie:
1. [1.1] WANG, Mitang - ZHENG, Qingshuang - CHEN, Aiyang - LI, Ying - ZHANG, Xiaowei - ZHANG, Dongliang - JIN, Siqingaowa - XIONG, Dehua - DENG, Wei. Crystallization, thermal expansion and hardness of Y₂O₃-Al₂O₃-SiO₂ glasses. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 17, pp. 25059-25066. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.236>, Registrované v: WOS
- ADCA288 LII, Ding-Fwu - HUANG, J.-L. - JEN, Iau-Jiue - LIN, Su-Shia - ŠAJGALÍK, Pavol. Effects of annealing on the properties of indium-tin oxide films prepared by ion beam sputtering. In Surface and coatings technology, 2005, vol. 192, no. 1, p. 106-111. ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2004.03.025>
Citácie:
1. [1.1] BUNDESMANN, Carsten - BAUER, Jens - FINZEL, Annemarie - GERLACH, Juergen W. - KNOLLE, Wolfgang - HELLMICH, Anke - SYNOWICKI, Ron. Properties of indium tin oxide thin films grown by Ar ion beam sputter deposition. In JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A. ISSN 0734-2101, 2021, vol. 39, no. 3, pp. Dostupné na: <https://doi.org/10.1116/6.0000917>, Registrované v: WOS
- ADCA289 LIN, Su-Shia - HUANG, J.-L. - ŠAJGALÍK, Pavol. Effects of substrate temperature on the properties of heavily Al-doped ZnO films by simultaneous r.f. and d.c. magnetron sputtering. In Surface and coatings technology, 2005, vol. 190, no. 1, p. 39-47. ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2004.03.022>
Citácie:
1. [1.1] ARORA, Isha - SHARMA, Praveen Kumar. Characterization of oxygen vacancy effect on structure and optoelectronic properties of sol gel deposited Zn_{2-x}CaxSnO₄ nanostructured films. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 258, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2020.123905>, Registrované v: WOS
- ADCA290 LIN, Su-Shia - HUANG, J.-L. - ŠAJGALÍK, Pavol. The properties of Ti-doped ZnO films deposited by simultaneous RF and DC magnetron sputtering. In Surface and coatings technology, 2005, vol. 191, no. 2-3, p. 286-292. ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2004.03.021>
Citácie:
1. [1.1] BAIRAM, Chousein - YALCIN, Yesim - EFKERE, Halil Ibrahim - COKDUYGULULAR, Erman - CETINKAYA, Caglar - KINACI, Baris - OZCELIK, Suleyman. Structural, morphological, optical and electrical properties of the Ti doped-ZnO (TZO) thin film prepared by RF sputter technique. In PHYSICA B-CONDENSED MATTER. ISSN 0921-4526, 2021, vol. 616, no., pp.

- Dostupné na: <https://doi.org/10.1016/j.physb.2021.413126>, Registrované v: WOS
2. [1.1] HKIRI, Khaoula - MOHAMED, Hamza Elsayed Ahmed - KHANYILE, Bhekumuzi Sfundo - MTSHALI, Christopher - NKOSI, Mlungisi - BEN SALEM, Mohamed - MAAZA, Malik - ZOUAOU, Mouldi. Deposition of CaZrO₃ thin films by EB-PVD: Effects of substrate on the composition, the structure, the morphology and the optical properties. In *SURFACES AND INTERFACES*. ISSN 2468-0230, 2021, vol. 25, no., pp. Dostupné na: <https://doi.org/10.1016/j.surf.2021.101259>, Registrované v: WOS
 3. [1.1] MEHMOOD, Bilal - KHAN, M. I. - IQBAL, Munawar - MAHMOOD, Asif - AL-MASRY, Waheed. Structural and optical properties of Ti and Cu co-doped ZnO thin films for photovoltaic applications of dye sensitized solar cells. In *INTERNATIONAL JOURNAL OF ENERGY RESEARCH*. ISSN 0363-907X, 2021, vol. 45, no. 2, pp. 2445-2459. Dostupné na: <https://doi.org/10.1002/er.5939>, Registrované v: WOS
 4. [1.1] SATHISH - SHAIK, Habibuddin - KUMAR, K. Naveen - JAFRI, R. Imran - REDDY, Ashok G. - SATTAR, Sheik Abdul. ZnO:Al thin films from (Al₂O₃)(x)(ZnO)((1-x)) powder targets by magnetron sputtering. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 11, pp. 14997-15004. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.02.037>, Registrované v: WOS
- ADCA291 LIN, Su-Shia - HUANG, J.-L. - ŠAJGALÍK, Pavol. The properties of heavily Al-doped ZnO films before and after annealing in the different atmosphere. In *Surface and coatings technology*, 2004, vol. 185, no. 2-3, p. 254-263. ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2003.12.007>
- Citácie:
1. [1.1] CHITANU, E. The influence of deposition parameters on structural, optical and electrical properties of AZO thin film. In *JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS*. ISSN 1454-4164, 2021, vol. 23, no. 5-6, pp. 270-274., Registrované v: WOS
- ADCA292 LINCK, Christoph - IONESCU, Emanuel - PAPENDORF, Benjamin - GALUSKOVÁ, Dagmar - GALUSEK, Dušan - ŠAJGALÍK, Pavol - RIEDEL, Ralf. Corrosion behavior of silicon oxycarbide-based ceramic nanocomposites under hydrothermal conditions. In *International Journal of Materials Research*, 2012, vol. 103, no. 1, p. 31-39. (2011: 0.830 - IF, Q2 - JCR, 0.504 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1862-5282. Dostupné na: <https://doi.org/10.3139/146.110625>
- Citácie:
1. [1.1] NYCZYK-MALINOWSKA, Anna - NIEMIEC, Wiktor - SMOLA, Grzegorz - GAWEL, Richard - SZUWARZYNSKI, Michal - GRZESIK, Zbigniew. Preparation and characterization of oxidation-resistant black glass (SiCO) coatings obtained by hydrosilylation of polysiloxanes. In *SURFACE & COATINGS TECHNOLOGY*. ISSN 0257-8972, 2021, vol. 407, no., pp. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2020.126760>, Registrované v: WOS
 2. [1.1] RAU, Advait - KNOTT, Ken - LU, Kathy. Porous SiOC/SiC ceramics via an active-filler-catalyzed polymer-derived method. In *MATERIALS CHEMISTRY FRONTIERS*, 2021, vol. 5, no. 17, pp. 6530-6545. Dostupné na: <https://doi.org/10.1039/d1qm00705j>, Registrované v: WOS
 3. [1.1] YANG, Ni - LU, Kathy. Effects of transition metals on the evolution of polymer-derived SiOC ceramics. In *CARBON*. ISSN 0008-6223, 2021, vol. 171, no., pp. 88-95. Dostupné na: <https://doi.org/10.1016/j.carbon.2020.08.072>, Registrované v: WOS
 4. [1.1] ZHANG, Zeyang - CALDERON, Jean E. - FAHAD, Saisaban - JU, Licheng - ANTONY, Dennis-Xavier - YANG, Yang - KUSHIMA, Akihiro - ZHAI, Lei. Polymer-Derived Ceramic Nanoparticle/Edge-Functionalized Graphene Oxide Composites for Lithium-Ion Storage. In *ACS APPLIED MATERIALS & INTERFACES*. ISSN 1944-8244, 2021, vol. 13, no. 8, pp. 9794-9803. Dostupné na: <https://doi.org/10.1021/acsami.0c19681>, Registrované v: WOS
- ADCA293 LIŠKA, Marek - LIŠSOVÁ, Magdaléna - PLŠKO, Alfonz - CHROMČÍKOVÁ, Mária - GAVENDA, Tadeáš - MACHÁČEK, Jan. Thermodynamic model and Raman spectra of ZnO-P₂O₅ glasses. In *Journal of Thermal Analysis and Calorimetry*, 2015, vol. 121, no. 1, p. 85-91. (2014: 2.042 - IF, Q2 - JCR, 0.643 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-015-4563-7>
- Citácie:
1. [1.1] EL-DAMRAWI, G. - HASSAN, A. K. - SHAHBOUB, A. Characteristic studies on Ag₂O-Al₂O₃-P₂O₅ glasses and glass ceramics. In *MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS*. ISSN 0921-5107, 2021, vol. 264, no., pp. Dostupné na: <https://doi.org/10.1016/j.mseb.2020.114957>, Registrované v: WOS
- ADCA294 LIŠKA, Marek - HOLUBOVÁ, Jana - ČERNOŠKOVÁ, Eva - ČERNOŠEK, Zdeněk - CHROMČÍKOVÁ, Mária - PLŠKO, Alfonz. Nucleation and crystallization of an As₂Se₃ undercooled melt. In *Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B*, 2012, vol. 53, no. 6, p. 289-293. (2011: 0.628 - IF, Q2 - JCR, 0.294 - SJR, Q3 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1753-3562.

- Citácie:
1. [1.1] HONCOVA, Pavla - VALDES, Diego - BARTAK, Jaroslav - MALEK, Jiri - PILNY, Petr - SLANG, Stanislav. Combination of indirect and direct approaches to the description of complex crystallization behavior in GeSe₂-rich region of pseudobinary GeSe₂-Sb₂Se₃ system. In JOURNAL OF NON-CRYSTALLINE SOLIDS, 2021, vol. 568, no., pp. ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2021.120968>, Registrované v: WOS
- ADCA295 LIŠKA, Marek - KLYUEV, V.P. - ANTALÍK, J. - ŠTUBŇA, I. Viscosity of Na₂O·2(TiO₂, SiO₂) glasses. In Physics and Chemistry of Glasses, 1997, vol. 38, no. 1, p. 6-10. ISSN 0031-9090.
- Citácie:
1. [1.1] XIAO, Huixia - WANG, Yifei - LI, Jilin - BAO, Zebin - MU, Liying - YU, Guangsu. Prediction of coal ash fusibility based on metal ionic potential concentration. In JOURNAL OF THE ENERGY INSTITUTE, 2021, vol. 98, no., pp. 29-34. ISSN 1743-9671. Dostupné na: <https://doi.org/10.1016/j.joei.2021.04.018>, Registrované v: WOS
- ADCA296 LIU, Junwen - ZHOU, Xiaobing** - TATARKO, Peter - YAUN, Qin - CHEN, Ke - WU, Haibo - HUANG, Zhengren - HUANG, Qing. High-strength SiC joints with a novel in-situ formed SiC/Al₄SiC₄ joining filler. In Journal of the European Ceramic Society, 2020, vol. 40, no. 15, p. 5172-5179. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.07.041>
- Citácie:
1. [1.1] CHEN, Jun - CHEN, Ding - GU, Huazhi - HUANG, Ao - NI, Hongwei. Microstructures and properties of in situ lamellar Al₄SiC₄ bonded SiC bricks: The effect of induction heating. In JOURNAL OF ALLOYS AND COMPOUNDS, 2021, vol. 870, no., pp. ISSN 0925-8388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.159463>, Registrované v: WOS
2. [1.1] CHENG, Xinyu - LIU, Rongzheng - LIU, Malin - SHAO, Youlin - LIU, Bing. Applications of carbide ceramics in nuclear reactors. In CHINESE SCIENCE BULLETIN-CHINESE, 2021, vol. 66, no. 24, pp. 3154-3170. ISSN 0023-074X. Dostupné na: <https://doi.org/10.1360/TB-2020-1316>, Registrované v: WOS
3. [1.1] YU, Chao - DONG, Bo - DENG, Chengji - DING, Jun - ZHU, Hongxi - DI, Jinghui. In-situ formation of plate-like Al₄O₄C and MWCNTs in Al₂O₃-C refractories with Al₄SiC₄ additives. In MATERIALS CHEMISTRY AND PHYSICS, 2021, vol. 263, no., pp. ISSN 0254-0584. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.124363>, Registrované v: WOS
4. [1.1] ZHANG, Mingyang - WANG, Chunming - MI, Gaoyang - JIANG, Ping - ZHANG, Xiong - YAN, Xiuhui. Characterization of Si-Cu-C-Al quaternary interface of SiC/2Al₄ joint via counterintuitive laser butt welding. In VACUUM, 2021, vol. 189, no., pp. ISSN 0042-207X. Dostupné na: <https://doi.org/10.1016/j.vacuum.2021.110221>, Registrované v: WOS
5. [1.1] ZHANG, Mingyang - WANG, Chunming - MI, Gaoyang - JIANG, Ping - ZHANG, Xiong. New insight into laser butt welded nonporous SiCp/2Al₄Al joint: Interfaces, precipitation phase and mechanical properties. In MATERIALS CHARACTERIZATION, 2021, vol. 176, no., pp. ISSN 1044-5803. Dostupné na: <https://doi.org/10.1016/j.matchar.2021.111082>, Registrované v: WOS
- ADCA297 LIU, Junwen - ZHOU, Xiaobing** - TATARKO, Peter - YUAN, Qin - ZHANG, Lan - WANG, Hongjie - HUANG, Zhengren - HUANG, Qing. Fabrication, microstructure, and properties of SiC/Al₄SiC₄ multiphase ceramics via an in-situ formed liquid phase sintering. In Journal of Advanced Ceramics, 2020, vol. 9, no. 2, p. 193-203. (2019: 2.889 - IF, Q1 - JCR, 0.522 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2226-4108. Dostupné na: <https://doi.org/10.1007/s40145-020-0359-8>
- Citácie:
1. [1.1] CHEN, Jun - CHEN, Ding - GU, Huazhi - HUANG, Ao - NI, Hongwei. Microstructures and properties of in situ lamellar Al₄SiC₄ bonded SiC bricks: The effect of induction heating. In JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 870, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.159463>, Registrované v: WOS
2. [1.1] HE, Rujie - ZHOU, Niping - ZHANG, Keqiang - ZHANG, Xueqin - ZHANG, Lu - WANG, Wenqing - FANG, Daining. Progress and challenges towards additive manufacturing of SiC ceramic. In JOURNAL OF ADVANCED CERAMICS. ISSN 2226-4108, 2021, vol. 10, no. 4, pp. 637-674. Dostupné na: <https://doi.org/10.1007/s40145-021-0484-z>, Registrované v: WOS
3. [1.1] LI, Ke - RAO, Jiancun - NING, Congqin. Optimized sintering and mechanical properties of Y-TZP ceramics for dental restorations by adding lithium disilicate glass ceramics. In JOURNAL OF ADVANCED CERAMICS. ISSN 2226-4108, 2021, vol. 10, no. 6, pp. 1326-1337. Dostupné na: <https://doi.org/10.1007/s40145-021-0507-9>, Registrované v: WOS
4. [1.1] QIN, Yi - XIONG, Tao - ZHAO, Ting - ZHU, Jianfeng - YANG, Jun - LIU, Yi - KONG, Xingang - LI, Xiaohan. Mechanical properties and wear behavior of Tin+1(Al, A)C-n (A = Ga, In, Sn, n=1, 2) via quasi-high-entropy of single atomic thick A layer. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 12641-12650. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.124>, Registrované v: WOS

5. [1.1] QIN, Zixuan - XU, Wentao - LING, Junrong - MU, Tinghai - ZHOU, Youfu. Preparation of HEMA gel-casted SiC ceramics combined with LPS sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 7, pp. 10050-10056. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.12.151>, Registrované v: WOS
 6. [1.1] REN, Xinming - MA, Beiyue - QIAN, Fan - YANG, Wengang - LIU, Guoqi - ZHANG, Yaran - YU, Jingkun - ZHU, Qiang. Green synthesis of porous SiC ceramics using silicon kerf waste in different sintering atmospheres and pore structure optimization. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 18, pp. 26366-26374. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.047>, Registrované v: WOS
 7. [1.1] XU, Haiyue - QI, Qian - JI, Wei - WANG, Weimin - ZHANG, Jinyong - FU, Zhengyi. In-situ synthesis and low-temperature fabrication of B4C/TiB2-based multilayer graded composites with B4C and Ti-Al intermetallics mixtures through transient liquid phase sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 17, pp. 24384-24392. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.152>, Registrované v: WOS
- ADCA298 LOJANOVÁ, Š. - TATARKO, Peter - CHLUP, Zdeněk - HNATKO, Miroslav - DUSZA, Ján - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Rare-earth element doped Si3N4/SiC micro/nano-composites-RT and HT mechanical properties. In Journal of the European Ceramic Society, 2010, vol. 30, p. 1931-1944. (2009: 2.090 - IF, Q1 - JCR, 1.374 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2010.03.007>
- Citácie:
1. [1.1] LEE, Chae-Eon - KIM, Mi-Ju - PARK, Young-Jo - KO, Jae-Woong - KIM, Ha-Neul - BAE, Sunghwan. The effect of silicon particle size on the characteristics of porous sintered reaction bonded silicon nitride. In INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS. ISSN 0263-4368, 2021, vol. 101, no., pp. Dostupné na: <https://doi.org/10.1016/j.ijrmhm.2021.105647>, Registrované v: WOS
 2. [1.1] WANG, Yuhan - LIU, Wen - GUO, Jingxia - LI, Mingliang - FAN, Bingbing - WANG, Hailong - XU, Hongliang - LU, Hongxia - SHAO, Gang - ZHANG, Rui - AN, Linan. In situ formation of Si3N4-SiC nanocomposites through polymer-derived SiAlCN ceramics and spark plasma sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 15, pp. 22049-22054. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.225>, Registrované v: WOS
 3. [1.2] YANG, Hailing - LI, Qinggang - WANG, Zhi - WU, Hao - WU, Yuying - HOU, Pengkun - CHENG, Xin. Effect of Graphene on Microstructure and Mechanical Properties of Si3N4/SiC Ceramics. In ES Materials and Manufacturing, 2021-06-01, 12, pp. 29-34. ISSN 25780611. Dostupné na: <https://doi.org/10.30919/esmm5f418>, Registrované v: SCOPUS
- ADCA299 MACA, Karel - POUCHLÝ, Václav - BODIŠOVÁ, Katarína - ŠVANČÁREK, Peter - GALUSEK, Dušan. Densification of fine-grained alumina ceramics doped by magnesia, yttria and zirconia evaluated by two different sintering models. In Journal of the European Ceramic Society, 2014, vol. 34, no. 16, p. 4363-4372. (2013: 2.307 - IF, Q1 - JCR, 1.122 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2014.06.030>
- Citácie:
1. [1.1] BARUAH, Biswajit - ANAND, Rahul - BEHERA, Shantanu K. Master sintering curve and activation energy of sintering of ZrO2-doped Al2O3. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 5, pp. 7253-7257. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.11.001>, Registrované v: WOS
 2. [1.1] NIE, Guanglin - LI, Yehua - SHENG, Pengfei - ZUO, Fei - WU, Haolin - LIU, Leiren - DENG, Xin - BAO, Yiwang - WU, Shanghua. Microstructure refinement-homogenization and flexural strength improvement of Al2O3 ceramics fabricated by DLP-stereolithography integrated with chemical precipitation coating process. In JOURNAL OF ADVANCED CERAMICS, 2021, vol. 10, no. 4, pp. 790-808. ISSN 2226-4108. Dostupné na: <https://doi.org/10.1007/s40145-021-0473-2>, Registrované v: WOS
 3. [1.1] RAO WEI-DONG - LIU YAO - CHENG LI-JING - LIU SHAO-JUN. Densification mechanism of stereolithographical dense Si3N4 ceramics with CeO2 as sintering additive by field assisted sintering. In JOURNAL OF CENTRAL SOUTH UNIVERSITY, 2021, vol. 28, no. 4, pp. 1233-1243. ISSN 2095-2899. Dostupné na: <https://doi.org/10.1007/s11771-021-4631-z>, Registrované v: WOS
 4. [1.1] YANG, Hongbing - LI, Lu - LI, Yuanyuan - SHEN, Bing - KANG, Yueming - ZHAO, Libin - LI, Jiajie - DONG, Yanhao - LI, Jiangong. Unveiling exceptional sinterability of ultrafine alpha-Al2O3 nanopowders. In JOURNAL OF MATERIALS, 2021, vol. 7, no. 4, pp. 837-844. ISSN 2352-8478. Dostupné na: <https://doi.org/10.1016/j.jmat.2020.12.011>, Registrované v: WOS
 5. [1.1] YURDAKUL, Arife - BALCI, Osman. Effects of titanium diboride on the mechanical,

ADCA300

tribological, and microstructural properties of alumina toughened co-doped (Y-Mg) stabilized zirconia composites. In ADVANCED COMPOSITES AND HYBRID MATERIALS, 2021, vol. 4, no. 2, pp. 415-434. ISSN 2522-0128. Dostupné na: <https://doi.org/10.1007/s42114-021-00245-w>, Registrované v: WOS

MADEJOVÁ, Jana** - BARLOG, Martin - JANKOVIČ, Ľuboš - SLANÝ, Michal - PÁLKOVÁ, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In *Applied Clay Science*, 2021, vol. 200, art. no. 105894. (2020: 5.467 - IF, Q1 - JCR, 1.062 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105894>

Citácie:

1. [1.1] EZ-ZAKI, Hassan - MARANGU, Joseph Mwititi - BELLOTTO, Maurizio - DALCONI, Maria Chiara - ARTIOLI, Gilberto - VALENTINI, Luca. A Fresh View on Limestone Calcined Clay Cement (LC3) Pastes. In *MATERIALS*, 2021, vol. 14, no. 11, pp. Dostupné na: <https://doi.org/10.3390/ma14113037>, Registrované v: WOS
2. [1.1] GONZALEZ-LOPEZ, Martin Esteban - LAUREANO-ANZALDO, Cesar Mario - PEREZ-FONSECA, Aida Alejandra - GOMEZ, Cesar - ROBLEDO-ORTIZ, Jorge Ramon. Congo red adsorption with cellulose-graphene nanoplatelets beads by differential column batch reactor. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105029>, Registrované v: WOS
3. [1.1] INTACHAI, Sonchai - SUPPASO, Chomphonoot - KHAORAPAPONG, Nithima. A NOVEL PROCESS FOR INTERCALATING ALKYLAMMONIUM IONS IN A THAI BENTONITE AND ITS EFFECT ON ADSORPTION PERFORMANCE. In *CLAYS AND CLAY MINERALS*. ISSN 0009-8604, 2021, vol. 69, no. 4, pp. 477-488. Dostupné na: <https://doi.org/10.1007/s42860-021-00145-6>, Registrované v: WOS
4. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>, Registrované v: WOS
5. [1.1] LI, Chuan - LI, Zilong - WU, Tao - LUO, Yaqin - ZHAO, Jun - LI, Xinren - YANG, Wencai - CHEN, Xuegang. Metallogenic Characteristics and Formation Mechanism of Naomugeng Clay-Type Lithium Deposit in Central Inner Mongolia, China. In *MINERALS*, 2021, vol. 11, no. 3, pp. Dostupné na: <https://doi.org/10.3390/min11030238>, Registrované v: WOS
6. [1.1] PERELOMOV, Leonid - MANDZHIEVA, Saglara - MINKINA, Tatiana - ATROSHCHENKO, Yury - PERELOMOVA, Irina - BAUER, Tatiana - PINSKY, David - BARAKHOV, Anatoly. The Synthesis of Organoclays Based on Clay Minerals with Different Structural Expansion Capacities. In *MINERALS*, 2021, vol. 11, no. 7, pp. Dostupné na: <https://doi.org/10.3390/min11070707>, Registrované v: WOS
7. [1.1] RASOULZADEH, Hassan - SHEIKHMOHAMMADI, Amir - ABTAHI, Mehrnoosh - ROSHAN, Bahram - JOKAR, Rezvan. Eco-friendly rapid removal of palladium from aqueous solutions using alginate-diatomite magnano composite. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105954>, Registrované v: WOS
8. [1.1] RASOULZADEH, Hassan - SHEIKHMOHAMMADI, Amir - ASGARI, Esrafil - HASHEMZADEH, Bayram. The adsorption behaviour of triclosan onto magnetic bio polymer beads impregnated with diatomite. In *INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY*. ISSN 0306-7319, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1080/03067319.2021.1922684>, Registrované v: WOS
9. [1.1] RUCINSKA, Katarzyna - FLORJANCZYK, Zbigniew - DEBOWSKI, Maciej - GOLOFIT, Tomasz - MALINOWSKI, Rafal. New Organophilic Montmorillonites with Lactic Acid Oligomers and Other Environmentally Friendly Compounds and Their Effect on Mechanical Properties of Polylactide (PLA). In *MATERIALS*, 2021, vol. 14, no. 21, pp. Dostupné na: <https://doi.org/10.3390/ma14216286>, Registrované v: WOS
10. [1.1] SOLTANI, Amin - RAEESI, Ramin - TAHERI, Abbas - DENG, An - MIRZABABAEI, Mehdi. Improved Shear Strength Performance of Compacted Rubberized Clays Treated with Sodium Alginate Biopolymer. In *POLYMERS*, 2021, vol. 13, no. 5, pp. Dostupné na: <https://doi.org/10.3390/polym13050764>, Registrované v: WOS
11. [1.1] SUN, Liwei - YIN, Meilin - TANG, Shaokun. Bi-functionalized ionic liquid-grafted mesoporous alumina: Synthesis, characterization and CO₂/N₂ selectivity. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105829>, Registrované v: WOS
12. [1.1] WOJCIK-BANIA, Monika - MATUSIK, Jakub. The Effect of Surfactant-Modified Montmorillonite on the Cross-Linking Efficiency of Polysiloxanes. In *MATERIALS*, 2021, vol. 14, no. 10, pp. Dostupné na: <https://doi.org/10.3390/ma14102623>, Registrované v: WOS

- ADCA301 MADEJOVÁ, Jana - PÁLKOVÁ, Helena - JANKOVIČ, Ľuboš. Near-infrared study of the interaction of pyridine with acid-treated montmorillonite. In *Vibrational Spectroscopy*, 2015, vol. 76, p. 22-30. (2014: 2.003 - IF, Q2 - JCR, 0.529 - SJR, Q3 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2014.11.003>
Citácie:
1. [1.1] BELKASSA, Kheira - KHELIFA, Mounir - BATONNEAU-GENER, Isabelle - MAROUF-KHELIFA, Kheira - KHELIFA, Amine. Understanding of the mechanism of crystal violet adsorption on modified halloysite: Hydrophobicity, performance, and interaction. In *JOURNAL OF HAZARDOUS MATERIALS*, 2021, vol. 415, no., pp. ISSN 0304-3894. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2021.125656>, Registrované v: WOS
- ADCA302 MADEJOVÁ, Jana - JANKOVIČ, Ľuboš - PENTRÁK, Martin - KOMADEL, Peter. Benefits of near-infrared spectroscopy for characterization of selected organo-montmorillonites. In *Vibrational Spectroscopy*, 2011, vol. 57, no. 1, p. 8-14. (2010: 2.083 - IF, Q2 - JCR, 0.673 - SJR, Q3 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2011.04.001>
Citácie:
1. [1.1] ALAMDARI, Navid Etebari - AKSOY, Burak - AKSOY, Mediha - BECK, Benjamin H. - JIANG, Zhihua. A novel paper-based and pH-sensitive intelligent detector in meat and seafood packaging. In *TALANTA*, 2021, vol. 224, no., pp. ISSN 0039-9140. Dostupné na: <https://doi.org/10.1016/j.talanta.2020.121913>, Registrované v: WOS
2. [1.1] DE SOUZA, Cristiane Gimenes - LIMA DE JESUS, Tammy Caroline - DOS SANTOS, Rafael Cavalcante - BOMFIM, Livia Melo - BERTOLINO, Luiz Carlos - DE ANDRADE, Debora Franca - D'AVILA, Luiz Antonio - SPINELLI, Luciana S. Characterization of Brazilian palygorskite (Guadalupe region) and adsorptive behaviour for solvatochromic dyes. In *CLAY MINERALS*, 2021, vol. 56, no. 1, pp. 55-64. ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/clm.2021.16>, Registrované v: WOS
3. [1.1] MUNOZ-IGLESIAS, Victoria - FERNANDEZ-SAMPEDRO, Maite - GIL-LOZANO, Carolina - BONALES, Laura J. - HERRERO, Oscar Ercilla - VALLES GONZALEZ, Maria Pilar - MATEO-MARTI, Eva - PRIETO-BALLESTEROS, Olga. Characterization of NH₄-montmorillonite under conditions relevant to Ceres. In *APPLIED CLAY SCIENCE*, 2021, vol. 209, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106137>, Registrované v: WOS
4. [1.1] WU, Shaokun - HE, Mingyue - YANG, Mei - ZHANG, Biyao - WANG, Feng - LI, Qianzhi. Near-Infrared Spectroscopy Study of Serpentine Minerals and Assignment of the OH Group. In *CRYSTALS*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/cryst11091130>, Registrované v: WOS
- ADCA303 MADEJOVÁ, Jana - PÁLKOVÁ, Helena - KOMADEL, Peter. Behaviour of Li⁺ and Cu²⁺ in heated montmorillonite: Evidence from far-, mid-, and near-IR regions. In *Vibrational Spectroscopy*, 2006, vol. 40, no. 1, p. 80-88. (2005: 1.758 - IF, Q2 - JCR, 0.717 - SJR, Q2 - SJR). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2005.07.004>
Citácie:
1. [1.1] ABDESSAMAD, M. - KHARROUBI, M. - BELBEL, A. Dielectric behavior of dehydrated homoionic alkali-cations-exchanged montmorillonite. In *SPECTROSCOPY LETTERS*, 2021, vol. 54, no. 3, pp. 195-203. ISSN 0038-7010. Dostupné na: <https://doi.org/10.1080/00387010.2021.1884576>, Registrované v: WOS
2. [1.1] QUERO-JIMENEZ, Pedro C. - ARIAS FELIPE, Lester A. - PRIETO GARCIA, Julio O. - JORGE RODRIGUEZ, Maria E. - DE LA TORRE, Jorge - MONTENEGRO, Osvaldo N. - MOLINA-RUIZ, Reinaldo - TISCORNIA, Ines S. Local Cuban bentonite clay: composition, structure and textural characterization. In *ANDEAN GEOLOGY*, 2021, vol. 48, no. 3, pp. 546-556. ISSN 0718-7106. Dostupné na: <https://doi.org/10.5027/andgeoV48n3-3362>, Registrované v: WOS
3. [1.1] ZHOU, Mingxuan - ZHAO, Lei - WANG, Xibo - NECHAEV, Victor P. - FRENCH, David - SPIRO, Baruch F. - GRAHAM, Ian T. - HOWER, James C. - DAI, Shifeng. Mineralogy and geochemistry of the Late Triassic coal from the Caotang mine, northeastern Sichuan Basin, China, with emphasis on the enrichment of the critical element lithium. In *ORE GEOLOGY REVIEWS*, 2021, vol. 139, no., pp. ISSN 0169-1368. Dostupné na: <https://doi.org/10.1016/j.oregeorev.2021.104582>, Registrované v: WOS
- ADCA304 MADEJOVÁ, Jana - PENTRÁK, Martin - PÁLKOVÁ, Helena - KOMADEL, Peter. Near-infrared spectroscopy: A powerful tool in studies of acid-treated clay minerals. In *Vibrational Spectroscopy*, 2009, vol. 49, no. 2, p. 211-218. (2008: 1.810 - IF, Q2 - JCR, 0.738 - SJR, Q3 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2008.08.001>
Citácie:
1. [1.1] AROBI, Nourin - AMIR-AL ZUMAHI, S. M. - IBRAHIM, Khalil - RAHMAN, M. Mahbubur

- HOSSAIN, Md Kamal - BHUIYAN, Md Mahbubur Rahman - KABIR, Humayun - AMRI, Amun - ABUL HOSSAIN, Md - AHMED, Farid. A holistic framework towards understanding the optical and dielectric behaviors of $\text{CH}_3\text{NH}_3\text{PbCl}_3$ perovskites/graphene oxide hybrid films for light absorbing active layer. In *JOURNAL OF SOLID STATE CHEMISTRY*, 2021, vol. 298, no., pp. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122137>, Registrované v: WOS
2. [1.1] GONZALEZ-SANTAMARIA, Daniel E. - JUSTEL, Ana - FERNANDEZ, Raill - RUIZ, Ana Isabel - STAVROPOULOU, Alexandra - RODRIGUEZ-BLANCO, Juan Diego - CUEVAS, Jaime. SEM-EDX study of bentonite alteration under the influence of cement alkaline solutions. In *APPLIED CLAY SCIENCE*, 2021, vol. 212, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106223>, Registrované v: WOS
3. [1.1] JIMENEZ-CRUZ, Federico - MARIN-ROSAS, Celia - CASTANEDA-LOPEZ, Luis Carlos - GARCIA-GUTIERREZ, Jose Luis. Promising extruded catalyst for palm oil transesterification from LiAlH_4 hydrolysates. In *ARABIAN JOURNAL OF CHEMISTRY*, 2021, vol. 14, no. 5, pp. ISSN 1878-5352. Dostupné na: <https://doi.org/10.1016/j.arabjc.2021.103141>, Registrované v: WOS
4. [1.1] LIU, Jiacheng - MICHALSKI, Joseph R. - ZHOU, Mei-Fu. Intense subaerial weathering of eolian sediments in Gale crater, Mars. In *SCIENCE ADVANCES*, 2021, vol. 7, no. 32, pp. ISSN 2375-2548. Dostupné na: <https://doi.org/10.1126/sciadv.abh2687>, Registrované v: WOS
5. [1.1] MARCOS, Celia - DE URIBE-ZORITA, Maria - ALVAREZ-LLORET, Pedro - ADAWY, Alaa - FERNANDEZ, Patricia - ARIAS, Pablo. Quartz Crystallite Size and Moganite Content as Indicators of the Mineralogical Maturity of the Carboniferous Chert: The Case of Cherts from Eastern Asturias (Spain). In *MINERALS*, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/min11060611>, Registrované v: WOS
6. [1.1] NOURI, Nooshin - TASVIRI, Mahboubeh - GHASEMZADEH, Hossein. DEVELOPING AN EFFICIENT CATALYST BASED ON THERMAL AND ACID-TREATED CLAY FOR THE REMOVAL OF TRACE OLEFINS FROM AROMATIC COMPOUNDS. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 1, pp. 105-116. ISSN 0009-8604. Dostupné na: <https://doi.org/10.1007/s42860-020-00108-3>, Registrované v: WOS

ADCA305

MADEJOVÁ, Jana - KEČKĚŠ, Jozef - PÁLKOVÁ, Helena - KOMADEL, Peter. Identification of components in smectite/kaolinite mixtures. In *Clay Minerals*, 2002, vol. 37, no. 2, p. 377-388. (2001: 0.610 - IF, karentované - CCC). (2002 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/0009855023720042>

Citácie:

1. [1.1] AL-ESSA, Khansaa - AL-ESSA, Ethar M. Effective Approach of Activated Jordanian Bentonite by Sodium Ions for Total Phenolic Compounds Removal from Olive Mill Wastewater. In *JOURNAL OF CHEMISTRY*, 2021, vol. 2021, no., pp. ISSN 2090-9063. Dostupné na: <https://doi.org/10.1155/2021/7405238>, Registrované v: WOS
2. [1.1] ANANYEVA, Lyudmila G. - DOROSHENKO, Alexandr A. - ILENOK, Sergey S. - KARYMOVA, Yana O. - KOROVKIN, Michail - MAKSIMOVA, Yulia A. - PESTEREV, Alexey - PROTSKY, Oleg N. - SAVINOVA, Olesya - KHRUSHCHEVA, Maria O. FEATURES OF MINERAL COMPOSITION OF LOW-PERMEABLE SILICEOUS-CLAY RESERVOIR ROCKS FROM THE BEREZOVSKAYA FORMATION IN THE NORTH OF WESTERN SIBERIA. In *BULLETIN OF THE TOMSK POLYTECHNIC UNIVERSITY-GEO ASSETS ENGINEERING*, 2021, vol. 332, no. 12, pp. 114-123. ISSN 2500-1019. Dostupné na: <https://doi.org/10.18799/24131830/2021/12/3275>, Registrované v: WOS
3. [1.1] BAUMANN, Philipp - LEE, Juhwan - FROSSARD, Emmanuel - SCHOENHOLZER, Laurie Paule - DIBY, Lucien - HGAZA, Valerie Kouame - KIBA, Delwende Innocent - SILA, Andrew - SHEPERD, Keith - SIX, Johan. Estimation of soil properties with mid-infrared soil spectroscopy across yam production landscapes in West Africa. In *SOIL*, 2021, vol. 7, no. 2, pp. 717-731. ISSN 2199-3971. Dostupné na: <https://doi.org/10.5194/soil-7-717-2021>, Registrované v: WOS
4. [1.1] GODEK, Ewelina - GRZADKA, Elzbieta - MACIOLEK, Urszula - BASTRZYK, Anna. Influence of Zwitterionic CAPB on Flocculation of the Aqueous Cationic Guar Gum/Glaucanite Suspensions at Various pH. In *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, 2021, vol. 22, no. 22, pp. Dostupné na: <https://doi.org/10.3390/ijms222212157>, Registrované v: WOS
5. [1.1] GRANATH, Tim - LOEBMANN, Peer - MANDEL, Karl. Oxidative Precipitation as a Versatile Method to Obtain Ferromagnetic Fe_3O_4 Nano- and Mesocrystals Adjustable in Morphology and Magnetic Properties. In *PARTICLE & PARTICLE SYSTEMS CHARACTERIZATION*, 2021, vol. 38, no. 3, pp. ISSN 0934-0866. Dostupné na: <https://doi.org/10.1002/ppsc.202000307>, Registrované v: WOS
6. [1.1] KUMAR, N. Vijay - ASADI, S. S. - REDDY, M. Karthik Kumar - SUJATHA, M. - VENKATASUBBIAH, M. C. Investigational studies on beneficial effect of geosynthetic

- reinforcement at an interface of two layered system. In MATERIALS TODAY-PROCEEDINGS, 2021, vol. 45, no., pp. 6596-6602. ISSN 2214-7853. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.11.771>., Registrované v: WOS*
7. [1.1] MOROZOV, Andrey - VASILCHENKO, Andrey - KASPRZHITSKII, Anton - LAZORENKO, Georgy - YAVNA, Victor - KOCHUR, Andrei. Express method for determining the composition of soils based on IR spectroscopy technology. In VIBRATIONAL SPECTROSCOPY, 2021, vol. 114, no., pp. ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2021.103258>., Registrované v: WOS
8. [1.1] NAZDRACHEVA, T. F. - KUKHARSKII, A. - KASPRZHITSKII, A. S. - LAZORENKO, G. - YAVNA, V. A. - KOCHUR, A. G. Study of the Features of the Formation of Water Films on the Surfaces of Montmorillonite and Kaolinite by Infrared Spectroscopy. In OPTICS AND SPECTROSCOPY, 2021, vol. 129, no. 2, pp. 270-275. ISSN 0030-400X. Dostupné na: <https://doi.org/10.1134/S0030400X21020107>., Registrované v: WOS
- ADCA306 MADEJOVÁ, Jana - ANDREJKOVIČOVÁ, Slávka - BUJDÁK, Juraj - ČEKLOVSKÝ, Alexander - HRACHOVÁ, Jana - VALÚCHOVÁ, Jana - KOMADEL, Peter. Characterization of products obtained by acid leaching of Fe-bentonite. In Clay Minerals, 2007, vol. 42, no. 4, p. 527-540. (2006: 0.974 - IF, Q3 - JCR, 0.751 - SJR, Q2 - SJR). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/claymin.2007.042.4.09>
- Citácie:
1. [1.1] MORENO-RODRIGUEZ, Daniel - JANKOVIC, L'ubos - SCHOLTZOVA, Eva - TUNEGA, Daniel. Stability of Atrazine-Smectite Intercalates: Density Functional Theory and Experimental Study. In MINERALS, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/min11060554>., Registrované v: WOS
2. [1.2] BAO, Shenxu. Modification of Mineral Surfaces and Microstructures. In Engineering Materials, 2021-01-01, pp. 93-143. ISSN 16121317. Available on: https://doi.org/10.1007/978-3-030-54451-5_3., Registrované v: SCOPUS
- ADCA307 MADEJOVÁ, Jana** - JANKOVIČ, Ľuboš - SLANÝ, Michal - HRONSKÝ, Viktor. Conformation heterogeneity of alkylammonium surfactants self-assembled on montmorillonite: Effect of head-group structure and temperature. In Applied Surface Science, 2020, vol. 503, art. no. 144125. (2019: 6.182 - IF, Q1 - JCR, 1.230 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2019.144125>
- Citácie:
1. [1.1] ABOELFETOH, Eman F. - ELABEDIEN, Mohamed E. Zain - EBEID, El-Zeiny M. Effective treatment of industrial wastewater applying SBA-15 mesoporous silica modified with graphene oxide and hematite nanoparticles. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104817>., Registrované v: WOS
2. [1.1] BHAT, Akash P. - GOGATE, Parag R. Cavitation-based pre-treatment of wastewater and waste sludge for improvement in the performance of biological processes: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104743>., Registrované v: WOS
3. [1.1] BHATT, Mukesh - CHAKINALA, Anand Gupta - JOSHI, Jyeshtharaj B. - SHARMA, Anita - PANT, K. K. - SHAH, Kalpit - SHARMA, Abhishek. Valorization of solid waste using advanced thermo-chemical process: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105434>., Registrované v: WOS
4. [1.1] COVALI, Pavel - RAAVE, Henn - ESCUER-GATIUS, Jordi - KAASIK, Allan - TONUTARE, Tonu - ASTOVER, Alar. The Effect of Untreated and Acidified Biochar on NH3-N Emissions from Slurry Digestate. In SUSTAINABILITY, 2021, vol. 13, no. 2, pp. Dostupné na: <https://doi.org/10.3390/su13020837>., Registrované v: WOS
5. [1.1] CRISTIANI, Cinzia - FINOCCHIO, Elisabetta - ROSSI, Luciana - GIROMINI, Carlotta - DELL'ANNO, Matteo - PANSERI, Sara - BELLOTTO, Maurizio. Natural Clays as Potential Amino Acids Carriers for Animal Nutrition Application. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 12, pp. Dostupné na: <https://doi.org/10.3390/app11125669>., Registrované v: WOS
6. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>., Registrované v: WOS
7. [1.1] HU, Fangxiang - LIU, Yuyue - LIN, Junzhang - WANG, Weidong - YU, Dinghua - LI, Shuang. Acetoin modulates conformational change of surfactin: Interfacial assembly and crude oil-washing performance. In COLLOIDS AND SURFACES B-BIOINTERFACES. ISSN 0927-

7765, 2021, vol. 200, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfb.2021.111602>, Registrované v: WOS

8. [1.1] JEYASEELAN, Antonysamy - ALBAQAMI, Munirah D. - VISWANATHAN, Natrayasamy. Facile design of metal ion fabricated benzene-1,3,5-tricarboxylic acid based metal organic frameworks for defluoridation of water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104995>, Registrované v: WOS

9. [1.1] KANIA, Dina - YUNUS, Robiah - OMAR, Rozita - RASHID, Suraya Abdul - JAN, Badrul Mohamed - AULIA, Akmal. Adsorption of non-ionic surfactants on organoclays in drilling fluid investigated by molecular descriptors and Monte Carlo random walk simulations. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, 2021, vol. 538, no., pp. Dostupné na: <https://doi.org/10.1016/j.apsusc.2020.148154>, Registrované v: WOS

10. [1.1] KLOPROGGE, J. Theo - PONCE, Concepcion P. - ORTILLO, Danilo O. X-ray Photoelectron Spectroscopic Study of Some Organic and Inorganic Modified Clay Minerals. In MATERIALS, 2021, vol. 14, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ma14237115>, Registrované v: WOS

11. [1.1] LIANG, Suu-Yan - LIN, Wen-Sheng - LIN, Gwo-Fong - LIU, Chen-Wuing - FAN, Chihhao. The Effect of Porosity Change in Bentonite Caused by Decay Heat on Radionuclide Transport through Buffer Material. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 17, pp. Dostupné na: <https://doi.org/10.3390/app11177933>, Registrované v: WOS

12. [1.1] MANFRIN, Jessica - GONCALVES JR, Affonso Celso - SCHWANTES, Daniel - CONRADI JR, Elio - ZIMMERMANN, Juliano - ZIEMER, Guilherme Lindner. Development of biochar and activated carbon from cigarettes wastes and their applications in Pb²⁺ adsorption. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104980>, Registrované v: WOS

13. [1.1] NONG, Yingyi - SUN, Jinlong - FU, Meng - CHEN, Huiwen - ZHANG, Zepeng. Effects of cationic modifier type on the structure and morphology of organo-montmorillonite and its application properties in a high-temperature white oil system. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105995>, Registrované v: WOS

14. [1.1] TANIMURA, Miho - SUGAHARA, Yoshiyuki - GUEGAN, Regis. Loss of a membrane phase under soft confinement conditions imposed by a porous silica colloids network. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 608, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.125554>, Registrované v: WOS

15. [1.2] WIJAYA, Karna - KURNIAWAN, Muhammad Ahan - SAPUTRI, Wahyu Dita - TRISUNARYANTI, Wega - MIRZAN, Mohammad - HARIANI, Poedji Loekitowati - TIKOALU, Alfrets Daniel. Synthesis of nickel catalyst supported on ZrO₂/SO₄ pillared bentonite and its application for conversion of coconut oil into gasoline via hydrocracking process. In Journal of Environmental Chemical Engineering, 2021-08-01, 9, 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105399>, Registrované v: SCOPUS

ADCA308

MADEJOVÁ, Jana - SEKERÁKOVÁ, Ľudmila - BIZOVSKÁ, Valéria - SLANÝ, Michal - JANKOVIČ, Ľuboš. Near-infrared spectroscopy as an effective tool for monitoring the conformation of alkylammonium surfactants in montmorillonite interlayers. In Vibrational Spectroscopy, 2016, vol. 84, p. 44-52. (2015: 1.682 - IF, Q3 - JCR, 0.588 - SJR, Q3 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2016.02.010>

Citácie:

1. [1.1] BHAT, Akash P. - GOGATE, Parag R. Cavitation-based pre-treatment of wastewater and waste sludge for improvement in the performance of biological processes: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104743>, Registrované v: WOS

2. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>, Registrované v: WOS

3. [1.1] DU, Weichao - WANG, Xiangyun - BI, Taifei - LIU, Man - ZHANG, Jie - CHEN, Gang. Synthesis and Inhibitive Mechanism of a Novel Clay Hydration Inhibitor for Water-based Drilling Fluids. In MATERIALS SCIENCE-MEDZIAGOTYRA. ISSN 1392-1320, 2021, vol. 27, no. 2, pp. 210-216. Dostupné na: <https://doi.org/10.5755/j02.ms.23947>, Registrované v: WOS

4. [1.1] ESMAEILI, Elaheh - ROUNAGHI, Seyyed Amin - ECKERT, Jurgen. Mechanochemical Synthesis of Rosin-Modified Montmorillonite: A Breakthrough Approach to the Next Generation of

- OMMT/Rubber Nanocomposites. In *NANOMATERIALS*, 2021, vol. 11, no. 8, pp. Dostupné na: <https://doi.org/10.3390/nano11081974>., Registrované v: WOS
5. [1.1] GUEGAN, Regis - LE FORESTIER, Lydie. Performance evaluation of organoclays for the amoxicillin retention in a dynamic context. In *CHEMICAL ENGINEERING JOURNAL*. ISSN 1385-8947, 2021, vol. 406, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.126859>., Registrované v: WOS
6. [1.1] LIU, Dong-Mei - DONG, Chen - XU, Bingjie. Preparation of magnetic kaolin embedded chitosan beads for efficient removal of hexavalent chromium from aqueous solution. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105438>., Registrované v: WOS
7. [1.1] MANFRIN, Jessica - GONCALVES JR, Affonso Celso - SCHWANTES, Daniel - CONRADI JR, Elío - ZIMMERMANN, Juliano - ZIEMER, Guilherme Lindner. Development of biochar and activated carbon from cigarettes wastes and their applications in Pb²⁺ adsorption. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104980>., Registrované v: WOS
8. [1.1] ORR, Asuka A. - WANG, Meichen - BEYKAL, Burcu - GANESH, Hari S. - HEARON, Sara E. - PISTIKOPOULOS, Efstratios N. - PHILLIPS, Timothy D. - TAMAMIS, Phanourios. Combining Experimental Isotherms, Minimalistic Simulations, and a Model to Understand and Predict Chemical Adsorption onto Montmorillonite Clays. In *ACS OMEGA*. ISSN 2470-1343, 2021, vol. 6, no. 22, pp. 14090-14103. Dostupné na: <https://doi.org/10.1021/acsomega.1c00481>., Registrované v: WOS
9. [1.1] VOLKOV, Dmitry S. - ROGOVA, Olga B. - PROSKURNIN, Mikhail A. Organic Matter and Mineral Composition of Silicate Soils: FTIR Comparison Study by Photoacoustic, Diffuse Reflectance, and Attenuated Total Reflection Modalities. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/agronomy11091879>., Registrované v: WOS
- ADCA309 MADEJOVÁ, Jana - BUJDÁK, Juraj - PETIT, Sabine - KOMADEL, Peter. Effects of chemical composition and temperature of heating on the infrared spectra of Li-saturated dioctahedral smectites. (II) Near-infrared region. In *Clay Minerals*, 2000, vol. 35, no. 5, p. 753-761. (1999: 1.090 - IF). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/000985500547205>
- Citácie:
1. [1.1] FOX, Valerie K. - KUPPER, Robert J. - EHLMANN, Bethany L. - CATALANO, Jeffrey G. - RAZZELL-HOLLIS, Joseph - ABBEY, William J. - SCHILD, Dirk J. - NICKERSON, Ryan D. - PETERS, Jonas C. - KATZ, Sydney M. - WHITE, Andrew A. Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. In *AMERICAN MINERALOGIST*, 2021, vol. 106, no. 6, pp. 964-982. ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2020-7419>., Registrované v: WOS
2. [1.1] RODRIGUES, Andreia - ANGELICA, Romulo - PAZ, Simone. CATIONIC DIFFERENTIATION OF BENTONITES BY INFRARED: A STUDY OF THE HYDRATION EFFECTS OF EXCHANGEABLE CATIONS. In *QUIMICA NOVA*, 2021, vol. 44, no. 3, pp. 272-277. ISSN 0100-4042. Dostupné na: <https://doi.org/10.21577/0100-4042.20170705>., Registrované v: WOS
- ADCA310 MADEJOVÁ, Jana - BUJDÁK, Juraj - PETIT, Sabine - KOMADEL, Peter. Effects of chemical composition and temperature of heating on the infrared spectra of Li-saturated dioctahedral smectites. (I) Mid-infrared region. In *Clay Minerals*, 2000, vol. 35, no. 5, p. 739-751. (1999: 1.090 - IF). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/000985500547160>
- Citácie:
1. [1.1] JO, Jaeguk - PARK, Chanhong - KIM, Changhwan - SHIN, Dongbok. Clay mineral characteristics in volcanic tuffs of Dokdo, South Korea: implication on their genesis and evolution. In *ENVIRONMENTAL EARTH SCIENCES*, 2021, vol. 80, no. 7, pp. ISSN 1866-6280. Dostupné na: <https://doi.org/10.1007/s12665-021-09583-w>., Registrované v: WOS
- ADCA311 MADEJOVÁ, Jana - BUJDÁK, Juraj - GATES, W.P. - KOMADEL, Peter. Preparation and infrared spectroscopic characterization of reduced-charge montmorillonite with various Li contents. In *Clay Minerals*, 1996, vol. 31, no. 2, p. 233-241. ISSN 0009-8558.
- Citácie:
1. [1.1] LARSSON, Ragnar - MALEK, Abdul. The Transformation by Catalysis of Prebiotic Chemical Systems to Useful Biochemicals: A Perspective Based on IR Spectroscopy of the Primary Chemicals: Solid-Phase and Water-Soluble Catalysts. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 21, pp. Dostupné na: <https://doi.org/10.3390/app112110125>., Registrované v: WOS
2. [1.1] PAZOURKOVA, Lenka - PEIKERTOVA, Pavlina - HUNDAKOVA, Marianna - MARTYNKOVA, Grazyna Simha. Preparation of calcium deficient hydroxyapatite on the montmorillonite substrate: Structure and morphology. In *MATERIALS TODAY-PROCEEDINGS*, 2021, vol. 37, no., pp. 35-41. ISSN 2214-7853. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.02.927>., Registrované v: WOS

ADCA312

MADEJOVÁ, Jana - KOMADEL, Peter - ČÍČEL, Blahoslav. Infrared study of octahedral site populations in smectites. In *Clay Minerals*, 1994, vol. 29, no. 3, p. 319-326. ISSN 0009-8558.

Citácie:

1. [1.1] FOX, Valerie K. - KUPPER, Robert J. - EHLMANN, Bethany L. - CATALANO, Jeffrey G. - RAZZELL-HOLLIS, Joseph - ABBEY, William J. - SCHILD, Dirk J. - NICKERSON, Ryan D. - PETERS, Jonas C. - KATZ, Sydney M. - WHITE, Andrew A. Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. In *AMERICAN MINERALOGIST*, 2021, vol. 106, no. 6, pp. 964-982. ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2020-7419>., Registrované v: WOS
2. [1.1] FRIESEM, David E. - SHAHACK-GROSS, Ruth - WEINSTEIN-EVRON, Mina - TEUTSCH, Nadya - WEISSBROD, Lior - SHIMELMITZ, Ron. High-resolution study of Middle Palaeolithic deposits and formation processes at Tabun Cave, Israel: Guano-rich cave deposits and detailed stratigraphic appreciation of Layer C. In *QUATERNARY SCIENCE REVIEWS*, 2021, vol. 274, no., pp. ISSN 0277-3791. Dostupné na: <https://doi.org/10.1016/j.quascirev.2021.107203>., Registrované v: WOS
3. [1.1] NAJAFI, Pegah - PENCHAH, Hamid Ramezanipour - GHAEMI, Ahad. Synthesis and characterization of Benzyl chloride-based hypercrosslinked polymers and its amine-modification as an adsorbent for CO₂ capture. In *ENVIRONMENTAL TECHNOLOGY & INNOVATION*, 2021, vol. 23, no., pp. ISSN 2352-1864. Dostupné na: <https://doi.org/10.1016/j.eti.2021.101746>., Registrované v: WOS
4. [1.1] PENCHAH, Hamid Ramezanipour - GHAEMI, Ahad - GODARZIANI, Hamed. Eco-friendly CO₂ adsorbent by impregnation of diethanolamine in nanoclay montmorillonite. In *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 2021, vol. 28, no. 39, pp. 55754-55770. ISSN 0944-1344. Dostupné na: <https://doi.org/10.1007/s11356-021-14920-4>., Registrované v: WOS
5. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>., Registrované v: WOS

ADCA313

MADEJOVÁ, Jana - JANEK, Marián - KOMADEL, Peter - HERBERT, H.-J. - MOOG, H.C. FTIR analyses of water in MX-80 bentonite compacted from high salinary salt solution systems. In *Applied Clay Science*, 2002, vol. 20, no. 6, p. 255-271. Dostupné na: [https://doi.org/10.1016/S0169-1317\(01\)00067-9](https://doi.org/10.1016/S0169-1317(01)00067-9)

Citácie:

1. [1.1] ALCAZAR-VARA, Luis A. - GUERRERO-HERNANDEZ, Jacqueline - CHACON, Cecilia - CORTES-MONROY, Ignacio R. Thermal degradation kinetics and structural characterization of sodium bentonite. In *ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS*, 2021, vol., no., pp. ISSN 1556-7036. Dostupné na: <https://doi.org/10.1080/15567036.2021.1977871>., Registrované v: WOS
2. [1.1] DOLATI, Samira - KALANI, Mohsen. STRUCTURAL CHARACTERIZATION OF A BENTONITE DEPOSIT FROM THE EASTERN IRAN; COMPARISON WITH TWO REFERENCE BENTONITES. In *CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES*, 2021, vol. 16, no. 1, pp. 151-162. ISSN 1842-4090. Dostupné na: <https://doi.org/10.26471/cjees/2021/016/163>., Registrované v: WOS
3. [1.1] DU, Wei - YANG, Yajun - HU, Liang - CHANG, Bokun - CAO, Gang - NASIR, Mubasher - LV, Jialong. Combined determination analysis of surface properties evolution towards bentonite by pH treatments. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 626, no., pp. ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127067>., Registrované v: WOS
4. [1.1] FOX, Valerie K. - KUPPER, Robert J. - EHLMANN, Bethany L. - CATALANO, Jeffrey G. - RAZZELL-HOLLIS, Joseph - ABBEY, William J. - SCHILD, Dirk J. - NICKERSON, Ryan D. - PETERS, Jonas C. - KATZ, Sydney M. - WHITE, Andrew A. Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. In *AMERICAN MINERALOGIST*, 2021, vol. 106, no. 6, pp. 964-982. ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2020-7419>., Registrované v: WOS
5. [1.1] KHAN, Mohd Moiz - MAHAJANI, S. M. - JADHAV, G. N. Transformation of bentonite used in green sand molds during metal casting process and its relevance in sand reclamation. In *APPLIED CLAY SCIENCE*, 2021, vol. 206, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106072>., Registrované v: WOS
6. [1.1] MINISY, Islam M. - SALAHUDDIN, Nehal A. - AYAD, Mohamad M. Adsorption of methylene blue onto chitosan/montmorillonite/polyaniline nanocomposite. In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na:

- <https://doi.org/10.1016/j.clay.2021.105993>., Registrované v: WOS
7. [1.1] PTACEK, Petr - SOUKAL, Frantisek - OPRAVIL, Tomas. Thermal decomposition of ferroan dolomite: A comparative study in nitrogen, carbon dioxide, air and oxygen. In *SOLID STATE SCIENCES*, 2021, vol. 122, no., pp. ISSN 1293-2558. Dostupné na: <https://doi.org/10.1016/j.solidstatesciences.2021.106778>., Registrované v: WOS
- ADCA314 MADEJOVÁ, Jana - BUJDAK, Juraj - JANEK, Marián - KOMADEL, Peter. Comparative FT-IR study of structural modifications during acid treatment of dioctahedral smectites and hectorite. In *Spectrochimica Acta Part A - Molecular and Biomolecular Spectroscopy*, 1988, vol. 54, no. 10, p. 1397-1406. ISSN 1386-1425.
- Citácie:
- [1.1] ARSLAN, Volkan. A study on the dissolution kinetics of iron oxide leaching from clays by oxalic acid. In *PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING*, 2021, vol. 57, no. 3, pp. 97-111. ISSN 1643-1049. Dostupné na: <https://doi.org/10.37190/ppmp/135749>., Registrované v: WOS
 - [1.1] DAMIAN, Gheorghe - DAMIAN, Floarea - SZAKACS, Zsolt - IEPURE, Gheorghe - ASTEFANEI, Dan. Mineralogical and Physico-Chemical Characterization of the Orasu-Nou (Romania) Bentonite Resources. In *MINERALS*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/min11090938>., Registrované v: WOS
 - [1.1] ELASHERY, Sally E. A. - ATTIA, Nour F. - MOHAMED, Gehad G. - OMAR, M. M. - TAYEA, Hager M. Hybrid Nanocomposite Based Graphene Sensor for Ultrasensitive Clomipramine HCl Detection. In *ELECTROANALYSIS*, 2021, vol. 33, no. 11, pp. 2361-2371. ISSN 1040-0397. Dostupné na: <https://doi.org/10.1002/elan.202100165>., Registrované v: WOS
 - [1.1] GARIKOE, Issaka - SORGHU, Brahim - GUEL, Boubie - PERSSON, Ingmar. SOLID-STATE SYNTHESIS AND PHYSICO-CHEMICAL CHARACTERIZATION OF MODIFIED SMECTITES USING NATURAL CLAYS FROM BURKINA FASO. In *BULLETIN OF THE CHEMICAL SOCIETY OF ETHIOPIA*, 2021, vol. 35, no. 1, pp. 43-59. ISSN 1011-3924. Dostupné na: <https://doi.org/10.4314/bcse.v35i1.4>., Registrované v: WOS
 - [1.1] GUBERNAT, Maciej - ZAMBRZYCKI, Marcel. Catalytic activity of K10 montmorillonite in the chemical vapor deposition of multi-wall carbon nanotubes from methane. In *APPLIED CLAY SCIENCE*, 2021, vol. 211, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106178>., Registrované v: WOS
 - [1.1] LIU, Hongchang - YUAN, Peng - LIU, Dong - ZHANG, Weiwei - TIAN, Qian - BU, Hongling - WEI, Yanfu - XIA, Jinlan - WANG, Yinchu - ZHOU, Junming. Insight into cyanobacteria preservation in shallow marine environments from experimental simulation of cyanobacteria-clay co-aggregation. In *CHEMICAL GEOLOGY*, 2021, vol. 577, no., pp. ISSN 0009-2541. Dostupné na: <https://doi.org/10.1016/j.chemgeo.2021.120285>., Registrované v: WOS
 - [1.1] MARTIN, S. A. - PEREZ, I - RIVERA, A. Hosting of the antibiotic Vancomycin by bentonite: Characterization and slow release study. In *APPLIED CLAY SCIENCE*, 2021, vol. 202, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105965>., Registrované v: WOS
 - [1.1] NUSHI, E. - GJURGJAJ, L. - MELE, A. Refractory materials structural and surface changes by sulfuric acid treatment. In *ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES*, 2021, vol. 77, no., pp. C953-C953. ISSN 2053-2733., Registrované v: WOS
 - [1.1] OLIVEIRA, Leandro - OSAJIMA, Josy - PENA-GARCIA, Ramon Raudel - SILVA-FILHO, Edson Cavalcanti - FONSECA, Maria Gardennia. Effect of Oxycations in Clay Mineral on Adsorption-Vanadyl Exchange Bentonites and Their Ability for Amiloride Removal. In *MINERALS*, 2021, vol. 11, no. 12, pp. Dostupné na: <https://doi.org/10.3390/min11121327>., Registrované v: WOS
 - [1.1] PAJAK, Magdalena. Adsorption Capacity of Smectite Clay and Its Thermal and Chemical Modification for Two Anionic Dyes: Comparative Study. In *WATER AIR AND SOIL POLLUTION*, 2021, vol. 232, no. 2, pp. ISSN 0049-6979. Dostupné na: <https://doi.org/10.1007/s11270-021-05032-3>., Registrované v: WOS
 - [1.1] QUEIROGA, Libia N. F. - NUNES FILHO, Francisco G. - FRANCA, D. B. - RODRIGUES, Francisco - JABER, Maguy - FONSECA, Maria G. Aminopropyl bentonites obtained by microwave-assisted silylation for copper removal. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 630, no., pp. ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127557>., Registrované v: WOS
 - [1.1] WU, Qiufang - HE, Lingmin - HOU, Lijiang - GAO, Xinqiang - WANG, Fan - WANG, Jingshun. SCREENING OF THE ROCK-GROWN *Aspergillus niger* XF-1 STRAIN AND ITS ECOLOGICAL RESTORATION IN ABANDONED MINES. In *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, 2021, vol. 22, no. 2, pp. 542-553. ISSN 1311-5065., Registrované v: WOS
- ADCA315 MADEJOVÁ, Jana - KOMADEL, Peter. Baseline studies of The Clay Minerals Society Source

Clays: Infrared methods. In *Clays and Clay Minerals*, 2001, vol. 49, no. 5, p. 410-432. (2001 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2001.0490508>

Citácie:

1. [1.1] AMRHAR, Otheman - BERISHA, Avni - EL GANA, Lahoucine - NASSALI, Hakima - S. ELYOUBI, Mohamed. Removal of methylene blue dye by adsorption onto Natural Muscovite Clay: experimental, theoretical and computational investigation. In *INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY*, 2021, vol., no., pp. ISSN 0306-7319. Dostupné na: <https://doi.org/10.1080/03067319.2021.1897119>., Registrované v: WOS
2. [1.1] ANANYEVA, Lyudmila G. - DOROSHENKO, Alexandr A. - ILENOK, Sergey S. - KARYMOVA, Yana O. - KOROVKIN, Michail - MAKSIMOVA, Yulia A. - PESTEREV, Alexey - PROTSKY, Oleg N. - SAVINOVA, Olesya - KHRUSHCHEVA, Maria O. FEATURES OF MINERAL COMPOSITION OF LOW-PERMEABLE SILICEOUS-CLAY RESERVOIR ROCKS FROM THE BEREZOVSKAYA FORMATION IN THE NORTH OF WESTERN SIBERIA. In *BULLETIN OF THE TOMSK POLYTECHNIC UNIVERSITY-GEO ASSETS ENGINEERING*, 2021, vol. 332, no. 12, pp. 114-123. ISSN 2500-1019. Dostupné na: <https://doi.org/10.18799/24131830/2021/12/3275>., Registrované v: WOS
3. [1.1] ANDREOU, Fevronia T. - BARYLSKA, Barbara - CIESIELSKA, Zuzanna - SZCZERBA, Marek - DERKOWSKI, Arkadiusz - GIONIS, Vassilis - SIRANIDI, Eirini - CHRYSSIKOS, Georgios D. Intercalation of N-methylformamide in kaolinite: In situ monitoring by near-infrared spectroscopy and X-ray diffraction. In *APPLIED CLAY SCIENCE*, 2021, vol. 212, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106209>., Registrované v: WOS
4. [1.1] ASGARY, Somayeh - VAGHRI, Elnaz - DAEMI, Masoumeh - ESMAILI, Parisa - RAMEZANI, Amir H. - MEMON, Saim - HOSEINZADEH, Siamak. Magnetron sputtering technique for analyzing the influence of RF sputtering power on microstructural surface morphology of aluminum thin films deposited on SiO₂/Si substrates. In *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*, 2021, vol. 127, no. 10, pp. ISSN 0947-8396. Dostupné na: <https://doi.org/10.1007/s00339-021-04892-0>., Registrované v: WOS
5. [1.1] AVRAMOVSKA, Marija - CHMELIK, Christian - DERKOWSKI, Arkadiusz - FANTALKIN, Alexander - FREUDE, Dieter - HAASE, Juergen - HARE, Vincent - KAERGER, Joerg - KULIGIEWICZ, Artur - MOINSTER, Murray. Searching for the fundamentals of rehydroxylation dating of archaeological ceramics via NMR and IR microscopy. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*, 2021, vol. 104, no. 10, pp. 5328-5340. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.17753>., Registrované v: WOS
6. [1.1] BABAHOUM, Nabil - OULD HAMOU, Malek. Characterization and purification of Algerian natural bentonite for pharmaceutical and cosmetic applications. In *BMC CHEMISTRY*, 2021, vol. 15, no. 1, pp. Dostupné na: <https://doi.org/10.1186/s13065-021-00776-9>., Registrované v: WOS
7. [1.1] BALBAY, Asim - SELVITEPE, Nuran - SAKA, Cafer. Fe doped-CoB catalysts with phosphoric acid-activated montmorillonite as support for efficient hydrogen production via NaBH₄ hydrolysis. In *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 2021, vol. 46, no. 1, pp. 425-438. ISSN 0360-3199. Dostupné na: <https://doi.org/10.1016/j.ijhydene.2020.09.181>., Registrované v: WOS
8. [1.1] BAYODE, Ajibola A. - DOS SANTOS, Dayana M. - OMOROGIE, Martins O. - OLUKANNI, Olumide D. - MOODLEY, Roshila - BODEDE, Olusola - AGUNBLADE, Foluso O. - TAUBERT, Andreas - DE CAMARGO, Andrea S. S. - ECKERT, Hellmut - VIEIRA, Eny Maria - UNUABONAH, Emmanuel I. Carbon-mediated visible-light clay-Fe₂O₃-graphene oxide catalytic nanocomposites for the removal of steroid estrogens from water. In *JOURNAL OF WATER PROCESS ENGINEERING*, 2021, vol. 40, no., pp. ISSN 2214-7144. Dostupné na: <https://doi.org/10.1016/j.jwpe.2020.101865>., Registrované v: WOS
9. [1.1] BIALOMAZUR, Magdalena - JASINSKA, Izabella - KOWALCZYK, Krzysztof - MUSIK, Marlena - PASIERBIEWICZ, Kamil - WROBEL, Rafal J. Acrylic polyurethane coatings durability under outdoor weathering in an industrial area. In *POLIMERY*, 2021, vol. 66, no. 10, pp. 503-517. ISSN 0032-2725. Dostupné na: <https://doi.org/10.14314/polimery.2021.10.1>., Registrované v: WOS
10. [1.1] CAMPOS, P. - ALBUQUERQUE, A. R. L. - ANGELICA, R. S. - PAZ, S. P. A. FTIR spectral signatures of amazon inorganic phosphates: Igneous, weathering, and biogenetic origin. In *SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY*, 2021, vol. 251, no., pp. ISSN 1386-1425. Dostupné na: <https://doi.org/10.1016/j.saa.2021.119476>., Registrované v: WOS
11. [1.1] CAO, Yubin - WANG, Yanru - ZHANG, Zuhua - MA, Yuwei - WANG, Hao. Turning sandstone clay into supplementary cementitious material: activation and pozzolanic reactivity evaluation. In *COMPOSITES PART B-ENGINEERING*, 2021, vol. 223, no., pp. ISSN 1359-8368. Dostupné na: <https://doi.org/10.1016/j.compositesb.2021.109137>., Registrované v: WOS

12. [1.1] CHALOUATI, Youssef - MANNAI, Faouzi - BENNOUR, Ali - SRASRA, Ezzedine. Firing behavior of argillites from northern Tunisia as raw materials for ceramic applications. In *INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY*, 2021, vol. 18, no. 6, pp. 2323-2335. ISSN 1546-542X. Dostupné na: <https://doi.org/10.1111/ijac.13713>, Registrované v: WOS
13. [1.1] CHANG, Po-Hsiang - LIU, Pan - SARKAR, Binoy - MUKHOPADHYAY, Raj - YANG, Qing-Yuan - TZOU, Yu-Min - ZHONG, Bo - LI, Xuxiang - OWENS, Gary. Unravelling the mechanism of amitriptyline removal from water by natural montmorillonite through batch adsorption, molecular simulation and adsorbent characterization studies. In *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, 2021, vol. 598, no., pp. 379-387. ISSN 0021-9797. Dostupné na: <https://doi.org/10.1016/j.jcis.2021.04.033>, Registrované v: WOS
14. [1.1] CHERIAN, Chinchu - SIDDIQUA, Sumi. Engineering and environmental evaluation for utilization of recycled pulp mill fly ash as binder in sustainable road construction. In *JOURNAL OF CLEANER PRODUCTION*, 2021, vol. 298, no., pp. ISSN 0959-6526. Dostupné na: <https://doi.org/10.1016/j.jclepro.2021.126758>, Registrované v: WOS
15. [1.1] DEBIH, Hadi - TERCHI, Smail - KHODJA, Mohamed - MELOUKI, Azzedine. ADSORPTION SELECTIVITY OF SRFA FRACTIONS BY BENTONITES. In *SCIENTIFIC STUDY AND RESEARCH-CHEMISTRY AND CHEMICAL ENGINEERING BIOTECHNOLOGY FOOD INDUSTRY*, 2021, vol. 22, no. 4, pp. 463-478. ISSN 1582-540X., Registrované v: WOS
16. [1.1] DEGBE, Koffi A. - BAFAI, Diyakadola D. - KORIKO, Moursalou - TCHEGUENI, Sanonka - LHOUSAIN, Chahid - EL MERAY, Mohamed - HAFIDI, Mohamed - TCHANGBEDJI, Gado. Lead sorption by Togo rock phosphate as a sustainable solution to metal water depollution. In *DESALINATION AND WATER TREATMENT*, 2021, vol. 224, no., pp. 302-307. ISSN 1944-3994. Dostupné na: <https://doi.org/10.5004/dwt.2021.27187>, Registrované v: WOS
17. [1.1] DILL, Lais P. - KOCHPEKA, Debora M. - LIMA, Larissa L. - LEITAO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian Mineral Clays: Classification, Acid Activation and Application as Catalysts for Methyl Esterification Reactions. In *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, 2021, vol. 32, no. 1, pp. 145-157. ISSN 0103-5053. Dostupné na: <https://doi.org/10.21577/0103-5053.20200164>, Registrované v: WOS
18. [1.1] DOLATI, Samira - KALANI, Mohsen. STRUCTURAL CHARACTERIZATION OF A BENTONITE DEPOSIT FROM THE EASTERN IRAN; COMPARISON WITH TWO REFERENCE BENTONITES. In *CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES*, 2021, vol. 16, no. 1, pp. 151-162. ISSN 1842-4090. Dostupné na: <https://doi.org/10.26471/cjees/2021/016/163>, Registrované v: WOS
19. [1.1] DRYAZ, Asmaa Ragab - SHABAN, Mohamed - ALMOHAMADI, Hamad - ABU AL-OLA, Khulood A. - HAMD, Ahmed - SOLIMAN, N. K. - AHMED, Sayed A. Design, characterization, and adsorption properties of Padina gymnospora/zeolite nanocomposite for Congo red dye removal from wastewater. In *SCIENTIFIC REPORTS*, 2021, vol. 11, no. 1, pp. ISSN 2045-2322. Dostupné na: <https://doi.org/10.1038/s41598-021-00025-y>, Registrované v: WOS
20. [1.1] DU, Wei - YANG, Yajun - HU, Liang - CHANG, Bokun - CAO, Gang - NASIR, Mubasher - LV, Jialong. Combined determination analysis of surface properties evolution towards bentonite by pH treatments. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 626, no., pp. ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2021.127067>, Registrované v: WOS
21. [1.1] ELHADJ, M.S. Yacoub - PERRIN, F. Xavier. Influencing parameters of mechanochemical intercalation of kaolinite with urea. In *APPLIED CLAY SCIENCE*, 2021, vol. 213, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106250>, Registrované v: WOS
22. [1.1] FURKA, Daniel - NAFTALY, Mira - FURKA, Samuel - SIMON, Erik - TOMANOVA, Katarina - CAPLOVICOVA, Maria - JANEK, Marian. Effect of Gallium and Boron doping on dielectric and conductivity properties of ZnO sintered from nanoparticles of different morphology in THz region. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 611, no., pp. ISSN 0927-7757. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.125896>, Registrované v: WOS
23. [1.1] FURKA, Samuel - FURKA, Daniel - DADI, Nitin Chandra Teja Chandra Teja - PALACKA, Patrik - HROMNIKOVA, Dominika - DUENAS SANTANA, Julio Ariel - PINEDA, Javier Diaz - CASAS, Saul Duenas - BUJDAK, Juraj. Novel antimicrobial materials designed for the 3D printing of medical devices used during the COVID-19 crisis. In *RAPID PROTOTYPING JOURNAL*, 2021, vol. 27, no. 5, pp. 890-904. ISSN 1355-2546. Dostupné na: <https://doi.org/10.1108/RPJ-09-2020-0219>, Registrované v: WOS
24. [1.1] GONZALEZ-SANTAMARIA, Daniel E. - JUSTEL, Ana - FERNANDEZ, Raill - RUIZ, Ana Isabel - STAVROPOULOU, Alexandra - RODRIGUEZ-BLANCO, Juan Diego - CUEVAS,

- Jaime. SEM-EDX study of bentonite alteration under the influence of cement alkaline solutions. In *APPLIED CLAY SCIENCE*, 2021, vol. 212, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106223>, Registrované v: WOS
25. [1.1] HAMD, Ahmed - DRYAZ, Asmaa Ragab - SHABAN, Mohamed - ALMOHAMADI, Hamad - ABU AL-OLA, Khulood A. - SOLIMAN, Nofal Khamis - AHMED, Sayed A. Fabrication and Application of Zeolite/Acanthophora Spicifera Nanoporous Composite for Adsorption of Congo Red Dye from Wastewater. In *NANOMATERIALS*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/nano11092441>, Registrované v: WOS
26. [1.1] HOLESOVA, Sylva - HUNDAKOVA, Marianna - TARASIUK, Yauheni - BARABASZOVA, Karla Cech - PAZDZIORA, Erich. Metronidazole/clay nanocomposites: Synthesis, structure and antibacterial efficacy. In *MATERIALS TODAY-PROCEEDINGS*, 2021, vol. 37, no., pp. 21-27. ISSN 2214-7853. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.02.101>, Registrované v: WOS
27. [1.1] KABA, O. B. - FILIPPOV, L. O. - FILIPPOVA, I. - BADAWI, M. Interaction between fine particles of fluorapatite and phosphoric acid unraveled by surface spectroscopies. In *POWDER TECHNOLOGY*, 2021, vol. 382, no., pp. 368-377. ISSN 0032-5910. Dostupné na: <https://doi.org/10.1016/j.powtec.2020.12.058>, Registrované v: WOS
28. [1.1] KAGONBE, B. P. - TSOZUE, D. - NZEUKOU, A. N. - NGOS, S. I. I. I. I. I. Mineralogical, physico-chemical and ceramic properties of clay materials from Sekande and Gashiga (North, Cameroon) and their suitability in earthenware production. In *HELIYON*, 2021, vol. 7, no. 7, pp. Dostupné na: <https://doi.org/10.1016/j.heliyon.2021.e07608>, Registrované v: WOS
29. [1.1] KARLIK, Mate - GYOLLAI, Ildike - VANCSEK, Anna - FINTOR, Krisztian - SZALAI, Zoltan - MINDRESCU, Marcel - GRADINARU, Ionela - VAGASI, Sandor - BOZSO, Gabor - POLGARI, Marta - PAL-MOLNAR, Elemer. HIGH RESOLUTION MINERALOGICAL CHARACTERIZATION OF SEDIMENTS LAKE BOLATAU-FEREDEU (ROMANIA). In *CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES*, 2021, vol. 16, no. 1, pp. 199-210. ISSN 1842-4090. Dostupné na: <https://doi.org/10.26471/cjees/2021/016/167>, Registrované v: WOS
30. [1.1] KHAKSAR NAJAFI, Elmira - JAMSHIDI CHENARI, Reza - ARABANI, Mahyar. Sorption Kinetics of Lead and Zinc Ions by Clay-Fly Ash Geopolymers. In *ENVIRONMENTAL ENGINEERING SCIENCE*, 2021, vol. 38, no. 8, pp. 729-741. ISSN 1092-8758. Dostupné na: <https://doi.org/10.1089/ees.2020.0351>, Registrované v: WOS
31. [1.1] KHAKSAR NAJAFI, Elmira - JAMSHIDI CHENARI, Reza - PAYAN, Meghdad - ARABANI, Mahyar. A sustainable landfill liner material: clay-fly ash geopolymers. In *BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT*, 2021, vol. 80, no. 5, pp. 4111-4124. ISSN 1435-9529. Dostupné na: <https://doi.org/10.1007/s10064-021-02185-7>, Registrované v: WOS
32. [1.1] KHAKSAR NAJAFI, Elmira - JAMSHIDI CHENARI, Reza - PAYAN, Meghdad - ARABANI, Mahyar. Compositional effects of clay-fly ash geopolymers on the sorption process of lead and zinc. In *JOURNAL OF ENVIRONMENTAL QUALITY*, 2021, vol. 50, no. 3, pp. 768-781. ISSN 0047-2425. Dostupné na: <https://doi.org/10.1002/jeq2.20207>, Registrované v: WOS
33. [1.1] KLJAJEVI, Ljiljana M. - MIRKOVI, Miljana M. - DOLENEC, Sabina - STER, Katarina - HADZALI, Mustafa - VUKANAC, Ivana S. - NENADOVI, Milos T. RADIOLOGICAL AND PHYSICO-CHEMICAL CHARACTERIZATION OF RED MUD AS AN AI-CONTAINING PRECURSOR IN INORGANIC BINDERS FOR THE BUILDING INDUSTRY. In *NUCLEAR TECHNOLOGY & RADIATION PROTECTION*, 2021, vol. 36, no. 2, pp. 182-191. ISSN 1451-3994. Dostupné na: <https://doi.org/10.2298/NTRP2002182K>, Registrované v: WOS
34. [1.1] KUMAR, N. Vijay - ASADI, S. S. - REDDY, M. Karthik Kumar - SUJATHA, M. - VENKATASUBBIAH, M. C. Investigational studies on beneficial effect of geosynthetic reinforcement at an interface of two layered system. In *MATERIALS TODAY-PROCEEDINGS*, 2021, vol. 45, no., pp. 6596-6602. ISSN 2214-7853. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.11.771>, Registrované v: WOS
35. [1.1] LAUFEK, Frantisek - HANUSOVA, Irena - SVOBODA, Jiri - VASICEK, Radek - NAJSER, Jan - KOUBOVA, Magdalena - CURDA, Michal - PTICEN, Frantisek - VACULIKOVA, Lenka - SUN, Haiquan - MASIN, David. Mineralogical, Geochemical and Geotechnical Study of BCV 2017 Bentonite-The Initial State and the State following Thermal Treatment at 200 degrees C. In *MINERALS*, 2021, vol. 11, no. 8, pp. Dostupné na: <https://doi.org/10.3390/min11080871>, Registrované v: WOS
36. [1.1] LAUKAMP, Carsten - RODGER, Andrew - LEGRAS, Monica - LAMPINEN, Heta - LAU, Ian C. - PEJCIC, Bobby - STROMBERG, Jessica - FRANCIS, Neil - RAMANAIDOU, Erick. Mineral Physicochemistry Underlying Feature-Based Extraction of Mineral Abundance and Composition from Shortwave, Mid and Thermal Infrared Reflectance Spectra. In *MINERALS*,

- 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/min11040347>., Registrované v: WOS
37. [1.1] LIN, Weiqing - ZHOU, Fangyuan - LUO, Wenjun - YOU, Lingyun. Effect of alkali cation type on compressive strength and thermal performance of the alkali-activated omphacite tailing. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 306, no., pp. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.124647>., Registrované v: WOS
38. [1.1] MENDEL, Niels - SIRETANU, Diana - SIRETANU, Igor - BRILMAN, Derk W. F. - MUGELE, Frieder. Interlayer Cation-Controlled Adsorption of Carbon Dioxide in Anhydrous Montmorillonite Clay. In JOURNAL OF PHYSICAL CHEMISTRY C, 2021, vol. 125, no. 49, pp. 27159-27169. ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c06746>., Registrované v: WOS
39. [1.1] MOROZOV, Andrey - VASILCHENKO, Andrey - KASPRZHITSKII, Anton - LAZORENKO, Georgy - YAVNA, Victor - KOCHUR, Andrei. Express method for determining the composition of soils based on IR spectroscopy technology. In VIBRATIONAL SPECTROSCOPY, 2021, vol. 114, no., pp. ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2021.103258>., Registrované v: WOS
40. [1.1] MSINJILI, Nsesheye S. - VOGLER, Nico - STURM, Patrick - NEUBERT, Markus - SCHROEDER, Hans-Jurgen - KUEHNE, Hans-Carsten - HUENGER, Klaus-Jurgen - GLUTH, Gregor J. G. Calcined brick clays and mixed clays as supplementary cementitious materials: Effects on the performance of blended cement mortars. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 266, no., pp. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2020.120990>., Registrované v: WOS
41. [1.1] MUNOZ-IGLESIAS, Victoria - FERNANDEZ-SAMPEDRO, Maite - GIL-LOZANO, Carolina - BONALES, Laura J. - HERRERO, Oscar Ercilla - VALLES GONZALEZ, Maria Pilar - MATEO-MARTI, Eva - PRIETO-BALLESTEROS, Olga. Characterization of NH₄-montmorillonite under conditions relevant to Ceres. In APPLIED CLAY SCIENCE, 2021, vol. 209, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106137>., Registrované v: WOS
42. [1.1] NGUYEN-THANH, Lan - MAEHLMANN, Rafael Ferreira - HOANG-MINH, Thao - PETSCHICK, Rainer - REISCHMANN, Thomas - NESBOR, Heinz-Dieter - RUTTMANN, Myriam - FRITSCHKE, Johann-Gerhard. Clay mineral formation in Permian rocks of a geothermal borehole at Northern Upper Rhine Graben, Germany. In INTERNATIONAL JOURNAL OF EARTH SCIENCES, 2021, vol. 110, no. 4, pp. 1415-1438. ISSN 1437-3254. Dostupné na: <https://doi.org/10.1007/s00531-021-02022-y>., Registrované v: WOS
43. [1.1] OLDHAM, Daniel - MALLICK, Rajib - FINI, Elham H. Reducing susceptibility to moisture damage in asphalt pavements using polyethylene terephthalate and sodium montmorillonite clay. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 269, no., pp. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2020.121302>., Registrované v: WOS
44. [1.1] OYEBANJO, O. O. - EKOSSE, G. E. - ODIYO, J. O. Mineralogy and geochemistry of clay fractions in soils developed from different parent rocks in Limpopo Province, South Africa. In HELIYON, 2021, vol. 7, no. 7, pp. Dostupné na: <https://doi.org/10.1016/j.heliyon.2021.e07664>., Registrované v: WOS
45. [1.1] PARENT, Elizabeth Jeanne - PARENT, Serge-Etienne - PARENT, Leon Etienne. Determining soil particle-size distribution from infrared spectra using machine learning predictions: Methodology and modeling. In PLOS ONE, 2021, vol. 16, no. 7, pp. ISSN 1932-6203. Dostupné na: <https://doi.org/10.1371/journal.pone.0233242>., Registrované v: WOS
46. [1.1] PATEL, C. M. - PATEL, C. D. - RAMI, J. M. - PATEL, K. R. Optical spectroscopic study of natural rock's minerals. In MATERIALS TODAY-PROCEEDINGS, 2021, vol. 43, no., pp. 497-501. ISSN 2214-7853. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.12.022>., Registrované v: WOS
47. [1.1] PETROVIC, Anda - LEMORINI, Cristina - NUNZIANTE-CESARO, Stella - MIHAILOVIC, Dusan. Use-wear and residue analysis of knapped stone artefacts from Lepenski Vir and Padina (Serbia). In JOURNAL OF LITHIC STUDIES, 2021, vol. 8, no. 2, pp. 1-29. ISSN 2055-0472. Dostupné na: <https://doi.org/10.2218/jls.6695>., Registrované v: WOS
48. [1.1] PLATOV, Yu. T. - PLATOVA, R. A. - MOLODKINA, P. G. Using Decomposition of IR Spectra to Analyze Structural-Phase Transformations of Kaolinite. In JOURNAL OF APPLIED SPECTROSCOPY, 2021, vol. 87, no. 6, pp. 1029-1036. ISSN 0021-9037. Dostupné na: <https://doi.org/10.1007/s10812-021-01105-7>., Registrované v: WOS
49. [1.1] RADY, Doaa - SHABAN, Mohamed - ELSAYED, Khaled N. M. - HAMD, Ahmed - SOLIMAN, N. K. - ABD EL-MAGEED, H. R. - ELZANATY, Ali M. - EL-SAYED, Refat - MORADA, Moataz - EL-BAHY, Salah M. - AHMED, Sayed A. Experimentally and theoretically approaches for Congo red dye adsorption on novel kaolinite-alga nano-composite. In INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, 2021, vol.,

- no., pp. ISSN 0306-7319. Dostupné na: <https://doi.org/10.1080/03067319.2021.1969378>., Registrované v: WOS
50. [1.1] RODRIGUES, Andreia - ANGELICA, Romulo - PAZ, Simone. CATIONIC DIFFERENTIATION OF BENTONITES BY INFRARED: A STUDY OF THE HYDRATION EFFECTS OF EXCHANGEABLE CATIONS. In *QUIMICA NOVA*, 2021, vol. 44, no. 3, pp. 272-277. ISSN 0100-4042. Dostupné na: <https://doi.org/10.21577/0100-4042.20170705>., Registrované v: WOS
51. [1.1] SCHINGARO, Emanuela - VENTRUTI, Gennaro - VINCI, Doriana - BALASSONE, Giuseppina - MONDILLO, Nicola - NIETO, Fernando - LACALAMITA, Maria - LEONI, Matteo. New insights into the crystal chemistry of sauconite (Zn-smectite) from the Skorpion zinc deposit (Namibia) via a multi-methodological approach. In *AMERICAN MINERALOGIST*, 2021, vol. 106, no. 2, pp. 290-300. ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am-2020-7460>., Registrované v: WOS
52. [1.1] SILVA, Isabela Mello - ROMERO, Danilo Jefferson - BARBOSA GUIMARAES, Clecia Cristina - ALVES, Marcelo Rodrigo - OSCO, Lucas Prado - E SOUZA, Arnaldo Barros - DA SILVA, Alvaro Pires - DEMATTE, Jose A. M. Readily dispersible clay in soils from different Brazilian regions by visible, near, and mid-infrared spectral data. In *INTERNATIONAL JOURNAL OF REMOTE SENSING*, 2021, vol. 42, no. 18, pp. 6945-6962. ISSN 0143-1161. Dostupné na: <https://doi.org/10.1080/01431161.2021.1948625>., Registrované v: WOS
53. [1.1] SILVA, Vanderlane C. - ARAUJO, Maria Eduarda B. - RODRIGUES, Alisson M. - CARTAXO, Juliana M. - MENEZES, Romualdo R. - NEVES, Gelmires A. Adsorption Behavior of Acid-Treated Brazilian Palygorskite for Cationic and Anionic Dyes Removal from the Water. In *SUSTAINABILITY*, 2021, vol. 13, no. 7, pp. Dostupné na: <https://doi.org/10.3390/su13073954>., Registrované v: WOS
54. [1.1] SILVA, Vanderlane Cavalcanti - ARAUJO, Maria Eduarda Barbosa - RODRIGUES, Alisson Mendes - VITORINO, Maria do Bom Conselho - CARTAXO, Juliana Melo - MENEZES, Romualdo Rodrigues - NEVES, Gelmires Araujo. Adsorption Behavior of Crystal Violet and Congo Red Dyes on Heat-Treated Brazilian Palygorskite: Kinetic, Isothermal and Thermodynamic Studies. In *MATERIALS*, 2021, vol. 14, no. 19, pp. Dostupné na: <https://doi.org/10.3390/ma14195688>., Registrované v: WOS
55. [1.1] SON, Se-Chang - YU, Geun-Hye - PARK, Seungshik - LEE, Sangil. Comprehensive characterization of PM2.5 using chemical, optical, and spectroscopic methods during pollution episodes at an urban site in Gwangju, Korea. In *ATMOSPHERIC POLLUTION RESEARCH*, 2021, vol. 12, no. 10, pp. ISSN 1309-1042. Dostupné na: <https://doi.org/10.1016/j.apr.2021.101199>., Registrované v: WOS
56. [1.1] SONG, Hongzhe - LIU, Hongmei - BU, Hongling - LIU, Dong - LI, Yun - DU, Peixin. Effects of montmorillonite charge reduction on the high-temperature/ high-pressure pyrolysis of organic matter. In *APPLIED CLAY SCIENCE*, 2021, vol. 213, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106243>., Registrované v: WOS
57. [1.1] THOMAS, Cathy L. - HERNANDEZ-ALLICA, Javier - DUNHAM, Sarah J. - MCGRATH, Steve P. - HAEFELE, Stephan M. A comparison of soil texture measurements using mid-infrared spectroscopy (MIRS) and laser diffraction analysis (LDA) in diverse soils. In *SCIENTIFIC REPORTS*, 2021, vol. 11, no. 1, pp. ISSN 2045-2322. Dostupné na: <https://doi.org/10.1038/s41598-020-79618-y>., Registrované v: WOS
58. [1.1] VACULIKOVA, L. - VALOVICOVA, V. - PLEVOVA, A. E. - NAPRUSZEWSKA, B. D. - DURACZYNSKA, D. - KARCZ, R. - SERWICKA, E. M. Synthesis, characterization and catalytic activity of cryptomelane/montmorillonite composites. In *APPLIED CLAY SCIENCE*, 2021, vol. 202, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105977>., Registrované v: WOS
59. [1.1] VAHUR, Signe - KIUDORV, Lisett - SOMELAR, Peeter - CAYME, Jan-Michael - RETRATO, Mark Dennis Chico - REMIGIO, Rady Jazmin - SHARMA, Varun - ORAS, Ester - LEITO, Ivo. Quantitative mineralogical analysis of clay-containing materials using ATR-FT-IR spectroscopy with PLS method. In *ANALYTICAL AND BIOANALYTICAL CHEMISTRY*, 2021, vol. 413, no. 26, pp. 6535-6550. ISSN 1618-2642. Dostupné na: <https://doi.org/10.1007/s00216-021-03617-9>., Registrované v: WOS
60. [1.1] VENDITTI, Flavia - AGAM, Aviad - TIRILLO, Jacopo - NUNZIANTE-CESARO, Stella - BARKAI, Ran. An integrated study discloses chopping tools use from Late Acheulean Revadim (Israel). In *PLOS ONE*, 2021, vol. 16, no. 1, pp. ISSN 1932-6203. Dostupné na: <https://doi.org/10.1371/journal.pone.0245595>., Registrované v: WOS
61. [1.1] VOLKOV, Dmitry S. - ROGOVA, Olga B. - PROSKURNIN, Mikhail A. Organic Matter and Mineral Composition of Silicate Soils: FTIR Comparison Study by Photoacoustic, Diffuse Reflectance, and Attenuated Total Reflection Modalities. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/agronomy11091879>., Registrované v: WOS

62. [1.1] VOLKOV, Dmitry S. - ROGOVA, Olga B. - PROSKURNIN, Mikhail A. *Temperature Dependences of IR Spectra of Humic Substances of Brown Coal*. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/agronomy11091822>., Registrované v: WOS
63. [1.1] WANG, Quan - SHAHEEN, Sabry M. - JIANG, Yahui - LI, Ronghua - SLANY, Michal - ABDELRAHMAN, Hamada - KWON, Eilhann - BOLAN, Nanthi - RINKLEBE, Joerg - ZHANG, Zengqiang. *Fe/Mn- and P-modified drinking water treatment residuals reduced Cu and Pb phytoavailability and uptake in a mining soil*. In *JOURNAL OF HAZARDOUS MATERIALS*, 2021, vol. 403, no., pp. ISSN 0304-3894. Dostupné na: <https://doi.org/10.1016/j.jhazmat.2020.123628>., Registrované v: WOS
64. [1.1] WEBER, Ch - KAUFHOLD, S. *Hamaker functions for kaolinite and montmorillonite*. In *COLLOID AND INTERFACE SCIENCE COMMUNICATIONS*, 2021, vol. 43, no., pp. ISSN 2215-0382. Dostupné na: <https://doi.org/10.1016/j.colcom.2021.100442>., Registrované v: WOS
65. [1.1] WU, Songlin - LIU, Yunjia - SOUTHAM, Gordon - ROBERTSON, Lachlan M. - WYKES, Jeremy - YI, Qing - HALL, Merinda - LI, Zhen - SUN, Qiang - SAHA, Narottam - CHAN, Ting-Shan - LU, Ying-Rui - HUANG, Longbin. *Rhizosphere Drives Biotite-Like Mineral Weathering and Secondary Fe-Si Mineral Formation in Fe Ore Tailings*. In *ACS EARTH AND SPACE CHEMISTRY*, 2021, vol. 5, no. 3, pp. 618-631. ISSN 2472-3452. Dostupné na: <https://doi.org/10.1021/acsearthspacechem.0c00331>., Registrované v: WOS
66. [1.1] WU, Songlin - YOU, Fang - BOUGHTON, Berin - LIU, Yunjia - NGUYEN, Tuan A. H. - WYKES, Jeremy - SOUTHAM, Gordon - ROBERTSON, Lachlan M. - CHAN, Ting-Shan - LU, Ying-Rui - LUTZ, Adrian - YU, Dingyi - YI, Qing - SAHA, Narottam - HUANG, Longbin. *Chemodiversity of Dissolved Organic Matter and Its Molecular Changes Driven by Rhizosphere Activities in Fe Ore Tailings Undergoing Eco-Engineered Pedogenesis*. In *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 2021, vol. 55, no. 19, pp. 13045-13060. ISSN 0013-936X. Dostupné na: <https://doi.org/10.1021/acs.est.1c04527>., Registrované v: WOS
67. [1.1] YIN, Yanshan - YIN, Huixia - YUAN, Zihan - WU, Zihua - ZHANG, Wei - TIAN, Hong - FENG, Leihua - CHENG, Shan - QING, Mengxia - SONG, Quanbin. *Study on the Pyrolysis Characteristics, Kinetics and Mineral Transformation of Paper Sludge*. In *BIOENERGY RESEARCH*, 2021, vol. 14, no. 4, pp. 1289-1299. ISSN 1939-1234. Dostupné na: <https://doi.org/10.1007/s12155-021-10248-6>., Registrované v: WOS
68. [1.1] YU, Wei Hua - LIU, Jia Hui - WANG, Min - LI, Na - ZHANG, Jun Rui - HUANG, Tian Hao - ZHOU, Chun Hui. *DISPERSION AND SWELLABILITY OF TERNARY SURFACTANT CO-MODIFIED MONTMORILLONITES. IN CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 6, pp. 759-771. ISSN 0009-8604. Dostupné na: <https://doi.org/10.1007/s42860-021-00149-2>., Registrované v: WOS
69. [1.1] YU, Wenchao - POLGARI, Marta - GYOLLAI, Ildiko - FINTOR, Krisztian - HUANG, Heng - SZABO, Mate - DU, Yuansheng. *Microbial metallogenesis of early carboniferous manganese deposit in central Guangxi, South China*. In *ORE GEOLOGY REVIEWS*, 2021, vol. 136, no., pp. ISSN 0169-1368. Dostupné na: <https://doi.org/10.1016/j.oregeorev.2021.104251>., Registrované v: WOS
70. [1.1] ZHANG, Yakun - HARTEMINK, Alfred E. - HUANG, Jingyi. *Spectral signatures of soil horizons and soil orders An exploratory study of 270 soil profiles*. In *GEODERMA*, 2021, vol. 389, no., pp. ISSN 0016-7061. Dostupné na: <https://doi.org/10.1016/j.geoderma.2021.114961>., Registrované v: WOS
71. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. *Origin of diocahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China)*. In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>., Registrované v: WOS
72. [1.1] ZHAO, Peng - ZHAO, Yuwei - CUI, Limin - TIAN, Yimei - ZHANG, Zhe - ZHU, Qiqi - ZHAO, Weigao. *Multiple antibiotics distribution in drinking water and their co-adsorption behaviors by different size fractions of natural particles*. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 775, no., pp. ISSN 0048-9697. Dostupné na: <https://doi.org/10.1016/j.scitotenv.2021.145846>., Registrované v: WOS

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MADEJOVÁ, Jana. FTIR techniques in clay mineral studies. In *Vibrational Spectroscopy*, 2003, vol. 31, no. 1, p. 1-10. Dostupné na: [https://doi.org/10.1016/S0924-2031\(02\)00065-6](https://doi.org/10.1016/S0924-2031(02)00065-6)

Citácie:

1. [1.1] AFGAN, Sher - BING, Chen. *Experimental investigation for the development of superior structural integrated thermocrete via incorporation of novel non-encapsulated paraffin aggregate*. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 271, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2020.121883>., Registrované v: WOS
2. [1.1] AL-ABSI, Rana S. - ABU-DIEYEH, Mohammed - AL-GHOUTI, Mohammad A. *Brine*

- management strategies, technologies, and recovery using adsorption processes. In ENVIRONMENTAL TECHNOLOGY & INNOVATION, 2021, vol. 22, no., pp. ISSN 2352-1864. Available on: <https://doi.org/10.1016/j.eti.2021.101541>., Registrované v: WOS*
3. [1.1] AL-HUSSAINI, Ayman S. Eco-Friendly Synthesis and Antimicrobial Performance of New Heteropolymer Composites. In JOURNAL OF POLYMERS AND THE ENVIRONMENT, 2021, vol. 29, no. 6, pp. 1717-1726. ISSN 1566-2543. Available on: <https://doi.org/10.1007/s10924-020-02011-3>., Registrované v: WOS
4. [1.1] AMADORI, Maria Letizia - MENGACCI, Valeria - VAGNINI, Manuela - CASOLI, Antonella - HOLAKOOEI, Parviz - EFTEKHARI, Negar - LIN, Kyi - MAEKAWA, Yoshifumi - GERMINARIO, Giulia. Organic Matter and Pigments in the Wall Paintings of Me-Taw-Ya Temple in Bagan Valley, Myanmar. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 23, pp. Available on: <https://doi.org/10.3390/app112311441>., Registrované v: WOS
5. [1.1] AROBI, Nourin - AMIR-AL ZUMAHI, S. M. - IBRAHIM, Khalil - RAHMAN, M. Mahbubur - HOSSAIN, Md Kamal - BHUIYAN, Md Mahbubur Rahman - KABIR, Humayun - AMRI, Amun - ABUL HOSSAIN, Md - AHMED, Farid. A holistic framework towards understanding the optical and dielectric behaviors of CH₃NH₃PbCl₃ perovskites/graphene oxide hybrid films for light absorbing active layer. In JOURNAL OF SOLID STATE CHEMISTRY, 2021, vol. 298, no., pp. ISSN 0022-4596. Available on: <https://doi.org/10.1016/j.jssc.2021.122137>., Registrované v: WOS
6. [1.1] ASSILA, Ouissal - MIYAH, Youssef - NAHALI, Loubna - EL BADRAOUI, Aziz - NENOV, Valentin - EL KHAZZAN, Bouchta - ZERROUQ, Farid - KHERBECHE, Abdelhak. Copper-impregnated on natural material as promising catalysts for the wet hydrogen peroxide catalytic oxidation of Methyl Green. In MOROCCAN JOURNAL OF CHEMISTRY, 2021, vol. 9, no. 1, pp. 75-84. ISSN 2351-812X., Registrované v: WOS
7. [1.1] AVILA, Maria C. - LICK, Ileana D. - COMELLI, Nora A. - RUIZ, Maria L. Adsorption of an anionic dye from aqueous solution on a treated clay. In GROUNDWATER FOR SUSTAINABLE DEVELOPMENT, 2021, vol. 15, no., pp. ISSN 2352-801X. Available on: <https://doi.org/10.1016/j.gsd.2021.100688>., Registrované v: WOS
8. [1.1] AVRAMOVSKA, Marija - CHMELIK, Christian - DERKOWSKI, Arkadiusz - FANTALKIN, Alexander - FREUDE, Dieter - HAASE, Juergen - HARE, Vincent - KAERGER, Joerg - KULIGIEWICZ, Artur - MOINSTER, Murray. Searching for the fundamentals of rehydroxylation dating of archaeological ceramics via NMR and IR microscopy. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2021, vol. 104, no. 10, pp. 5328-5340. ISSN 0002-7820. Available on: <https://doi.org/10.1111/jace.17753>., Registrované v: WOS
9. [1.1] AYGUN, Zeynep - YARBASI, Necmi - AYGUN, Murat. Spectroscopic and radiation shielding features of Nemrut, Pasinler, Sarikamis and Ikizdere obsidians in Turkey: Experimental and theoretical study. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 24, pp. 34207-34217. ISSN 0272-8842. Available on: <https://doi.org/10.1016/j.ceramint.2021.08.330>., Registrované v: WOS
10. [1.1] AZIZ, Bakhtyar K. The impact of acidic spring water on Gwrgay natural clay and its adsorption efficiency: a kinetic, equilibrium and thermodynamic comparison. In REACTION KINETICS MECHANISMS AND CATALYSIS, 2021, vol. 133, no. 1, pp. 467-481. ISSN 1878-5190. Available on: <https://doi.org/10.1007/s11144-021-01998-7>., Registrované v: WOS
11. [1.1] BARBOSA GUIMARAES, Clecia Cristina - DEMATTE, Jose A. M. - DE AZEVEDO, Antonio Carlos - DINIZ DALMOLIN, Ricardo Simao - TEN CATEN, Alexandre - SAYAO, Veridiana Maria - DA SILVA, Rafael Cipriano - POPPIEL, Raul Roberto - MENDES, Wanderson de Sousa - URBINA SALAZAR, Diego Fernando - BARROS E SOUZA, Arnaldo. Soil weathering behavior assessed by combined spectral ranges: Insights into aggregate analysis. In GEODERMA, 2021, vol. 402, no., pp. ISSN 0016-7061. Available on: <https://doi.org/10.1016/j.geoderma.2021.115154>., Registrované v: WOS
12. [1.1] BARNI, Dario - RAIMONDO, Luisa - GALLI, Anna - YIVLIALIN, Rossella - CAGLIO, Simone - MARTINI, Marco - SASSELLA, Adele. Chemical separation of acrylic color components enabling the identification of the pigment spectroscopic response. In EUROPEAN PHYSICAL JOURNAL PLUS, 2021, vol. 136, no. 2, pp. ISSN 2190-5444. Available on: <https://doi.org/10.1140/epjp/s13360-021-01223-3>., Registrované v: WOS
13. [1.1] BAVANI, S. Najafi - KHEZRABAD, M. S. Akhoundi. The electron mobility in Hg1-xCdxTe (x=0.22 and 0.3): A comparison between experimental and theoretical results. In MATERIALS RESEARCH BULLETIN, 2021, vol. 140, no., pp. ISSN 0025-5408. Available on: <https://doi.org/10.1016/j.materresbull.2021.111325>., Registrované v: WOS
14. [1.1] BAYOUSSEF, A. - LOUTOU, M. - TAHA, Y. - MANSORI, M. - BENZAAZOUA, M. - MANOUN, B. - HAKKOU, R. Use of clays by-products from phosphate mines for the manufacture of sustainable lightweight aggregates. In JOURNAL OF CLEANER PRODUCTION, 2021, vol. 280, no., pp. ISSN 0959-6526. Available on: <https://doi.org/10.1016/j.jclepro.2020.124361>., Registrované v: WOS

15. [1.1] BENKACEM, Samra - BOUDEGHDEGH, Kamel - ZEHANI, Fouzia - HAMIDOUCHE, Mohamed - BELHOCINE, Youghourta. Preparation, Microstructure Studies and Mechanical Properties of Glazes Ceramic Sanitary Ware Based on Kaolin. In *SCIENCE OF SINTERING*, 2021, vol. 53, no. 2, pp. 209-221. ISSN 0350-820X. Available on: <https://doi.org/10.2298/SOS2102209B>., Registrované v: WOS
16. [1.1] BEZERRA LIMA, Edla Maria - MIDDEA, Antonieta - MARCONCINI, Jose Manoel - CORREA, Ana Carolina - FERNANDES PEREIRA, Jessica - VIEIRA GUIMARAES, Alessandra - FIRMINO DE LIMA, Josimar - RAMOS DOS ANJOS, Marianna - MIRANDA DE CASTRO, Izabela - NUNES OLIVEIRA, Renata - RAMOS MOREIRA, Carla - DE PAIVA, Mauricio Magalhaes - RANGEL, Francisco Luiz Correa - NEUMANN, Reiner. Biodegradable PLA based nanocomposites for packaging applications: The effects of organo-modified bentonite concentration. In *JOURNAL OF APPLIED POLYMER SCIENCE*, 2021, vol. 138, no. 36, pp. ISSN 0021-8995. Available on: <https://doi.org/10.1002/app.50907>., Registrované v: WOS
17. [1.1] BRIELLE, Esther S. - ARKIN, Isaiah T. Isotope-Edited Amide II Mode: A New Label for Site-Specific Vibrational Spectroscopy. In *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*, 2021, vol. 12, no. 28, pp. 6634-6638. ISSN 1948-7185. Available on: <https://doi.org/10.1021/acs.jpcllett.1c01073>., Registrované v: WOS
18. [1.1] BURBANO-GARCIA, Claudia - HURTADO, Ana - FERNANDO SILVA, Yimmy - DELVASTO, Silvio - ARAYA-LETELIER, Gerardo. Utilization of waste engine oil for expanded clay aggregate production and assessment of its influence on lightweight concrete properties. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 273, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2020.121677>., Registrované v: WOS
19. [1.1] CAMPOS, P. - ALBUQUERQUE, A. R. L. - ANGELICA, R. S. - PAZ, S. P. A. FTIR spectral signatures of amazon inorganic phosphates: Igneous, weathering, and biogenetic origin. In *SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY*, 2021, vol. 251, no., pp. ISSN 1386-1425. Available on: <https://doi.org/10.1016/j.saa.2021.119476>., Registrované v: WOS
20. [1.1] CANDRA, I. Nyoman - GERZABEK, Martin H. - OTTNER, Franz - WRIESSNIG, Karin - TINTNER, Johannes - SCHMIDT, Greta - RECHBERGER, Maria V. - RAMPAZZO, Nicola - ZEHETNER, Franz. Soil development and mineral transformations along a one-million-year chronosequence on the Galapagos Islands. In *SOIL SCIENCE SOCIETY OF AMERICA JOURNAL*, 2021, vol. 85, no. 6, pp. 2077-2099. ISSN 0361-5995. Available on: <https://doi.org/10.1002/saj2.20317>., Registrované v: WOS
21. [1.1] CAO, Xiang - SUN, Yingjuan - SUN, Yongrong - XIE, Dong - LI, Hongyan - LIU, Mingxian. Conductive halloysite clay nanotubes for high performance sodium ion battery cathode. In *APPLIED CLAY SCIENCE*, 2021, vol. 213, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106265>., Registrované v: WOS
22. [1.1] CAO, Yubin - WANG, Yanru - ZHANG, Zuhua - MA, Yuwei - WANG, Hao. Turning sandstone clay into supplementary cementitious material: activation and pozzolanic reactivity evaluation. In *COMPOSITES PART B-ENGINEERING*, 2021, vol. 223, no., pp. ISSN 1359-8368. Available on: <https://doi.org/10.1016/j.compositesb.2021.109137>., Registrované v: WOS
23. [1.1] CASIELLO, Michele - LOSITO, Onofrio - ALOIA, Andrea - CAPUTO, Daniela - FUSCO, Caterina - ATTROTTO, Rosella - MONOPOLI, Antonio - NACCI, Angelo - D'ACCOLTI, Lucia. Steel Slag as New Catalyst for the Synthesis of Fumes from Soybean Oil. In *CATALYSTS*, 2021, vol. 11, no. 5, pp. Available on: <https://doi.org/10.3390/catal11050619>., Registrované v: WOS
24. [1.1] CELIK, Yakup - KARAYIGIT, Ali Ihsan - OSKAY, Riza Gorkem - KAYSERI-OZER, Mine Sezgul - CHRISTANIS, Kimon - HOWER, James C. - QUEROL, Xavier. A multidisciplinary study and palaeoenvironmental interpretation of middle Miocene Keles lignite (Harmancik Basin, NW Turkey), with emphasis on syngenetic zeolite formation. In *INTERNATIONAL JOURNAL OF COAL GEOLOGY*, 2021, vol. 237, no., pp. ISSN 0166-5162. Available on: <https://doi.org/10.1016/j.coal.2021.103691>., Registrované v: WOS
25. [1.1] CHAPARRO, Marcos A. E. - GNANASARAVANAN, Shanmugasundaram - RAJKUMAR, Pachamuthu. Trace and major minerals of (natural and manufactured) sand: the importance of manufactured sand for construction purposes and the preservation of rivers. In *INNOVATIVE INFRASTRUCTURE SOLUTIONS*, 2021, vol. 6, no. 2, pp. ISSN 2364-4176. Available on: <https://doi.org/10.1007/s41062-020-00422-8>., Registrované v: WOS
26. [1.1] CHEN, Linhong - GUO, Zizheng - LAO, Biyin - LI, Chunlei - ZHU, Jianhua - YU, Rongmin - LIU, Mingxian. Phytotoxicity of halloysite nanotubes using wheat as a model: seed germination and growth. In *ENVIRONMENTAL SCIENCE-NANO*, 2021, vol. 8, no. 10, pp. 3015-3027. ISSN 2051-8153. Available on: <https://doi.org/10.1039/d1en00507c>., Registrované v: WOS
27. [1.1] COSTA, Leonardo Martins - ALMEIDA, Natanael Geraldo Silva - HOUMARD, Manuel - CETLIN, Paulo Roberto - SILVA, Guilherme Jorge Brigolini - AGUILAR, Maria Teresa Paulino.

- Influence of the addition of amorphous and crystalline silica on the structural properties of metakaolin-based geopolymers. In APPLIED CLAY SCIENCE, 2021, vol. 215, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106312>., Registrované v: WOS*
28. [1.1] CRISTIANI, Cinzia - FINOCCHIO, Elisabetta - ROSSI, Luciana - GIROMINI, Carlotta - DELL'ANNO, Matteo - PANSERI, Sara - BELLOTTO, Maurizio. Natural Clays as Potential Amino Acids Carriers for Animal Nutrition Application. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 12, pp. Available on: <https://doi.org/10.3390/app11125669>., Registrované v: WOS
29. [1.1] CVEJN, Daniel - MARTAUSOVA, Iveta - MARTAUS, Alexandr - PRECH, Jan - VESELY, Ondrej - CEJKA, Jiri - LACNY, Zdenek - NEDOMA, Jan - MARTINEK, Radek. Vermiculites catalyze unusual benzaldehyde and dioxane reactivity. In CATALYSIS TODAY, 2021, vol. 366, no., pp. 218-226. ISSN 0920-5861. Available on: <https://doi.org/10.1016/j.cattod.2020.08.032>., Registrované v: WOS
30. [1.1] DA SILVA, Jefferson C. S. - FRANCA, D. B. - RODRIGUES, Francisco - OLIVEIRA, Dyego M. - TRIGUEIRO, Pollyana - SILVA FILHO, E. C. - FONSECA, M. G. What happens when chitosan meets bentonite under microwave-assisted conditions? Clay-based hybrid nanocomposites for dye adsorption. In COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, 2021, vol. 609, no., pp. ISSN 0927-7757. Available on: <https://doi.org/10.1016/j.colsurfa.2020.125584>., Registrované v: WOS
31. [1.1] DE OLIVEIRA MORAIS, Pedro Augusto - DE SOUZA, Diego Mendes - MADARI, Beata Emoke - DE OLIVEIRA, Anselmo Elcana. Predicting silicon, aluminum, and iron oxides contents in soil using computer vision and infrared. In MICROCHEMICAL JOURNAL, 2021, vol. 170, no., pp. ISSN 0026-265X. Available on: <https://doi.org/10.1016/j.microc.2021.106669>., Registrované v: WOS
32. [1.1] DILL, Lais P. - KOCHPEKA, Debora M. - LIMA, Larissa L. - LEITAO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian Mineral Clays: Classification, Acid Activation and Application as Catalysts for Methyl Esterification Reactions. In JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY, 2021, vol. 32, no. 1, pp. 145-157. ISSN 0103-5053. Available on: <https://doi.org/10.21577/0103-5053.20200164>., Registrované v: WOS
33. [1.1] DOLATI, Samira - KALANI, Mohsen. STRUCTURAL CHARACTERIZATION OF A BENTONITE DEPOSIT FROM THE EASTERN IRAN; COMPARISON WITH TWO REFERENCE BENTONITES. In CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES, 2021, vol. 16, no. 1, pp. 151-162. ISSN 1842-4090. Available on: <https://doi.org/10.26471/cjees/2021/016/163>., Registrované v: WOS
34. [1.1] DUDEK, Michal - KABALA, Cezary - LABAZ, Beata - MITULA, Pawel - BEDNIK, Magdalena - MEDYNSKA-JURASZEK, Agnieszka. Mid-Infrared Spectroscopy Supports Identification of the Origin of Organic Matter in Soils. In LAND, 2021, vol. 10, no. 2, pp. Available on: <https://doi.org/10.3390/land10020215>., Registrované v: WOS
35. [1.1] ELASHERY, Sally E. A. - ATTIA, Nour F. - MOHAMED, Gehad G. - OMAR, M. M. - TAYEA, Hager M. Hybrid Nanocomposite Based Graphene Sensor for Ultrasensitive Clomipramine HCl Detection. In ELECTROANALYSIS, 2021, vol. 33, no. 11, pp. 2361-2371. ISSN 1040-0397. Available on: <https://doi.org/10.1002/elan.202100165>., Registrované v: WOS
36. [1.1] ELERT, Kerstin - RUIZ-AGUDO, Encarnacion - JROUNDI, Fadwa - TERESA GONZALEZ-MUNOZ, Maria - FASH, Barbara W. - FASH, William L. - VALENTIN, Nieves - DE TAGLE, Alberto - RODRIGUEZ-NAVARRO, Carlos. Degradation of ancient Maya carved tuff stone at Copan and its bacterial bioconservation. In NPJ MATERIALS DEGRADATION, 2021, vol. 5, no. 1, pp. Available on: <https://doi.org/10.1038/s41529-021-00191-4>., Registrované v: WOS
37. [1.1] ELMORSI, Randa R. - MOSTAFA, Gamal Abdel-Hafiz - ABOU-EL-SHERBINI, Khaled S. Homoionic soda-activated bentonite for batchmode removal of Pb(II) from polluted brackish water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. ISSN 2213-2929. Available on: <https://doi.org/10.1016/j.jece.2020.104606>., Registrované v: WOS
38. [1.1] FREEMAN, Ashley Amanda - DE FERRI, Lavinia - MAZUREK, Joy - ANDRIULO, Fabrizio - BERTOLIN, Chiara. A Multi-Analytical Approach for the Characterization of Seventeenth Century Decorative Wall Paintings in Two Norwegian Stave Churches: A Case Study at Eidsborg and Heddal, Norway. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 8, pp. Available on: <https://doi.org/10.3390/app11083477>., Registrované v: WOS
39. [1.1] FURKA, Samuel - FURKA, Daniel - DADI, Nitin Chandra Teja Chandra Teja - PALACKA, Patrik - HROMNIKOVA, Dominika - DUENAS SANTANA, Julio Ariel - PINEDA, Javier Diaz - CASAS, Saul Duenas - BUJDAK, Juraj. Novel antimicrobial materials designed for the 3D printing of medical devices used during the COVID-19 crisis. In RAPID PROTOTYPING JOURNAL, 2021, vol. 27, no. 5, pp. 890-904. ISSN 1355-2546. Available on: <https://doi.org/10.1108/RPJ-09-2020-0219>., Registrované v: WOS
40. [1.1] GAMAL, Hany - ELKATATNY, Salaheldin - ADEBAYO, Abdulrauf. Influence of mud filtrate on the pore system of different sandstone rocks. In JOURNAL OF PETROLEUM SCIENCE

- AND ENGINEERING, 2021, vol. 202, no., pp. ISSN 0920-4105. Available on: <https://doi.org/10.1016/j.petrol.2021.108595>., Registrované v: WOS
41. [1.1] GAO, Xiaodan - XU, Yingde - LI, Zhongyi - LI, Song - TIAN, Rui - LI, Hang - LAL, Rattan - LIU, Lingzhi - SAEED, Muhammad Farhan - WANG, Jingkuan. Heteroaggregation of humic acid with montmorillonite in divalent electrolytes: effects of humic acid content and ionic concentration. In JOURNAL OF SOILS AND SEDIMENTS, 2021, vol. 21, no. 3, pp. 1317-1328. ISSN 1439-0108. Available on: <https://doi.org/10.1007/s11368-020-02858-y>., Registrované v: WOS
42. [1.1] GARIKOE, Issaka - SORGHO, Brahma - GUEL, Boubie - PERSSON, Ingmar. SOLID-STATE SYNTHESIS AND PHYSICO-CHEMICAL CHARACTERIZATION OF MODIFIED SMECTITES USING NATURAL CLAYS FROM BURKINA FASO. In BULLETIN OF THE CHEMICAL SOCIETY OF ETHIOPIA, 2021, vol. 35, no. 1, pp. 43-59. ISSN 1011-3924. Available on: <https://doi.org/10.4314/bcse.v35i1.4>., Registrované v: WOS
43. [1.1] GOLUBEVA, Olga Yu - ALIKINA, Yulia A. - KHAMOVA, Tamara - VLADIMIROVA, Elizaveta V. - SHAMOVA, Olga. Aluminosilicate Nanosponges: Synthesis, Properties, and Application Prospects. In INORGANIC CHEMISTRY, 2021, vol. 60, no. 22, pp. 17008-17018. ISSN 0020-1669. Available on: <https://doi.org/10.1021/acs.inorgchem.1c02122>., Registrované v: WOS
44. [1.1] GONZALEZ, J. - SARGENT, P. - ENNIS, C. Sewage treatment sludge biochar activated blast furnace slag as a low carbon binder for soft soil stabilisation. In JOURNAL OF CLEANER PRODUCTION, 2021, vol. 311, no., pp. ISSN 0959-6526. Available on: <https://doi.org/10.1016/j.jclepro.2021.127553>., Registrované v: WOS
45. [1.1] GOWTHAMY, P. - INDRARATNE, S. P. - WEERASOORIYA, R. - MAPA, R. B. Characterisation of clay mineralogy of the major soils in the Northern region of Sri Lanka. In JOURNAL OF THE NATIONAL SCIENCE FOUNDATION OF SRI LANKA, 2021, vol. 49, no. 3, pp. 351-360. ISSN 1391-4588. Available on: <https://doi.org/10.4038/jnsfsr.v49i3.10231>., Registrované v: WOS
46. [1.1] GOYDARAGH, Maryam Ghebleh - TAGHIZADEH-MEHRJARDI, Ruhollah - GOLCHIN, Ahmad - JAFARZADEH, Ali Asghar - LADO, Marcos. Predicting weathering indices in soils using FTIR spectra and random forest models. In CATENA, 2021, vol. 204, no., pp. ISSN 0341-8162. Available on: <https://doi.org/10.1016/j.catena.2021.105437>., Registrované v: WOS
47. [1.1] GRANADA, Jonas E. - MARON, Guilherme K. - BEATRICE, Cesar A. G. - LAROCCA, Nelson M. - MOREIRA, Eduardo C. - ALANO, Jose H. - PESSAN, Luiz A. - SANTANA, Ruth M. C. - CARRENO, Neftali L. - DE OLIVEIRA, Amanda D. Effect of carbon nanotubes functionalization on properties of their nanocomposites with polycarbonate/poly(acrylonitrile-butadiene-styrene) matrix. In JOURNAL OF APPLIED POLYMER SCIENCE, 2021, vol. 138, no. 21, pp. ISSN 0021-8995. Available on: <https://doi.org/10.1002/app.50471>., Registrované v: WOS
48. [1.1] GUO, Wei - YANG, Qinchuan - ZHANG, Xu - XU, Shaotao - DENG, Sunhua - LI, Qiang. Thermal Behavior of Oil Shale Pyrolysis under Low-Temperature Co-Current Oxidizing Conditions. In ACS OMEGA, 2021, vol. 6, no. 28, pp. 18074-18083. ISSN 2470-1343. Available on: <https://doi.org/10.1021/acsomega.1c01875>., Registrované v: WOS
49. [1.1] HAN, Weiyi - LI, Ye - YIN, Hang. The Influence of Mechanical Composition and Mineral Composition of Calcareous Soil on Slope Farmland on Phosphorus Fixation. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 9, pp. Available on: <https://doi.org/10.3390/app11093731>., Registrované v: WOS
50. [1.1] HASSAAN, Mohamed A. - EL NEMR, Ahmed. Classification and identification of different minerals in the Mediterranean sediments using PSA, FTIR, and XRD techniques. In MARINE POLLUTION BULLETIN, 2021, vol. 173, no., pp. ISSN 0025-326X. Available on: <https://doi.org/10.1016/j.marpolbul.2021.113070>., Registrované v: WOS
51. [1.1] HUSSIN, Farihausnah - AROUA, Mohamed Kheireddine - YUSOFF, Rozita. Adsorption of CO₂ on palm shell based activated carbon modified by deep eutectic solvent: Breakthrough adsorption study. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 4, pp. ISSN 2213-2929. Available on: <https://doi.org/10.1016/j.jece.2021.105333>., Registrované v: WOS
52. [1.1] JAIME-ACUNA, Oscar E. - SAN-JUAN FARFAN, Roberto E. - VILLAVICENCIO, Humberto - HERRERA, Manuel - RAYMOND HERRERA, Oscar. Photoluminescence up-conversion and cathodoluminescence in quaternary Cd_xZn_{1-x}O gamma S delta nanoparticles embedded on zeolite. In JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, 2021, vol. 153, no., pp. ISSN 0022-3697. Available on: <https://doi.org/10.1016/j.jpcs.2021.110004>., Registrované v: WOS
53. [1.1] JANKOVIC, Lubos - SKORNA, Peter - RODRIGUEZ, Daniel Moreno - SCHOLTZOVA, Eva - TUNEGA, Daniel. Preparation, characterization and adsorption properties of tetraalkylphosphonium organobedellites. In APPLIED CLAY SCIENCE, 2021, vol. 204, no., pp.

- ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105989>., Registrované v: WOS
54. [1.1] JEDLI, Hedi - BRAHMI, Jihed - CHROUDA, Amani - JBARA, Abdessalem - ALMALKI, Sami Garallah - OSMAN, Gamal - SLIMI, Khalifa. CO₂ adsorption performance of amine clay adsorbent. In *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*, 2021, vol. 127, no. 1, pp. ISSN 0947-8396. Available on: <https://doi.org/10.1007/s00339-020-04142-9>., Registrované v: WOS
55. [1.1] JO, Jaeguk - PARK, Chanhong - KIM, Changhwan - SHIN, Dongbok. Clay mineral characteristics in volcanic tuffs of Dokdo, South Korea: implication on their genesis and evolution. In *ENVIRONMENTAL EARTH SCIENCES*, 2021, vol. 80, no. 7, pp. ISSN 1866-6280. Available on: <https://doi.org/10.1007/s12665-021-09583-w>., Registrované v: WOS
56. [1.1] JUNG, Daeseung - BHATTACHARYYA, Debes. Combined effect of silicate coating and phosphate loading on the performance improvement of a keratinous fiber-based flame retardant. In *CHEMICAL ENGINEERING JOURNAL*, 2021, vol. 424, no., pp. ISSN 1385-8947. Available on: <https://doi.org/10.1016/j.cej.2021.130484>., Registrované v: WOS
57. [1.1] KARAEEYVAZ, M. Candan - BALCI, Suna. One pot synthesis of aluminum pillared intercalated layered clay supported silicotungstic acid (STA/Al-PILC) catalysts. In *MICROPOROUS AND MESOPOROUS MATERIALS*, 2021, vol. 323, no., pp. ISSN 1387-1811. Available on: <https://doi.org/10.1016/j.micromeso.2021.111193>., Registrované v: WOS
58. [1.1] KLOPROGGE, J. Theo - PONCE, Concepcion P. Spectroscopic Studies of Synthetic and Natural Saponites: A Review. In *MINERALS*, 2021, vol. 11, no. 2, pp. Available on: <https://doi.org/10.3390/min11020112>., Registrované v: WOS
59. [1.1] LARSSON, Ragnar - MALEK, Abdul. The Transformation by Catalysis of Prebiotic Chemical Systems to Useful Biochemicals: A Perspective Based on IR Spectroscopy of the Primary Chemicals: Solid-Phase and Water-Soluble Catalysts. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 21, pp. Available on: <https://doi.org/10.3390/app112110125>., Registrované v: WOS
60. [1.1] LAUKAMP, Carsten - RODGER, Andrew - LEGRAS, Monica - LAMPINEN, Heta - LAU, Ian C. - PEJCIC, Bobby - STROMBERG, Jessica - FRANCIS, Neil - RAMANAIDOU, Erick. Mineral Physicochemistry Underlying Feature-Based Extraction of Mineral Abundance and Composition from Shortwave, Mid and Thermal Infrared Reflectance Spectra. In *MINERALS*, 2021, vol. 11, no. 4, pp. Available on: <https://doi.org/10.3390/min11040347>., Registrované v: WOS
61. [1.1] LEANDRO, Gabriel Coelho - CAPELLO, Cristiane - KOOP, Betina Luiza - GARCEZ, Jussara - MONTEIRO, Alcilene Rodrigues - VALENCIA, German Ayala. Adsorption-desorption of anthocyanins from jambolan (*Syzygium cumini*) fruit in laponite (R) platelets: Kinetic models, physicochemical characterization, and functional properties of biohybrids. In *FOOD RESEARCH INTERNATIONAL*, 2021, vol. 140, no., pp. ISSN 0963-9969. Available on: <https://doi.org/10.1016/j.foodres.2020.109903>., Registrované v: WOS
62. [1.1] LI, Shu E. - MU, B. - DING, Jun J. - ZHANG, H. - WANG, Xiao W. - WANG, Ai Q. FABRICATION OF ANTHOCYANIN/MONTMORILLONITE HYBRID PIGMENTS TO ENHANCE THEIR ENVIRONMENTAL STABILITY AND APPLICATION IN ALLOCHROIC COMPOSITE FILMS. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 1, pp. 142-151. ISSN 0009-8604. Available on: <https://doi.org/10.1007/s42860-021-00114-z>., Registrované v: WOS
63. [1.1] LI, Yao - SUN, Hongjuan - PENG, Tongjiang - YOU, Hao - ZENG, Li - QIN, Yating. PREPARATION AND VISIBLE PHOTOCATALYTIC PROPERTIES OF N-DOPED TiO₂/MUSCOVITE NANOCOMPOSITES. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 2, pp. 254-262. ISSN 0009-8604. Available on: <https://doi.org/10.1007/s42860-021-00126-9>., Registrované v: WOS
64. [1.1] LICHINGA, Kevin Nsolloh - NTAWANGA, Athanas Christopher. Experimental study on the effect of oil based filtercake on bonding strength at wellbore second interface. In *NATURAL GAS INDUSTRY B*, 2021, vol. 8, no. 6, pp. 680-688. ISSN 2352-8540. Available on: <https://doi.org/10.1016/j.ngib.2021.11.012>., Registrované v: WOS
65. [1.1] LIU, Jie - QIU, Jingping - WU, Pinqi - SUN, Xiaogang - ZHANG, Shiyu - GUO, Zhenbang. Calcined oil shale residue as a supplementary cementitious material for ordinary Portland cement. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 306, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.124849>., Registrované v: WOS
66. [1.1] LUHAR, Ismail - LUHAR, Salmabanu - ABDULLAH, Mohd Mustafa Al Bakri - NABIALEK, Marcin - SANDU, Andrei Victor - SZMIDLA, Janusz - JURCZYNSKA, Anna - RAZAK, Rafiza Abdul - AZIZ, Ikmal Hakem A. - JAMIL, Noorina Hidayu - DERAMAN, Laila Mardiah. Assessment of the Suitability of Ceramic Waste in Geopolymer Composites: An Appraisal. In *MATERIALS*, 2021, vol. 14, no. 12, pp. Available on: <https://doi.org/10.3390/ma14123279>., Registrované v: WOS
67. [1.1] LUO, Weige - ZENG, Zheng - BIAN, Liang. Effect of Lattice Substitution on Adsorption

- of Hexavalent Chromium by Montmorillonite, Nontronite, and Beidellite. In *MINERALS*, 2021, vol. 11, no. 12, pp. Available on: <https://doi.org/10.3390/min11121407>., Registrované v: WOS
68. [1.1] MAIER, Matthias - BEUNTNER, Nancy - THIENEL, Karl-Christian. Mineralogical characterization and reactivity test of common clays suitable as supplementary cementitious material. In *APPLIED CLAY SCIENCE*, 2021, vol. 202, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105990>., Registrované v: WOS
69. [1.1] MALIMA, N. M. - OWONUBI, S. J. - LUGWISHA, E. H. - MWAKABOKO, A. S. Thermodynamic, isothermal and kinetic studies of heavy metals adsorption by chemically modified Tanzanian Malangali kaolin clay. In *INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, 2021, vol. 18, no. 10, pp. 3153-3168. ISSN 1735-1472. Available on: <https://doi.org/10.1007/s13762-020-03078-0>., Registrované v: WOS
70. [1.1] MALIMA, Nyemaga Masanje - OWONUBI, Shesan John - LUGWISHA, Esther Hellen - MWAKABOKO, Alinanuswe Simon. Development of cost-effective and eco-friendly adsorbent by direct physical activation of Tanzanian Malangali kaolinite for efficient removal of heavy metals. In *MATERIALS TODAY-PROCEEDINGS*, 2021, vol. 38, no., pp. 1126-1132. ISSN 2214-7853. Available on: <https://doi.org/10.1016/j.matpr.2020.06.469>., Registrované v: WOS
71. [1.1] MARCOS, Celia - DEL RIO, Zulema - ADAWY, Alaa. Heterogeneous Distribution of Interlayer Cations and Iron as a Plausible Explanation of the Non-Exfoliation of Commercial Vermiculites Post Alcohol Treatment and Microwave Irradiation. In *MINERALS*, 2021, vol. 11, no. 8, pp. Available on: <https://doi.org/10.3390/min11080835>., Registrované v: WOS
72. [1.1] MARTIN, S. A. - PEREZ, I - RIVERA, A. Hosting of the antibiotic Vancomycin by bentonite: Characterization and slow release study. In *APPLIED CLAY SCIENCE*, 2021, vol. 202, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2020.105965>., Registrované v: WOS
73. [1.1] MORITA, Motoaki - YAMAGUCHI, Ayumu - KOYAMA, Sota - MOTODA, Shinichi. Method for imitating magnesium silicate scale formed at the geothermal power plant in Obama Hot Spring, Japan. In *GEOTHERMICS*, 2021, vol. 96, no., pp. ISSN 0375-6505. Available on: <https://doi.org/10.1016/j.geothermics.2021.102203>., Registrované v: WOS
74. [1.1] MORLOCK, Marina A. - VOGEL, Hendrik - RUSSELL, James M. - ANSELMETTI, Flavio S. - BIJAKSANA, Satria. Quaternary environmental changes in tropical Lake Towuti, Indonesia, inferred from end-member modelling of X-ray fluorescence core-scanning data. In *JOURNAL OF QUATERNARY SCIENCE*, 2021, vol. 36, no. 6, pp. 1040-1051. ISSN 0267-8179. Available on: <https://doi.org/10.1002/jqs.3338>., Registrované v: WOS
75. [1.1] MORTADA, Bassem - MEDHAT, Mostafa - SABRY, Yasser M. - SADEK, Mohamed - SHEBL, Ahmed - HASSAN, Khaled - EL-MASRY, Moez - NADA, Yasseen - ANWAR, Momen - GAD, Mina - AL HARON, Mohamed H. - SAADANY, Bassam - KHALIL, Diaa - BOUROUINA, Tarik. Ultra-Compact Fourier Transform Near-Infrared MEMS Spectral Sensor for Smart Industry and IoT. In *IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS*, 2021, vol. 27, no. 6, pp. ISSN 1077-260X. Available on: <https://doi.org/10.1109/JSTQE.2021.3091375>., Registrované v: WOS
76. [1.1] NODA, Natsumi - YAMASHITA, Shohei - TAKAHASHI, Yoshio - MATSUMOTO, Megumi - ENOKIDO, Yuma - AMANO, Kana - KAWAI, Takahiro - SAKUMA, Hiroshi - FUKUSHI, Keisuke - SEKINE, Yasuhito - NAKAMURA, Tomoki. Anaerobic Microscopic Analysis of Ferrous Saponite and Its Sensitivity to Oxidation by Earth's Air: Lessons Learned for Analysis of Returned Samples from Mars and Carbonaceous Asteroids. In *MINERALS*, 2021, vol. 11, no. 11, pp. Available on: <https://doi.org/10.3390/min11111244>., Registrované v: WOS
77. [1.1] NUNES, Mario B. S. - FARIAS, Ana Flavia F. - MEDEIROS, Eliton S. - OLIVEIRA, Juliano E. - SANTOS, Ieda M. G. - CARVALHO, Laura H. - SANTOS, Amelia S. F. The effect of clay organophilization on wood plastic composite (WPC) based on recycled high density polyethylene (HDPE) and coir fiber. In *PROGRESS IN RUBBER PLASTICS AND RECYCLING TECHNOLOGY*, 2021, vol. 37, no. 4, pp. 394-411. ISSN 1477-7606. Available on: <https://doi.org/10.1177/14777606211019404>., Registrované v: WOS
78. [1.1] NZEUGANG, A. Nzeukou - TSOZUE, D. - PAGNA, B. Kagonbe - MADI, A. Balo - DEUMENI, A. Fankam - NGOS, S. - NKOUMBOU, C. - FAGEL, N. Clayey soils from Boulgou (North Cameroon): geotechnical, mineralogical, chemical characteristics and properties of their fired products. In *SN APPLIED SCIENCES*, 2021, vol. 3, no. 5, pp. ISSN 2523-3963. Available on: <https://doi.org/10.1007/s42452-021-04541-4>., Registrované v: WOS
79. [1.1] PEREIRA, Rodrigo C. - TEIXEIRA, Bruna S. - DA COSTA, Antonio C. S. - ZAIA, Dimas A. M. Interaction between adenine and Cu²⁺ and Fe³⁺-montmorillonites: a prebiotic chemistry experiment. In *INTERNATIONAL JOURNAL OF ASTROBIOLOGY*, 2021, vol. 20, no. 3, pp. 223-233. ISSN 1473-5504. Available on: <https://doi.org/10.1017/S1473550421000070>., Registrované v: WOS
80. [1.1] PETLITCKAIA, Svetlana - GHARZOUNI, Ameni - HYVERNAUD, Eloise - TEXIER-

- MANDOKI, Nathalie - BOURBON, Xavier - ROSSIGNOL, Sylvie. Influence of the nature and amount of carbonate additions on the thermal behaviour of geopolymers: A model for prediction of shrinkage. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 296, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.123752>., Registrované v: WOS
81. [1.1] PETROVIC, Anda - LEMORINI, Cristina - NUNZIANTE-CESARO, Stella - MIHAJLOVIC, Dusan. Use-wear and residue analysis of knapped stone artefacts from Lepenski Vir and Padina (Serbia). In *JOURNAL OF LITHIC STUDIES*, 2021, vol. 8, no. 2, pp. 1-29. ISSN 2055-0472. Available on: <https://doi.org/10.2218/jls.6695>., Registrované v: WOS
82. [1.1] POLZIN DE MELO, Ana Paula - SOTILES, Anne Raquel - VETTER FERRI, Elidia Aparecida - SIKORA, Mariana de Souza - BUDZIAK PARABOCZ, Cristiane Regina. Synthesis and characterization of kaolinite and TiO₂ nanocomposites using the polymer precursor method. In *MATERIA-RIO DE JANEIRO*, 2021, vol. 26, no. 2, pp. ISSN 1517-7076. Available on: <https://doi.org/10.1590/S1517-707620210002.1260>., Registrované v: WOS
83. [1.1] POONI, J. - ROBERT, D. - GUNASEKARA, C. - GIUSTOZZI, F. - SETUNGE, S. Mechanism of Enzyme Stabilization for Expansive Soils Using Mechanical and Microstructural Investigation. In *INTERNATIONAL JOURNAL OF GEOMECHANICS*, 2021, vol. 21, no. 10, pp. ISSN 1532-3641. Available on: [https://doi.org/10.1061/\(ASCE\)GM.1943-5622.0002164](https://doi.org/10.1061/(ASCE)GM.1943-5622.0002164)., Registrované v: WOS
84. [1.1] QUERO-JIMENEZ, Pedro C. - ARIAS FELIPE, Lester A. - PRIETO GARCIA, Julio O. - JORGE RODRIGUEZ, Maria E. - DE LA TORRE, Jorge - MONTENEGRO, Osvaldo N. - MOLINA-RUIZ, Reinaldo - TISCORNIA, Ines S. Local Cuban bentonite clay: composition, structure and textural characterization. In *ANDEAN GEOLOGY*, 2021, vol. 48, no. 3, pp. 546-556. ISSN 0718-7106. Available on: <https://doi.org/10.5027/andgeoV48n3-3362>., Registrované v: WOS
85. [1.1] RAKHIMOVA, Nailia R. - RAKHIMOV, Ravil Z. - MOROZOV, Vladimir P. - ESKIN, Aleksey A. Calcined Low-grade Clays as Sources for Zeolite Containing Material. In *PERIODICA POLYTECHNICA-CIVIL ENGINEERING*, 2021, vol. 65, no. 1, pp. 204-214. ISSN 0553-6626. Available on: <https://doi.org/10.3311/PPci.14084>., Registrované v: WOS
86. [1.1] RANA, Azeem - SALEH, Tawfik A. - ARFAJ, Mohammed K. Nanosilica modified with moringa extracts to get an efficient and cost-effective shale inhibitor in water-based drilling muds. In *CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION*, 2021, vol. 168, no., pp. ISSN 0255-2701. Available on: <https://doi.org/10.1016/j.ccep.2021.108589>., Registrované v: WOS
87. [1.1] RODRIGUES, Andreia - ANGELICA, Romulo - PAZ, Simone. CATIONIC DIFFERENTIATION OF BENTONITES BY INFRARED: A STUDY OF THE HYDRATION EFFECTS OF EXCHANGEABLE CATIONS. In *QUIMICA NOVA*, 2021, vol. 44, no. 3, pp. 272-277. ISSN 0100-4042. Available on: <https://doi.org/10.21577/0100-4042.20170705>., Registrované v: WOS
88. [1.1] SAKA, Cafer - EYGI, Mustafa Salih - BALBAY, Asimm. Cobalt loaded organic acid modified kaolin clay for the enhanced catalytic activity of hydrogen release via hydrolysis of sodium borohydride. In *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 2021, vol. 46, no. 5, pp. 3876-3886. ISSN 0360-3199. Available on: <https://doi.org/10.1016/j.ijhydene.2020.10.201>., Registrované v: WOS
89. [1.1] SAKR, Ahmed K. - CHEIRA, Mohamed F. - HASSANIN, Mohamed A. - MIRA, Hamed I. - MOHAMED, Saad A. - KHANDAKER, Mayeen Uddin - OSMAN, Hamid - EED, Emad M. - SAYYED, M. I. - HANFI, Mohamed Y. Adsorption of Yttrium Ions on 3-Amino-5-Hydroxypyrazole Impregnated Bleaching Clay, a Novel Sorbent Material. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 21, pp. Available on: <https://doi.org/10.3390/app112110320>., Registrované v: WOS
90. [1.1] SASAKI, Naoya - ARASUNA, Akane - OKUNO, Masayuki. SiO₄ network structure changes and crystallization of diatom shells in diatomaceous earth by heat treatment. In *JOURNAL OF MINERALOGICAL AND PETROLOGICAL SCIENCES*, 2021, vol. 116, no. 4, pp. 193-202. ISSN 1345-6296. Available on: <https://doi.org/10.2465/jmps.201007>., Registrované v: WOS
91. [1.1] SCHOLTZOVA, Eva. Insight into the Structure of TMA-Hectorite: A Theoretical Approach. In *MINERALS*, 2021, vol. 11, no. 5, pp. Available on: <https://doi.org/10.3390/min11050505>., Registrované v: WOS
92. [1.1] SHAKRANI, Shahrul Azwan - AYOB, Afizah - AB RAHIM, Mohd Asri - ALLAS, Salina. UTILIZATION OF THERMALLY ACTIVATED WATER-WASHED KAOLIN PARTICLES TOWARDS MINERAL RESOURCES CONSERVATION. In *INTERNATIONAL JOURNAL OF CONSERVATION SCIENCE*, 2021, vol. 12, no. 3, pp. 1077-1090. ISSN 2067-533X., Registrované v: WOS
93. [1.1] SHAMAKI, Mubarak - ADU-AMANKWAH, Samuel - BLACK, Leon. Reuse of UK alum

- water treatment sludge in cement-based materials. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 275, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2020.122047>., Registrované v: WOS
94. [1.1] SHAN, Xifeng - LIU, Ling - LI, Gang - XU, Kexin - LIU, Bingyan - JIANG, Wei. PM2.5 and the typical components cause organelle damage, apoptosis and necrosis: Role of reactive oxygen species. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 782, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.146785>., Registrované v: WOS
95. [1.1] SHEN, Xianlei - LI, Zongjie - DENG, Nanping - FAN, Jie - WANG, Liang - XIA, Zhaopeng - LIU, Yong - LIU, Jian. Rational designing of tree-like polymer gel membrane based on PVDF/ lamellar organic montmorillonite nanofiber with excellent flame retardancy and superior ion conductivity for high-performance lithium-ion capacitor. In *CHEMICAL ENGINEERING JOURNAL*, 2021, vol. 422, no., pp. ISSN 1385-8947. Available on: <https://doi.org/10.1016/j.cej.2021.130116>., Registrované v: WOS
96. [1.1] SORKHABI, M. Golghasemi - AGHDASINIA, H. - OSKUI, F. Notghi - KARIMI, A. - GOLIZADEH, M. Simultaneous adsorption of chromium and acidic dye from leather tannery model wastewater using a novel modified nanoclay. In *ENVIRONMENTAL EARTH SCIENCES*, 2021, vol. 80, no. 24, pp. ISSN 1866-6280. Available on: <https://doi.org/10.1007/s12665-021-10120-y>., Registrované v: WOS
97. [1.1] TAKENO, H. - AOKI, Y. - KIMURA, K. Effects of addition of silica nanospheres on mechanical properties of clay/sodium polyacrylate hydrogels. In *MATERIALS TODAY COMMUNICATIONS*, 2021, vol. 28, no., pp. Available on: <https://doi.org/10.1016/j.mtcomm.2021.102710>., Registrované v: WOS
98. [1.1] TAKENO, H. - AOKI, Y. - KIMURA, K. Effects of silica and clay nanoparticles on the mechanical properties of poly (vinyl alcohol) nanocomposite hydrogels. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 2021, vol. 630, no., pp. ISSN 0927-7757. Available on: <https://doi.org/10.1016/j.colsurfa.2021.127592>., Registrované v: WOS
99. [1.1] TENEQJA, Valdet - KORPA, Arjan - DRUSHKU, Spiro - XHAXHIU, Kledi - SKENDULI, Enkeleida. PROPERTIES COMPARISON OF TWO ACID-ACTIVATED BENTONITES OF KOSOVO TO BE USED AS BLEACHING AGENTS. In *INTERNATIONAL JOURNAL OF ECOSYSTEMS AND ECOLOGY SCIENCE-IJEES*, 2021, vol. 11, no. 2, pp. 321-326. ISSN 2224-4980. Available on: <https://doi.org/10.31407/ijeess11.217>., Registrované v: WOS
100. [1.1] TRUJILLANO, Raquel - GONZALEZ, Beatriz - RIVES, Vicente. Phase Change Materials (PCMs) Based in Paraffin/Synthetic Saponite Used as Heat Storage Composites. In *ENERGIES*, 2021, vol. 14, no. 21, pp. Available on: <https://doi.org/10.3390/en14217414>., Registrované v: WOS
101. [1.1] ULHAQ, Ihtisham - AHMAD, Waqas - AHMAD, Imtiaz - YASEEN, Muhammad - ILYAS, Muhammad. Engineering TiO2 supported CTAB modified bentonite for treatment of refinery wastewater through simultaneous photocatalytic oxidation and adsorption. In *JOURNAL OF WATER PROCESS ENGINEERING*, 2021, vol. 43, no., pp. ISSN 2214-7144. Available on: <https://doi.org/10.1016/j.jwpe.2021.102239>., Registrované v: WOS
102. [1.1] ULLAH, Sami - RAHMAN, Altaf Ur - ULLAH, Fida - RASHID, Abdur - ARSHAD, Tausif - VIGLASOVA, Eva - GALAMBOS, Michal - MAHMOODI, Niyaz Mohammad - ULLAH, Haseeb. Adsorption of Malachite Green Dye onto Mesoporous Natural Inorganic Clays: Their Equilibrium Isotherm and Kinetics Studies. In *WATER*, 2021, vol. 13, no. 7, pp. Available on: <https://doi.org/10.3390/w13070965>., Registrované v: WOS
103. [1.1] UZ-ZAMAN, Kh Ashraf - BISWAS, Bhabananda - RAHMAN, Mohammad Mahmudur - NAIDU, Ravi. Smectite-supported chain of iron nanoparticle beads for efficient clean-up of arsenate contaminated water. In *JOURNAL OF HAZARDOUS MATERIALS*, 2021, vol. 407, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2020.124396>., Registrované v: WOS
104. [1.1] VAHUR, Signe - KIUDORV, Lisett - SOMELAR, Peeter - CAYME, Jan-Michael - RETRATO, Mark Dennis Chico - REMIGIO, Rady Jazmin - SHARMA, Varun - ORAS, Ester - LEITO, Ivo. Quantitative mineralogical analysis of clay-containing materials using ATR-FT-IR spectroscopy with PLS method. In *ANALYTICAL AND BIOANALYTICAL CHEMISTRY*, 2021, vol. 413, no. 26, pp. 6535-6550. ISSN 1618-2642. Available on: <https://doi.org/10.1007/s00216-021-03617-9>., Registrované v: WOS
105. [1.1] VALERA-ZARAGOZA, Mario - AGUERO-VALDEZ, Diana - LOPEZ-MEDINA, Margarita - DEHESA-BLAS, Shunashi - KARIN NAVARRO-MTZ, A. - AVALOS-BORJA, Miguel - JUAREZ-ARELLANO, Erick A. Controlled modification of sodium montmorillonite clay by a planetary ball-mill as a versatile tool to tune its properties. In *ADVANCED POWDER TECHNOLOGY*, 2021, vol. 32, no. 2, pp. 591-599. ISSN 0921-8831. Available on: <https://doi.org/10.1016/j.appt.2021.01.004>., Registrované v: WOS

106. [1.1] VENDITTI, Flavia - AGAM, Aviad - TIRILLO, Jacopo - NUNZIANTE-CESARO, Stella - BARKAI, Ran. An integrated study discloses chopping tools use from Late Acheulean Revadim (Israel). In *PLOS ONE*, 2021, vol. 16, no. 1, pp. ISSN 1932-6203. Available on: <https://doi.org/10.1371/journal.pone.0245595>., Registrované v: WOS
107. [1.1] WAN, Dan - MA, Mingkai - PENG, Na - LUO, Xuesong - CHEN, Wenli - CAI, Peng - WU, Lihui - PAN, Haibin - CHEN, Jiubin - YU, Guanghui - HUANG, Qiaoyun. Effects of long-term fertilization on calcium-associated soil organic carbon: Implications for C sequestration in agricultural soils. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 772, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.145037>., Registrované v: WOS
108. [1.1] WANG, Duo - QIAO, Chenyu - ZHAO, Ziqian - YANG, Wenshuai - CHEN, Hongyun - YIN, Taiheng - YAN, Zhiling - WU, Meng - MAO, Xiaohui - SANTANDER, Camila - LIU, Qi - LIU, Qingxia - NIKRITYUK, Petr A. - TANG, Tian - ZENG, Hongbo. Understanding the Properties of Bitumen Froth from Oil Sands Surface Mining and Treatment of Water-in-Oil Emulsions. In *ENERGY & FUELS*, 2021, vol. 35, no. 24, pp. 20079-20091. ISSN 0887-0624. Available on: <https://doi.org/10.1021/acs.energyfuels.1c03370>., Registrované v: WOS
109. [1.1] WOJCIK-BANIA, Monika - MATUSIK, Jakub. The Effect of Surfactant-Modified Montmorillonite on the Cross-Linking Efficiency of Polysiloxanes. In *MATERIALS*, 2021, vol. 14, no. 10, pp. Available on: <https://doi.org/10.3390/ma14102623>., Registrované v: WOS
110. [1.1] WOJCIK-BANIA, Monika. Influence of the addition of organo-montmorillonite nanofiller on cross-linking of polysiloxanes FTIR studies. In *SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY*, 2021, vol. 252, no., pp. ISSN 1386-1425. Available on: <https://doi.org/10.1016/j.saa.2021.119491>., Registrované v: WOS
111. [1.1] XU, Baile - HUANG, Dan - LIU, Fei - ALFARO, David - LU, Zhijiang - TANG, Caixian - GAN, Jay - XU, Jianming. Contrasting effects of microplastics on sorption of diazepam and phenanthrene in soil. In *JOURNAL OF HAZARDOUS MATERIALS*, 2021, vol. 406, no., pp. ISSN 0304-3894. Available on: <https://doi.org/10.1016/j.jhazmat.2020.124312>., Registrované v: WOS
112. [1.1] YANG, Xiaohan - CAI, Jiabing - CHEN, Linhong - CAO, Xiang - LIU, Hongzhong - LIU, Mingxian. Green detergent made of halloysite nanotubes. In *CHEMICAL ENGINEERING JOURNAL*, 2021, vol. 425, no., pp. ISSN 1385-8947. Available on: <https://doi.org/10.1016/j.cej.2021.130623>., Registrované v: WOS
113. [1.1] YU, Wei Hua - LIU, Jia Hui - WANG, Min - LI, Na - ZHANG, Jun Rui - HUANG, Tian Hao - ZHOU, Chun Hui. DISPERSION AND SWELLABILITY OF TERNARY SURFACTANT CO-MODIFIED MONTMORILLONITES. In *CLAYS AND CLAY MINERALS*, 2021, vol. 69, no. 6, pp. 759-771. ISSN 0009-8604. Available on: <https://doi.org/10.1007/s42860-021-00149-2>., Registrované v: WOS
114. [1.1] ZENOUI, Leila Kashi - KABOLI, Seyed Hasan - KHAVAZI, Kazem - SOHRABI, Mohammad - KHOSROSHAHI, Mohammad - KARSTEN, Ulf. Selecting phototrophic species of native biocrusts in arid and semi-arid regions. In *ENVIRONMENTAL HEALTH ENGINEERING AND MANAGEMENT JOURNAL*, 2021, vol. 8, no. 3, pp. 153-167. ISSN 2423-3765. Available on: <https://doi.org/10.34172/EHEM.2021.19>., Registrované v: WOS
115. [1.1] ZHANG, Hang - ZHANG, Yugui - LEI, Dongji - JIAO, Yinqiu. Characterization of structure of kaolinite in tectonically deformed coal: evidence of mechanochemistry. In *ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS*, 2021, vol., no., pp. ISSN 1556-7036. Available on: <https://doi.org/10.1080/15567036.2021.1910751>., Registrované v: WOS
116. [1.1] ZHANG, Nan - HEDAYAT, Ahmadreza - BOLANOS SOSA, Hector Gelber - HUAMANI BERNAL, Roberto Pedro - TUPA, Nestor - YANQUI MORALES, Isaac - CANAHUA LOZA, Reynaldo Sabino. On the incorporation of class F fly-ash to enhance the geopolymerization effects and splitting tensile strength of the gold mine tailings-based geopolymer. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 308, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.125112>., Registrované v: WOS
117. [1.1] ZHAO, Bingxin - LIU, Limei - CHENG, Hongfei. Rational design of kaolinite-based photocatalytic materials for environment decontamination. In *APPLIED CLAY SCIENCE*, 2021, vol. 208, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106098>., Registrované v: WOS
118. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106026>., Registrované v: WOS
119. [1.1] ZHAO, Song - LIU, Ze - ZHANG, Ru - LIU, Jinsong - LIU, Jinbo - DAI, Yunchao - ZHANG, Chi - JIA, Hanzhong. Interfacial reaction between organic acids and iron-containing clay minerals: Hydroxyl radical generation and phenolic compounds degradation. In *SCIENCE*

OF THE TOTAL ENVIRONMENT, 2021, vol. 783, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.147025>., Registrované v: WOS
120. [1.1] ZHENG, Fanbang - WANG, Chengdong - HUANG, Kaiyue - LI, Jinhong. Surface Adsorption in PEG/Hydroxyapatite and PEG/Dickite Composite Phase Change Materials. In *ENERGY & FUELS*, 2021, vol. 35, no. 13, pp. 10850-10859. ISSN 0887-0624. Available on: <https://doi.org/10.1021/acs.energyfuels.1c00885>., Registrované v: WOS
121. [1.1] ZHU, Hongqing - ZHANG, Yilong - HU, Lintao - LIAO, Qi - FANG, Shuhao - GAO, Rongxiang. Dynamic Simulation Based on a Simplified Model of 1/3 Coking Coal Molecule and Its Formation Characteristics of Hydration Films. In *ACS OMEGA*, 2021, vol. 6, no. 49, pp. 33339-33353. ISSN 2470-1343. Available on: <https://doi.org/10.1021/acsomega.1c03345>., Registrované v: WOS

- ADCA317 MACHÁČEK, Jan - GEDEON, Ondrej - LIŠKA, Marek. The MD study of mixed alkali effect in alkali silicate glasses. In *Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B*, 2010, vol. 51, no. 1, p. 65-68. (2009: 0.553 - IF, Q2 - JCR, 0.473 - SJR, Q2 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1753-3562.

Citácie:

1. [1.1] HANNON, Alex C. - VAISHNAV, Shuchi - ALDERMAN, Oliver L. G. - BINGHAM, Paul A. The structure of sodium silicate glass from neutron diffraction and modeling of oxygen-oxygen correlations. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*, 2021, vol. 104, no. 12, pp. 6155-6171. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.17993>., Registrované v: WOS

- ADCA318 MACHÁČEK, Jan - GEDEON, Ondrej - LIŠKA, Marek. Group connectivity in binary silicate glasses. In *Journal of Non-Crystalline Solids*, 2006, vol. 352, no. 21-22, p. 2173-2179. (2005: 1.264 - IF, Q1 - JCR, 1.003 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents, SCOPUS). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrsol.2006.01.036>

Citácie:

1. [1.1] BOUCHIKHI, Abdelhadi - MAHERZI, Walid - BENZERZOUR, Mahfoud - MAMINDY-PAJANY, Yannick - PEYS, Arne - ABRIAK, Nor-Edine. Manufacturing of Low-Carbon Binders Using Waste Glass and Dredged Sediments: Formulation and Performance Assessment at Laboratory Scale. In *SUSTAINABILITY*, 2021, vol. 13, no. 9, pp. Dostupné na: <https://doi.org/10.3390/su13094960>., Registrované v: WOS

2. [1.1] DATHE, M. - LEBEK, W. - KOSLOWSKI, E. - BRON, M. - BRAEUNIGER, T. - STOESSEL, I - ROGGENDORF, H. Dissolution of sodium silicate glasses for the production of water glass part IV: characterisation of reaction layer and glass surface. In *GLASS TECHNOLOGY-EUROPEAN JOURNAL OF GLASS SCIENCE AND TECHNOLOGY PART A*, 2021, vol. 62, no. 1, pp. 9-23. ISSN 1753-3546. Dostupné na: <https://doi.org/10.13036/17533546.62.1.007>., Registrované v: WOS

- ADCA319 MALKIN, Elena - REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - MACH, Pavel - MALKINA, Oľga - MALKIN, Vladimír. Effects of finite size nuclei in relativistic four-component calculations of hyperfine structure. In *Journal of Chemical Physics*, 2011, vol. 134, no. 4, art. no. 044111. (2010: 2.921 - IF, Q1 - JCR, 1.777 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3526263>

Citácie:

1. [1.1] GARBACZ, Piotr - VAARA, Juha. Direct enantiomeric discrimination through antisymmetric hyperfine coupling. In *CHEMICAL COMMUNICATIONS*, 2021, vol. 57, no. 67, pp. 8264-8267. ISSN 1359-7345. Available on: <https://doi.org/10.1039/d1cc02579a>., Registrované v: WOS

2. [1.1] GILLHUBER, Sebastian - FRANZKE, Yannick J. - WEIGEND, Florian. Paramagnetic NMR Shielding Tensors and Ring Currents: Efficient Implementation and Application to Heavy Element Compounds. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 44, pp. 9707-9723. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c07793>., Registrované v: WOS

3. [1.1] MARTIN, Inocencio - MARTIN, Leo - DAS, Anwasha - GROOTVELD, Martin - RADU, Valentin - MATHERC, Melissa L. - WILSON, Philippe B. Electron Spin Resonance for the Detection of Paramagnetic Species: From Fundamentals to Computational Methods for Simulation and Interpretation. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 335-361., Registrované v: WOS

- ADCA320 MALKIN, Elena - MALKIN, Irina - MALKINA, Oľga - MALKIN, Vladimír - KAUPP, Martin. Scalar relativistic calculations of hyperfine coupling tensors using the Douglas-Kroll-Hess method with a finite-size nucleus model. In *Physical Chemistry Chemical Physics*, 2006, vol. 8, no. 35, p. 4079-4085. (2005: 2.519 - IF, Q1 - JCR, 1.423 - SJR, Q1 - SJR). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/b607044b>

Citácie:

1. [1.1] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. *Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 1, pp. 255-268. ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c01005>., Registrované v: WOS
- ADCA321 MALKIN, Irina - MALKINA, Oľga - MALKIN, Vladimír. Relativistic calculations of electric field gradients using the Douglas-Kroll method. In *Chemical Physics Letters*, 2002, vol. 361, no. 3-4, p. 231-236. Dostupné na: [https://doi.org/10.1016/S0009-2614\(02\)00956-9](https://doi.org/10.1016/S0009-2614(02)00956-9)
Citácie:
1. [1.1] AUCAR, Juan J. - MALDONADO, Alejandro F. - MELO, Juan. *Relativistic corrections of the electric field gradient in dihalogen molecules XY (X, Y = F, Cl, Br, I, At) within the linear response elimination of the small component formalism*. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*, 2021, vol. 121, no. 20, pp. ISSN 0020-7608. Dostupné na: <https://doi.org/10.1002/qua.26769>., Registrované v: WOS
2. [1.1] IKABATA, Yasuhiro - NAKAI, Hiromi. *Picture-change correction in relativistic density functional theory*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 29, pp. 15458-15474. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp01773j>., Registrované v: WOS
- ADCA322 MALKIN, Irina - MALKINA, Oľga - MALKIN, Vladimír - KAUPP, Martin. Scalar relativistic calculations of hyperfine coupling tensors using the Douglas-Kroll-Hess method. In *Chemical Physics Letters*, 2004, vol. 396, no. 4-6, p. 268-276. Dostupné na: <https://doi.org/10.1016/j.cplett.2004.08.037>
Citácie:
1. [1.1] IKABATA, Yasuhiro - NAKAI, Hiromi. *Picture-change correction in relativistic density functional theory*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 29, pp. 15458-15474. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp01773j>., Registrované v: WOS
2. [1.2] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. *Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian*. In *Journal of Chemical Theory and Computation*, 2021-01-12, 17, 1, pp. 255-268. ISSN 15499618. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c01005>., Registrované v: SCOPUS
3. [1.2] GÓMEZ-PIÑEIRO, Rogelio J. - PANTAZIS, Dimitrios A. - ORIO, Maylis. *Comparison of Density Functional and Correlated Wave Function Methods for the Prediction of Cu(II) Hyperfine Coupling Constants*. In *ChemPhysChem*, 2020-12-14, 21, 24, pp. 2667-2679. ISSN 14394235. Dostupné na: <https://doi.org/10.1002/cphc.202000649>., Registrované v: SCOPUS
- ADCA323 MALKIN, Vladimír - MALKINA, Oľga - SALAHUB, Dennis R. Spin-orbit correction to NMR shielding constants from density functional theory. In *Chemical Physics Letters*, 1996, vol. 261, no. 3, p. 335-345. Dostupné na: [https://doi.org/10.1016/0009-2614\(96\)00988-8](https://doi.org/10.1016/0009-2614(96)00988-8)
Citácie:
1. [1.1] BAJAC, Daniel F. E. - AUCAR, I. Agustin - AUCAR, Gustavo A. *Absolute NMR shielding scales in methyl halides obtained from experimental and calculated nuclear spin-rotation constants*. In *PHYSICAL REVIEW A*, 2021, vol. 104, no. 1, pp. ISSN 2469-9926. Dostupné na: <https://doi.org/10.1103/PhysRevA.104.012805>., Registrované v: WOS
- ADCA324 MALKINA, Oľga - KOMOROVSKÝ, Stanislav - VISSCHER, Lucas - MALKIN, Vladimír. Note: Counterintuitive gauge-dependence of nuclear magnetic resonance shieldings for rare-gas dimers: Does a natural gauge-origin for spherical atoms exist? In *Journal of Chemical Physics*, 2011, vol. 134, no. 8, art. no. 086101. (2010: 2.921 - IF, Q1 - JCR, 1.777 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.3553559>
Citácie:
1. [1.1] SCHATTENBERG, Caspar Jonas - KAUPP, Martin. *Effect of the Current Dependence of Tau-Dependent Exchange-Correlation Functionals on Nuclear Shielding Calculations*. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 3, pp. 1469-1479. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c01223>., Registrované v: WOS
- ADCA325 MALKINA, Oľga - MALKIN, Vladimír. Visualization of nuclear spin-spin coupling pathways by real-space functions. In *Angewandte Chemie*, 2003, vol. 42, no. 36, p. 4335-4338. ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.200351713>
Citácie:
1. [1.1] AYYAPPAN, Ramaraj - COPPEL, Yannick - VENDIER, Laure - GHOSH, Sundargopal - SABO-ETIENNE, Sylviane - BONTEMPS, Sebastien. *Synthesis and reactivity of phosphine borohydride compounds*. In *CHEMICAL COMMUNICATIONS*, 2021, vol. 57, no. 3, pp. 375-378. ISSN 1359-7345. Dostupné na: <https://doi.org/10.1039/d0cc07072f>., Registrované v: WOS
2. [1.1] NGUYEN, Tuan-Anh - PENOUILH, Marie-Jose - CATTEY, Helene - PIRIO, Nadine - FLEURAT-LESSARD, Paul - HIERO, Jean-Cyrille - ROGER, Julien. *Unsymmetrically*

- Substituted Bis(phosphino)Ferrocenes Triggering Through-Space (31)(P, P ')-Nuclear Spin Couplings and Encapsulating Coinage Metal Cations. In ORGANOMETALLICS, 2021, vol. 40, no. 21, pp. 3571-3584. ISSN 0276-7333. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00465>, Registrované v: WOS*
- ADCA326 MALKINA, Olga - SCHIMMELPFENNIG, Bernd - KAUPP, Martin - HESS, B.A. - CHANDRA, P. - WAHLGREN, U. - MALKIN, Vladimír. Spin-orbit corrections to NMR shielding constants from density functional theory. How important are the two-electron terms? In Chemical Physics Letters, 1998, vol. 296, no. 1-2, p. 93-104. (1997: 2.440 - IF, karentované - CCC). (1998 - Current Contents).
Citácie:
1. [1.1] COSTA, Fabio L. P. - DE ALBUQUERQUE, Ana C. F. - FIOROT, Rodolfo G. - LIAO, Luciano M. - MARTORANO, Lucas H. - MOTA, Gunar V. S. - VALVERDE, Alessandra L. - CARNEIRO, Jose W. M. - JUNIOR, Fernando M. dos Santos. Structural characterisation of natural products by means of quantum chemical calculations of NMR parameters: new insights. In ORGANIC CHEMISTRY FRONTIERS, 2021, vol. 8, no. 9, pp. 2019-2058. ISSN 2052-4129. Dostupné na: <https://doi.org/10.1039/d1qo00034a>, Registrované v: WOS
2. [1.1] SENAPATI, Sibadatta - DAS, Shyamsundar - DIXIT, Ruchi - VANKA, Kumar - RAMANA, Chepuri. Synthesis of four diastereomers of notoryne and their C-13 NMR chemical shifts analysis. In JOURNAL OF CHEMICAL SCIENCES, 2021, vol. 133, no. 3, pp. ISSN 0974-3626. Dostupné na: <https://doi.org/10.1007/s12039-021-01929-y>, Registrované v: WOS
3. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. Inverse halogen dependence in anion C-13 NMR. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 4, pp. 3019-3030. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d0cp05891b>, Registrované v: WOS
4. [1.2] DUTTA, Indranil - RACHURI, Yadagiri - GONÇALVES, Théo P. - HUANG, Mei Hui - HUANG, Kuo Wei. Pyrroles and Their Benzo Derivatives: Structure. In Comprehensive Heterocyclic Chemistry IV, 2021-01-01, pp. 1-67. Dostupné na: <https://doi.org/10.1016/B978-0-12-818655-8.00003-2>, Registrované v: SCOPUS
- ADCA327 MAN, Yi - WANG, Bo - WANG, Jianxu** - SLANÝ, Michal - YAN, Haiyu** - LI, Ping - EL-NAGGAR, Ali - SHAHEEN, Sabry M. - RINKLEBE, Jörg - FENG, Xinbin. Use of biochar to reduce mercury accumulation in Oryza sativa L: A trial for sustainable management of historically polluted farmlands. In Environment International, 2021, vol. 153, p. 106527-1-106527-11. (2020: 9.621 - IF, Q1 - JCR, 2.582 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0160-4120. Dostupné na: <https://doi.org/10.1016/j.envint.2021.106527>
Citácie:
1. [1.1] ABD EL-MAGEED, Taia A. - BELAL, Eman E. - RADY, Mohamed O. A. - ABD EL-MAGEED, Shima A. - MANSOUR, Elsayed - AWAD, Mohamed F. - SEMIDA, Wael M. Acidified Biochar as a Soil Amendment to Drought Stressed (Vicia faba L.) Plants: Influences on Growth and Productivity, Nutrient Status, and Water Use Efficiency. In AGRONOMY-BASEL, 2021, vol. 11, no. 7, art. no. 1290. Dostupné na: <https://doi.org/10.3390/agronomy11071290>, Registrované v: WOS
2. [1.1] ALLAMIN, Ibrahim Alkali - YASID, Nur Adeela - ABDULLAH, Siti Rozaimah Sheikh - HALMI, Mohd Izuan Effendi - SHUKOR, Mohd Yunus. Phyto-Tolerance Degradation of Hydrocarbons and Accumulation of Heavy Metals by of Cajanus cajan (Pigeon Pea) in Petroleum-Oily-Sludge-Contaminated Soil. In AGRONOMY-BASEL, 2021, vol. 11, no. 6, art. no. 1138. Dostupné na: <https://doi.org/10.3390/agronomy11061138>, Registrované v: WOS
3. [1.1] AWAD, Mahrous - EL-DESOKY, M. A. - GHALLAB, A. - KUBES, Jan - ABDEL-MAWLY, S. E. - DANISH, Subhan - RATNASEKERA, Disna - ISLAM, Mohammad Sohiful - SKALICKY, Milan - BRESTIC, Marian - BAAZEEM, Alaa - ALOTAIBI, Saqer S. - JAVED, Talha - SHABBIR, Rubab - FAHAD, Shah - RAHMAN, Muhammad Habib ur - EL SABAGH, Ayman. Ornamental Plant Efficiency for Heavy Metals Phytoextraction from Contaminated Soils Amended with Organic Materials. In MOLECULES, 2021, vol. 26, no. 11, art. no. 3360. Dostupné na: <https://doi.org/10.3390/molecules26113360>, Registrované v: WOS
4. [1.1] BASHIR, Arshid - PANDITH, Altaf Hussain - MALIK, Lateef Ahmad - QUREASHI, Aaliya - GANAIE, Firdous Ahmad - DAR, Ghulam Nabi. Magnetically recyclable L-cysteine capped Fe3O4 nanoadsorbent: A promising pH guided removal of Pb(II), Zn(II) and HCrO4- contaminants. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 105880. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105880>, Registrované v: WOS
5. [1.1] BUATES, Jitrera - IMAI, Tsuyoshi. Application of Biochar Functionalized with Layered Double Hydroxides: Improved Plant Growth Performance after Use as Phosphate Adsorbent. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 14, art. no. 6489. Dostupné na: <https://doi.org/10.3390/app11146489>, Registrované v: WOS
6. [1.1] CALDERON, Rosalie B. - JEONG, Changyoon - KU, Hyun-Hwoi - COGHILL, Lyndon M. - JU, Young Jeong - KIM, Nayong - HAM, Jong Hyun. Changes in the Microbial Community in

- Soybean Plots Treated with Biochar and Poultry Litter. In AGRONOMY-BASEL, 2021, vol. 11, no. 7, art. no. 1428. Dostupné na: <https://doi.org/10.3390/agronomy11071428>., Registrované v: WOS*
7. [1.1] CHEN, Yan - NIE, Zeguang - GAO, Junkai - WANG, Jiaqi - CAI, Miaomiao. A novel adsorbent of bentonite modified chitosan-microcrystalline cellulose aerogel prepared by bidirectional regeneration strategy for Pb(II) removal. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, art. no. 105755. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105755>., Registrované v: WOS
8. [1.1] CHOI, Jeongyun - ROY CHOUDHURY, Aritra - PARK, Song-Yi - OH, Myung-Min - SA, Tongmin. Inoculation of ACC Deaminase-Producing *Brevibacterium linens* RS16 Enhances Tolerance against Combined UV-B Radiation and Heat Stresses in Rice (*Oryza sativa* L.). In SUSTAINABILITY, 2021, vol. 13, no. 18, art. no. 10013. Dostupné na: <https://doi.org/10.3390/su131810013>., Registrované v: WOS
9. [1.1] DARGAHI, Abdollah - HASANI, Kamal - MOKHTARI, S. Ahmad - VOSOUGHI, Mehdi - MORADI, Mina - VAZIRI, Yaser. Highly effective degradation of 2,4-Dichlorophenoxyacetic acid herbicide in a three-dimensional sono-electro-Fenton (3D/SEF) system using powder activated carbon (PAC)/Fe₃O₄ as magnetic particle electrode. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 105889. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105889>., Registrované v: WOS
10. [1.1] GAMIZ, Beatriz - CELIS, Rafael. S-Carvone Formulation Based on Granules of Organoclay to Modulate Its Losses and Phytotoxicity in Soil. In AGRONOMY-BASEL, 2021, vol. 11, no. 8, art. no. 1593. Dostupné na: <https://doi.org/10.3390/agronomy11081593>., Registrované v: WOS
11. [1.1] HASSAAN, Mohamed A. - EL NEMR, Ahmed - ELKATORY, Marwa R. - RAGAB, Safaa - EL-NEMR, Mohamed A. - PANTALEO, Antonio. Synthesis, Characterization, and Synergistic Effects of Modified Biochar in Combination with alpha-Fe₂O₃ NPs on Biogas Production from Red Algae *Pterocladia capillacea*. In SUSTAINABILITY, 2021, vol. 13, no. 16, art. no. 9275. Dostupné na: <https://doi.org/10.3390/su13169275>., Registrované v: WOS
12. [1.1] KANG, Se-Won - YUN, Jin-Ju - PARK, Jae-Hyuk - CHO, Ju-Sik. Exploring Suitable Biochar Application Rates with Compost to Improve Upland Field Environment. In AGRONOMY-BASEL, 2021, vol. 11, no. 6, art. no. 1136. Dostupné na: <https://doi.org/10.3390/agronomy11061136>., Registrované v: WOS
13. [1.1] LIN, Zongkun - YANG, Yuru - LIANG, Zizhan - ZENG, Lei - ZHANG, Aiping. Preparation of Chitosan/Calcium Alginate/Bentonite Composite Hydrogel and Its Heavy Metal Ions Adsorption Properties. In POLYMERS, 2021, vol. 13, no. 11, art. no. 1891. Dostupné na: <https://doi.org/10.3390/polym13111891>., Registrované v: WOS
14. [1.1] MIDYA, Ashim - SAREN, Binoy Kumar - DEY, Joy Kumar - MAITRA, Sagar - PRAHARAJ, Subhashisa - GAIKWAD, Dinkar Jagannath - GABER, Ahmed - ALHOMRANI, Majid - HOSSAIN, Akbar. Crop Establishment Methods and Integrated Nutrient Management Improve: Part II. Nutrient Uptake and Use Efficiency and Soil Health in Rice (*Oryza sativa* L.) Field in the Lower Indo-Gangetic Plain, India. In AGRONOMY-BASEL, 2021, vol. 11, no. 9, art. no. 1894. Dostupné na: <https://doi.org/10.3390/agronomy11091894>., Registrované v: WOS
15. [1.1] MIDYA, Ashim - SAREN, Binoy Kumar - DEY, Joy Kumar - MAITRA, Sagar - PRAHARAJ, Subhashisa - GAIKWAD, Dinkar Jagannath - GABER, Ahmed - ALSANIE, Walaa F. - HOSSAIN, Akbar. Crop Establishment Methods and Integrated Nutrient Management Improve: Part I. Crop Performance, Water Productivity and Profitability of Rice (*Oryza sativa* L.) in the Lower Indo-Gangetic Plain, India. In AGRONOMY-BASEL, 2021, vol. 11, no. 9, art. no. 1860. Dostupné na: <https://doi.org/10.3390/agronomy11091860>., Registrované v: WOS
16. [1.1] MINH KHIEM NGUYEN - SHIH, Tin-Han - LIN, Szu-Hsien - LIN, Jun-Wei - HOANG CHINH NGUYEN - YANG, Zhi-Wei - YANG, Chi-Ming. Transcription Profile Analysis of Chlorophyll Biosynthesis in Leaves of Wild-Type and Chlorophyll b-Deficient Rice (*Oryza sativa* L.). In AGRICULTURE-BASEL, 2021, vol. 11, no. 5, art. no. 401. Dostupné na: <https://doi.org/10.3390/agriculture11050401>., Registrované v: WOS
17. [1.1] MOSHARROF, Mehnaz - UDDIN, Md Kamal - SULAIMAN, Muhammad Firdaus - MIA, Shamim - SHAMSUZZAMAN, Shordar M. - HAQUE, Ahmad Numery Ashfaqu. Combined Application of Biochar and Lime Increases Maize Yield and Accelerates Carbon Loss from an Acidic Soil. In AGRONOMY-BASEL, 2021, vol. 11, no. 7, art. no. 1313. Dostupné na: <https://doi.org/10.3390/agronomy11071313>., Registrované v: WOS
18. [1.1] MUBRAIZ, Nadia - BANO, Asghari - MAHMOOD, Tariq - KHAN, Naeem. Microbial and Plant Assisted Synthesis of Cobalt Oxide Nanoparticles and Their Antimicrobial Activities. In AGRONOMY-BASEL, 2021, vol. 11, no. 8, art. no. 1607. Dostupné na: <https://doi.org/10.3390/agronomy11081607>., Registrované v: WOS
19. [1.1] SANTIAGO CRUZ-MENDEZ, Addi - ORTEGA-RAMIREZ, Esau - ALEXANDER

LUCHO-CONSTANTINO, Carlos - ARCE-CERVANTES, Oscar - ALEJANDRA VAZQUEZ-RODRIGUEZ, Gabriela - CORONEL-OLIVARES, Claudia - ICELA BELTRAN-HERNANDEZ, Rosa. Bamboo Biochar and a Nopal-Based Biofertilizer as Improvers of Alkaline Soils with Low Buffer Capacity. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 14, art. no. 6502. Dostupné na: <https://doi.org/10.3390/app11146502>, Registrované v: WOS

20. [1.1] SHARIFAN, Hamidreza - MA, Xingmao. Foliar Application of Zn Agrichemicals Affects the Bioavailability of Arsenic, Cadmium and Micronutrients to Rice (*Oryza sativa* L.) in Flooded Paddy Soil. In *AGRICULTURE-BASEL*, 2021, vol. 11, no. 6, art. no. 505. Dostupné na: <https://doi.org/10.3390/agriculture11060505>, Registrované v: WOS

21. [1.1] WANG, Chongqing - HUANG, Rong - SUN, Ruirui - YANG, Jiapeng - SILLANPAA, Mika. A review on persulfates activation by functional biochar for organic contaminants removal: Synthesis, characterizations, radical determination, and mechanism. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 106267. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106267>, Registrované v: WOS

22. [1.1] WANG, Dongfang - YI, Chuan - XU, Meng - PARK, Joon-Seok - KIM, Daeik - SHIN, Chul-Ho - RYU, Moon-Hee - ZHAO, Yufeng. Adsorption of As(III) and As(V) by using the Fenton reaction modified kapok fiber. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 105918. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105918>, Registrované v: WOS

23. [1.1] WOLNA-MARUWKA, Agnieszka - PIECHOTA, Tomasz - NIEWIADOMSKA, Alicja - KAMINSKI, Adam - KAYZER, Dariusz - GRZYB, Aleksandra - PILARSKA, Agnieszka A. The Effect of Biochar-Based Organic Amendments on the Structure of Soil Bacterial Community and Yield of Maize (*Zea mays* L.). In *AGRONOMY-BASEL*, 2021, vol. 11, no. 7, art. no. 1286. Dostupné na: <https://doi.org/10.3390/agronomy11071286>, Registrované v: WOS

24. [1.1] ZHOU, Nianbing - SHI, Qiang - WEI, Haiyan - ZHANG, Hongcheng. Effects of Main Meteorological Indicators on Eating Quality of Rice in Lower Reaches of the Huai River. In *AGRICULTURE-BASEL*, 2021, vol. 11, no. 7, art. no. 618. Dostupné na: <https://doi.org/10.3390/agriculture11070618>, Registrované v: WOS

ADCA328 MARLTAN, W. - VENKATESWARA RAO, P.** - KLEMENT, Róbert - GALUSEK, Dušan - SAYYED, M.I. - TEKIN, H.O. - SYAM PRASAD, P. - VEERAAIAH, N. Spectroscopic and thermal analysis of lead-free multipurpose radiation shielding glasses. In *Ceramics International*, 2019, vol. 45, no. 5, p. 5332-5338. (2018: 3.450 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2018.11.231>

Citácie:

1. [1.1] ALSAIF, Norah A. M. - ELMAHROUG, Youssef - ALOTAIBI, B. M. - ALYOUSEF, Haifa A. - REKIK, Najeh - HUSSEIN, A. Wahab M. A. - CHAND, Ram - FAROOQ, Umer. Calculating photon buildup factors in determining the g-ray shielding effectiveness of some materials susceptible to be used for the conception of neutrons and gamma-ray shielding. In *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*. ISSN 2238-7854, 2021, vol. 11, no., pp. 769-784. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.01.052>, Registrované v: WOS

2. [1.1] SAENBOONRUANG, Kiadtisak - POLTABTIM, Worawat - THUMWONG, Arkarapol - PIANPANIT, Theerasarn - RATTANAPONGS, Chanis. Rare-Earth Oxides as Alternative High-Energy Photon Protective Fillers in HDPE Composites: Theoretical Aspects. In *POLYMERS*, 2021, vol. 13, no. 12, pp. Dostupné na: <https://doi.org/10.3390/polym13121930>, Registrované v: WOS

ADCA329 MARLTAN, W. - VENKATESWARA RAO, P.** - TEKIN, H.O. - SAYYED, M.I.** - KLEMENT, Róbert - GALUSEK, Dušan - LAKSHMINARAYANA, G. - SYAM PRASAD, P. - VEERAAIAH, N. Analysis of red mud doped Bi₂O₃-B₂O₃-BaO glasses for application as glass solder in radiation shield repair using MCNPX simulation. In *Ceramics International*, 2019, vol. 45, no. 6, p. 7619-7626. (2018: 3.450 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2019.01.058>

Citácie:

1. [1.1] MI, Hongcheng - YI, Longsheng - WU, Qian - XIA, Jin - ZHANG, Binghang. Preparation of high-strength ceramics from red mud, fly ash, and bentonite. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 13, pp. 18218-18229. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.141>, Registrované v: WOS

ADCA330 MATEJDES, Marián - CZIMEROVÁ, Adriana - JANEK, Marián. Fluorescence tuning of 2D montmorillonite optically active layers with beta-cyclodextrine/dye supramolecular complexes. In *Applied Clay Science*, 2015, vol. 114, p. 9-19. (2014: 2.467 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2015.05.002>

Citácie:

1. [1.1] GIOVANNINI, Giorgia - ROSSI, Rene M. - BOESEL, Luciano F. *Changes in Optical Properties upon Dye-Clay Interaction: Experimental Evaluation and Applications*. In *NANOMATERIALS*, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.3390/nano11010197>., Registrované v: WOS
- ADCA331 MATEJDES, Marián** - HIMENO, Daisuke - SUZUKI, Yasutaka - KAWAMATA, Jun. The effect of the negative charge density on switchable properties of pseudoisocyanine dye. In *Applied Clay Science*, 2017, vol. 144, p. 54-59. (2016: 3.101 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2017.05.005>
- Citácie:
1. [1.1] SATO, Rina - MACHIDA, Shingo - SOHMIYA, Minoru - SUGAHARA, Yoshiyuki - GUEGAN, Regis. *Intercalation of a Cationic Cyanine Dye Assisted by Anionic Surfactants within Mg-Al Layered Double Hydroxide*. In *ACS OMEGA*. ISSN 2470-1343, 2021, vol. 6, no. 37, pp. 23837-23845. Dostupné na: <https://doi.org/10.1021/acsomega.1c02724>., Registrované v: WOS
- ADCA332 MATEJDES, Marián - HIMENO, Daisuke - SUZUKI, Yasutaka - KAWAMATA, Jun. Controlled formation of pseudoisocyanine J-aggregates in the interlayer space of synthetic saponite. In *Applied Clay Science*, 2017, vol. 140, p. 119-123. (2016: 3.101 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2017.02.007>
- Citácie:
1. [1.1] BOHAC, P. - SASAI, R. - SOONTORNCHAIYAKUL, W. - CZIMEROVA, A. - BUJDAK, J. *Resonance energy transfer between cyanine dyes in hybrid films of layered silicate prepared by layer-by-layer method*. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 202, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105985>., Registrované v: WOS
 2. [1.1] KLOPROGGE, J. Theo - PONCE, Concepcion P. *Spectroscopic Studies of Synthetic and Natural Saponites: A Review*. In *MINERALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020112>., Registrované v: WOS
 3. [1.1] OHSAKI, Yutaka - SHIBATANI, Ryohei - SHIMADA, Tetsuya - ISHIDA, Tamao - TAKAGI, Shinsuke. *Estimation of Adsorption Distribution of Di-cationic Porphyrin on Anionic Nanosheet Surface Using Self-fluorescence Quenching as a Probe*. In *CHEMISTRY LETTERS*. ISSN 0366-7022, 2021, vol. 50, no. 12, pp. 1983-1986. Dostupné na: <https://doi.org/10.1246/cl.210506>., Registrované v: WOS
- ADCA333 MATUSIK, Jakub - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Influence of synthesis conditions on the formation of a kaolinite-methanol complex and simulation of its vibrational spectra. In *Clays and Clay Minerals*, 2012, vol. 60, no. 3, p. 227-239. (2011: 1.162 - IF, Q3 - JCR, 0.723 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2012.0600301>
- Citácie:
1. [1.1] WIERZBINSKA, Monika. *The Removal of Organic Acids and Aldehydes from Gases Emitted from Composting Municipal Waste*. In *JOURNAL OF ECOLOGICAL ENGINEERING*, 2021, vol. 22, no. 3, pp. 58-66. ISSN 2299-8993. Dostupné na: <https://doi.org/10.12911/22998993/132434>., Registrované v: WOS
 2. [1.1] ZHANG, Shilong - LIU, Qinfu - YANG, Yongjie - ZHANG, Hao - LIU, Jingjing - ZENG, Songshan - LACHANCE, Anna Marie - BARRETT, Allyson T. - SUN, Luyi. *An efficient method to prepare aluminosilicate nanoscrolls under mild conditions*. In *CHEMICAL COMMUNICATIONS*, 2021, vol. 57, no. 6, pp. 789-792. ISSN 1359-7345. Dostupné na: <https://doi.org/10.1039/d0cc07291e>., Registrované v: WOS
 3. [1.1] ZHANG, Suhong - GAO, Ni - LIU, Kai. *Insights on the intercalation mechanism of the coal-bearing kaolinite intercalation based on experimental investigation and molecular dynamics simulations*. In *CHEMICAL PAPERS*, 2021, vol. 75, no. 12, pp. 6335-6344. ISSN 0366-6352. Dostupné na: <https://doi.org/10.1007/s11696-021-01803-8>., Registrované v: WOS
- ADCA334 MICHÁLEK, Martin - SEDLÁČEK, Jaroslav - PARCHOVIANSKÝ, Milan - MICHÁLKOVÁ, Monika - GALUSEK, Dušan. Mechanical properties and electrical conductivity of alumina/MWCNT and alumina/zirconia/MWCNT composites. In *Ceramics International*, 2014, vol. 40, no. 1, p. 1289-1295. (2013: 2.086 - IF, Q1 - JCR, 0.812 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2013.07.008>
- Citácie:
1. [1.1] BASHA, Mohammed Thalib G. - VENKATESHWARLU, B. *INFLUENCE OF CARBON NANOTUBES REINFORCEMENT ON CHARACTERISTICS OF THERMALLY SPRAYED CERAMIC COATINGS*. In *SURFACE REVIEW AND LETTERS*, 2021, vol. 28, no. 2, pp. ISSN 0218-625X. Available on: <https://doi.org/10.1142/S0218625X20500523>., Registrované v: WOS
 2. [1.1] BATAINEH, Omar - AL-DWAIRI, Abdullah F. - AYOUB, Zaid - AL-OMOSH, Mohammad. *DOE-based experimental investigation and optimization of hardness and corrosion rate for Cu-*

x%Al₂O₃ as processed by powder metallurgy. In AIMS MATERIALS SCIENCE, 2021, vol. 8, no. 3, pp. 416-433. ISSN 2372-0468. Available on: <https://doi.org/10.3934/materci.2021026>., Registrované v: WOS

3. [1.1] CHAN, Kar Fei - Zaid, Mohd Hafiz Mohd - MAMAT, Md Shuhazly - LIZA, Shahira - TANEMURA, Masaki - YAAKOB, Yazid. Recent Developments in Carbon Nanotubes-Reinforced Ceramic Matrix Composites: A Review on Dispersion and Densification Techniques. In CRYSTALS, 2021, vol. 11, no. 5, pp. ISSN 2073-4352. Available on: <https://doi.org/10.3390/cryst11050457>., Registrované v: WOS

4. [1.1] DUNTU, Solomon Hanson - ELIASU, Ali - AHMAD, Ifthikhar - ISLAM, Mohammad - BOAKYE-YIADOM, Solomon. Synergistic effect of graphene and carbon nanotubes on wear behaviour of alumina-zirconia nanocomposites. In MATERIALS CHARACTERIZATION, 2021, vol. 175, no., pp. ISSN 1044-5803. Available on: <https://doi.org/10.1016/j.matchar.2021.111056>., Registrované v: WOS

5. [1.1] MARTIN ABRAHAM-EKEROTH, Ricardo - DE ANGELIS, Francesco. Radioplasmonics: Plasmonic Transducers in the Radiofrequency Regime for Resonant Thermo-acoustic Imaging in Deep Tissues. In ACS PHOTONICS, 2021, vol. 8, no. 1, pp. 238-246. ISSN 2330-4022. Available on: <https://doi.org/10.1021/acsphotonics.0c01381>., Registrované v: WOS

6. [1.1] OLIVER, Ujah Chika - SUNDAY, Aigbodion Victor - CHRISTAIN, Ezema Ike-Eze Ikechukwu - ELIZABETH, Makhatha Mamookho. Spark plasma sintering of aluminium composites-a review. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, 2021, vol. 112, no. 7-8, pp. 1819-1839. ISSN 0268-3768. Available on: <https://doi.org/10.1007/s00170-020-06480-7>., Registrované v: WOS

7. [1.1] POWERS, Sean W. - SCHETZ, Joseph A. - LOWE, K. Todd - KAPANIA, Rakesh K. Analysis of Stresses in Metal Sheathed Thermocouples in High-Temperature Flows. In AIAA JOURNAL, 2021, vol. 59, no. 9, pp. 3710-3724. ISSN 0001-1452. Available on: <https://doi.org/10.2514/1.J060239>., Registrované v: WOS

8. [1.1] SABUAN, Nur Amalina - ASMELASH, Mebrahitom - AZHARI, Azmir - MULUBRHAN, Freselam - ALEMU, Tamiru. Investigation on the electrical conductivity of Al₂O₃-Ti ceramic composites using a pressureless sintering process. In MATERIALS TODAY-PROCEEDINGS, 2021, vol. 46, no., pp. 1718-1723. ISSN 2214-7853. Available on: <https://doi.org/10.1016/j.matpr.2020.07.520>., Registrované v: WOS

9. [1.1] SONG, Yifa - PHULE, Ajit Dattatray - YU, Zhen - ZHANG, Xin - DU, Aihua - WANG, Hongzhen - ZHANG, Zhen Xiu. Lightweight and flexible silicone rubber foam with dopamine grafted multi-walled carbon nanotubes and silver nanoparticles using supercritical foaming technology: Its preparation and electromagnetic interference shielding performance. In EUROPEAN POLYMER JOURNAL, 2021, vol. 161, no., pp. ISSN 0014-3057. Available on: <https://doi.org/10.1016/j.eurpolymj.2021.110839>., Registrované v: WOS

ADCA335 MICHÁLEK, Martin - BODIŠOVÁ, Katarína - MICHÁLKOVÁ, Monika - SEDLÁČEK, Jaroslav - GALUSEK, Dušan. Alumina/MWCNTs composites by aqueous slip casting and pressureless sintering. In Ceramics International, 2013, vol. 39, no. 6, p. 6543-6550. (2012: 1.789 - IF, Q1 - JCR, 0.810 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2013.01.087> (LPP-0297-09 : Keramické kompozity s perkolujúcimi fázami pripravené infiltráciou organokovového prekursoru. ITMS 26220120056 : Centrum excelentnosti pre keramiku, sklo a silikátové materiály)

Citácie:

1. [1.1] RIVERO-ANTUNEZ, Pedro - CANO-CRESPO, Rafael - SANCHEZ-BAJO, Florentino - DOMINGUEZ-RODRIGUEZ, Arturo - MORALES-FLOREZ, Victor. Reactive SPS for sol-gel alumina samples: Structure, sintering behavior, and mechanical properties. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 11, pp. 5548-5557. ISSN 0955-2219. Available on: <https://doi.org/10.1016/j.jeurceramsoc.2021.04.060>., Registrované v: WOS

ADCA336 MICHÁLKOVÁ, Monika - KAŠIAROVÁ, Monika - TATARKO, Peter - DUSZA, Ján - ŠAJGALÍK, Pavol. Effect of homogenization treatment on the fracture behaviour of silicon nitride/graphene nanoplatelets composites. In Journal of the European Ceramic Society, 2014, vol. 34, no. 14, p. 3291-3299. (2013: 2.307 - IF, Q1 - JCR, 1.122 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2014.03.023>

Citácie:

1. [1.1] GALLARDO-LOPEZ, Angela - MUNOZ-FERREIRO, Carmen - LOPEZ-PERNIA, Cristina - JIMENEZ-PIQUE, Emilio - GUTIERREZ-MORA, Felipe - MORALES-RODRIGUEZ, Ana - POYATO, Rosalia. Critical Influence of the Processing Route on the Mechanical Properties of Zirconia Composites with Graphene Nanoplatelets. In MATERIALS, 2021, vol. 14, no. 1, pp. Dostupné na: <https://doi.org/10.3390/ma14010108>., Registrované v: WOS

2. [1.1] LOPEZ-PERNIA, Cristina - MORALES-RODRIGUEZ, Ana - GALLARDO-LOPEZ,

- Angela - POYATO, Rosalia. Enhancing the electrical conductivity of in-situ reduced graphene oxide-zirconia composites through the control of the processing routine. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 7, pp. 9382-9391. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.12.069>, Registrované v: WOS
3. [1.1] WANG, Aiyang - LIU, Chun - HU, Lanxin - TIAN, Tian - HE, Qianglong - WANG, Weimin - WANG, Hao - FU, Zhengyi. Effects of processing on mechanical properties of B4C-graphene composites fabricated by hot pressing. In MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING. ISSN 0921-5093, 2021, vol. 808, no., pp. Dostupné na: <https://doi.org/10.1016/j.msea.2021.140872>, Registrované v: WOS
4. [1.1] ZHAO, Wenlong - SUN, Jialin - HUANG, Zhifu. Three-dimensional graphene-carbon nanotube reinforced ceramics and computer simulation. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 24, pp. 33941-33955. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.304>, Registrované v: WOS
5. [1.2] CHEN, Fei - YAN, Ke - ZHANG, Xiaohong - ZHU, Yongsheng - HONG, Jun. Microscale simulation method for prediction of mechanical properties and composition design of multilayer graphene-reinforced ceramic bearings. In Ceramics International. ISSN 02728842, 2021-06-15, 47, 12, pp. 17531-17539. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.071>, Registrované v: SCOPUS

ADCA337 MICHÁLKOVÁ, Monika** - KRAXNER, Jozef - PARCHOVIANSKÝ, Milan - KLEMENT, Róbert - POUCHLÝ, Václav - MACA, Karel - GALUSEK, Dušan. Viscous flow spark plasma sintering of glass microspheres with YAG composition and high tendency to crystallization. In Journal of the European Ceramic Society, 2021, vol. 41, no. 2, p. 1537-1542. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.015>

Citácie:

1. [1.2] PAYGIN, V. D. - ILELA, A. E. - DEULINA, D. E. - LYAMINA, G. V. - STEPANOV, S. A. - ALISHIN, T. R. - DVILIS, E. S. - KHASANOV, O. L. - VALIEV, D. T. - KALASHNIKOV, M. P. Spark plasma sintering of transparent YAG:Ce ceramics with LiF flux. In Journal of Physics: Conference Series, 2021-08-10, 1989, 1, pp. ISSN 17426588. Available on: <https://doi.org/10.1088/1742-6596/1989/1/012008>, Registrované v: SCOPUS

ADCA338 MICHÁLKOVÁ, Monika** - KRAXNER, Jozef - MICHÁLEK, Martin - GALUSEK, Dušan. Preparation of translucent YAG glass/ceramic at temperatures below 900 degrees C. In Journal of the European Ceramic Society, 2020, vol. 40, no. 7, p. 2581-2585. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.11.011>

Citácie:

1. [1.1] AKUSEVICH, Alena - PARCHOVIANSKA, Ivana - PARCHOVIANSKY, Milan - PRNOVA, Anna - LOFAJ, Frantisek - VOJTKO, Marek - KLEMENT, Robert. Glass-ceramic Ce³⁺-doped YAG-Al₂O₃ composites prepared by sintering of glass microspheres. In INTERNATIONAL JOURNAL OF APPLIED GLASS SCIENCE, 2021, vol. 12, no. 4, pp. 497-508. ISSN 2041-1286. Available on: <https://doi.org/10.1111/ijag.16174>, Registrované v: WOS
2. [1.1] LAURIKENAS, A. - SAKALAUSKAS, D. - MARSALKA, A. - RAUDONIS, R. - ANTUZEVICIUS, A. - BALEVICIUS, V. - ZARKOV, A. - KAREIVA, A. Investigation of lanthanum substitution effects in yttrium aluminium garnet: importance of solid state NMR and EPR methods. In JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, 2021, vol. 97, no. 2, pp. 479-487. ISSN 0928-0707. Available on: <https://doi.org/10.1007/s10971-020-05445-2>, Registrované v: WOS
3. [1.1] PAKALNISKIS, Andrius - MARSALKA, Arunas - RAUDONIS, Rimantas - BALEVICIUS, Vytautas - ZARKOV, Aleksej - SKAUDZIUS, Ramunas - KAREIVA, Aivaras. Sol-gel synthesis and study of praseodymium substitution effects in yttrium aluminium garnet Y_{3-x}Pr_xAl₅O₁₂. In OPTICAL MATERIALS, 2021, vol. 111, no., pp. ISSN 0925-3467. Available on: <https://doi.org/10.1016/j.optmat.2020.110586>, Registrované v: WOS
4. [1.1] SHCHERBAKOVA, Galina I. - SHAUKHIN, Maxim K. - KUTINOVA, Natalia B. - STOROZHENKO, Pavel A. - KIRILIN, Aleksey D. - VARFOLOMEEV, Maxim S. - DRACHEV, Aleksander I. - ASHMARIN, Artem A. Condensation of Organoyttriumoxanalumoxanes with Chromium Acetylacetonate. In JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 2021, vol. 31, no. 8, pp. 3460-3480. ISSN 1574-1443. Available on: <https://doi.org/10.1007/s10904-021-02026-w>, Registrované v: WOS

ADCA339 MICHÁLKOVÁ, Monika - GHILLÁNYOVÁ, Katarína - GALUSEK, Dušan. The influence of solid loading in suspensions of a submicrometric alumina powder on green and sintered pressure filtrated samples. In Ceramics International, 2010, vol. 36, no. 1, p. 385-390. (2009: 1.686 - IF, Q1 - JCR, 0.932 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0272-8842. Dostupné

na: <https://doi.org/10.1016/j.ceramint.2009.07.032>

Citácie:

1. [1.1] OVEISI, Sh - KHAKPOUR, Z. - FAGHIHI-SANI, M. A. - KAZEMZAD, M. Processing study of gel-cast tubular porous NiO/SDC composite materials from gel-combustion synthesized nanopowder. In JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, 2021, vol. 97, no. 3, pp. 581-592. ISSN 0928-0707. Dostupné na: <https://doi.org/10.1007/s10971-021-05475-4>, Registrované v: WOS

2. [1.1] ZHANG, Guangran - WU, Yiquan. Three-dimensional printing of transparent ceramics by lithography-based digital projection. In ADDITIVE MANUFACTURING, 2021, vol. 47, no., pp. ISSN 2214-8604. Dostupné na: <https://doi.org/10.1016/j.addma.2021.102271>, Registrované v: WOS

ADCA340 MILKO, Matúš - NOGA, Jozef - VARGA, Štefan. Accuracy of density fitting in calculation of two-electron repulsion integrals in periodic systems. In International Journal of Quantum Chemistry, 2007, vol. 107, no. 11, p. 2158-2168. (2006: 1.182 - IF, Q2 - JCR, 0.711 - SJR, Q2 - SJR). ISSN 0020-7608. Dostupné na: <https://doi.org/10.1002/qua.21401>

Citácie:

1. [1.1] HANSEN, A. S. - AURBAKKEN, E. - PEDERSEN, T. B. Smooth potential-energy surfaces in fragmentation-based local correlation methods for periodic systems. In MOLECULAR PHYSICS, 2021, vol. 119, no. 9, pp. ISSN 0026-8976. Dostupné na: <https://doi.org/10.1080/00268976.2021.1896046>, Registrované v: WOS

2. [1.1] PATTERSON, C. H. Excited states of molecular and crystalline acetylene: application of TDHF and BSE via density fitting methods. In MOLECULAR PHYSICS. ISSN 0026-8976, 2021, vol. 119, no. 13, pp. Dostupné na: <https://doi.org/10.1080/00268976.2020.1792568>, Registrované v: WOS

ADCA341 MLYNÁRIKOVÁ, Jarmila - BOČA, Miroslav - KIPSOVÁ, Linda. The role of the alkaline cations in the density and volume properties of the melts MF-K2NbF7 (MF=LiF-NaF, LiF-KF and NaF-KF). In Journal of Molecular Liquids, 2008, vol. 140, no. 1-3, p. 101-107. (2007: 0.982 - IF, Q3 - JCR, 0.583 - SJR, Q2 - SJR). ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2008.02.002>

Citácie:

1. [1.1] LIU, Xiyan - WANG, Baozhu - FU, Haiying - WANG, Chenyang. Raman spectroscopic and theoretical studies on the structure of Ta (V) fluoro and oxofluoro complexes in molten FLiNaK. In JOURNAL OF MOLECULAR LIQUIDS, 2021, vol. 337, no., pp. ISSN 0167-7322. Available on: <https://doi.org/10.1016/j.molliq.2021.116409>, Registrované v: WOS

ADCA342 MLYNÁRIKOVÁ, Jarmila - CHRENKOVÁ, Marta - DANIELIK, Vladimír - DANĚK, Vladimír - MATAL, Oldřich. Revised phase diagram of the system NaF-NaBF4. In Monatshefte für Chemie, 2008, vol. 139, no. 2, p. 77-80. (2007: 0.972 - IF, Q3 - JCR, 0.406 - SJR, Q2 - SJR). ISSN 0026-9247. Dostupné na: <https://doi.org/10.1007/s00706-007-0673-7>

Citácie:

1. [1.1] ANDREWS, Hunter B. - MCFARLANE, Joanna - CHAPEL, A. Shay - EZELL, N. Dianne Bull - HOLCOMB, David E. - DE WET, Dane - GREENWOOD, Michael S. - MYHRE, Kristian G. - BRYAN, Samuel A. - LINES, Amanda - RILEY, Brian J. - FELMY, Heather M. - HUMRICKHOUSE, Paul W. Review of molten salt reactor off-gas management considerations. In NUCLEAR ENGINEERING AND DESIGN. ISSN 0029-5493, 2021, vol. 385, no., pp. Dostupné na: <https://doi.org/10.1016/j.nucengdes.2021.111529>, Registrované v: WOS

ADCA343 MORENO RODRÍGUEZ, Daniel** - JANKOVIČ, Ľuboš - SCHOLTZOVÁ, Eva - TUNEGA, Daniel. Stability of atrazine-smectite intercalates: Density functional theory and experimental study. In MINERALS-BASEL, 2021, vol. 11, no. 6, p. 554-1-554-20. (2020: 2.644 - IF, Q2 - JCR, 0.524 - SJR, Q2 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 2075-163X. Dostupné na: <https://doi.org/10.3390/min11060554>

Citácie:

1. [1.1] DAMIAN, Gheorghe - DAMIAN, Floarea - SZAKACS, Zsolt - IEPURE, Gheorghe - ASTEFANEI, Dan. Mineralogical and Physico-Chemical Characterization of the Orasu-Nou (Romania) Bentonite Resources. In MINERALS, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/min11090938>, Registrované v: WOS

ADCA344 NOVOTNÝ, Jan - PŘICHYSTAL, David - SOJKA, Martin - KOMOROVSKÝ, Stanislav - NEČAS, Marek - MAREK, Radek**. Hyperfine effects in ligand NMR: Paramagnetic Ru(III) complexes with 3-substituted pyridines. In Inorganic Chemistry, 2018, vol. 57, no. 2, p. 641-652. (2017: 4.700 - IF, Q1 - JCR, 1.892 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.7b02440>

Citácie:

1. [1.1] ANDERSEN, Anders B. A. - PYYKKONEN, Ari - JENSEN, Hans Jorgen Aa. - MCKEE, Vickie - VAARA, Juha - NIELSEN, Ulla Gro. Remarkable reversal of C-13-NMR assignment in d(1), d(2) compared to d(8), d(9) acetylacetonate complexes: analysis and explanation based on

solid-state MAS NMR and computations. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2020, vol. 22, no. 15, pp. 8048-8059. Dostupné na:

<https://doi.org/10.1039/d0cp00980f>, Registrované v: WOS

2. [1.1] AUTILLO, Matthieu - ISLAM, Md. Ashraful - HERON, Julie - GUERIN, Laetitia - ACHER, Eleonor - TAMAIN, Christelle - ILLY, Marie-Claire - MOISY, Philippe - COLINEAU, Eric - GRIVEAU, Jean-Christophe - BERTHON, Claude - BOLVIN, Helene. *Temperature Dependence of H-1 Paramagnetic Chemical Shifts in Actinide Complexes, Beyond Bleaney's Theory: The An(IV)O(2)(2+)-Dipicolinic Acid Complexes (An = Np, Pu) as an Example. In CHEMISTRY-A EUROPEAN JOURNAL. ISSN 0947-6539, 2021, vol. 27, no. 24, pp. 7138-7153. Dostupné na: <https://doi.org/10.1002/chem.202005147>, Registrované v: WOS*

3. [1.1] CASTRO, Abril C. - SWART, Marcel. *Recent Advances in Computational NMR Spectrum Prediction. In COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS*

4. [1.1] KRIVDIN, Leonid B. *Computational H-1 NMR: Part 2. Chemical applications. In MAGNETIC RESONANCE IN CHEMISTRY. ISSN 0749-1581, 2020, vol. 58, no. 1, pp. 5-14. Dostupné na: <https://doi.org/10.1002/mrc.4896>, Registrované v: WOS*

ADCA345 NOVOTNÝ, Jan - VÍCHA, Jan - BORA, Pankaj L. - REPISKÝ, Michal - STRAKA, Michal - KOMOROVSKÝ, Stanislav - MAREK, Radek. *Linking the character of the metal-ligand bond to the ligand NMR shielding in transition-metal complexes: NMR contributions from spin-orbit coupling. In Journal of Chemical Theory and Computation, 2017, vol. 13, no. 8, p. 3586-3601. (2016: 5.245 - IF, Q1 - JCR, 2.711 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.7b00444>*

Citácie:

1. [1.1] BATISTA, Patrick R. - DUCATI, Lucas C. - AUTSCHBACH, Jochen. *Solvent effect on the Pt-195 NMR properties in pyridonate-bridged Pt-III dinuclear complex derivatives investigated by ab initio molecular dynamics and localized orbital analysis. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 22, pp. 12864-12880. Dostupné na: <https://doi.org/10.1039/d0cp05849a>, Registrované v: WOS*

2. [1.1] CASTRO, Abril C. - SWART, Marcel. *Recent Advances in Computational NMR Spectrum Prediction. In COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS*

3. [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. *A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCp] Complexes. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 10, pp. 1443-1453. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>, Registrované v: WOS*

4. [1.1] KRIVDIN, Leonid B. *Computational H-1 NMR: Part 2. Chemical applications. In MAGNETIC RESONANCE IN CHEMISTRY. ISSN 0749-1581, 2020, vol. 58, no. 1, pp. 5-14. Dostupné na: <https://doi.org/10.1002/mrc.4896>, Registrované v: WOS*

5. [1.1] LATYPOV, Shamil K. - KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - SINYASHIN, Oleg G. *Quantum Chemical Calculations of P-31 NMR Chemical Shifts in Nickel Complexes: Scope and Limitations. In ORGANOMETALLICS. ISSN 0276-7333, 2020, vol. 39, no. 8, pp. 1413-1422. Dostupné na: <https://doi.org/10.1021/acs.organomet.0c00127>, Registrované v: WOS*

6. [1.1] MELO, Juan - MALDONADO, Alejandro F. - AUCAR, Gustavo A. *Performance of the LRESC Model on top of DFT Functionals for Relativistic NMR Shielding Calculations. In JOURNAL OF CHEMICAL INFORMATION AND MODELING. ISSN 1549-9596, 2020, vol. 60, no. 2, pp. 722-730. Dostupné na: <https://doi.org/10.1021/acs.jcim.9b00912>, Registrované v: WOS*

7. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. *Inverse halogen dependence in anion C-13 NMR. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 3019-3030. Dostupné na: <https://doi.org/10.1039/d0cp05891b>, Registrované v: WOS*

8. [1.2] IGGO, Jonathan Ainsley - LUZYANIN, Konstantin V. *Nuclear magnetic resonance spectroscopy. In Comprehensive Coordination Chemistry III, 2021-07-21, 1-9, pp. 3-43. Dostupné na: <https://doi.org/10.1016/B978-0-08-102688-5.00002-7>, Registrované v: SCOPUS*

ADCA346 NOWICKA, Aleksandra** - EL-MAGHRABY, Hesham F. M. Aldelrehim - ŠVANČÁRKOVÁ, Anna - GALUSKOVÁ, Dagmar - REVERON, Helen - GREMILLARD, L. - CHEVALIER, J. - GALUSEK, Dušan. *Corrosion and low temperature degradation of 3Y-TZP dental ceramics under acidic conditions. In Journal of the European Ceramic Society, 2020, vol. 40, no. 15, p. 6114-6122. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.06.019>*

Citácie:

1. [1.1] FAN, Zhou - WANG, Yang - ZHANG, Yidong - LIU, Jianyi. *Influence of oxygen vacancy compensation on the structure, electronic and mechanical properties of yttrium stabilized tetragonal zirconia. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, 2021, vol.*

- 135, no., pp. ISSN 1369-8001. Available on: <https://doi.org/10.1016/j.mssp.2021.106082>,
Registrované v: WOS
2. [1.2] LIU, Qianli - FAN, Zhou - WANG, Yang. Investigation on the structure and electronic properties of rare earth oxide stabilized t-ZrO₂/inf. In *Gongneng Cailiao/Journal of Functional Materials*, 2021-11-30, 52, 11, pp. 11087-11093. ISSN 10019731. Available on: <https://doi.org/10.3969/j.issn.1001-9731.2021.11.011>, Registrované v: SCOPUS
- ADCA347 OPÁLKOVÁ ŠÍŠKOVÁ, Alena** - DVORÁK, Tomáš - ŠIMONOVÁ BARANYAIOVÁ, Tímea - ŠIMON, Erik - ECKSTEIN ANDICSOVÁ, Anita - ŠVAJDLENKOVÁ, Helena - OPÁLEK, Andrej - KRÍŽIK, Peter - NOSKO, Martin. Simple and eco-friendly route from agro-food waste to water pollutants removal. In *Materials*, 2020, vol. 13, art. no. 5424, [21] p. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13235424>
- Citácie:
1. [1.1] AJIBOYE, T.O. - OYEWO, O.A. - ONWUDIWE, D.C. Adsorption and photocatalytic removal of Rhodamine B from wastewater using carbon-based materials. In *FLATCHEM*. ISSN 2452-2627, SEP 2021, vol. 29., Registrované v: WOS
2. [1.1] LIONETTO, F. - CORCIONE, C.E. An Overview of the Sorption Studies of Contaminants on Poly(Ethylene Terephthalate) Microplastics in the Marine Environment. In *JOURNAL OF MARINE SCIENCE AND ENGINEERING*. APR 2021, vol. 9, no. 4., Registrované v: WOS
- ADCA348 OSACKÝ, Marek** - PÁLKOVÁ, Helena - HUDEC, Pavol - CZÍMEROVÁ, Adriana - GALUSKOVÁ, Dagmar - VÍTKOVÁ, Martina. Effect of alkaline synthesis conditions on mineralogy, chemistry and surface properties of phillipsite, P and X zeolitic materials prepared from fine powdered perlite by-product. In *Microporous and Mesoporous Materials*, 2020, vol. 294, art. no. 109852. (2019: 4.551 - IF, Q1 - JCR, 0.999 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1387-1811. Dostupné na: <https://doi.org/10.1016/j.micromeso.2019.109852>
- Citácie:
1. [1.1] DIMITROV, L. - LIHAREVA, N. - TZVETANOVA, Y. - PETROV, O. Synthesis of phillipsite from perlite utilizing mother waters from wet gel EMT preparation and study of the obtained zeolitic material as ion exchanger. In *ENVIRONMENTAL EARTH SCIENCES*, 2021, vol. 80, no. 3, pp. ISSN 1866-6280. Dostupné na: <https://doi.org/10.1007/s12665-021-09378-z>, Registrované v: WOS
2. [1.1] SHI, Bin - ZHAO, Junjie - CHANG, Qing. Green synthesise of fly ash-based zeolite X: a potential microwave absorbent. In *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS*, 2021, vol. 32, no. 21, pp. 26097-26104. ISSN 0957-4522. Dostupné na: <https://doi.org/10.1007/s10854-021-06168-y>, Registrované v: WOS
3. [1.1] VAICIUKYNIENE, Danute - JAKEVICIUS, Leonas - KANTAUTAS, Aras - VAITKEVICIUS, Vitoldas - VAICIUKYNAS, Vilimantas - DVORAK, Karel. Conversion of silica by-product into zeolites by thermo-sonochemical treatment. In *ULTRASONICS SONOCHEMISTRY*, 2021, vol. 72, no., pp. ISSN 1350-4177. Dostupné na: <https://doi.org/10.1016/j.ultsonch.2020.105426>, Registrované v: WOS
4. [1.1] WANG, Binyu - LI, Li - LI, Jing - JIN, Keyan - ZHANG, Shaoqing - ZHANG, Jianan - YAN, Wenfu. Recent Progresses on the Synthesis of Zeolites from the Industrial Solid Wastes. In *CHEMICAL JOURNAL OF CHINESE UNIVERSITIES-CHINESE*, 2021, vol. 42, no. 1, pp. 40-59. ISSN 0251-0790. Dostupné na: <https://doi.org/10.7503/cjcu20200362>, Registrované v: WOS
5. [1.1] YOUSSEF, Hanan F. - NASR, Rabab A. - EL-ANWAR, Esmat A. Abou - MEKKY, Hamed S. - RAHIM, Said H. Abd El. Preparation and characterization of different zeolites from andesite rock: Product evaluation for efficient dye removal. In *MICROPOROUS AND MESOPOROUS MATERIALS*, 2021, vol. 328, no., pp. ISSN 1387-1811. Dostupné na: <https://doi.org/10.1016/j.micromeso.2021.111485>, Registrované v: WOS
- ADCA349 OSACKÝ, Marek - ŠUCHA, Vladimír - CZÍMEROVÁ, Adriana - MADEJOVÁ, Jana. Reaction of smectites with iron in a nitrogen atmosphere at 75 °C. In *Applied Clay Science*, 2010, vol. 50, no. 2, p. 237-244. (2009: 2.784 - IF, 1.054 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2010.08.004>
- Citácie:
1. [1.1] LEUPIN, Olivier X. - SMART, Nick R. - ZHANG, Zhidong - STEFANONI, Matteo - ANGST, Ueli - PAPAFOTIOU, Alexandros - DIOMIDIS, Nikitas. Anaerobic corrosion of carbon steel in bentonite: An evolving interface. In *CORROSION SCIENCE*, 2021, vol. 187, no., pp. ISSN 0010-938X. Available on: <https://doi.org/10.1016/j.corsci.2021.109523>, Registrované v: WOS
- ADCA350 OSACKÝ, Marek - ŠUCHA, Vladimír - CZÍMEROVÁ, Adriana - PENTRÁK, Martin - MADEJOVÁ, Jana. Reaction of smectites with iron in aerobic conditions at 75 °C. In *Applied Clay Science*, 2013, vol. 72, p. 26-36. (2012: 2.342 - IF, Q1 - JCR, 1.106 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2012.12.010> (Vega č. 2/0183/09 : Chemické modifikácie povrchov

prírodných nanomateriálov. Vega č. 2/0089/09 : Fluorescenčné hybridné materiály organických farbív interkalovaných v anorganických nosičoch s vrstevnatou štruktúrou. ITMS 26240120007 : Centrum pre materiály, vrstvy a systémy pre aplikácie a chemické procesy v extrémnych podmienkach)

Citácie:

1. [1.2] LEUPIN, Olivier X. - SMART, Nick R. - ZHANG, Zhidong - STEFANONI, Matteo - ANGST, Ueli - PAPAFOIOTOU, Alexandros - DIOMIDIS, Nikitas. Anaerobic corrosion of carbon steel in bentonite: An evolving interface. In *Corrosion Science*, 2021-07-15, 187, pp. ISSN 0010938X. Available on: <https://doi.org/10.1016/j.corsci.2021.109523>, Registrované v: SCOPUS

ADCA351

OSIPOV, Armenak A.** - OSIPOVA, Leyla M. - HRUŠKA, Branislav - OSIPOV, Artem A. - LIŠKA, Marek. FTIR and Raman spectroscopy studies of ZnO-doped BaO.2B2O3 glass mix. In *Vibrational Spectroscopy*, 2019, vol. 103, art. no. 102921. (2018: 1.861 - IF, Q3 - JCR, 0.440 - SJR, Q3 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2019.05.003>

Citácie:

1. [1.1] HASSAN, Moukhtar A. - ASHOUSH, M. A. - EBRAHIM, F. M. - EL-HADY, M. M. - AHMAD, F. - ABD EL-FATTAH, Zakaria M. Multiple optical features in binary-transition-metal borate glasses. In *OPTICAL AND QUANTUM ELECTRONICS*. ISSN 0306-8919, 2021, vol. 53, no. 8, pp. Dostupné na: <https://doi.org/10.1007/s11082-021-03095-4>, Registrované v: WOS

2. [1.1] KILIC, G. - ILIK, E. - ISSA, Shams A. M. - ISSA, Bashar - ISSEVER, U. G. - ZAKALY, Hesham M. H. - TEKIN, H. O. Fabrication, structural, optical, physical and radiation shielding characterization of indium (III) oxide reinforced 85TeO2-(15-x)ZnO-xIn(2)O(3) glass system. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 19, pp. 27305-27315. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.152>, Registrované v: WOS

3. [1.1] LAKSHMINARAYANA, G. - MEZA-ROCHA, A. N. - SORIANO-ROMERO, O. - HUERTA, E. F. - CALDINO, U. - LIRA, A. - LEE, Dong-Eun - YOON, Jonghun - PARK, Taejoon. Analysis of fluorescence characteristics of Sm3+-doped B2O3-rich glasses for Orange-light-emitting diodes. In *JOURNAL OF ALLOYS AND COMPOUNDS*. ISSN 0925-8388, 2021, vol. 884, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.161076>, Registrované v: WOS

4. [1.1] LAKSHMINARAYANA, G. - MEZA-ROCHA, A. N. - SORIANO-ROMERO, O. - HUERTA, E. F. - CALDINO, U. - LIRA, A. - LEE, Dong-Eun - YOON, Jonghun - PARK, Taejoon. Pr3+-doped B2O3-Bi2O3-ZnO-NaF glasses comprising alkali/mixed alkali oxides for potential warm white light generation, blue laser, and E- plus S- plus C-optical bands amplification applications. In *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*. ISSN 2238-7854, 2021, vol. 13, no., pp. 2501-2526. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.06.037>, Registrované v: WOS

5. [1.1] MADSHAL, M. A. - EL-DAMRAWI, G. - ABDELGHANY, A. M. - ABDELGHANY, M. Structural studies and physical properties of Gd2O3-doped borate glass. In *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS*. ISSN 0957-4522, 2021, vol. 32, no. 11, pp. 14642-14653. Dostupné na: <https://doi.org/10.1007/s10854-021-06022-1>, Registrované v: WOS

6. [1.1] MAHMOUD, Mohamed E. - KHALIFA, Mohammed A. - EL-SHARKAWY, Rehab M. - YOUSSEF, Mahues R. Effects of Al2O3 and BaO nano-additives on mechanical characteristics of high-density polyethylene. In *MATERIALS CHEMISTRY AND PHYSICS*. ISSN 0254-0584, 2021, vol. 262, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.124251>, Registrované v: WOS

7. [1.1] ROY, Harekrishna - MADDELA, Sudhir - MUNAGALA, Alekhya - RAHAMAN, Shaik Abdul - NANDI, Sisir. A Quality by Design Approach of Metronidazole Bigel and Assessment of Antimicrobial Study Utilizing Box-Behnken Design. In *COMBINATORIAL CHEMISTRY & HIGH THROUGHPUT SCREENING*. ISSN 1386-2073, 2021, vol. 24, no. 10, pp. 1628-1643. Dostupné na: <https://doi.org/10.2174/1386207323666201230094115>, Registrované v: WOS

ADCA352

OSZAJCA, Marcin - SMRČOK, Ľubomír - LASOCHA, Wieslaw. Bis(4-methylanilinium) and bis(4-iodoanilinium) pentamolybdates from laboratory X-ray powder data and total energy minimization. In *Acta Crystallographica Section C.Crystal Structure Communications*, 2013, vol. 69, p. 1367-1372. (2012: 0.492 - IF, Q4 - JCR, karentované - CCC). (2013 - Current Contents). ISSN 0108-2701. Dostupné na: <https://doi.org/10.1107/S010827011302845X>

Citácie:

1. [1.1] KUZMAN, Dino - DAMJANOVIC, Vladimir - STILINOVIC, Vladimir - CINDRIC, Marina - VRDOLJAK, Visnja. The role of mono- and dicarboxylic acids in the building of oxomolybdates containing {MoO4}, {Mo2O5}, {Mo2O6}, {Mo3O8}, {Mo5O17}, {Mo5O18}, {Mo8O26}, and {SiMo12O40} units. In *NEW JOURNAL OF CHEMISTRY*. ISSN 1144-0546, 2021, vol. 45, no. 42, pp. 19764-19774. Dostupné na: <https://doi.org/10.1039/d1nj03280a>, Registrované v: WOS

ADCA353

OSZAJCA, Marcin - SMRČOK, Ľubomír - PÁLKOVÁ, Helena - LASOCHA, Wieslaw. Synthesis and structure determination of tetrakis(4-iodoanilinium) β-octamolybdate dihydrate. In *Journal of*

Molecular Structure, 2012, vol. 1021, p. 70-75. (2011: 1.634 - IF, Q3 - JCR, 0.493 - SJR, Q3 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2012.04.060>

Citácie:

1. [1.1] FOTOVIC, Luka - BEDEKOVIC, Nikola - STILINOVIC, Vladimir. Evaluation of Halogenopyridinium Cations as Halogen Bond Donors. In CRYSTAL GROWTH & DESIGN, 2021, vol. 21, no. 12, pp. 6889-6901. ISSN 1528-7483. Dostupné na: <https://doi.org/10.1021/acs.cgd.1c00805>, Registrované v: WOS

ADCA354

PAGÁČOVÁ, Jana** - PLŠKO, Alfonz - PAPUČOVÁ, Iveta - FATURÍKOVÁ, Katarína - PRNOVÁ, Anna - VALÚCHOVÁ, Jana - ONDRUŠOVÁ, D. Crystallization of TiO₂ xerogel. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 5, p. 1643-1648. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09682-z>

Citácie:

1. [1.1] NISHIKIORI, Hiromasa - EBARA, Hiroyoshi - TAKAYAMA, Hitoshi - ADACHI, Shinnosuke - KOBAYASHI, Naoya - HAYASHI, Fumitaka - TESHIMA, Katsuya. Formation of alkali metal titanate nanocrystals using titanium alkoxide. In RESEARCH ON CHEMICAL INTERMEDIATES, 2021, vol. 47, no. 12, pp. 5135-5153. ISSN 0922-6168. Available on: <https://doi.org/10.1007/s11164-021-04581-w>, Registrované v: WOS

ADCA355

PÁLKOVÁ, Helena** - KUREKOVÁ, Valéria - MADEJOVÁ, Jana - NETRIOVÁ, Zuzana - UHLÍK, Peter - VARGA, Peter - HRONSKÝ, Viktor - LEXA, Jaroslav. Determination of water content in raw perlites: Combination of NIR spectroscopy and thermoanalytical methods. In Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 2020, vol. 240, art. no. 118517. (2019: 3.232 - IF, Q1 - JCR, 0.550 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1386-1425. Dostupné na: <https://doi.org/10.1016/j.saa.2020.118517>

Citácie:

1. [1.1] WANG, Weibin - DOU, Haixu - ZHANG, Gaofeng - XIE, Liang - WANG, Zhaoxuan - DENG, Guodong. An approach for simultaneous monitoring the content of insensitive agent in the double-base oblate spherical propellant by application of near-infrared spectroscopy and partial least squares. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, 2021, vol. 258, no., pp. Dostupné na: <https://doi.org/10.1016/j.saa.2021.119851>, Registrované v: WOS

ADCA356

PÁLKOVÁ, Helena - HRONSKÝ, Viktor - BIZOVSKÁ, Valéria - MADEJOVÁ, Jana. Spectroscopic study of water adsorption on Li⁺, TMA⁺ and HDTMA⁺ exchanged montmorillonite. In Spectrochimica Acta Part A - Molecular and Biomolecular Spectroscopy, 2015, vol. 149, p. 751-761. (2014: 2.353 - IF, Q2 - JCR, 0.640 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1386-1425. Dostupné na: <https://doi.org/10.1016/j.saa.2015.04.065>

Citácie:

1. [1.1] OKADA, Tomohiko - IZUMI, Kana - KAWAGUCHI, Shogo - MORIYOSHI, Chikako - FUJIMURA, Takuya - SASAI, Ryo - OGAWA, Makoto. Important Roles of Water Clusters Confined in a Nanospace as Revealed by a Synchrotron X-ray Diffraction Study. In LANGMUIR, 2021, vol. 37, no. 35, pp. 10469-10480. ISSN 0743-7463. Dostupné na: <https://doi.org/10.1021/acs.langmuir.1c01322>, Registrované v: WOS

2. [1.1] WANG, Gaofeng - RAN, Lingyu - XU, Jie - WANG, Yuanyuan - MA, Lingya - ZHU, Runliang - WEI, Jingming - HE, Hongping - XI, Yunfei - ZHU, Jianxi. Technical development of characterization methods provides insights into clay mineral-water interactions: A comprehensive review. In APPLIED CLAY SCIENCE, 2021, vol. 206, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106088>, Registrované v: WOS

ADCA357

PÁLKOVÁ, Helena - MADEJOVÁ, Jana - ZIMOWSKA, Malgorzata - SERWICKA, Ewa M. Laponite-derived porous clay heterostructures: II. FTIR study of the structure evolution. In Microporous and Mesoporous Materials, 2010, vol. 127, no 3, p. 237-244. (2009: 2.652 - IF, Q2 - JCR, 1.250 - SJR, Q1 - SJR). Dostupné na: <https://doi.org/10.1016/j.micromeso.2009.07.012>

Citácie:

1. [1.1] KRISHNAN, P. Santhana - UMASANKAR, S. - TAMIZHDURAI, P. - MANGESH, V. L. - SHANTHI, K. Liquid phase hydrodeoxygenation of furfural over laponite supported NiPMoS nanocatalyst: Effect of phosphorus addition and laponite support. In JOURNAL OF SOLID STATE CHEMISTRY, 2021, vol. 297, no., pp. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122050>, Registrované v: WOS

2. [1.1] LEANDRO, Gabriel Coelho - CAPELLO, Cristiane - KOOP, Betina Luiza - GARCEZ, Jussara - MONTEIRO, Alcilene Rodrigues - VALENCIA, German Ayala. Adsorption-desorption of anthocyanins from jambolan (Syzygium cumini) fruit in laponite (R) platelets: Kinetic models, physicochemical characterization, and functional properties of biohybrids. In FOOD RESEARCH INTERNATIONAL, 2021, vol. 140, no., pp. ISSN 0963-9969. Dostupné na:

<https://doi.org/10.1016/j.foodres.2020.109903>., Registrované v: WOS

3. [1.1] LI, Bin - QIN, Yan - LI, Zhiqiang - ZHANG, Ying - LI, Huanrong. Smart luminescent hydrogel with superior mechanical performance based on polymer networks embedded with lanthanide containing clay nanocomposites. In NANOSCALE, 2021, vol. 13, no. 26, pp. 11380-11386. ISSN 2040-3364. Dostupné na: <https://doi.org/10.1039/d1nr01642c>., Registrované v: WOS

4. [1.1] ORAFA, Zahra - IRANI, Shiva - ZAMANIAN, Ali - BAKHSHI, Hadi - NIKUKAR, Habib - GHALANDARI, Behafarid. Coating of Laponite on PLA Nanofibrous for Bone Tissue Engineering Application. In MACROMOLECULAR RESEARCH, 2021, vol. 29, no. 3, pp. 191-198. ISSN 1598-5032. Dostupné na: <https://doi.org/10.1007/s13233-021-9028-1>., Registrované v: WOS

5. [1.1] SAHA, Mou - RAY, Ruma - CHOUDHURY, Anupa Roy - DE BHOWMIK, Poulami - BALLABH, Tapas Kumar. Impact of exfoliation/intercalation of nano-clay on structure, morphology and electrical properties of poly (ethylene oxide) based solid nanocomposite electrolytes. In JOURNAL OF POLYMER RESEARCH, 2021, vol. 28, no. 8, pp. ISSN 1022-9760. Dostupné na: <https://doi.org/10.1007/s10965-021-02622-x>., Registrované v: WOS

6. [1.1] SHI, Jiabo - ZHANG, Ruizhen - YANG, Na - ZHANG, Yi - MANSEL, Bradley W. - PRABAKAR, Sujay - MA, Jianzhong. Hierarchical Incorporation of Surface-Functionalized Laponite Clay Nanoplatelets with Type I Collagen Matrix. In BIOMACROMOLECULES, 2021, vol. 22, no. 2, pp. 504-513. ISSN 1525-7797. Dostupné na: <https://doi.org/10.1021/acs.biomac.0c01391>., Registrované v: WOS

7. [1.1] SNIGDHA, S. - JISHMA, P. - NANDAKUMAR, Kalarikkal - SYLAS, V. P. - THOMAS, Sabu - RADHAKRISHNAN, E. K. Laponite (R) nanoclay gel based microenvironment for plant probiotic rhizobacterial delivery. In RHIZOSPHERE, 2021, vol. 18, no., pp. Dostupné na: <https://doi.org/10.1016/j.rhisph.2021.100346>., Registrované v: WOS

8. [1.1] SNIGDHA, S. - KALARIKKAL, Nandakumar - THOMAS, Sabu - RADHAKRISHNAN, E. K. Laponite(R) clay/poly(ethylene oxide) gel beads for delivery of plant growth-promoting rhizobacteria. In BULLETIN OF MATERIALS SCIENCE, 2021, vol. 44, no. 2, pp. ISSN 0250-4707. Dostupné na: <https://doi.org/10.1007/s12034-021-02383-9>., Registrované v: WOS

9. [1.1] TAKENO, H. - AOKI, Y. - KIMURA, K. Effects of addition of silica nanospheres on mechanical properties of clay/sodium polyacrylate hydrogels. In MATERIALS TODAY COMMUNICATIONS, 2021, vol. 28, no., pp. Dostupné na: <https://doi.org/10.1016/j.mtcomm.2021.102710>., Registrované v: WOS

10. [1.1] VOICU (MIHAI), Anda Ionelia - GAREA, Sorina Alexandra - VASILE, Eugeniu - GHEBAUR, Adi - IOVU, Horia. Hybrid Hosts Based on Sodium Alginate and Porous Clay Heterostructures for Drug Encapsulation. In POLYMERS, 2021, vol. 13, no. 16, pp. Dostupné na: <https://doi.org/10.3390/polym13162803>., Registrované v: WOS

11. [1.1] WEI, Dandi - LIU, Yishan - SONG, Yaya - LIU, Wenjie - ZHAO, Liqian - WANG, Lu - WU, Ronglan - YANG, Chao. Bimetal oxalate-derived synthesis of laponite-decorated CoFe₂O₄ porous nanostructures for activation of peroxymonopersulfate towards degradation of rhodamine B. In JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, 2021, vol. 96, no. 7, pp. 1936-1946. ISSN 0268-2575. Dostupné na: <https://doi.org/10.1002/jctb.6717>., Registrované v: WOS

ADCA358

PÁLKOVÁ, Helena - MADEJOVÁ, Jana - ZIMOWSKA, Malgorzata - BIELAŇSKA, Elzbieta - OLEJNICZAK, Zbigniew - LITYŇSKA-DOBRZYŇSKA, Lidia - SERWICKA, Ewa M. Laponite-derived porous clay heterostructures: I. Synthesis and physicochemical characterization. In Microporous and Mesoporous Materials, 2010, vol. 127, no. 3, p. 228-236. (2009: 2.652 - IF, Q2 - JCR, 1.250 - SJR, Q1 - SJR). Dostupné na: <https://doi.org/10.1016/j.micromeso.2009.07.019>

Citácie:

1. [1.1] GUPTA, Prashant - DWIVEDI, Swarit - VAN DUIN, Adri C. T. - SRINIVAS, S. - TANKSALE, Akshat. Coke resistant catalyst for hydrogen production in a versatile, multi-fuel, reformer. In JOURNAL OF CATALYSIS, 2021, vol. 402, no., pp. 177-193. ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2021.08.031>., Registrované v: WOS

2. [1.1] KRISHNAN, P. Santhana - UMASANKAR, S. - TAMIZHDURAI, P. - MANGESH, V. L. - SHANTHI, K. Liquid phase hydrodeoxygenation of furfural over laponite supported NiPMoS nanocatalyst: Effect of phosphorus addition and laponite support. In JOURNAL OF SOLID STATE CHEMISTRY, 2021, vol. 297, no., pp. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122050>., Registrované v: WOS

3. [1.1] LOPEZ-RODRIGUEZ, Daniel - MICO-VICENT, Barbara - JORDAN-NUNEZ, Jorge - BONET-ARACIL, Mariles - BOU-BELDA, Eva. Uses of Nanoclays and Adsorbents for Dye Recovery: A Textile Industry Review. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 23, pp. Dostupné na: <https://doi.org/10.3390/app112311422>., Registrované v: WOS

4. [1.1] MICO-VICENT, Barbara - PERALES ROMERO, Esther - BERMEJO, Ruperto - JORDAN-NUNEZ, Jorge - VIQUEIRA, Valentin - PEREZ, Jorge. Using Laminar Nanoclays for Phycocyanin and Phycoerythrin Stabilization as New Natural Hybrid Pigments from Microalgae

- Extraction. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 24, pp. Dostupné na: <https://doi.org/10.3390/app112411992>, Registrované v: WOS*
5. [1.1] PEIXOTO, Diana - PEREIRA, Irina - PEREIRA-SILVA, Miguel - VEIGA, Francisco - HAMBLIN, Michael R. - LVOV, Yuri - LIU, Mingxian - PAIVA-SANTOS, Ana Claudia. *Emerging role of nanoclays in cancer research, diagnosis, and therapy. In COORDINATION CHEMISTRY REVIEWS, 2021, vol. 440, no., pp. ISSN 0010-8545. Dostupné na: <https://doi.org/10.1016/j.ccr.2021.213956>, Registrované v: WOS*
6. [1.1] UMASANKAR, S. - KRISHNAN, P. Santhana - THERES, G. Sonia - TAMIZHDURAI, P. - SHANTHI, K. *Liquid phase hydrogenation of furfural to biofuel over robust NiCu/Laponite catalyst: A study on the role of copper loading. In ADVANCED POWDER TECHNOLOGY, 2021, vol. 32, no. 8, pp. 3034-3045. ISSN 0921-8831. Dostupné na: <https://doi.org/10.1016/j.appt.2021.06.012>, Registrované v: WOS*
- ADCA359 PÁLKOVÁ, Helena - MADEJOVÁ, Jana - RIGHI, D. Acid dissolution of reduced-charge Li- and Ni-montmorillonites. In *Clays and Clay Minerals*, 2003, vol. 51, no. 2, p. 133-142. (2002: 1.594 - IF, karentované - CCC). (2003 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2003.0510202>
- Citácie:
1. [1.1] SONG, Hongzhe - LIU, Hongmei - BU, Hongling - LIU, Dong - LI, Yun - DU, Peixin. *Effects of montmorillonite charge reduction on the high-temperature/ high-pressure pyrolysis of organic matter. In APPLIED CLAY SCIENCE, 2021, vol. 213, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106243>, Registrované v: WOS*
- ADCA360 PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČÁREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Microstructure and mechanical properties of hot pressed Al₂O₃/SiC nanocomposites. In *Journal of the European Ceramic Society*, 2013, vol. 33, no. 12, p. 2291-2298. (2012: 2.360 - IF, Q1 - JCR, 1.293 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2013.01.024> (LPP-0297-09 : Keramické kompozity s perkolujúcimi fázami pripravené infiltráciou organokovového prekursoru. ITMS 26220120056 : Centrum excelentnosti pre keramiku, sklo a silikátové materiály)
- Citácie:
1. [1.1] LIU, Jin - LIANG, Bingliang - AI, Yunlong - ZHANG, Jianjun - HE, Fei - HE, Wen - LIU, Zhiyong. *Microwave sintering and mechanical properties of La₂O₃/Nb₂O₅ toughened Al₂O₃ ceramics. In JOURNAL OF CERAMIC PROCESSING RESEARCH. ISSN 1229-9162, 2021, vol. 22, no. 3, pp. 296-300. Dostupné na: <https://doi.org/10.36410/jcpr.2021.22.3.296>, Registrované v: WOS*
2. [1.1] NALLUSAMY, Tamilselvam - VIJAYAKUMAR, S. *High-Temperature Stability of Titanium Boride Reinforced Alumina-Silicon Carbide Based Composite. In SILICON. ISSN 1876-990X, 2021, vol. 13, no. 4, pp. 1087-1095., Registrované v: WOS*
3. [1.1] WU JIANFENG - ZHOU YANG - SUN MENGKE - XU XIAOHONG - TIAN KEZHONG - YY JIAQI. *Mechanical Properties and Microstructure of Al₂O₃/SiC Composite Ceramics for Solar Heat Absorber. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, 2021, vol. 36, no. 5, pp. 615-623. Dostupné na: <https://doi.org/10.1007/s11595-021-2452-4>, Registrované v: WOS*
4. [1.2] DAS, Apurba - SAHA, Ankuran - BISWAS, Nabarun - CHOUDHURI, Kishan. *Fabrication of Graphene-Reinforced Alumina Composites: Morphology and Mechanical Property. In Journal of The Institution of Engineers (India): Series D, 2021-12-01, 102, 2, pp. 367-375. ISSN 22502122. Dostupné na: <https://doi.org/10.1007/s40033-021-00296-9>, Registrované v: SCOPUS*
5. [1.2] ZHENZHURIST, I. A. *Prospects for microwave sintering of the composition from waste of the fuel and energy complex. In IOP Conference Series: Earth and Environmental Science, 2021-07-08, 808, 1, pp. ISSN 17551307. Dostupné na: <https://doi.org/10.1088/1755-1315/808/1/012040>, Registrované v: SCOPUS*
- ADCA361 PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - MICHÁLEK, Martin - ŠVANČÁREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - HNATKO, Miroslav. Effect of the volume fraction of SiC on the microstructure and creep behavior of hot pressed Al₂O₃/SiC composites. In *Ceramics International*, 2014, vol. 40, no. 1, p. 1807-1814. (2013: 2.086 - IF, Q1 - JCR, 0.812 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2013.07.081>
- Citácie:
1. [1.1] NALLUSAMY, Tamilselvam - VIJAYAKUMAR, S. *High-Temperature Stability of Titanium Boride Reinforced Alumina-Silicon Carbide Based Composite. In SILICON. ISSN 1876-990X, 2021, vol. 13, no. 4, pp. 1087-1095., Registrované v: WOS*
2. [1.2] PELLEGG, Joshua. *Fracture in Nano-Structures. In Engineering Materials. ISSN 16121317, 2021-01-01, pp. 415-517. Dostupné na: https://doi.org/10.1007/978-3-030-74652-0_9,*

Registrované v: SCOPUS

3. [1.2] PELLE, Joshua. Time Dependent Deformation-Creep in Nanomaterials. In *Engineering Materials*. ISSN 16121317, 2021-01-01, pp. 257-351. Dostupné na: https://doi.org/10.1007/978-3-030-74652-0_7, Registrované v: SCOPUS

4. [1.2] VISHNU VANDANA, K. I. - SUMAN, K. N.S. FINITE ELEMENT MODELLING AND EXPERIMENTAL INVESTIGATION ON MECHANICAL PROPERTIES AND MICRO STRUCTURAL STUDIES OF ALUMINA-GRAPHENE COMPOSITES. In *New Materials, Compounds and Applications*. ISSN 25217194, 2021-01-01, 5, 3, pp. 156-170., Registrované v: SCOPUS

ADCA362 PARCHOVIANSKÝ, Milan - BALKO, Ján - ŠVANČÁREK, Peter - SEDLÁČEK, Jaroslav - DUSZA, Ján - LOFAJ, František - GALUSEK, Dušan. Mechanical properties and sliding wear behaviour of Al₂O₃-SiC nanocomposites with 3-20 vol% SiC. In *Journal of the European Ceramic Society*, 2017, vol. 37, p. 4297-4306. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.04.051>

Citácie:

1. [1.1] CHALIA, Sonia - BHARTI, Manish Kumar - THAKUR, Preeti - THAKUR, Atul - SRIDHARA, S. N. An overview of ceramic materials and their composites in porous media burner applications. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 8, pp. 10426-10441., Registrované v: WOS

2. [1.1] HALDAR, Partha - BHATTACHARYA, Tapas Kumar - MODAK, Nipu. Effect of nano CuO addition on the tribo-mechanical behavior of alumina ceramics in non-conformal contact. In *INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY*. ISSN 1546-542X, 2021, vol. 18, no. 1, pp. 110-118., Registrované v: WOS

3. [1.2] BHOI, Neeraj Kumar - SINGH, Harpreet - PRATAP, Saurabh - GUPTA, Manoj - JAIN, Pramod K. Investigation on the combined effect of ZnO nanorods and Y<inf>O</inf> nanoparticles on the microstructural and mechanical response of aluminium. In *Advanced Composite Materials*. ISSN 09243046, 2021-01-01, pp. Dostupné na: <https://doi.org/10.1080/09243046.2021.1993555>, Registrované v: SCOPUS

4. [1.2] HALDAR, Partha - BHATTACHARYA, Tapas Kumar - MODAK, Nipu. Friction Coefficient Analysis of Nano-crystalline TiO<inf>-Added Alumina Ceramics. In *Lecture Notes in Mechanical Engineering*. ISSN 21954356, 2021-01-01, pp. 233-243. Dostupné na: https://doi.org/10.1007/978-981-16-2347-9_20, Registrované v: SCOPUS

ADCA363 PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - ŠVANČÁREK, Peter - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Thermal behavior, electrical conductivity and microstructure of hot pressed Al₂O₃/SiC nanocomposites. In *Ceramics International*, 2014, vol. 40, no. 9, p. 14421-14429. (2013: 2.086 - IF, Q1 - JCR, 0.812 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2014.06.038>

Citácie:

1. [1.1] JIAN, Liu - CHOI, Gyung-Min. Using Amorphous CoB Alloy as Transducer to Detect Acoustic Propagation and Heat Transport at Interface. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/app11115155>, Registrované v: WOS

2. [1.1] KANG, Kyuhwe - CHOI, Gyung-Min. Electron-Phonon Coupling Parameter of Ferromagnetic Metal Fe and Co. In *MATERIALS*, 2021, vol. 14, no. 11, pp. Dostupné na: <https://doi.org/10.3390/ma14112755>, Registrované v: WOS

3. [1.1] LUO, Yong - XIE, Yuhui - CHEN, Renjie - ZHENG, Ruizhi - WU, Hua - SHENG, Xinxin - XIE, Delong - MEI, Yi. A low-density polyethylene composite with phosphorus-nitrogen based flame retardant and multi-walled carbon nanotubes for enhanced electrical conductivity and acceptable flame retardancy. In *FRONTIERS OF CHEMICAL SCIENCE AND ENGINEERING*. ISSN 2095-0179, 2021, vol. 15, no. 5, pp. 1332-1345. Dostupné na: <https://doi.org/10.1007/s11705-021-2035-0>, Registrované v: WOS

4. [1.1] ZHAO, Yunshan - ZENG, Xiangliang - REN, Linlin - XIA, Xinnian - ZENG, Xiaoliang - ZHOU, Jun. Heat conduction of electrons and phonons in thermal interface materials. In *MATERIALS CHEMISTRY FRONTIERS*, 2021, vol. 5, no. 15, pp. 5617-5638. Dostupné na: <https://doi.org/10.1039/d0qm01136c>, Registrované v: WOS

ADCA364 PARCHOVIANSKÝ, Milan** - PETŘÍKOVÁ, I. - ŠVANČÁREK, Peter - LENZ LEITE, Mateus - MOTZ, Günter - GALUSEK, Dušan. Passive filler loaded polysilazane-derived glass/ceramic coating system applied to AISI 441 stainless steel, part 2: Oxidation behavior in synthetic air. In *International Journal of Applied Ceramic Technology*, 2020, vol. 17, no. 4, p. 1675-1687. (2019: 1.762 - IF, Q2 - JCR, 0.386 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/ijac.13531>

Citácie:

1. [1.1] QAZZAZIE-HAUSER, Afnan - HONNEF, Kirsten - HANEMANN, Thomas. Crosslinking

- Behavior of UV-Cured Polyorganosilazane as Polymer-Derived Ceramic Precursor in Ambient and Nitrogen Atmosphere. In POLYMERS, 2021, vol. 13, no. 15, pp. Available on: <https://doi.org/10.3390/polym13152424>., Registrované v: WOS*
2. [1.1] QUENARD, Sebastien - ROUMANIE, Marilyne. *A Simple Method for a Protective Coating on Stainless Steel against Molten Aluminum Alloy Comprising Polymer-Derived Ceramics, Oxides and Refractory Ceramics. In MATERIALS, 2021, vol. 14, no. 6, pp. Available on: <https://doi.org/10.3390/ma14061519>., Registrované v: WOS*
- ADCA365 PARCHOVIANSKÝ, Milan** - PARCHOVIANSKÁ, Ivana - ŠVANČÁREK, Peter - MOTZ, Günter - GALUSEK, Dušan. PDC glass/ceramic coatings applied to differently pretreated AISI441 stainless steel substrates. In *Materials*, 2020, vol. 13, no. 3, art. no. 629. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13030629>
- Citácie:
1. [1.1] HU, Lung-Hao - WANG, Yu-Kai. *Silicon carbonitride ceramic surface-modified nanoporous aluminum alloy by preceramic polysilazane precursor for surface strengthening. In MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS. ISSN 0921-5107, 2021, vol. 267, no., pp. Dostupné na: <https://doi.org/10.1016/j.mseb.2021.115113>., Registrované v: WOS*
2. [1.1] QAZZAZIE-HAUSER, Afnan - HONNEF, Kirsten - HANEMANN, Thomas. *Crosslinking Behavior of UV-Cured Polyorganosilazane as Polymer-Derived Ceramic Precursor in Ambient and Nitrogen Atmosphere. In POLYMERS, 2021, vol. 13, no. 15, pp. Dostupné na: <https://doi.org/10.3390/polym13152424>., Registrované v: WOS*
3. [1.1] QUENARD, Sebastien - ROUMANIE, Marilyne. *A Simple Method for a Protective Coating on Stainless Steel against Molten Aluminum Alloy Comprising Polymer-Derived Ceramics, Oxides and Refractory Ceramics. In MATERIALS, 2021, vol. 14, no. 6, pp. Dostupné na: <https://doi.org/10.3390/ma14061519>., Registrované v: WOS*
4. [1.1] TARBOKOV, Vladislav - PAVLOV, Sergey - SMOLYANSKIY, Egor - UGLOV, Vladimir - SLOBODYAN, Mikhail - REMNEV, Gennady. *Effect of Preliminary Irradiation of 321 Steel Substrates with High-Intense Pulsed Ion Beams on Scratch Test Results of Subsequently Deposited AlN Coatings. In COATINGS, 2021, vol. 11, no. 10, pp. Dostupné na: <https://doi.org/10.3390/coatings11101169>., Registrované v: WOS*
- ADCA366 PARCHOVIANSKÝ, Milan** - PETRIKOVÁ, I. - BARROSO, G. - ŠVANČÁREK, Peter - GALUSKOVÁ, Dagmar - MOTZ, Günter - GALUSEK, Dušan. Corrosion and oxidation behavior of polymer derived ceramic coatings with passive glass fillers on AISI 441 stainless steel. In *Ceramics-Silikáty*, 2018, vol. 62, no. 2, p. 146-157. (2017: 0.680 - IF, Q3 - JCR, 0.238 - SJR, Q3 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0862-5468. Dostupné na: <https://doi.org/10.13168/cs.2018.0006>
- Citácie:
1. [1.1] CHROMCIKOVA, Maria - HRUSKA, Branislav - SVOBODA, Roman - LISKA, Marek - NOWICKA, Aleksandra - BRUNEEL, Els - DE BUYSSER, Klaartje. *Identification of surface active components in glass forming melts by thermodynamic model. In JOURNAL OF NON-CRYSTALLINE SOLIDS. ISSN 0022-3093, 2021, vol. 551, no., pp. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2020.120415>., Registrované v: WOS*
2. [1.2] LI, En Zhong - GUO, Wei Ling - XU, Bin Shi - LIU, Jun - YU, He Long. *Research progress on preparation of polymer derived ceramic coatings reinforced by fillers. In Surface Technology, 2021-01-01, 50, 10, pp. 66-79. Dostupné na: <https://doi.org/10.16490/j.cnki.issn.1001-3660.2021.10.007>., Registrované v: SCOPUS*
- ADCA367 PASTOREK, Adam - HRNČÍŘOVÁ, Jana - JANKOVIČ, Ľuboš - NEJDL, Lukáš - CIVIŠ, Svatopluk - IVANEK, Ondřej - SHESTIVSKA, Violetta - KNÍŽEK, Antonín - KUBELÍK, Petr - ŠPONER, Jiří - PETERA, Lukáš - KRIVKOVÁ, Anna - CASSONE, Guiseppe - VACULOVIČOVÁ, Markéta** - ŠPONER, Judit E.** - FERUS, Martin**. Prebiotic synthesis at impact craters: the role of Fe-clays and iron meteorites. In *Chemical Communication*, 2019, vol. 55, no. 71, p. 10563-10566. (2018: 6.164 - IF, Q1 - JCR, 2.177 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1359-7345. Dostupné na: <https://doi.org/10.1039/c9cc04627e>
- Citácie:
1. [1.1] ENCHEV, Venelin - SLAVOVA, Sofia. *Self-catalytic mechanism of prebiotic reactions: II. From urea and glycineamide to hypoxanthine. In INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. ISSN 0020-7608, 2021, vol. 121, no. 5, pp. Dostupné na: <https://doi.org/10.1002/qua.26508>., Registrované v: WOS*
2. [1.1] MELENDEZ-LOPEZ, A. - COLIN-GARCIA, M. - ORTEGA-GUTIERREZ, F. - CRUZ-CASTANEDA, J. *Role of the Interchangeable Cations on the Sorption of Fumaric and Succinic Acids on Montmorillonite and its Relevance in Prebiotic Chemistry. In ORIGINS OF LIFE AND EVOLUTION OF BIOSPHERES. ISSN 0169-6149, 2021, vol. 51, no. 2, pp. 87-116. Dostupné na:*

ADCA368

<https://doi.org/10.1007/s11084-021-09609-0>, Registrované v: WOS
 PATEL, Niketan Sarabhai - PAVLÍK, Viliam - BOČA, Miroslav. High-temperature corrosion behavior of superalloys in molten salts - A review. In *Critical Reviews in Solid State and Materials Sciences*, 2017, vol. 42, no. 1, p. 83-97. (2016: 6.455 - IF, Q1 - JCR, 1.924 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1040-8436. Dostupné na: <https://doi.org/10.1080/10408436.2016.1243090>

Citácie:

1. [1.1] AKANDE, I. G. - OLUWOLE, O. O. - FAYOMI, O. S. - ODUNLAMI, O. A. Overview of mechanical, microstructural, oxidation properties and high-temperature applications of superalloys. In *MATERIALS TODAY-PROCEEDINGS*. ISSN 2214-7853, 2021, vol. 43, no., pp. 2222-2231. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.12.523>, Registrované v: WOS
2. [1.1] BAUER, Thomas - ODENTHAL, Christian - BONK, Alexander. Molten Salt Storage for Power Generation. In *CHEMIE INGENIEUR TECHNIK*. ISSN 0009-286X, 2021, vol. 93, no. 4, pp. 534-546. Dostupné na: <https://doi.org/10.1002/cite.202000137>, Registrované v: WOS
3. [1.1] CAO, B. X. - KONG, H. J. - DING, Z. Y. - WU, S. W. - LUAN, J. H. - JIAO, Z. B. - LU, J. - LIU, C. T. - YANG, T. A novel L1(2)-strengthened multicomponent Co-rich high-entropy alloy with both high gamma '-solvus temperature and superior high-temperature strength. In *SCRIPTA MATERIALIA*. ISSN 1359-6462, 2021, vol. 199, no., pp. Dostupné na: <https://doi.org/10.1016/j.scriptamat.2021.113826>, Registrované v: WOS
4. [1.1] DING, Wenjin - BAUER, Thomas. Progress in Research and Development of Molten Chloride Salt Technology for Next Generation Concentrated Solar Power Plants. In *ENGINEERING*. ISSN 2095-8099, 2021, vol. 7, no. 3, pp. 334-347. Dostupné na: <https://doi.org/10.1016/j.eng.2020.06.027>, Registrované v: WOS
5. [1.1] HU, Shanshan - FINKLEA, Harry - LIU, Xingbo. A review on molten sulfate salts induced hot corrosion. In *JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY*. ISSN 1005-0302, 2021, vol. 90, no., pp. 243-254. Dostupné na: <https://doi.org/10.1016/j.jmst.2021.03.013>, Registrované v: WOS
6. [1.1] LEE, Tae-Gyu - KANG, Hui-Ju - KIM, Jong-Ho - SUZUKI, Norihiro - FUJISHIMA, Akira - CHOI, Minkee - JUN, Young-Si. Eutectic iodide-based salt as a melem-to-PTI conversion stopping agent for all-in-one graphitic carbon nitride. In *APPLIED CATALYSIS B-ENVIRONMENTAL*. ISSN 0926-3373, 2021, vol. 294, no., pp. Dostupné na: <https://doi.org/10.1016/j.apcatb.2021.120222>, Registrované v: WOS
7. [1.1] LEI, Qi - ZHANG, Xingming - GAO, Mei - WEN, Wen - JIA, Yanyan - LIU, Huajian - LI, Yuhe - LIU, Jizhao - ZHOU, Xingtai. Inconel 617 corrosion in FLiNaK molten salts: An in situ X-ray diffraction study. In *CORROSION SCIENCE*. ISSN 0010-938X, 2021, vol. 182, no., pp. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.109289>, Registrované v: WOS
8. [1.1] MA, Zhangke - LI, Yingjie - LI, Boyu - WANG, Zeyan - WANG, Tao - LEI, Wentao. Calcium looping heat storage performance and mechanical property of CaO-based pellets under fluidization. In *CHINESE JOURNAL OF CHEMICAL ENGINEERING*. ISSN 1004-9541, 2021, vol. 36, no., pp. 170-180. Dostupné na: <https://doi.org/10.1016/j.cjche.2020.10.002>, Registrované v: WOS
9. [1.1] POOJA, M. - RAVISHANKAR, K. S. - MADAV, Vasudeva. High temperature corrosion behaviour of stainless steels and Inconel 625 in hydroxide salt. In *MATERIALS TODAY-PROCEEDINGS*. ISSN 2214-7853, 2021, vol. 46, no., pp. 2612-2615. Dostupné na: <https://doi.org/10.1016/j.matpr.2021.02.266>, Registrované v: WOS
10. [1.1] QIU, Jie - MACDONALD, Digby D. - SCHOELL, Ryan - HAN, Junsoo - MASTROMARINO, Sara - SCULLY, John R. - KAOUMI, Djamel - HOSEMAN, Peter. Electrochemical study of the dissolution of oxide films grown on type 316L stainless steel in molten fluoride salt. In *CORROSION SCIENCE*. ISSN 0010-938X, 2021, vol. 186, no., pp. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.109457>, Registrované v: WOS
11. [1.1] XU, Yunfei - LI, Yingjie - ZHANG, Chunxiao - WANG, Yuzhuo - ZHAO, Jianli - WANG, Tao - LEI, Wentao. High-Temperature Thermochemical Heat Storage Performance of CaO Honeycombs During CaO/CaCO₃ Cycles. In *ENERGY & FUELS*. ISSN 0887-0624, 2021, vol. 35, no. 20, pp. 16882-16893. Dostupné na: <https://doi.org/10.1021/acs.energyfuels.1c02274>, Registrované v: WOS
12. [1.1] ZUO, Yong - SONG, Yu-Long - TANG, Rui - QIAN, Yuan. A novel purification method for fluoride or chloride molten salts based on the redox of hydrogen on a nickel electrode. In *RSC ADVANCES*, 2021, vol. 11, no. 56, pp. 35069-35076. Dostupné na: <https://doi.org/10.1039/d1ra05794d>, Registrované v: WOS
13. [1.2] GABRIEL-OHANU, Emmanuel - KHADSE, Akshay - VESELY, Ladislav - RAJU, Nandhini - OTTO, Marcel - KAPAT, Jayanta S. - HARRIS, Kurt. Optimization of a primary heat exchanger for flibe molten salt nuclear reactor with sCO₂ power system. In *Proceedings of the ASME Turbo Expo*, 2021-01-01, 10, pp. Dostupné na: <https://doi.org/10.1115/GT2021->

59939., Registrované v: SCOPUS

14. [1.2] MAHAJAN, Sumit - CHHIBBER, Rahul. High temperature molten salt corrosion investigations on P22/P91 power plant dissimilar welds. In *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*. ISSN 09544089, 2021-04-01, 235, 2, pp. 440-451. Dostupné na: <https://doi.org/10.1177/0954408920966304>., Registrované v: SCOPUS

15. [1.2] NGUYEN, Manh Thuong - ZHANG, Jun - CANTU, David C. - ROUSSEAU, Roger - GLEZAKOU, Vassiliki Alexandra. Tailored Computational Approaches to Interrogate Heavy Element Chemistry and Structure in Condensed Phase. In *ACS Symposium Series*. ISSN 00976156, 2021-01-01, 1388, pp. 219-245. Dostupné na: <https://doi.org/10.1021/bk-2021-1388.ch011>., Registrované v: SCOPUS

16. [1.2] ZUO, Yong - CAO, Mingpeng - SHEN, Miao - YANG, Xinmei. Effect of Mg on corrosion of 316H stainless steel in molten salts $MgCl_2$ -NaCl-KCl. In *Journal of the Chinese Society of Corrosion and Protection*. ISSN 10054537, 2021-01-01, 41, 1, pp. 80-86. Dostupné na: <https://doi.org/10.11902/1005.4537.2020.012>., Registrované v: SCOPUS

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PAVLÍK, Viliam - KONTRÍK, Martin - BOČA, Miroslav. Corrosion behavior of Incoloy 800H/HT in the fluoride molten salt FLiNaK + MF_x (MF_x = CrF₃, FeF₂, FeF₃ and NiF₂). In *New Journal of Chemistry*, 2015, vol. 39, no. 12, p. 9841-9847. (2014: 3.086 - IF, Q2 - JCR, 1.006 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1144-0546. Dostupné na: <https://doi.org/10.1039/c5nj01839k>

Citácie:

1. [1.1] ABBAS, Alaa A. - FARRAG, Heba H. - EL-SAWY, Ehab - ALLAM, Nageh K. Microbial fuel cells with enhanced bacterial catalytic activity and stability using 3D nanoporous stainless steel anode. In *JOURNAL OF CLEANER PRODUCTION*, 2021, vol. 285, no., pp. ISSN 0959-6526. Available on: <https://doi.org/10.1016/j.jclepro.2020.124816>., Registrované v: WOS

2. [1.1] AI, Hua - LIU, Yiyang - SHEN, Miao - LIU, Huajian - CHEN, Yanjun - YANG, Xinmei - LIU, Hongtao - QIAN, Yuan - WANG, Jianqiang. Dissolved valence state of iron fluorides and their effect on Ni-based alloy in FLiNaK salt. In *CORROSION SCIENCE*, 2021, vol. 192, no., pp. ISSN 0010-938X. Available on: <https://doi.org/10.1016/j.corsci.2021.109794>., Registrované v: WOS

3. [1.1] DAI, Hailong - SHI, Shouwen - YANG, Lin - GUO, Can - CHEN, Xu. Recent progress on the corrosion behavior of metallic materials in HF solution. In *CORROSION REVIEWS*, 2021, vol. 39, no. 4, pp. 313-337. ISSN 0334-6005. Available on: <https://doi.org/10.1515/corrrev-2020-0101>., Registrované v: WOS

4. [1.1] LEE, M. - MURANSKY, O. - KARATCHEVTSEVA, I - HUANG, H. - LAWS, K. J. Corrosion performance of Ni-based structural alloys for applications in molten-salt based energy systems: Experiment & numerical validation. In *CORROSION SCIENCE*, 2021, vol. 190, no., pp. ISSN 0010-938X. Available on: <https://doi.org/10.1016/j.corsci.2021.109607>., Registrované v: WOS

5. [1.1] WU, Yanping - LIU, Chengpeng - LENG, Bin - JIANG, Li - YE, Xiang-Xi - LI, Xiaoli - LI, Zhijun - ZHOU, Xingtai. Effect of high temperature molten salt corrosion on the microstructure of a Co-Mo-Cr-Si wear resistant alloy. In *MATERIALS CHARACTERIZATION*, 2021, vol. 179, no., pp. ISSN 1044-5803. Available on: <https://doi.org/10.1016/j.matchar.2021.111377>., Registrované v: WOS

ADCA370

PENTRÁK, Martin - HRONSKÝ, Viktor - PÁLKOVÁ, Helena - UHLÍK, Peter - KOMADEL, Peter - MADEJOVÁ, Jana**. Alteration of fine fraction of bentonite from Kopernica (Slovakia) under acid treatment: A combined XRD, FTIR, MAS NMR and AES study. In *Applied Clay Science*, 2018, vol. 163, no., p. 204-213. (2017: 3.641 - IF, Q1 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2018.07.028>

Citácie:

1. [1.1] BABAHOUM, Nabil - OULD HAMOU, Malek. Characterization and purification of Algerian natural bentonite for pharmaceutical and cosmetic applications. In *BMC CHEMISTRY*, 2021, vol. 15, no. 1, pp. Dostupné na: <https://doi.org/10.1186/s13065-021-00776-9>., Registrované v: WOS

2. [1.1] CHAARI, Islem - MEDHIOUB, Mounir - JAMOSSI, Fakher - HAMZAOU, Ahmed Hichem. Acid-treated clay materials (Southwestern Tunisia) for removing sodium leuco-vat dye : Characterization, adsorption study and activation mechanism. In *JOURNAL OF MOLECULAR STRUCTURE*. ISSN 0022-2860, 2021, vol. 1223, no., pp. Dostupné na: <https://doi.org/10.1016/j.molstruc.2020.128944>., Registrované v: WOS

3. [1.1] DE OLIVEIRA, Luis H. - TRIGUEIRO, Pollyana - RIGAUD, Baptiste - DA SILVA-FILHO, Edson C. - OSAJIMA, Josy A. - FONSECA, Maria G. - LAMBERT, JeanFrancois - GEORGELIN, Thomas - JABER, Maguy. When RNA meets montmorillonite: Influence of the pH and divalent cations. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 214, no., pp.

Dostupné na: <https://doi.org/10.1016/j.clay.2021.106234>, Registrované v: WOS

4. [1.1] DILL, Lais P. - KOCHPEKA, Debora M. - LIMA, Larissa L. - LEITAO, Alexandre A. - WYPYCH, Fernando - CORDEIRO, Claudiney S. Brazilian Mineral Clays: Classification, Acid Activation and Application as Catalysts for Methyl Esterification Reactions. In JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY. ISSN 0103-5053, 2021, vol. 32, no. 1, pp. 145-157.

Dostupné na: <https://doi.org/10.21577/0103-5053.20200164>, Registrované v: WOS

5. [1.1] MATEI, Simona - STOICANESCU, Maria - BELA, Varga - TIRON, Elena - CRISAN, Aurel. Bentonite-based composites with ceramic and metallic powders additions for use as filters. In ADVANCES IN MECHANICAL ENGINEERING. ISSN 1687-8132, 2021, vol. 13, no. 4, pp.

Dostupné na: <https://doi.org/10.1177/16878140211011888>, Registrované v: WOS

6. [1.1] WANG, Zhongkai - MUHAMMAD, Yaseen - TANG, Rui - LU, Caimei - YU, Sishan - SONG, Rongrong - TONG, Zhangfa - HAN, Biao - ZHANG, Hanbing. Dually organic modified bentonite with enhanced adsorption and desorption of tetracycline and ciprofloxacin. In SEPARATION AND PURIFICATION TECHNOLOGY. ISSN 1383-5866, 2021, vol. 274, no., pp.

Dostupné na: <https://doi.org/10.1016/j.seppur.2021.119059>, Registrované v: WOS

7. [1.1] XI, Huan - JIANG, Haoli - ZHAO, Dan - ZHANG, Ai Hua - FAN, Bo - YANG, Yan - ZHANG, Jianfeng. Highly selective adsorption of phosphate from high-salinity water environment using MgO-loaded and sodium alginate-immobilized bentonite beads. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2021, vol. 313, no., pp. Dostupné na:

<https://doi.org/10.1016/j.jclepro.2021.127773>, Registrované v: WOS

8. [1.1] XI, Huan - LI, Qingqing - YANG, Yan - ZHANG, Jianfeng - GUO, Feng - WANG, Xiaogang - XU, Shikai - RUAN, Shiping. Highly effective removal of phosphate from complex water environment with porous Zr-bentonite alginate hydrogel beads: Facile synthesis and adsorption behavior study. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 201, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105919>, Registrované v: WOS

9. [1.1] YAN, Lixia - CHEN, Qingze - YANG, Yixuan - ZHU, Runliang. The significant role of montmorillonite on the formation of hematite nanoparticles from ferrihydrite under heat treatment. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 202, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105962>, Registrované v: WOS

10. [1.1] YANG, Yixuan - ZHU, Runliang - CHEN, Qingze - XING, Jieqi - MA, Lingya - HE, Qiuzhi - FAN, Jian - XI, Yunfei - ZHU, Jianxi - HE, Hongping. Development of novel multifunctional adsorbent by effectively hosting both zwitterionic surfactant and hydrated ferric oxides in montmorillonite. In SCIENCE OF THE TOTAL ENVIRONMENT. ISSN 0048-9697, 2021, vol. 774, no., pp. Dostupné na: <https://doi.org/10.1016/j.scitotenv.2021.144974>, Registrované v: WOS

11. [1.2] TANG, Rui - ZHANG, Hanbing - LU, Caimei - LIU, Kun - WANG, Zhongkai - YU, Sishan - TONG, Zhangfa - JI, Junrong. Adsorption of ciprofloxacin and tetracycline by organically modified magnetic bentonite. In Huagong Jinzhan/Chemical Industry and Engineering Progress. ISSN 10006613, 2021-11-05, 40, 11, pp. 6235-6245. Dostupné na: <https://doi.org/10.16085/j.issn.1000-6613.2020-2356>, Registrované v: SCOPUS

ADCA371

PENTRÁK, Martin - BIZOVSKÁ, Valéria - MADEJOVÁ, Jana. Near-IR study of water adsorption on acid-treated montmorillonite. In Vibrational Spectroscopy, 2012, vol. 63, p. 360-366. (2011: 1.650 - IF, Q3 - JCR, 0.632 - SJR, Q3 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2012.07.012>

Citácie:

1. [1.1] DE OLIVEIRA, Luis H. - TRIGUEIRO, Pollyana - RIGAUD, Baptiste - DA SILVA-FILHO, Edson C. - OSAJIMA, Josy A. - FONSECA, Maria G. - LAMBERT, JeanFrancois - GEORGELIN, Thomas - JABER, Maguy. When RNA meets montmorillonite: Influence of the pH and divalent cations. In APPLIED CLAY SCIENCE, 2021, vol. 214, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106234>, Registrované v: WOS

2. [1.2] GORDOBIL, Oihana - HERRERA, René - POOHPHAJAI, Faksawat - SANDAK, Jakub - SANDAK, Anna. Impact of drying process on kraft lignin: Lignin-water interaction mechanism study by 2D NIR correlation spectroscopy. In Journal of Materials Research and Technology, 2021-01-01, 12, pp. 159-169. ISSN 22387854. Available on: <https://doi.org/10.1016/j.jmrt.2021.02.080>, Registrované v: SCOPUS

ADCA372

PENTRÁK, Martin - CZÍMEROVÁ, Adriana - MADEJOVÁ, Jana - KOMADEL, Peter. Changes in layer charge of clay minerals upon acid treatment as obtained from their interactions with methylene blue. In Applied Clay Science, 2012, vol. 55, p. 100-107. (2011: 2.474 - IF, Q1 - JCR, 1.159 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2011.10.012>

Citácie:

1. [1.1] FATHY, Nady - EL-KHOULY, Sahar - AHMED, Sohair - EL-NABARAWY, Thoria - TAO, Yousheng. Superior adsorption of cationic dye on novel bentonite/carbon composites. In ASIA-

- PACIFIC JOURNAL OF CHEMICAL ENGINEERING*, 2021, vol. 16, no. 1, pp. ISSN 1932-2135. Available on: <https://doi.org/10.1002/apj.2586>., Registrované v: WOS
2. [1.1] PLUANGKLANG, Chutima - RANGSRIWATANANON, Kunwadee. Facile Method by Bentonite Treated with Heat and Acid to Enhance Pesticide Adsorption. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 11, pp. Available on: <https://doi.org/10.3390/app11115147>., Registrované v: WOS
3. [1.1] ZHOU, Yi - CHENG, Hongfei - WEI, Changxin - ZHANG, Yihe. Effect of acid activation on structural evolution and surface charge of different derived kaolinites. In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.105997>., Registrované v: WOS
4. [1.2] BAO, Shenxu. Modification of Mineral Surfaces and Microstructures. In *Engineering Materials*, 2021-01-01, pp. 93-143. ISSN 16121317. Available on: https://doi.org/10.1007/978-3-030-54451-5_3., Registrované v: SCOPUS

ADCA373

PENTRÁK, Martin - MADEJOVÁ, Jana - KOMADEL, Peter. Acid and alkali treatment of kaolins. In *Clay Minerals*, 2009, vol. 44, no. 4, p. 511-523. (2008: 0.500 - IF, Q4 - JCR, 0.467 - SJR, Q3 - SJR). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/claymin.2009.044.4.511>

Citácie:

1. [1.1] AL-REYAH, Anas Yousef - AL-DEGS, Yahya Salem - ISSA, Ayman Abdulla - KHATTARI, Ziad Yousef - ABU AL SAYYED, Mohammed. Assessment of Structure, Dielectric and Gamma-Shielding Properties of Chemically Treated Natural Kaolinite Clay. In *IRANIAN JOURNAL OF MATERIALS SCIENCE AND ENGINEERING*, 2021, vol. 18, no. 4, pp. ISSN 1735-0808. Available on: <https://doi.org/10.22068/ijmse.2114>., Registrované v: WOS
2. [1.1] BAYRAM, Hale - USTUNISIK, Gokce - ONAL, Muserref - SARIKAYA, Yuksel. Optimization of bleaching power by sulfuric acid activation of bentonite. In *CLAY MINERALS*, 2021, vol. 56, no. 2, pp. 148-155. ISSN 0009-8558. Available on: <https://doi.org/10.1180/clm.2021.28>., Registrované v: WOS
3. [1.1] BOOTH, Clarissa J. - LICHTENBERG, Stuart Siegfried - CHAPPELL, Richard J. - PEDERSEN, Joel A. Chemical Inactivation of Prions Is Altered by Binding to the Soil Mineral Montmorillonite. In *ACS INFECTIOUS DISEASES*, 2021, vol. 7, no. 4, pp. 859-870. ISSN 2373-8227. Available on: <https://doi.org/10.1021/acsinfecdis.0c00860>., Registrované v: WOS
4. [1.1] GIL, A. - SANTAMARIA, L. - KORILI, S. A. - VICENTE, M. A. - BARBOSA, L. V. - DE SOUZA, S. D. - MARCAL, L. - DE FARIA, E. H. - CIUFFI, K. J. A review of organic-inorganic hybrid clay based adsorbents for contaminants removal: Synthesis, perspectives and applications. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 5, pp. ISSN 2213-2929. Available on: <https://doi.org/10.1016/j.jece.2021.105808>., Registrované v: WOS
5. [1.1] N'GUESSAN, Noel Essey - JOUSSEIN, Emmanuel - COURTIN-NOMADE, Alexandra - PAINEAU, Erwan - SOUBRAND, Marilyne - GRAUBY, Olivier - ROBIN, Valentin - CRISTINA, Coelho Diogo - VANTELON, Delphine - LAUNOIS, Pascale - FONDANECHÉ, Patrice - ROSSIGNOL, Sylvie - TEXIER-MANDOKI, Nathalie - BOURBON, Xavier. Role of cations on the dissolution mechanism of kaolinite in high alkaline media. In *APPLIED CLAY SCIENCE*, 2021, vol. 205, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106037>., Registrované v: WOS

ADCA374

PETIT, Sabine - RIGHI, D. - MADEJOVÁ, Jana. Infrared spectroscopy of NH₄⁺-bearing and saturated clay minerals: A review of the study of layer charge. In *Applied Clay Science*, 2006, vol. 34, no. 1-4, p. 22-30. (2005: 1.324 - IF, Q2 - JCR, 0.986 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2006.02.007>

Citácie:

1. [1.1] AMIN, M. T. - ALAZBA, A. A. - SHAFIQ, M. Synthesis and characterization of Zn/Fe layered double hydroxide and its composites for copper adsorption from aqueous solution. In *DESALINATION AND WATER TREATMENT*, 2021, vol. 218, no., pp. 281-293. ISSN 1944-3994. Available on: <https://doi.org/10.5004/dwt.2021.26948>., Registrované v: WOS
2. [1.1] MUNOZ-IGLESIAS, Victoria - FERNANDEZ-SAMPEDRO, Maite - GIL-LOZANO, Carolina - BONALES, Laura J. - HERRERO, Oscar Ercilla - VALLES GONZALEZ, Maria Pilar - MATEO-MARTI, Eva - PRIETO-BALLESTEROS, Olga. Characterization of NH₄-montmorillonite under conditions relevant to Ceres. In *APPLIED CLAY SCIENCE*, 2021, vol. 209, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106137>., Registrované v: WOS
3. [1.1] SHAKIBA, Nazanin - KHOEI, Seyed Mohammad Mousavi. Role of KOH and NaNO₂ on the structural and corrosion properties of anodic spark electrolysis coatings produced on aluminium. In *CERAMICS INTERNATIONAL*, 2021, vol. 47, no. 21, pp. 30319-30330. ISSN 0272-8842. Available on: <https://doi.org/10.1016/j.ceramint.2021.07.212>., Registrované v: WOS

ADCA375

PETIT, Sabine - MADEJOVÁ, Jana - DECARREAU, Alain - MARTIN, F. Characterization of octahedral substitutions in kaolinites using near infrared spectroscopy. In *Clays and Clay Minerals*, 1999, vol. 47, no. 1, p. 103-108. (1998: 1.010 - IF).

Citácie:

1. [1.1] ANDREOU, Fevronia T. - BARYLSKA, Barbara - CIESIELSKA, Zuzanna - SZCZERBA, Marek - DERKOWSKI, Arkadiusz - GIONIS, Vassilis - SIRANIDI, Eirini - CHRYSSIKOS, Georgios D. Intercalation of N-methylformamide in kaolinite: In situ monitoring by near-infrared spectroscopy and X-ray diffraction. In *APPLIED CLAY SCIENCE*, 2021, vol. 212, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106209>, Registrované v: WOS
2. [1.1] LAUKAMP, Carsten - RODGER, Andrew - LEGRAS, Monica - LAMPINEN, Heta - LAU, Ian C. - PEJCIC, Bobby - STROMBERG, Jessica - FRANCIS, Neil - RAMANAIDOU, Erick. Mineral Physicochemistry Underlying Feature-Based Extraction of Mineral Abundance and Composition from Shortwave, Mid and Thermal Infrared Reflectance Spectra. In *MINERALS*, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/min11040347>, Registrované v: WOS

ADCA376 PETIT, Sabine - RIGHI, D. - MADEJOVÁ, Jana - DECARREAU, Alain. Layer charge estimation of smectites using infrared spectroscopy. In *Clay Minerals*, 1998, vol. 33, no. 4, p. 579-591. (1997: 0.640 - IF, karentované - CCC). (1998 - Current Contents). ISSN 0009-8558.

Citácie:

1. [1.1] DE ANGELIS, S. - FERRARI, M. - DE SANCTIS, M. C. - AMMANNITO, E. - RAPONI, A. - CIARNIELLO, M. High-Temperature VIS-IR Spectroscopy of NH₄-Phyllosilicates. In *JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS*, 2021, vol. 126, no. 5, pp. ISSN 2169-9097. Dostupné na: <https://doi.org/10.1029/2020JE006696>, Registrované v: WOS

ADCA377 PETIT, Sabine - RIGHI, D. - MADEJOVÁ, Jana - DECARREAU, Alain. Interpretation of the infrared NH₄⁺ spectrum of the NH₄⁺-clays: application to the evaluation of the layer charge. In *Clay Minerals*, 1999, vol. 34, no. 4, p. 543-550. (1998: 1.130 - IF, karentované - CCC). (1999 - Current Contents).

Citácie:

1. [1.1] BORTH, Ketlyn Wolfart - GALDINO, Carlos William - TEIXEIRA, Veronica de Carvalho - ANAISSI, Fauze Jaco. Iron oxide nanoparticles obtained from steel waste recycling as a green alternative for Congo red dye fast adsorption. In *APPLIED SURFACE SCIENCE*, 2021, vol. 546, no., pp. ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2021.149126>, Registrované v: WOS
2. [1.1] CAO, Ranran - LI, Lianxin - ZHANG, Pengyi - GAO, Lele - RONG, Shaopeng. Regulating oxygen vacancies in ultrathin delta-MnO₂ nanosheets with superior activity for gaseous ozone decomposition. In *ENVIRONMENTAL SCIENCE-NANO*, 2021, vol. 8, no. 6, pp. 1628-1641. ISSN 2051-8153. Dostupné na: <https://doi.org/10.1039/d1en00149c>, Registrované v: WOS
3. [1.1] NASERI, Shiva - COOKE, Megan E. - ROSENZWEIG, Derek H. - TABRIZIAN, Maryam. 3D Printed In Vitro Dentin Model to Investigate Occlusive Agents against Tooth Sensitivity. In *MATERIALS*, 2021, vol. 14, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ma14237255>, Registrované v: WOS

ADCA378 PETIT, Sabine - CAILLAUD, J. - RIGHI, D. - MADEJOVÁ, Jana - ELSASS, Francoise - KÖSTER, H.M. Characterization and crystal chemistry of an Fe-rich montmorillonite from Ölberg, Germany. In *Clay Minerals*, 2002, vol. 37, no. 2, p. 283-297. (2001: 0.610 - IF, karentované - CCC). (2002 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/0009855023720034>

Citácie:

1. [1.1] FERNANDEZ-LANDERO, Sandra - FERNANDEZ-CALIANI, Juan Carlos. Mineralogical and Crystal-Chemical Constraints on the Glauconite-Forming Process in Neogene Sediments of the Lower Guadalquivir Basin (SW Spain). In *MINERALS*, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/min11060578>, Registrované v: WOS
2. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In *APPLIED CLAY SCIENCE*, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>, Registrované v: WOS

ADCA379 PETRA, Lukáš - BILLIK, Peter - KOMADEL, Peter. Preparation and characterization of hybrid materials consisting of high-energy ground montmorillonite and α-amino acids. In *Applied Clay Science*, 2015, vol. 115, p. 174-178. (2014: 2.467 - IF, Q1 - JCR, 0.914 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2015.08.002>

Citácie:

1. [1.1] ESMAEILI, E. - ROUNAGHI, S.A. - ECKERT, J. Mechanochemical Synthesis of Rosin-Modified Montmorillonite: A Breakthrough Approach to the Next Generation of OMMT/Rubber Nanocomposites. In *NANOMATERIALS*. AUG 2021, vol. 11, no. 8. Dostupné na: <https://doi.org/10.3390/nano11081974>, Registrované v: WOS
2. [1.1] MERINO, D. - IGLESIAS, M.J. - MANSILLA, A.Y. - CASALONGUE, C.A. - ALVAREZ,

V.A. Fighting against plant saline stress: Development of a novel bioactive composite based on bentonite and L-proline. In CLAYS AND CLAY MINERALS. ISSN 0009-8604, APR 2021, vol. 69, no. 2, p. 232-242. Dostupné na: <https://doi.org/10.1007/s42860-021-00120-1>, Registrované v: WOS

3. [1.1] PAVON, E. - ALBA, M.D. Swelling layered minerals applications: A solid state NMR overview. In PROGRESS IN NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY. ISSN 0079-6565, JUN-AUG 2021, vol. 124, p. 99-128. Dostupné na: <https://doi.org/10.1016/j.pnmrs.2021.04.001>, Registrované v: WOS

ADCA380 PETRA, Lukáš - BILLIK, Peter - MELICHOVÁ, Zuzana - KOMADEL, Peter. Mechanochemically activated saponite as materials for Cu²⁺ and Ni²⁺ removal from aqueous solutions. In Applied Clay Science, 2017, vol. 143, p. 22-28. (2016: 3.101 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2017.03.012>

Citácie:

1. [1.1] MINENKO, V. G. Adsorption Properties of Modified Saponite in Removal of Heavy Metals from Process Water. In JOURNAL OF MINING SCIENCE. ISSN 1062-7391, 2021, vol. 57, no. 2, pp. 298-306. Dostupné na: <https://doi.org/10.1134/S1062739121020149>, Registrované v: WOS

2. [1.1] TRACH, Yuliia - TYTKOWSKA-OWERKO, Marta - RECZEK, Lidia - MICHEL, Magdalena M. Comparison the Adsorption Capacity of Ukrainian Tuff and Basalt with Zeolite-Manganese Removal from Water Solution. In JOURNAL OF ECOLOGICAL ENGINEERING. ISSN 2299-8993, 2021, vol. 22, no. 3, pp. 161-168. Dostupné na: <https://doi.org/10.12911/22998993/132605>, Registrované v: WOS

3. [1.2] NIKITINA, M.V. - POPOVA, L.F. - NAKVASINA, E.N. - ROMANOV, E.M. - ZHURAVLEVA, E.A. Possibility Determination of Using Saponite in Agriculture. In IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE. ISSN 1755-1307, 2021, vol. 723, no. 2. Dostupné na: <https://doi.org/10.1088/1755-1315/723/2/022016>, Registrované v: SCOPUS

ADCA381 PETRIKOVÁ, I.** - PARCHOVIANSKÝ, Milan - ŠVANČÁREK, Peter - LENZ LEITE, Mateus - MOTZ, Günter - GALUSEK, Dušan. Passive filler loaded polysilazane-derived glass/ceramic coating system applied to AISI 441 stainless steel, part 1: Processing and characterization. In International Journal of Applied Ceramic Technology, 2020, vol. 17, no. 3, p. 998-1009. (2019: 1.762 - IF, Q2 - JCR, 0.386 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/ijac.13417>

Citácie:

1. [1.1] GATZEN, Caren - SMOKOVYCH, Iryna - SCHEFFLER, Michael - KRUEGER, Manja. Oxidation-Resistant Environmental Barrier Coatings for Mo-Based Alloys: A Review. In ADVANCED ENGINEERING MATERIALS, 2021, vol. 23, no. 4, pp. ISSN 1438-1656. Available on: <https://doi.org/10.1002/adem.202001016>, Registrované v: WOS

2. [1.1] GLASSOCK, Richard - MADONNA, Vincenzo - GIANGRANDE, Paolo - GALEA, Michael. RexMoto A Range Extender Concept for Light Electric Aircraft. In 2020 IEEE TRANSPORTATION ELECTRIFICATION CONFERENCE & EXPO (ITEC), 2020, vol., no., pp. 930-935. ISSN 2377-5483, Registrované v: WOS

3. [1.1] MADONNA, Vincenzo - GIANGRANDE, Paolo - GALEA, Michael. Influence of Thermal Aging on the Winding Thermal Conductivity in Low Voltage Electrical Machines. In 2020 23RD INTERNATIONAL CONFERENCE ON ELECTRICAL MACHINES AND SYSTEMS (ICEMS), 2020, vol., no., pp. 123-128, Registrované v: WOS

4. [1.1] MADONNA, Vincenzo - GIANGRANDE, Paolo - GALEA, Michael. On the Capability of Heat Dissipation in Thermally Aged Electrical Machines. In 2020 INTERNATIONAL CONFERENCE ON ELECTRICAL MACHINES (ICEM), VOL 1, 2020, vol., no., pp. 954-960, Registrované v: WOS

5. [1.1] MADONNA, Vincenzo - SPAGNOLO, Cosimo - GIANGRANDE, Paolo - GALEA, Michael. Improving Performance and Extending Lifetime of PMSMs via Advanced End-Winding Cooling. In 2020 IEEE 29TH INTERNATIONAL SYMPOSIUM ON INDUSTRIAL ELECTRONICS (ISIE), 2020, vol., no., pp. 319-325. ISSN 2163-5137, Registrované v: WOS

6. [1.1] PETROVIC, Ivica - NIKOLOVSKI, Srete - GLAVAS, Hrvoje - RELIC, Filip. Power System Fault Detection Automation Based on Fuzzy Logic. In PROCEEDINGS OF 2020 INTERNATIONAL CONFERENCE ON SMART SYSTEMS AND TECHNOLOGIES (SST 2020), 2020, vol., no., pp. 129-134, Registrované v: WOS

7. [1.2] LI, En Zhong - GUO, Wei Ling - XU, Bin Shi - LIU, Jun - YU, He Long. Research progress on preparation of polymer derived ceramic coatings reinforced by fillers. In Surface Technology, 2021-01-01, 50, 10, pp. 66-79. Available on: <https://doi.org/10.16490/j.cnki.issn.1001-3660.2021.10.007>, Registrované v: SCOPUS

8. [1.2] LI, Enzhong - GUO, Weiling - LIU, Jun - YU, Helong - XU, Binshi. *Research Progress in Pyrolysis Method of Polymer Derived Ceramic Coatings*. In *Cailiao Daobao/Materials Reports*, 2021-11-10, 35, 21, pp. 21151-21158. ISSN 1005023X. Available on: <https://doi.org/10.11896/cldb.20040261>., Registrované v: SCOPUS
- ADCA382 PETRISKOVÁ, Patricia - MONFORT, O. - SATRAPINSKY, Leonid - DOBROČKA, Edmund - PLECENIK, T. - PLESCH, Gustáv - PAPŠÍK, Roman - BERMEJO, Raúl - LENČEŠ, Zoltán**. Preparation and photocatalytic activity of TiO₂ nanotube arrays prepared on transparent spinel substrate. In *Ceramics International*, 2021, vol. 47, no. 9, p. 12970-12980. (2020: 4.527 - IF, Q1 - JCR, 0.936 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.160>
- Citácie:
1. [1.1] BRUDZISZ, Anna M. - GIZINSKI, Damian - STEPNIOWSKI, Wojciech J. *Incorporation of Ions into Nanostructured Anodic Oxides-Mechanism and Functionalities*. In *MOLECULES*, 2021, vol. 26, no. 21, pp. Dostupné na: <https://doi.org/10.3390/molecules26216378>., Registrované v: WOS
- ADCA383 PETRUŠKOVÁ, V. - VRÁBEL, Peter - ŠIMURKA, Peter - ŠAJGALÍK, Pavol - MARYŠKA, M. Surface damage of two different wineglasses during dishwashing process. In *Ceramics-Silikáty*, 2007, vol. 51, no. 1, p. 57-66. (2006: 0.597 - IF, Q2 - JCR, 0.343 - SJR, Q2 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] CHROMCIKOVA, Maria - HRUSKA, Branislav - SVOBODA, Roman - LISKA, Marek - NOWICKA, Aleksandra - BRUNEEL, Els - DE BUYSSER, Klaartje. *Identification of surface active components in glass forming melts by thermodynamic model*. In *JOURNAL OF NON-CRYSTALLINE SOLIDS*. ISSN 0022-3093, 2021, vol. 551, no., pp. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2020.120415>., Registrované v: WOS
- ADCA384 PICHLEBAUER, Sabine - HARMUTH, Harald - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Preliminary investigations of the production of MgAlON bonded refractories. In *Journal of the European Ceramic Society*, 2012, vol. 32, no. 9, p. 2013-2018. (2011: 2.353 - IF, Q1 - JCR, 1.343 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2011.10.036>
- Citácie:
1. [1.2] XIA, Miao - SI, Yaochen - SUN, Honggang - LI, Hongxia - DU, Yihao - XINLIAN, Shang. *Research progress of MgAlON and its composite materials*. In *Naihuo Cailiao/Refractories*, 2021-01-01, 55, 4, pp. 348-353. ISSN 10011935. Dostupné na: <https://doi.org/10.3969/j.issn.1001-1935.2021.04.017>., Registrované v: SCOPUS
2. [1.2] YAN, Mingwei - YANG, Yumin - LI, Yong - LIU, Kaiqi - SUN, Guangchao - ZHANG, Jiayu - HU, Chaoquan. *Phase Composition and Reaction Mechanism of Aluminum-Spinel Composite at 1700°C in Flowing Nitrogen*. In *Kuei Suan Jen Hsueh Pao/Journal of the Chinese Ceramic Society*, 2021-03-01, 49, 3, pp. 590-596. ISSN 04545648. Dostupné na: <https://doi.org/10.14062/j.issn.0454-5648.20200450>., Registrované v: SCOPUS
- ADCA385 PLACHKÝ, Tomáš - LENČEŠ, Zoltán - HRIC, Ľ. - ŠAJGALÍK, Pavol - BALÁŽ, Peter - RIEDEL, Ralf - KLEEBE, Hans-Joachim. Processing and mechanical properties of Si₃N₄ composites employing polymer-derived SiAlOC as sintering aid. In *Journal of the European Ceramic Society*, 2010, vol. 30, no. 3, p. 759-767. (2009: 2.090 - IF, Q1 - JCR, 1.374 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2009.08.014>
- Citácie:
1. [1.1] REN, Zhongkan - MUJIB, Shakir Bin - SINGH, Gurpreet. *High-Temperature Properties and Applications of Si-Based Polymer-Derived Ceramics: A Review*. In *MATERIALS*, 2021, vol. 14, no. 3, pp. Dostupné na: <https://doi.org/10.3390/ma14030614>., Registrované v: WOS
- ADCA386 POLOVOV, Ilya B.** - BATAEV, Ya. S. - AFONIN, Yu. D. - VOLKOVICH, Vladimir - CHUKIN, Andrey V. - RAKHMATULLIN, Aydar - BOČA, Miroslav. Synthesis of HfO₂ from hafnium hydroxide hydrate. In *Journal of Alloys and Compounds*, 2019, vol. 790, p. 405-412. (2018: 4.175 - IF, Q1 - JCR, 1.065 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0925-8388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2019.03.103>
- Citácie:
1. [1.1] VEVED, Albert - EJUH, Geh Wilson - DJONGYANG, Noel. *Study of the chemical softness, chemical hardness, chemical stability and interaction energy of the piezoelectric composite: (-CH₂CF₂)(₃)/nHfO(₂)*. In *POLYMER BULLETIN*. ISSN 0170-0839, 2021, vol. 78, no. 9, pp. 4977-4986. Dostupné na: <https://doi.org/10.1007/s00289-020-03346-6>., Registrované v: WOS
- ADCA387 PRECNEROVÁ, Magdaléna - BODIŠOVÁ, Katarína - FRAJKOROVÁ, Františka - GALUSKOVÁ, Dagmar - VARCHULOVÁ NOVÁKOVÁ, Zuzana - VOJTAŠŠÁK, Ján - LENČEŠ, Zoltán -

ŠAJGALÍK, Pavol. In vitro bioactivity of silicon nitride-hydroxyapatite composites. In *Ceramics International*, 2015, vol. 41, no. 6, p. 8100-8108. (2014: 2.605 - IF, Q1 - JCR, 0.856 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2015.03.011>

Citácie:

1. [1.1] AKIN, Seniz R. Kushan - GARCIA, Caterina Bartomeu - WEBSTER, Thomas J. A comparative study of silicon nitride and SiAlON ceramics against *E. coli*. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 2, pp. 1837-1843. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.09.012>, Registrované v: WOS
2. [1.1] BOZKURT, Dilan - AKARSU, Melis Kaplan - AKIN, Ipek - GOLLER, Gultekin. Phase analysis, mechanical properties and in vitro bioactivity of graphene nanoplatelet-reinforced silicon nitride-caidum phosphate composites. In *JOURNAL OF ASIAN CERAMIC SOCIETIES*. ISSN 2187-0764, 2021, vol. 9, no. 2, pp. 471-486. Dostupné na: <https://doi.org/10.1080/21870764.2021.1891664>, Registrované v: WOS
3. [1.1] KUSHAN AKIN, Seniz R. - DOLEKCEKIC, Emrah - WEBSTER, Thomas J. Antibacterial behavior of oxynitride glasses as a glassy grain boundary phase for silicon nitride-based ceramics. In *INTERNATIONAL JOURNAL OF APPLIED GLASS SCIENCE*. ISSN 2041-1286, 2021, vol. 12, no. 3, pp. 328-336. Dostupné na: <https://doi.org/10.1111/ijag.15902>, Registrované v: WOS
4. [1.1] SHEN, Mui - ZHAO, Huifen - FENG, Weiwei - LUO, Yali - CHEN, Han - ZHENG, Yifeng - GE, Lin - GUO, Lucun. Porous silicon nitride for scaffold material by direct forming with protective gelling. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 20, pp. 29342-29354. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.101>, Registrované v: WOS

ADCA388 PRNOVÁ, Anna** - PLŠKO, Alfonz - KLEMENT, Róbert - VALÚCHOVÁ, Jana - HALADEJOVÁ, Katarína - ŠVANČÁREK, Peter - MAJEROVÁ, Melinda - GALUSEK, Dušan. Crystallization kinetics of binary La₂O₃-Al₂O₃ glass. In *Journal of Non-Crystalline Solids*, 2018, vol. 501, p. 55-61. (2017: 2.488 - IF, Q1 - JCR, 0.722 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2018.03.001>

Citácie:

1. [1.1] XU, T. - LI, Q. - SHI, Y. - FANG, J. - WANG, H. - WANG, C. - HE, H. - NI, J. - YU, J. The enhancement of hardness and anti-corrosion of ZrO₂ to the LaO₃/2-AlO₃/2-ZrO₂ glasses. In *JOURNAL OF NON-CRYSTALLINE SOLIDS*. ISSN 0022-3093, 2021, vol. 572. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2021.121118>, Registrované v: WOS
2. [1.1] YANG, J. - LI, J. - LU, P. Understanding the structure, thermal, and optical properties in Al₂O₃-incorporated La₂O₃-TiO₂-Nb₂O₅ glasses. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. ISSN 0002-7820, 2021, vol. 104, no. 6, p. 2539-2551. Dostupné na: <https://doi.org/10.1111/jace.17698>, Registrované v: WOS

ADCA389 PRNOVÁ, Anna** - PLŠKO, Alfonz - VALÚCHOVÁ, Jana - HALADEJOVÁ, Katarína - KLEMENT, Róbert - GALUSEK, Dušan. Crystallization kinetics of glass microspheres with yttrium aluminium garnet (YAG) composition. In *Journal of Thermal Analysis and Calorimetry*, 2018, vol. 131, no. 2, p. 1115-1123. (2017: 2.209 - IF, Q2 - JCR, 0.587 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-017-6690-9>

Citácie:

1. [1.1] ZHANG, Ying - MA, Xiaoguang - LI, Xiaoyu - YANG, Lixia - GE, Binghui - ALLIX, Mathieu - LI, Jianqiang. Crystallization kinetics of Al₂O₃-26mol%Y₂O₃ glass and full crystallized transparent Y₃Al₅O₁₂-based nanoceramic. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 2, pp. 1557-1563. ISSN 0955-2219. Available on: <https://doi.org/10.1016/j.jeurceramsoc.2020.09.036>, Registrované v: WOS

ADCA390 PRNOVÁ, Anna** - VALÚCHOVÁ, Jana - MUTLU, Nurshen - PARCHOVIANSKÝ, Milan - KLEMENT, Róbert - PLŠKO, Alfonz - GALUSEK, Dušan. Thermal behaviour and photoluminescence properties of Er- and Nd-doped yttrium aluminate glasses. In *Journal of Thermal Analysis and Calorimetry*, 2020, vol. 142, no. 1, p. 129-138. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09816-3>

Citácie:

1. [1.1] LI, Zhi - CAO, Yuxi - MAO, Xueli - TANG, Hexi - YAN, Meng. In-situ immobilization of soil containing simulated radionuclide Ce using AC/CaCO₃/Nano-HAP by microwave sintering. In *JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY*, 2021, vol. 328, no. 1, pp. 315-323. ISSN 0236-5731. Available on: <https://doi.org/10.1007/s10967-021-07632-z>, Registrované v: WOS

ADCA391 PRNOVÁ, Anna** - VALÚCHOVÁ, Jana - PARCHOVIANSKÝ, Milan - WISNIEWSKI, Wolfgang

- ŠVANČÁREK, Peter - KLEMENT, Róbert - HRIC, L. - BRUNEEL, E. - GALUSEK, Dušan. Y3Al5O12-alpha-Al2O3 composites with fine-grained microstructure by hot pressing of Al2O3-Y2O3 glass microspheres. In Journal of the European Ceramic Society, 2020, vol. 40, no. 3, p. 852-860. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.10.017>

Citácie:

1. [1.1] ABALI, Serkan - KILIC, Songul. Effects of sintering temperature on the microstructural properties of Al2O3-Y2O3 powder mixtures. In INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, 2021, vol. 112, no. 6, pp. 430-438. ISSN 1862-5282. Available on: <https://doi.org/10.1515/ijmr-2020-8106>., Registrované v: WOS
2. [1.1] HROCH, J. - DOHNALOVA, Z. - SULCOVA, P. Study of reactions in the solid phase leading to the formation of SrSn0.9Mn0.1O3 perovskite oxide. In THERMOCHIMICA ACTA, 2021, vol. 706, no., pp. ISSN 0040-6031. Available on: <https://doi.org/10.1016/j.tca.2021.179054>., Registrované v: WOS
3. [1.1] SHCHERBAKOVA, Galina I. - SHAUKHIN, Maxim K. - KUTINOVA, Natalia B. - STOROZHENKO, Pavel A. - KIRILIN, Aleksey D. - VARFOLOMEEV, Maxim S. - DRACHEV, Aleksander I. - ASHMARIN, Artem A. Condensation of Organoyttriumoxanalumoxanes with Chromium Acetylacetonate. In JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 2021, vol. 31, no. 8, pp. 3460-3480. ISSN 1574-1443. Available on: <https://doi.org/10.1007/s10904-021-02026-w>., Registrované v: WOS

ADCA392

PRNOVÁ, Anna - BODIŠOVÁ, Katarína - KLEMENT, R. - MIGÁT, M. - VETEŠKA, P. - ŠKRÁTEK, Martin - BRUNEEL, E. - VAN DRIESSE, I. - GALUSEK, Dušan. Preparation and characterization of Yb2O3-Al2O3 glasses by the Pechini sol-gel method combined with flame synthesis. In Ceramics International, 2014, vol. 40, no. 4, p. 6179-6184. (2013: 2.086 - IF, Q1 - JCR, 0.812 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2013.11.071>

Citácie:

1. [1.1] AFTAB, A. - CHAGOYA, K. - FELIX, A. - BLAIR, R. - ORLOVSKAYA, N. Catalytic performance of porous Yb2O3 sesquioxide. In ADVANCES IN APPLIED CERAMICS. ISSN 1743-6753, APR 3 2021, vol. 120, no. 3, p. 175-186. Dostupné na: <https://doi.org/10.1080/17436753.2021.1919359>., Registrované v: WOS
2. [1.1] BALASUBRAMANI, V. - CHANDRASEKARAN, J. - MANIKANDAN, V. - LE, T.K. - MARNADU, R. - VIVEK, P. Upgraded photosensitivity under the influence of Yb doped on V2O5 thin films as an interfacial layer in MIS type Schottky barrier diode as photodiode application. In JOURNAL OF SOLID STATE CHEMISTRY. ISSN 0022-4596, SEP 2021, vol. 301. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122289>., Registrované v: WOS
3. [1.1] MOHAN, K.S. - PANNEERSELVAM, A. - CHANDRASEKARAN, J. - MARNADU, R. - SHKIR, M. An in-depth examination of opto-electrical properties of In-Yb2O3 thin films and fabricated Al/In-Yb2O3/p-Si (MIS) hetero junction diodes. In APPLIED NANOSCIENCE. ISSN 2190-5509, MAY 2021, vol. 11, no. 5, p. 1617-1635. Dostupné na: <https://doi.org/10.1007/s13204-021-01817-4>., Registrované v: WOS
4. [1.1] MOHAN, K.S. - PANNEERSELVAM, A. - MARNADU, R. - CHANDRASEKARAN, J. - SHKIR, M. - TATAROGLU, A. A systematic influence of Cu doping on structural and opto-electrical properties of fabricated Yb2O3 thin films for Al/Cu-Yb2O3/p-Si Schottky diode applications. In INORGANIC CHEMISTRY COMMUNICATIONS. ISSN 1387-7003, JUL 2021, vol. 129. Dostupné na: <https://doi.org/10.1016/j.inoche.2021.108646>., Registrované v: WOS

ADCA393

PUCHÝ, Viktor** - HVIŽDOŠ, Pavol - IVOR, Michal - MEDVEĎ, Dávid - HNATKO, Miroslav - KOVALČÍKOVÁ, Alexandra - SEDLÁK, Richard - DUSZA, Ján. Preparation, friction, wear, and fracture of the Si3N4-Ag-GNPs composites prepared by SPS. In Journal of the European Ceramic Society, 2020, vol. 40, no. 14, p. 4853-4859. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.04.056>

Citácie:

1. [1.1] GRIGORIEV, Sergey - PRISTINSKIY, Yuri - VOLOSOVA, Marina - FEDOROV, Sergey - OKUNKOVA, Anna - PERETYAGIN, Pavel - SMIRNOV, Anton. Wire Electrical Discharge Machining, Mechanical and Tribological Performance of TiN Reinforced Multiscale SiAlON Ceramic Composites Fabricated by Spark Plasma Sintering. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 2, pp., Registrované v: WOS
2. [1.1] LIU, Lei - SHINOZAKI, Kenji. Toughening silica glass by imparting ductility using a small amount of silver nanoparticles. In MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING. ISSN 0921-5093, 2021, vol. 817, no., pp. Dostupné na: <https://doi.org/10.1016/j.msea.2021.141372>., Registrované v: WOS

3. [1.1] MIR, Aqib Hussain - AHMAD, S. N. A study on fabrication of silicon nitride-based advanced ceramic composite materials via spark plasma sintering. In *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS*. ISSN 1464-4207, 2021, vol. 235, no. 8, pp. 1739-1756. Dostupné na: <https://doi.org/10.1177/14644207211013560>., Registrované v: WOS
- ADCA394 QIN, Zhengxing* - ZENG, Shu* - MELINTE, Georgian - BUČKO, Tomáš - BADAWI, Michael - SHEN, Yanfeng - GILSON, Jean-Pierre - ERSEN, Ovidiu - WEI, Yingxu - LIU, Zhongmin - LIU, Xinmei - YAN, Zifeng - XU, Shutao** - VALTCHEV, Valentin - MINTOVA, Svetlana**. Understanding the fundamentals of microporosity upgrading in zeolites: Increasing diffusion and catalytic performances. In *Advanced Science*, 2021, vol. 8, no. 17, p. 2100001-1-2100001-9. (2020: 16.806 - IF, Q1 - JCR, 5.388 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 2198-3844. Dostupné na: <https://doi.org/10.1002/advs.202100001>
- Citácie:
1. [1.1] PACANA, Andrzej - SIWIEC, Dominika. Universal Model to Support the Quality Improvement of Industrial Products. In *MATERIALS*, 2021, vol. 14, no. 24, pp. Available on: <https://doi.org/10.3390/ma14247872>., Registrované v: WOS
- ADCA395 RAKHMATULLIN, Aydar - BOČA, Miroslav** - MLYNÁRIKOVÁ, Jarmila - HADZIMOVÁ, Eva - VASKOVÁ, Zuzana - POLOVOV, Ilya B. - MIČUŠÍK, Matej. Solid state NMR and XPS of ternary fluorido-zirconates of various coordination modes. In *Journal of Fluorine Chemistry*, 2018, vol. 208, p. 24-35. (2017: 1.879 - IF, Q2 - JCR, 0.645 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0022-1139. Dostupné na: <https://doi.org/10.1016/j.jfluchem.2018.01.010>
- Citácie:
1. [1.1] BOGDANOV, Evgeniy - MOLOKEEV, Maxim S. - GOREV, Mikhail - KARTASHEV, Andrey - LAPTASH, Natalia M. - FLEROV, Igor N. Phase transition in RbCdZrF7: Structure and thermal properties. In *JOURNAL OF FLUORINE CHEMISTRY*. ISSN 0022-1139, 2021, vol. 245, no., pp. Dostupné na: <https://doi.org/10.1016/j.jfluchem.2021.109748>., Registrované v: WOS
2. [1.1] FLYNN, Steven - ZHANG, Chi - GRIFFITH, Kent J. - SHEN, Jiahong - WOLVERTON, Christopher - DRAVID, Vinayak P. - POEPELMEIER, Kenneth R. Fluoridation of HfO2. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 7, pp. 4463-4474. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.0c03254>., Registrované v: WOS
3. [1.1] GOREV, Mikhail - MOLOKEEV, Maxim S. - KARTASHEV, Andrey - POGORELTSEV, Evgeniy - MEL'NIKOVA, Svetlana - LAPTASH, Natalia M. - FLEROV, Igor N. Investigation of thermal properties and structure of complex fluoride K3ZrF7. In *JOURNAL OF FLUORINE CHEMISTRY*. ISSN 0022-1139, 2021, vol. 241, no., pp. Dostupné na: <https://doi.org/10.1016/j.jfluchem.2020.109677>., Registrované v: WOS
4. [1.1] KAVUN, V. Ya - UVAROV, N. F. - DIDENKO, N. A. - POLYANTSEV, M. M. Synthesis, thermal properties, ion mobility, and conductivity in non-stoichiometric phases (NH4)(2-x)ZrF6-x (0 < x ≤ 0.25). In *JOURNAL OF SOLID STATE CHEMISTRY*. ISSN 0022-4596, 2021, vol. 296, no., pp. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122025>., Registrované v: WOS
5. [1.1] KAVUN, V. Ya. - ANTOKHINA, T. F. - SAVCHENKO, N. N. - POLYANTSEV, M. M. - PODGORBUNSKII, A. B. Ion Mobility and Conduction in the (NH4)(6)LiHf2Zr2F23 Compound. In *RUSSIAN JOURNAL OF ELECTROCHEMISTRY*. ISSN 1023-1935, 2021, vol. 57, no. 2, pp. 104-114. Dostupné na: <https://doi.org/10.1134/S102319352102004X>., Registrované v: WOS
6. [1.1] LAN, Rongshan - LIU, Yiyang - HAN, Ling - YANG, Jing - YIN, Huiqin - GE, Min - FU, Xiaobin - LIU, Hongtao - QIAN, Yuan. Probing the ionic structure of FLiNaK-ZrF4 salt mixtures by solid-state NMR. In *RSC ADVANCES*, 2021, vol. 11, no. 39, pp. 23846-23850. Dostupné na: <https://doi.org/10.1039/d1ra04629b>., Registrované v: WOS
7. [1.1] LIU, Yiyang - LAN, Rongshan - DONG, Changwu - WANG, Kun - FU, Xiaobin - LIU, Hongtao - QIAN, Yuan - WANG, Jianqiang. High-Temperature Magic-Angle Spin Nuclear Magnetic Resonance Reveals Sodium Ion-Doped Crystal-Phase Formation in FLiNaK Eutectic Salt Solidification. In *JOURNAL OF PHYSICAL CHEMISTRY C*. ISSN 1932-7447, 2021, vol. 125, no. 8, pp. 4704-4709. Dostupné na: <https://doi.org/10.1021/acs.jpcc.0c10608>., Registrované v: WOS
8. [1.1] QIU, Zhang-wei-jia - LI, Zheng-kun - FU, Hua-meng - ZHANG, Long - ZHU, Zheng-wang - ZHANG, Hong-wei - WANG, Ai-min - LI, Hong - ZHANG, Hai-feng. Effect of pH and NaF addition on corrosion of Zr-based bulk metallic glass in Na2SO4-containing solution. In *INTERMETALLICS*. ISSN 0966-9795, 2021, vol. 129, no., pp. Dostupné na: <https://doi.org/10.1016/j.intermet.2020.107034>., Registrované v: WOS
9. [1.1] YANG, Fanxi - LI, Qiuju - WANG, Dan - ZHOU, Cang - ZHENG, Shaobo. Interfacial Structure Change and Selective Dissolution of Columbite-(Fe) Mineral during HF Acid Leaching. In *MINERALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020146>., Registrované v: WOS
10. [1.2] LAN, Rongshan - LIU, Yiyang - FU, Xiaobin - LIU, Hongtao - QIAN, Yuan. Probing the

- glass transition structure of ZrF_4 -FLiNaK by solid-state MAS NMR. In *He Jishu/Nuclear Techniques*. ISSN 02533219, 2021-07-15, 44, 7, pp. Dostupné na: <https://doi.org/10.11889/j.0253-3219.2021.hjs.44.070501>, Registrované v: SCOPUS
- ADCA396 RAKHMATULLIN, Aydar** - POLOVOV, Ilya B. - MALTSEV, Dmitry** - ALLIX, Mathieu - VOLKOVICH, Vladimir - CHUKIN, Andrey V. - BOČA, Miroslav - BESSADA, Catherine. Combined approach for the structural characterization of alkali fluoroscandates: Solid-state NMR, powder X-ray diffraction, and density functional theory calculations. In *Inorganic Chemistry*, 2018, vol. 57, no. 3, p. 1184-1195. (2017: 4.700 - IF, Q1 - JCR, 1.892 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.7b02617>
- Citácie:
- [1.1] BRAUNIGER, Thomas - BIELEC, Philipp - ZEMAN, Otto E. O. - MOUDRAKOVSKI, Igor L. - HOCH, Constantin - SCHNICK, Wolfgang. Synthesis of the scandium chloride hydrates $ScCl_3 \cdot 3H_2O$ and $Sc_2Cl_4(OH)_2 \cdot 12H_2O$ and their characterisation by X-ray diffraction, Sc-45 NMR spectroscopy and DFT calculations. In *ZEITSCHRIFT FÜR NATURFORSCHUNG SECTION B-A JOURNAL OF CHEMICAL SCIENCES*. ISSN 0932-0776, 2021, vol. 76, no. 3-4, pp. 217-225. Dostupné na: <https://doi.org/10.1515/znb-2021-0009>, Registrované v: WOS
- ADCA397 RAMTEKE, D. - HUJOVÁ, Miroslava - KRAXNER, Jozef - GALUSEK, Dušan - ROMERO, Acacio Rincon - FALCONE, Roberto - BERNARDO, Enrico**. Up-cycling of 'unrecyclable' glasses in glass-based foams by weak alkali-activation, gel casting and low-temperature sintering. In *Journal of cleaner production*, 2021, vol. 278, p. 123985-1-123985-7. (2020: 9.297 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0959-6526. Dostupné na: <https://doi.org/10.1016/j.jclepro.2020.123985>
- Citácie:
- [1.1] KONGKAJUN, Nuntaporn - LAITILA, Edward A. - INEURE, Pitcharat - PRAKAYPAN, Wichit - CHERDHIRUNKORN, Benya - CHAKARTNARODOM, Parinya. Soil-cement bricks produced from local clay brick waste and soft sludge from fiber cement production. In *CASE STUDIES IN CONSTRUCTION MATERIALS*, 2020, vol. 13, no., pp. ISSN 2214-5095. Available on: <https://doi.org/10.1016/j.cscm.2020.e00448>, Registrované v: WOS
 - [1.1] KURTULUS, Cansu - KURTULUS, Recep - KAVAS, Taner. Foam glass derived from ferrochrome slag and waste container glass: Synthesis and extensive characterizations. In *CERAMICS INTERNATIONAL*, 2021, vol. 47, no. 17, pp. 24997-25008. ISSN 0272-8842. Available on: <https://doi.org/10.1016/j.ceramint.2021.05.228>, Registrované v: WOS
 - [1.1] VOLLPRECHT, Daniel - MACHIELS, Lieven - JONES, Peter Tom. The EU Training Network for Resource Recovery through Enhanced Landfill Mining-A Review. In *PROCESSES*, 2021, vol. 9, no. 2, pp. Available on: <https://doi.org/10.3390/pr9020394>, Registrované v: WOS
- ADCA398 REGE, Pankaj D. - MALKINA, Oľga - GOROFF, Nancy S. The effect of Lewis bases on the ^{13}C NMR of lodoalkynes. In *Journal of American Chemical Society*, 2002, vol. 124, no. 3, p. 370-371. Dostupné na: <https://doi.org/10.1021/ja016290g>
- Citácie:
- [1.1] WANG, Ye - XIONG, Guowei - ZHANG, Chuanxin - CHEN, Yunfeng. Controllable Activation of beta-Alkyl Nitroalkenes: Regioselective Synthesis of Allyl and Vinyl Sulfones. In *JOURNAL OF ORGANIC CHEMISTRY*, 2021, vol. 86, no. 5, pp. 4018-4026. ISSN 0022-3263. Dostupné na: <https://doi.org/10.1021/acs.joc.0c02869>, Registrované v: WOS
- ADCA399 REPISKÝ, Michal** - KOMOROVSKÝ, Stanislav** - KÁDEK, Marius - KONEČNÝ, Lukáš - EKSTRÖM, Ulf - MALKIN, Elena - KAUPP, Martin - RUUD, Kenneth - MALKINA, Oľga - MALKIN, Vladimír. ReSpect: Relativistic spectroscopy DFT program package. In *Journal of Chemical Physics*, 2020, vol. 152, no. 18, p. 184101-1-184101-36. (2019: 2.991 - IF, Q2 - JCR, 1.047 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/5.0005094>
- Citácie:
- [1.1] ALKORTA, Ibon - CLARAMUNT, Rosa M. - SANZ, Dionisia - ELGUERO, Jose - HOLZER, Wolfgang. A C-13 chemical shifts study of iodopyrazoles: experimental results and relativistic and non-relativistic calculations. In *STRUCTURAL CHEMISTRY*. ISSN 1040-0400, 2021, vol. 32, no. 3, pp. 925-937. Dostupné na: <https://doi.org/10.1007/s11224-021-01755-5>, Registrované v: WOS
 - [1.1] DESMARAIS, Jacques K. - ERBA, Alessandro - FLAMENT, Jean-Pierre - KIRTMAN, Bernard. Perturbation Theory Treatment of Spin-Orbit Coupling II: A Coupled Perturbed Kohn-Sham Method. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 8, pp. 4712-4732. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00460>, Registrované v: WOS
 - [1.1] FRANZKE, Yannick J. - MACK, Fabian - WEIGEND, Florian. NMR Indirect Spin-Spin

- Coupling Constants in a Modern QuasiRelativistic Density Functional Framework. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 7, pp. 3974-3994. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00167>, Registrované v: WOS*
4. [1.1] GARBACZ, Piotr - VAARA, Juha. Direct enantiomeric discrimination through antisymmetric hyperfine coupling. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2021, vol. 57, no. 67, pp. 8264-8267. Dostupné na: <https://doi.org/10.1039/d1cc02579a>, Registrované v: WOS
5. [1.1] HALBERT, Loic - VIDAL, Marta L. - SHEE, Avijit - CORIANI, Sonia - GOMES, Andre Severo Pereira. Relativistic EOM-CCSD for Core-Excited and Core-Ionized State Energies Based on the Four-Component Dirac-Coulomb(-Gaunt) Hamiltonian. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 6, pp. 3583-3598. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c01203>, Registrované v: WOS
6. [1.1] MATTIAT, Johann - LUBER, Sandra. Recent Progress in the Simulation of Chiral Systems with Real Time Propagation Methods. In HELVETICA CHIMICA ACTA. ISSN 0018-019X, 2021, vol. 104, no. 12, pp. Dostupné na: <https://doi.org/10.1002/hlca.202100154>, Registrované v: WOS
7. [1.1] MELL, Bernd - RUST, Joerg - LEHMANN, Christian W. - BERGER, Raphael J. F. - OTTE, Daniela - ERTL, Martin - MONKOWIUS, Uwe - MOHR, Fabian. Arylamidoethyl-Functionalized Imidazolium Salts: Precursors for Dianionic [C,N,C](2-) Carbene Ligands at a Platinum Center. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 7, pp. 890-898. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00013>, Registrované v: WOS
8. [1.1] NAKAI, Hiromi. Development of Linear-Scaling Relativistic Quantum Chemistry Covering the Periodic Table. In BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN. ISSN 0009-2673, 2021, vol. 94, no. 6, pp. 1664-1681. Dostupné na: <https://doi.org/10.1246/bcsj.20210091>, Registrované v: WOS
9. [1.1] SUN, Shichao - STETINA, Torin F. - ZHANG, Tianyuan - HU, Hang - VALEEV, Edward F. - SUN, Qiming - LI, Xiaosong. Efficient Four-Component Dirac-Coulomb-Gaunt Hartree-Fock in the Pauli Spinor Representation. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 6, pp. 3388-3402. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00137>, Registrované v: WOS
10. [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. Current density and molecular magnetic properties. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2021, vol. 57, no. 93, pp. 12362-12378. Dostupné na: <https://doi.org/10.1039/d1cc03350f>, Registrované v: WOS
11. [1.1] VELASQUEZ, Angie - CHAMORRO, Yuly - MALDONADO, Alejandro - AUCAR, Gustavo - RESTREPO, Albeiro. Microsolvation of Sr²⁺, Ba²⁺: Structures, energies, bonding, and nuclear magnetic shieldings. In INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. ISSN 0020-7608, 2021, vol. 121, no. 18, pp. Dostupné na: <https://doi.org/10.1002/qua.26753>, Registrované v: WOS
12. [1.2] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of ⁷⁷Se and ¹²⁵Te nuclear magnetic resonance spectral parameters and their structural applications. In Magnetic Resonance in Chemistry. ISSN 07491581, 2021-04-01, 59, 4, pp. 359-407. Dostupné na: <https://doi.org/10.1002/mrc.5111>, Registrované v: SCOPUS

ADCA400 REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - MALKIN, Elena - MALKINA, Oľga - MALKIN, Vladimír. Relativistic four-component calculations of electronic g-tensors in the matrix Dirac-Kohn-Sham framework. In Chemical Physics Letters, 2010, vol. 488, no. 1-3, p. 94-97. (2009: 2.291 - IF, Q2 - JCR, 1.241 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0009-2614. Dostupné na: <https://doi.org/10.1016/j.cplett.2010.01.077>

Citácie:

1. [1.1] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION, 2021, vol. 17, no. 1, pp. 255-268. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.0c01005>, Registrované v: WOS

ADCA401 REPISKÝ, Michal - KOMOROVSKÝ, Stanislav - MALKINA, Oľga - MALKIN, Vladimír. Restricted magnetically balanced basis applied for relativistic calculations of indirect nuclear spin-spin coupling tensors in the matrix Dirac-Kohn-Sham framework. In Chemical Physics, 2009, vol. 356, no. 1-3, p. 236-242. (2008: 1.961 - IF, Q2 - JCR, 1.200 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). Dostupné na: <https://doi.org/10.1016/j.chemphys.2008.10.037>

Citácie:

1. [1.2] FENG, Rulin - DUIGNAN, Thomas J. - AUTSCHBACH, Jochen. Electron-Nucleus Hyperfine Coupling Calculated from Restricted Active Space Wavefunctions and an Exact Two-Component Hamiltonian. In Journal of Chemical Theory and Computation, 2021-01-12, 17, 1, pp. 255-268. ISSN 15499618. Available on: <https://doi.org/10.1021/acs.jctc.0c01005>, Registrované v:

SCOPUS

2. [1.2] FRANZKE, Yannick J. - MACK, Fabian - WEIGEND, Florian. NMR Indirect Spin-Spin Coupling Constants in a Modern Quasi-Relativistic Density Functional Framework. In *Journal of Chemical Theory and Computation*, 2021-07-13, 17, 7, pp. 3974-3994. ISSN 15499618. Available on: <https://doi.org/10.1021/acs.jctc.1c00167>., Registrované v: SCOPUS
3. [1.2] GILLHUBER, Sebastian - FRANZKE, Yannick J. - WEIGEND, Florian. Paramagnetic NMR Shielding Tensors and Ring Currents: Efficient Implementation and Application to Heavy Element Compounds. In *Journal of Physical Chemistry A*, 2021-11-11, 125, 44, pp. 9707-9723. ISSN 10895639. Available on: <https://doi.org/10.1021/acs.jpca.1c07793>., Registrované v: SCOPUS
4. [1.2] JAKUBOWSKA, Katarzyna - PECUL, Magdalena. Nuclear magnetic resonance parameters in Zninf2/inf, Cdinf2/inf and Hginf2/inf dimers: relativistic calculations. In *Theoretical Chemistry Accounts*, 2021-03-01, 140, 3, pp. ISSN 1432881X. Available on: <https://doi.org/10.1007/s00214-021-02720-5>., Registrované v: SCOPUS
5. [1.2] RUSAKOV, Yuriy Yu - RUSAKOVA, Irina L. Efficient J-oriented tin basis sets for the correlated calculations of indirect nuclear spin-spin coupling constants. In *Magnetic Resonance in Chemistry*, 2021-07-01, 59, 7, pp. 713-722. ISSN 07491581. Available on: <https://doi.org/10.1002/mrc.5132>., Registrované v: SCOPUS
6. [1.2] RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of sup77/supSe and sup125/supTe nuclear magnetic resonance spectral parameters and their structural applications. In *Magnetic Resonance in Chemistry*, 2021-04-01, 59, 4, pp. 359-407. ISSN 07491581. Available on: <https://doi.org/10.1002/mrc.5111>., Registrované v: SCOPUS
7. [1.2] VALENTINE, Andrew J. - GEER, Ana M. - TAYLOR, Laurence J. - TEALE, Andrew M. - WOOD, Katherine E. - WILLIAMS, Huw E.L. - LEWIS, William - ARGENT, Stephen P. - MCMASTER, Jonathan - KAYS, Deborah L. Structural and electronic studies of substituted: Mterphenyl lithium complexes. In *Dalton Transactions*, 2021-01-14, 50, 2, pp. 722-728. ISSN 14779226. Available on: <https://doi.org/10.1039/d0dt03972a>., Registrované v: SCOPUS

ADCA402

REPISKÝ, Michal - KONEČNÝ, Lukáš - KÁDEK, Marius - KOMOROVSKÝ, Stanislav - MALKINA, Olga - MALKIN, Vladimír - RUUD, Kenneth. Excitation energies from real-time propagation of the four-component Dirac-Kohn-Sham equation. In *Journal of Chemical Theory and Computation*, 2015, vol. 11, no. 3, p. 980-991. (2014: 5.498 - IF, Q1 - JCR, 2.803 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/ct501078d>

Citácie:

1. [1.1] BAIARDI, Alberto. Electron Dynamics with the Time-Dependent Density Matrix Renormalization Group. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 6, pp. 3320-3334. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.0c01048>., Registrované v: WOS
2. [1.1] HELMICH-PARIS, Benjamin. Simulating X-ray absorption spectra with complete active space self-consistent field linear response methods. In *INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY*, 2021, vol. 121, no. 3, pp. ISSN 0020-7608. Available on: <https://doi.org/10.1002/qua.26559>., Registrované v: WOS
3. [1.1] MATTIAT, Johann - LUBER, Sandra. Recent Progress in the Simulation of Chiral Systems with Real Time Propagation Methods. In *HELVETICA CHIMICA ACTA*, 2021, vol. 104, no. 12, pp. ISSN 0018-019X. Available on: <https://doi.org/10.1002/hlca.202100154>., Registrované v: WOS
4. [1.1] PANDEYA, Pratima - AIKENS, Christine M. Real-Time Electron Dynamics Study of Plasmon-Mediated Photocatalysis on an Icosahedral Al-13(-1) Nanocluster. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 22, pp. 4847-4860. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c02924>., Registrované v: WOS
5. [1.1] SHEPARD, Christopher - ZHOU, Ruiyi - YOST, Dillon C. - YAO, Yi - KANAI, Yosuke. Simulating electronic excitation and dynamics with real-time propagation approach to TDDFT within plane-wave pseudopotential formulation. In *JOURNAL OF CHEMICAL PHYSICS*, 2021, vol. 155, no. 10, pp. ISSN 0021-9606. Available on: <https://doi.org/10.1063/5.0057587>., Registrované v: WOS
6. [1.1] WIBOWO, Meilani - IRONS, Tom J. P. - TEALE, Andrew M. Modeling Ultrafast Electron Dynamics in Strong Magnetic Fields Using Real-Time Time-Dependent Electronic Structure Methods. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*, 2021, vol. 17, no. 4, pp. 2137-2165. ISSN 1549-9618. Available on: <https://doi.org/10.1021/acs.jctc.0c01269>., Registrované v: WOS
7. [1.2] DANIEL, C. Density functional theories and coordination chemistry. In *Comprehensive Coordination Chemistry III*, 2021-07-21, 1-9, pp. 256-275. Dostupné na: <https://doi.org/10.1016/B978-0-12-409547-2.14828-0>., Registrované v: SCOPUS

- ADCA403 RESCHKE, S. - HALUSCHKA, C. - RIEDEL, Ralf - LENČEŠ, Zoltán - GALUSEK, Dušan. In situ generated homogeneous and functionally graded ceramic materials derived from polysilazane. In Journal of the European Ceramic Society, 2003, vol. 23, no. 11, p. 1963-1970. ISSN 0955-2219. Dostupné na: [https://doi.org/10.1016/S0955-2219\(02\)00420-X](https://doi.org/10.1016/S0955-2219(02)00420-X)
Citácie:
1. [1.1] QAZZAZIE-HAUSER, Afnan - HONNEF, Kirsten - HANEMANN, Thomas. Crosslinking Behavior of UV-Cured Polyorganosilazane as Polymer-Derived Ceramic Precursor in Ambient and Nitrogen Atmosphere. In POLYMERS, 2021, vol. 13, no. 15, pp. Dostupné na: <https://doi.org/10.3390/polym13152424>., Registrované v: WOS
- ADCA404 REVIKINE, Roman - ARBUZNIKOV, Alexei V. - TREMBLAY, Jean-Christophe - REMENYI, Christian - MALKINA, Olga - MALKIN, Vladimír - KAUPP, Martin. Calculation of zero-field splitting parameters: Comparison of a two-component noncolinear spin-density-functional method and a one-component perturbational approach. In Journal of Chemical Physics, 2006, vol. 125, no. 5, art. no. 054110. (2005: 3.138 - IF, Q1 - JCR, 2.323 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.2227382>
Citácie:
1. [1.1] GHOSH, Krishnendu - MA, He - ONIZHUK, Mykyta - GAVINI, Vikram - GALLI, Giulia. Spin-spin interactions in defects in solids from mixed all-electron and pseudopotential first-principles calculations. In NPJ COMPUTATIONAL MATERIALS, 2021, vol. 7, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41524-021-00590-w>., Registrované v: WOS
2. [1.1] SHURTAKOVA, Daria Vladimirovna - GRISHIN, Peter Olegovich - GAFUROV, Marat Revgerovich - MAMIN, Georgy Vladimirovich. Using DFT to Calculate the Parameters of the Crystal Field in Mn²⁺ Doped Hydroxyapatite Crystals. In CRYSTALS, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/cryst11091050>., Registrované v: WOS
3. [1.1] YOSHIZAWA, Terutaka. A mathematical discussion of Pons Viver's implementation of Lowdin's spin projection operator. In INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. ISSN 0020-7608, 2020, vol. 120, no. 12, pp. Dostupné na: <https://doi.org/10.1002/qua.26215>., Registrované v: WOS
- ADCA405 REY, Jérôme - BIGNAUD, Charles - RAYBAUD, Pascal - BUČKO, Tomáš** - CHIZALLET, Céline**. Dynamic features of transition states for beta-scission reactions of alkenes over acid zeolites revealed by AIMD simulations. In Angewandte Chemie, 2020, vol. 59, no. 43, p. 18938-18942. (2019: 12.959 - IF, Q1 - JCR, 5.438 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.202006065>
Citácie:
1. [1.1] FECIK, Michal - PLESSOW, Philipp N. - STUDT, Felix. Theoretical investigation of the side-chain mechanism of the MTO process over H-SSZ-13 using DFT and ab initio calculations. In CATALYSIS SCIENCE & TECHNOLOGY, 2021, vol. 11, no. 11, pp. 3826-3833. ISSN 2044-4753. Available on: <https://doi.org/10.1039/d1cy00433f>., Registrované v: WOS
- ADCA406 REY, Jérôme - RAYBAUD, Pascal - CHIZALLET, Céline** - BUČKO, Tomáš**. Competition of secondary versus tertiary carbenium routes for the type B isomerization of alkenes over acid zeolites quantified by ab initio molecular dynamics simulations. In ACS Catalysis, 2019, vol. 9, no. 11, p. 9813-9828. (2018: 12.221 - IF, Q1 - JCR, 4.702 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 2155-5435. Dostupné na: <https://doi.org/10.1021/acscatal.9b02856>
Citácie:
1. [1.1] MORTEN, Magnus - CORDERO-LANZAC, Tomas - CNUDE, Pieter - REDEKOP, Evgeniy A. - SVELLE, Stian - VAN SPEYBROECK, Veronique - OLSBYE, Unni. Acidity effect on benzene methylation kinetics over substituted H-MeAlPO-5 catalysts. In JOURNAL OF CATALYSIS. ISSN 0021-9517, 2021, vol. 404, no., pp. 594-606. Dostupné na: <https://doi.org/10.1016/j.jcat.2021.11.002>., Registrované v: WOS
- ADCA407 REY, Jérôme - GOMEZ, Axel - RAYBAUD, Pascal - CHIZALLET, Céline** - BUČKO, Tomáš**. On the origin of the difference between type A and type B skeletal isomerization of alkanes catalyzed by zeolites: The crucial input of ab initio molecular dynamics. In Journal of Catalysis, 2019, vol. 373, p. 361-373. (2018: 7.723 - IF, Q1 - JCR, 2.254 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2019.04.014>
Citácie:
1. [1.1] GALIMBERTI, Daria Ruth - SAUER, Joachim. Chemically Accurate Vibrational Free Energies of Adsorption from Density Functional Theory Molecular Dynamics: Alkanes in Zeolites. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2021, vol. 17, no. 9, pp. 5849-5862. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00519>., Registrované v: WOS
- ADCA408 RIBEIRO, Fabiana R. - FABRIS, José D. - KOSTKA, Joel E. - KOMADEL, Peter - STUCKI, Joseph W. Comparisons of structural iron reduction in smectites by bacteria and dithionite: II. A variable-temperature Mössbauer spectroscopic study of Garfield nontronite. In Pure and Applied Chemistry,

2009, vol. 81, no. 8, p. 1499-1509. (2008: 2.237 - IF, Q2 - JCR, 1.127 - SJR, Q1 - SJR). ISSN 0033-4545. Dostupné na: <https://doi.org/10.1351/PAC-CON-08-11-16>

Citácie:

1. [1.1] HAYNES, Haydn M. - BAILEY, Matthew T. - LLOYD, Jonathan R. Bentonite barrier materials and the control of microbial processes: Safety case implications for the geological disposal of radioactive waste. In *CHEMICAL GEOLOGY*, 2021, vol. 581, no., pp. ISSN 0009-2541. Available on: <https://doi.org/10.1016/j.chemgeo.2021.120353>, Registrované v: WOS
2. [1.1] HUANG, Jianzhi - JONES, Adele - WAITE, T. David - CHEN, Yiling - HUANG, Xiaopeng - ROSSO, Kevin M. - KAPPLER, Andreas - MANSOR, Muammar - TRATNYEK, Paul G. - ZHANG, Huichun. Fe(II) Redox Chemistry in the Environment. In *CHEMICAL REVIEWS*, 2021, vol. 121, no. 13, pp. 8161-8233. ISSN 0009-2665. Available on: <https://doi.org/10.1021/acs.chemrev.0c01286>, Registrované v: WOS
3. [1.1] JOE-WONG, Claresta - WEAVER, Karrie L. - BROWN, Shaun T. - MAHER, Kate. Chromium isotope fractionation during reduction of Chromium(VI) by Iron(II/III)-bearing clay minerals. In *GEOCHIMICA ET COSMOCHIMICA ACTA*, 2021, vol. 292, no., pp. 235-253. ISSN 0016-7037. Available on: <https://doi.org/10.1016/j.gca.2020.09.034>, Registrované v: WOS
4. [1.1] SHI, Bingjie - SMEATON, Christina M. - RODEN, Eric E. - LEE, Seungyeol - LIU, Kai - XU, Huijiang - KENDALL, Brian - JOHNSON, Clark M. - PARSONS, Chris T. - VAN CAPPELLEN, Philippe. Consecutive Fe redox cycles decrease bioreducible Fe(III) and Fe isotope fractionations by eliminating small clay particles. In *GEOCHIMICA ET COSMOCHIMICA ACTA*, 2021, vol. 308, no., pp. 118-135. ISSN 0016-7037. Available on: <https://doi.org/10.1016/j.gca.2021.05.040>, Registrované v: WOS
5. [1.1] YANG, Ran - CAI, Jun - YANG, Hu. Enhanced reactivity of zero-valent aluminum/O₂ by using Fe-bearing clays in 4-chlorophenol oxidation. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 773, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.145661>, Registrované v: WOS
6. [1.1] ZHANG, Na - TONG, Man - YUAN, Songhu. Redox transformation of structural iron in nontronite induced by quinones under anoxic conditions. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 801, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2021.149637>, Registrované v: WOS
7. [1.1] ZHAO, Ziwang - MENG, Ying - WANG, Yahua - LIN, Leiming - XIE, Fuyu - LUAN, Fubo. Anaerobic oxidation of arsenite by bioreduced nontronite. In *JOURNAL OF ENVIRONMENTAL SCIENCES*, 2021, vol. 110, no., pp. 21-27. ISSN 1001-0742. Available on: <https://doi.org/10.1016/j.jes.2021.03.011>, Registrované v: WOS
8. [1.1] ZHAO, Ziwang - MENG, Ying - YUAN, Qingke - WANG, Yahua - LIN, Leiming - LIU, Wenbin - LUAN, Fubo. Microbial mobilization of arsenic from iron-bearing clay mineral through iron, arsenate, and simultaneous iron-arsenate reduction pathways. In *SCIENCE OF THE TOTAL ENVIRONMENT*, 2021, vol. 763, no., pp. ISSN 0048-9697. Available on: <https://doi.org/10.1016/j.scitotenv.2020.144613>, Registrované v: WOS

ADCA409

ROCCA, Dario** - DIXIT, Anant - BADAWI, Michael - LEBÈGUE, Sébastien - GOULD, Tim - BUČKO, Tomáš**. Bridging molecular dynamics and correlated wave-function methods for accurate finite-temperature properties. In *Physical Review Materials*, 2019, vol. 3, no. 4, art. no. 040801, p. 1-6. (2018: 2.926 - IF, Q2 - JCR, karentované - CCC). (2019 - Current Contents). ISSN 2475-9953. Dostupné na: <https://doi.org/10.1103/PhysRevMaterials.3.040801>

Citácie:

1. [1.1] BERGER, Fabian - RYBICKI, Marcin - SAUER, Joachim. Adsorption and cracking of propane by zeolites of different pore size. In *JOURNAL OF CATALYSIS*. ISSN 0021-9517, 2021, vol. 395, no., pp. 117-128. Dostupné na: <https://doi.org/10.1016/j.jcat.2020.12.008>, Registrované v: WOS
2. [1.1] GALIMBERTI, Daria Ruth - SAUER, Joachim. Chemically Accurate Vibrational Free Energies of Adsorption from Density Functional Theory Molecular Dynamics: Alkanes in Zeolites. In *JOURNAL OF CHEMICAL THEORY AND COMPUTATION*. ISSN 1549-9618, 2021, vol. 17, no. 9, pp. 5849-5862. Dostupné na: <https://doi.org/10.1021/acs.jctc.1c00519>, Registrované v: WOS

ADCA410

ROCH, T. ** - GREGOR, Maroš - ŠVEC, Peter Jr. - PLECENIK, T. - SATRAPINSKY, L. - ČAPLOVIČOVÁ, Mária - BYSTRICKÝ, Roman - KÚŠ, P. - PLECENIK, Andrej. Structure of superconducting MgB₂ thin films prepared by vacuum evaporation and ex-situ annealing in Ar and O₂ atmospheres. In *Applied Surface Science*, 2018, vol. 461, p. 233-241. (2017: 4.439 - IF, Q1 - JCR, 1.093 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2018.05.038>

Citácie:

1. [1.1] PUTRA, R. P. - LEE, Y. S. - DUONG, P. - KO, Y. J. - KANG, W. N. - KIM, K.H. - KANG, B. Electron-phonon coupling behavior in MgB₂ films with various thicknesses of ZnO buffer layer

- on metallic substrates. In *SOLID STATE COMMUNICATIONS*. ISSN 0038-1098, 2021, vol. 323, 114117. Dostupné na: <https://doi.org/10.1016/j.ssc.2020.114117>, Registrované v: WOS
- ADCA411 ROUAIX, Sandrine - CANTREL, Laurent** - ARMAND, Yves - MATTEI, Jean-Marie - LIŠKA, Marek - GALUSKOVÁ, Dagmar - VICENA, Ivan - SOLTESZ, Bela. Precipitate formation contributing to sump screens clogging of a nuclear power plant during an accident. In *Chemical engineering research and design*, 2008, vol. 86, no. 6A, p. 633-639. (2007: 0.837 - IF, Q2 - JCR, 0.580 - SJR, Q1 - SJR). ISSN 0263-8762. Dostupné na: <https://doi.org/10.1016/j.cherd.2008.03.016>
Citácie:
1. [1.1] PASI, Anna-Elina - GLANNESKOG, Henrik - FOREMAN, Mark R. St.J - EKBERG, Christian. Tellurium Behavior in the Containment Sump: Dissolution, Redox, and Radiolysis Effects. In *NUCLEAR TECHNOLOGY*, 2021, vol. 207, no. 2, pp. 217-227. ISSN 0029-5450. Available on: <https://doi.org/10.1080/00295450.2020.1762456>, Registrované v: WOS
- ADCA412 SAHU, Sadananda - KAVECKÝ, Štefan - ILLÉSOVÁ, Ľubica - MADEJOVÁ, Jana - BERTÓTI, I. - SZÉPVÖLGYI, János. Formation of boron nitride thin films on β -Si₃N₄ whiskers and α -SiC platelets by dip-coating. In *Journal of the European Ceramic Society*, 1998, vol. 18, no. 8, p.1037-1043. ISSN 0955-2219.
Citácie:
1. [1.2] GENG, Dongsan - ZENG, Ruikai - RONG, Mingcong - WANG, Qimin - LI, Haiqing - WU, Zhengtao. Impact of Si addition on oxidation resistance of Zr-Si-N nanocomposite films. In *Vacuum*, 2021-01-01, 183, pp. ISSN 0042-207X. Dostupné na: <https://doi.org/10.1016/j.vacuum.2020.109853>, Registrované v: SCOPUS
- ADCA413 SAMLÍKOVÁ, Magda - HOLEŠOVÁ, Sylva - HUNDÁKOVÁ, Marianna - PAZDZIARA, Erich - JANKOVIČ, Ľuboš - VALÁŠKOVÁ, Marta. Preparation of antibacterial chlorhexidine/vermiculite and release study. In *International Journal of Mineral Processing*, 2017, vol. 159, p. 1-6. (2016: 1.561 - IF, Q2 - JCR, 0.792 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0301-7516. Dostupné na: <https://doi.org/10.1016/j.minpro.2016.12.002>
Citácie:
1. [1.1] KOTHALAWALA, Sukitha Geethma - ZHANG, Jun - WANG, Yue - YU, Chengzhong. Submicron-Sized Vermiculite Assisted Oregano Oil for Controlled Release and Long-Term Bacterial Inhibition. In *ANTIBIOTICS-BASEL*. ISSN 2079-6382, 2021, vol. 10, no. 11, pp. Dostupné na: <https://doi.org/10.3390/antibiotics10111324>, Registrované v: WOS
2. [1.1] KOWALCZUK, Dorota - GLADYSZ, Agata - PITUCHA, Monika - KAMINSKI, Daniel M. - BARANSKA, Agnieszka - DROP, Bartłomiej. Spectroscopic Study of the Molecular Structure of the New Hybrid with a Potential Two-Way Antibacterial Effect. In *MOLECULES*, 2021, vol. 26, no. 5, pp. Dostupné na: <https://doi.org/10.3390/molecules26051442>, Registrované v: WOS
- ADCA414 SAS, Samuel - DANKO, Martin - BIZOVSKÁ, Valéria - LANG, Kamil - BUJDÁK, Juraj. Highly luminescent hybrid materials based on smectites with polyethylene glycol modified with rhodamine fluorophore. In *Applied Clay Science*, 2017, vol. 138, p. 25-33. (2016: 3.101 - IF, Q1 - JCR, 0.899 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2016.12.034>
Citácie:
1. [1.1] GIOVANNINI, Giorgia - ROSSI, Rene M. - BOESEL, Luciano F. Changes in Optical Properties upon Dye-Clay Interaction: Experimental Evaluation and Applications. In *NANOMATERIALS*, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.3390/nano11010197>, Registrované v: WOS
2. [1.1] LOPEZ-RODRIGUEZ, Daniel - MICO-VICENT, Barbara - JORDAN-NUNEZ, Jorge - BONET-ARACIL, Mariles - BOU-BELDA, Eva. Uses of Nanoclays and Adsorbents for Dye Recovery: A Textile Industry Review. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 23, pp. Dostupné na: <https://doi.org/10.3390/app112311422>, Registrované v: WOS
- ADCA415 SEDLÁČEK, Jaroslav - GALUSEK, Dušan - ŠVANČÁREK, Peter - RIEDEL, Ralf - ATKINSON, A. - WANG, Xin. Abrasive wear of Al₂O₃-SiC and Al₂O₃-(SiC)-C composites with micrometer- and submicrometer-sized alumina matrix grains. In *Journal of the European Ceramic Society*, 2008, vol. 28, no. 15, p. 2983-2993. (2007: 1.562 - IF, Q1 - JCR, 1.212 - SJR, Q1 - SJR). (2008 - WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2008.04.018>
Citácie:
1. [1.1] MARDER, Rachel - GHOSH, Priyadarshini - REIMANIS, Ivar - KAPLAN, Wayne D. The influence of carbon on the microstructure and wear resistance of alumina. In *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*, 2021, vol. 104, no. 8, pp. 4214-4225. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.17832>, Registrované v: WOS
- ADCA416 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - MÚDRA, Erika - RUTKOWSKI, Pawel - DUBIEL, Aleksandra - GIRMAN, Vladimír - BYSTRICKÝ, Roman - DUSZA, Ján. Boron carbide/graphene platelet ceramics with improved fracture toughness and electrical conductivity. In *Journal of the European Ceramic Society*, 2017, vol. 37, p. 3773-3780. (2016: 3.454 - IF, Q1 - JCR,

1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.04.061>

Citácie:

1. [1.1] BALCI, Erdem - YAVAS, Baris - GOLLER, Gultekin. Investigation of the effects of varying amount of graphene nanoplatelets'; (GNPs) addition on carbon nanotubes (CNTs) reinforced boron carbide produced by spark plasma sintering. In JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY. ISSN 2510-1560, 2021, vol. 57, no. 5, pp. 1435-1444. Dostupné na: <https://doi.org/10.1007/s41779-021-00635-9>, Registrované v: WOS
2. [1.1] LIANG, Bin - LIAO, Xingqi - ZHU, Qishuai - YU, Ming - LI, Jiacheng - GENG, Bo - LIU, Kangwei - JIA, Dechang - YANG, Zhihua - ZHOU, Yu. Spark plasma sintering and improved fracture toughness of silicoboron carbonitride ceramics with the integration of 2D MXene. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 19, pp. 27730-27735. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.06.198>, Registrované v: WOS
3. [1.1] LIU, Yingying - GE, Sheng - HUANG, Yihua - HUANG, Zhengren. Formation of core-shell structure in W-added B4C-based composites. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 15, pp. 21915-21923. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.04.209>, Registrované v: WOS
4. [1.1] OJALVO, Cristina - AYLLON, Marcos - ORTIZ, Angel L. - MORENO, Rodrigo. Aqueous tape casting of super-hard B4C laminates with rGO-enriched reinforcing interlayers. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 11, pp. 5457-5465., Registrované v: WOS
5. [1.1] WANG, Aiyang - LIU, Chun - HU, Lanxin - TIAN, Tian - HE, Qianglong - WANG, Weimin - WANG, Hao - FU, Zhengyi. Effects of processing on mechanical properties of B4C-graphene composites fabricated by hot pressing. In MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING. ISSN 0921-5093, 2021, vol. 808, no., pp., Registrované v: WOS
6. [1.2] HVIŽDOŠ, Pavol. Wear and erosion resistant ceramic materials. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 416-424. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00056-4>, Registrované v: SCOPUS
7. [1.2] LIAN, Jiawei - SHAN, Qingliang - CHEN, Weiwei - MA, Qian - ZENG, Shenghui - XIONG, Hao - WANG, Yewei - XU, Qiankun - SHUI, Anze. Influence of Cooling Rates on the Microstructure and Mechanical Properties of Aluminum Titanate Flexible Ceramic. In Advanced Engineering Materials. ISSN 14381656, 2021-09-01, 23, 9, pp. Dostupné na: <https://doi.org/10.1002/adem.202100170>, Registrované v: SCOPUS

ADCA417 SEDNIČKOVÁ, Michaela - JOCHEC MOŠKOVÁ, Daniela - JANIGOVÁ, Ivica - KRONEK, Juraj - JANKOVIČ, Ľuboš - ŠLOUF, Miroslav - CHODÁK, Ivan. Properties of natural rubber composites with structurally different clay intercalable surfactants. In Journal of Polymer Research, 2017, vol. 24, art. no. 105. (2016: 1.615 - IF, Q2 - JCR, 0.446 - SJR, Q2 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1022-9760. Dostupné na: <https://doi.org/10.1007/s10965-017-1261-0>

Citácie:

1. [1.1] MOHANRAJ, K. - RAI, R.S. - SURESH, M. - LOGAPRIYA, B. - MARICHAMY, S. - MUTHURAJ, S. Optimal process characteristics of melting of polyisoprene. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2021, vol. 45, 2, SI, p. 2413-2415., Registrované v: WOS
2. [1.1] RAVIKUMAR, N. - SHARMILA, P. - PREMNATH, S.P. - RAI, R.S. - KHAN, J.M.F. - SUBBIAH, R. Performance and optimization of parameters on rubber punching process. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2021, vol. 45, 2, p. 2581-2583., Registrované v: WOS

ADCA418 SERWICKA, Ewa M.** - ZIMOWSKA, Malgorzata - DURACZYNSKA, Dorota - NAPRUSZEWSKA, Bogna D. - NATTICH-RAK, Malgorzata - MORDARSKI, Grzegorz - LITYNSKA-DOBRZYNSKA, L. - PÁLKOVÁ, Helena. PDDA-montmorillonite composites loaded with Ru nanoparticles: Synthesis, characterization, and catalytic properties in hydrogenation of 2-butanone. In Polymers : Open Access Polymer Science Journal, 2018, vol. 10, iss. 8, p. 865-879. (2017: 2.935 - IF, Q1 - JCR, 0.852 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 2073-4360. Dostupné na: <https://doi.org/10.3390/polym10080865>

Citácie:

1. [1.1] JOSHI, Sameer - SAHU, Rajnish - DENNIS, Vida A. - SINGH, Shree R. Nanofiller-Enhanced Soft Non-Gelatin Alginate Capsules for Modified Drug Delivery. In PHARMACEUTICALS, 2021, vol. 14, no. 4, pp. Dostupné na: <https://doi.org/10.3390/ph14040355>, Registrované v: WOS

ADCA419 SHENDEROVICH, Ilja G. - SMIRNOV, S.N. - DENISOV, Gleb S. - GINDIN, V.A. - GOLUBEV, Nikolai S. - DUNGER, A. - REIBKE, R. - KIRPEKAR, S. - MALKINA, Olga - LIMBACH, Hans-Heinrich. Nuclear magnetic resonance of hydrogen bonded clusters between F- and (HF)_n:

Experiment and theory. In *Berichte der Bunsen-Gesellschaft - Physical Chemistry Chemical Physics*, 1998, vol. 102, no. 3, p. 422-428.

Citácie:

1. [1.1] ALKORTA, Ibon - ELGUERO, Jose - DEL BENE, Janet E. Perturbing the O-(HO)-O-horizontal ellipsis Hydrogen Bond in 1-oxo-3-hydroxy-2-propene. In *MOLECULES*, 2021, vol. 26, no. 11, pp. Dostupné na: <https://doi.org/10.3390/molecules26113086>, Registrované v: WOS
2. [1.1] BAYZI ISFAHANI, Vahideh - SILVA, Maria Manuela. Fundamentals and Advances of Electrochromic Systems: A Review. In *ADVANCED ENGINEERING MATERIALS*, 2021, vol. 23, no. 12, pp. ISSN 1438-1656. Dostupné na: <https://doi.org/10.1002/adem.202100567>, Registrované v: WOS
3. [1.1] GRABOWSKI, Slawomir J. Experimental Methods and Techniques. In *UNDERSTANDING HYDROGEN BONDS*, 2021, vol. 19, no., pp. 225-306., Registrované v: WOS
4. [1.1] GRABOWSKI, Slawomir J. From Weak Interactions to Covalent Bonds: Weak, Moderate and Strong Hydrogen Bonds. In *UNDERSTANDING HYDROGEN BONDS*, 2021, vol. 19, no., pp. 334-367., Registrované v: WOS
5. [1.1] KARPOV, Valerii V. - PUZYK, Aleksandra M. - TOLSTOY, Peter M. - TUPIKINA, Elena Yu. Hydration of selenolate moiety: Ab initio investigation of properties of O-HMIDLINE HORIZONTAL ELLIPSISSe(-) hydrogen bonds in CH3Se(-)MIDLINE HORIZONTAL ELLIPSIS(H2O)(n) clusters. In *JOURNAL OF COMPUTATIONAL CHEMISTRY*, 2021, vol. 42, no. 28, pp. 2014-2023. ISSN 0192-8651. Dostupné na: <https://doi.org/10.1002/jcc.26733>, Registrované v: WOS
6. [1.1] KAWASAKI, Mitsuo - MORIGAKI, Ken-Ichi - KANO, Gentaro - NAKAMOTO, Hirofumi - TAKEKAWA, Reiji - KAWAMURA, Junichi - MINATO, Taketoshi - ABE, Takeshi - OGUMI, Zempachi. Lactone-Based Liquid Electrolytes for Fluoride Shuttle Batteries. In *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*, 2021, vol. 168, no. 1, pp. ISSN 0013-4651. Dostupné na: <https://doi.org/10.1149/1945-7111/abdaff>, Registrované v: WOS
7. [1.1] SANDER, Stefan - MUELLER, Robert - AHRENS, Mike - KAUPP, Martin - BRAUN, Thomas. Platinum Indolylphosphine Fluorido and Polyfluorido Complexes: An Interplay between Cyclometallation, Fluoride Migration, and Hydrogen Bonding. In *CHEMISTRY-A EUROPEAN JOURNAL*, 2021, vol. 27, no. 57, pp. 14287-14298. ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202102451>, Registrované v: WOS
8. [1.1] WU, Jianglan - LI, Chencheng - CHEN, Qiaobin - ZHAO, Jiang. Salicylaldehyde-based anion sensors featuring turn-on fluorescence, colorimetry, and the anti-counterfeiting application. In *DYES AND PIGMENTS*, 2021, vol. 195, no., pp. ISSN 0143-7208. Dostupné na: <https://doi.org/10.1016/j.dyepig.2021.109709>, Registrované v: WOS

ADCA420

SHEPA, Ivan** - MÚDRA, Erika - VOJTKO, Marek - TATARKO, Peter - GIRMAN, Vladimír - MILKOVIČ, Ondrej - SOPČÁK, Tibor - MEDVEČKÁ, V. - DUSZA, Ján. Preparation of highly crystalline titanium-based ceramic microfibers from polymer precursor blend by needle-less electrospinning. In *Ceramics International*, 2018, vol. 44, no. 15, p. 17925-17934. (2017: 3.057 - IF, Q1 - JCR, 0.784 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2018.06.268>

Citácie:

1. [1.1] WU, Xibing - QIN, Ning - WANG, Feng - LI, Zhihui - QIN, Jiayao - HUANG, Guojing - WANG, Dianhui - LIU, Peng - YAO, Qingrong - LU, Zhouguang - DENG, Jianqiu. Reversible aluminum ion storage mechanism in Ti-deficient rutile titanium dioxide anode for aqueous aluminum-ion batteries. In *ENERGY STORAGE MATERIALS*. ISSN 2405-8297, 2021, vol. 37, no., pp. 619-627. Dostupné na: <https://doi.org/10.1016/j.ensm.2021.02.040>, Registrované v: WOS
2. [1.1] ZHAO, Buyue - HUANG, Haiming - CHEN, Qunjiao. Fabrication and characterization of Y2Si2O7 fibers prepared by electrospinning. In *JOURNAL OF NON-CRYSTALLINE SOLIDS*, 2021, vol. 594, no., pp. ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2022.121809>, Registrované v: WOS

ADCA421

SHIH, S. J. - LIN, Yu-Chien - LIN, S.H. - VETEŠKA, P. - GALUSEK, Dušan - TUAN, Wei-Hsing. Preparation and characterization of Eu-doped gehlenite glassy particles using spray pyrolysis. In *Ceramics International*, 2016, vol. 42, no. 9, p. 11324-11329. (2015: 2.758 - IF, Q1 - JCR, 0.823 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2016.04.053>

Citácie:

1. [1.1] NAGASAWA, Tsuyoshi - MATSUMOTO, Kai - MINEGISHI, Naoya - KOSAKA, Hidenori. Structural Characterization of Ceria-Supported Pt Nanoparticles by Flame-Assisted Spray Pyrolysis Using a Burner Diffusion Flame. In *ENERGY & FUELS*. ISSN 0887-0624, 2021, vol. 35, no. 15, pp. 12380-12391. Dostupné na: <https://doi.org/10.1021/acs.energyfuels.1c01296>, Registrované v: WOS

ADCA422

SCHLEYER, P.V. - JIAO, H.J. - HOMMES, N.J.R.V. - MALKIN, Vladimír - MALKINA, Ol'ga. An

- evaluation of the aromaticity of inorganic rings: Refined evidence from magnetic properties. In *Journal of the American Chemical Society*, 1997, vol. 119, no. 51, p. 12669-12670. ISSN 0002-7863.
- Citácie:
- [1.1] AL-YASSIRI, Muntadar A. H. Bonding, Aromaticity and Isomerization of Furfuraldehyde through Off-Nucleus Isotropic Magnetic Shielding. In *CHEMISTRYOPEN*, 2021, vol. 10, no. 10, pp. 976-985. ISSN 2191-1363. Dostupné na: <https://doi.org/10.1002/open.202100202>., Registrované v: WOS
 - [1.1] ALTUNDAL, Omer Faruk - HASLAK, Zeynep Pinar - KESKIN, Seda. Combined GCMC, MD, and DFT Approach for Unlocking the Performances of COFs for Methane Purification. In *INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH*, 2021, vol. 60, no. 35, pp. 12999-13012. ISSN 0888-5885. Dostupné na: <https://doi.org/10.1021/acs.iecr.1c01742>., Registrované v: WOS
 - [1.1] ARTIGAS, Albert - HAGEBAUM-REIGNIER, Denis - CARISSAN, Yannick - COQUEREL, Yoann. Visualizing electron delocalization in contorted polycyclic aromatic hydrocarbons. In *CHEMICAL SCIENCE*, 2021, vol. 12, no. 39, pp. 13092-13100. ISSN 2041-6520. Dostupné na: <https://doi.org/10.1039/d1sc03368a>., Registrované v: WOS
 - [1.1] BARANAC-STOJANOVIC, Marija - STOJANOVIC, Milovan - ALEKSIC, Jovana. Triplet state (anti)aromaticity of some monoheterocyclic analogues of benzene, naphthalene and anthracene. In *NEW JOURNAL OF CHEMISTRY*, 2021, vol. 45, no. 11, pp. 5060-5074. ISSN 1144-0546. Dostupné na: <https://doi.org/10.1039/d1nj00207d>., Registrované v: WOS
 - [1.1] CAO, Guo-Jin. Electronic structures and bonding properties of MSi₂- anions (M = V, Nb, and Ta). In *COMPUTATIONAL AND THEORETICAL CHEMISTRY*, 2021, vol. 1206, no., pp. ISSN 2210-271X. Dostupné na: <https://doi.org/10.1016/j.comptc.2021.113480>., Registrované v: WOS
 - [1.1] CAO, Yan - EBADI, Abdol Ghaffar - RAHMANI, Zahra - HERAVI, Mohammad Reza Poor - VESSALLY, Esmail. Substitution effects via aromaticity, polarizability, APT, AIM, IR analysis, and hydrogen adsorption in C₂₀-nTin nanostructures: a DFT survey. In *JOURNAL OF MOLECULAR MODELING*, 2021, vol. 27, no. 12, pp. ISSN 1610-2940. Dostupné na: <https://doi.org/10.1007/s00894-021-04943-6>., Registrované v: WOS
 - [1.1] COSTA, Alexandre - LOPEZ-CASTILLO, Alejandro. Prediction of azulene-based nanographene-like materials. In *DIAMOND AND RELATED MATERIALS*, 2021, vol. 112, no., pp. ISSN 0925-9635. Dostupné na: <https://doi.org/10.1016/j.diamond.2020.108235>., Registrované v: WOS
 - [1.1] DAS, Prasenjit - CHATTARAJ, Pratim Kumar. In Silico Studies on Selected Neutral Molecules, CGa₂Ge₂, AlGaGe₂, and CSiGa₂Ge Containing Planar Tetracoordinate Carbon. In *ATOMS*, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.3390/atoms9030065>., Registrované v: WOS
 - [1.1] DAS, Prasenjit - CHATTARAJ, Pratim Kumar. Substituent Effects on Electride Characteristics of Mg-2(eta(5)-C₅H₅)(2): A Theoretical Study. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 28, pp. 6207-6220. ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.1c04605>., Registrované v: WOS
 - [1.1] DASH, Mrinal Kanti - DAS, Subhra - GIRI, Santanab - DE, Gobinda Chandra - ROYMAHAPATRA, Gourisankar. Comprehensive in silico study on lithiated Triazine isomers and its H-2 storage efficiency. In *JOURNAL OF THE INDIAN CHEMICAL SOCIETY*, 2021, vol. 98, no. 9, pp. ISSN 0019-4522. Dostupné na: <https://doi.org/10.1016/j.jics.2021.100134>., Registrované v: WOS
 - [1.1] FINGERLE, Michael - DINGERKUS, Juliane - SCHUBERT, Hartmut - WURST, Kai M. - SCHEELE, Marcus - BETTINGER, Holger F. Heteroatom Cycloaddition at the (BN)(2) Bay Region of Dibenzoperylene. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2021, vol. 60, no. 29, pp. 15798-15802. ISSN 1433-7851. Dostupné na: <https://doi.org/10.1002/anie.202016699>., Registrované v: WOS
 - [1.1] HASSANPOUR, Akbar - HERAVI, Mohammad Reza Poor - RAHMANI, Zahra - EBADI, Abdolghaffar - AHMADI, Sheida. Characterization of novel pyridine-derived N-heterocyclic silylenes via density functional theory perspective. In *JOURNAL OF THE CHINESE CHEMICAL SOCIETY*, 2021, vol. 68, no. 8, pp. 1405-1412. ISSN 0009-4536. Dostupné na: <https://doi.org/10.1002/jccs.202100051>., Registrované v: WOS
 - [1.1] HASSANPOUR, Akbar - POOR HERAVI, Mohammad Reza - KHEIROLLAHI NEZHAD, Parvaneh Delir - HOSSEINIAN, Akram - AHMADI, Sheida. A computational perspective of novel N-heterocyclic silylenes using density functional theory. In *JOURNAL OF PHYSICAL ORGANIC CHEMISTRY*, 2021, vol. 34, no. 7, pp. ISSN 0894-3230. Dostupné na: <https://doi.org/10.1002/poc.4197>., Registrované v: WOS
 - [1.1] HASSANPOUR, Akbar - YASAR, Semih - EBADI, Abdolghaffar - EBRAHIMIASL, Saeideh - AHMADI, Sheida. Thermodynamic stability, structural and electronic properties for the

- C20-nAln heterofullerenes (n=1-5): a DFT study. In JOURNAL OF MOLECULAR MODELING, 2021, vol. 27, no. 5, pp. ISSN 1610-2940. Dostupné na: <https://doi.org/10.1007/s00894-021-04727-y>, Registrované v: WOS*
15. [1.1] HERAVI, Mohammad Reza Poor - HABIBZADEH, Sepideh - EBADI, Abdol Ghaffar - NEZHAD, Parvaneh Delir Kheirollahi - VESSALLY, Esmail. Substituent effects of fused Hammick silylenes via density functional theory survey. In JOURNAL OF PHYSICAL ORGANIC CHEMISTRY, 2021, vol. 34, no. 11, pp. ISSN 0894-3230. Dostupné na: <https://doi.org/10.1002/poc.4264>, Registrované v: WOS
16. [1.1] HERMANN, Mathias - BOETTCHER, Tobias - SCHORPP, Marcel - RICHERT, Sabine - WASSY, Daniel - KROSSING, Ingo - ESSER, Birgit. Cations and Anions of Dibenzo[a,e]pentalene and Reduction of a Dibenzo[a,e]pentalenophane. In CHEMISTRY-A EUROPEAN JOURNAL, 2021, vol. 27, no. 15, pp. 4964-4970. ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.202005131>, Registrované v: WOS
17. [1.1] HUANG, Yuanyuan - CHEN, Dandan - ZHU, Jun. Adaptive Aromaticity in Metallasilapentalynes. In ORGANOMETALLICS, 2021, vol. 40, no. 7, pp. 899-906. ISSN 0276-7333. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00014>, Registrované v: WOS
18. [1.1] INOSTROZA, Diego - GARCIA, Victor - YANEZ, Osvaldo - TORRES-VEGA, Juan J. - VASQUEZ-ESPINAL, Alejandro - PINO-RIOS, Ricardo - BAEZ-GREZ, Rodrigo - TIZNADO, William. On the NICS limitations to predict local and global current pathways in polycyclic systems. In NEW JOURNAL OF CHEMISTRY, 2021, vol. 45, no. 18, pp. 8345-8351. ISSN 1144-0546. Dostupné na: <https://doi.org/10.1039/d1nj01510a>, Registrované v: WOS
19. [1.1] ISLAS, Rafael - ARIAS-OLIVARES, David - BECERRA-BUITRAGO, Andres - CARLOS GARCIA-SANCHEZ, Luis - NEFTALY MENDEZ-AYON, Lya - ZUNIGA-GUTIERREZ, Bernardo. Metallaborazines: To Be or Not To Be Delocalized. In ACS OMEGA, 2021, vol. 6, no. 30, pp. 19629-19641. ISSN 2470-1343. Dostupné na: <https://doi.org/10.1021/acsomega.1c02257>, Registrované v: WOS
20. [1.1] KARADAKOV, Peter B. - PRESTON, Nicholas. Aromaticity reversals and their effect on bonding in the low-lying electronic states of cyclooctatetraene. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 43, pp. 24750-24756. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp04394c>, Registrované v: WOS
21. [1.1] KODAMA, Takuya - KAWASHIMA, Yuki - UCHIDA, Kenta - DENG, Zhirong - TOBISU, Mamoru. Synthesis and Characterization of 1-Hydroxy-4,5-arene-Fused Tropylium Derivatives. In JOURNAL OF ORGANIC CHEMISTRY, 2021, vol. 86, no. 19, pp. 13800-13807. ISSN 0022-3263. Dostupné na: <https://doi.org/10.1021/acs.joc.1c01818>, Registrované v: WOS
22. [1.1] MIYAZAWA, Yuki - WANG, Zhe - MATSUMOTO, Misaki - HATANO, Sayaka - ANTOL, Ivana - KAYAHARA, Eiichi - YAMAGO, Shigeru - ABE, Manabu. 1,3-Diradicals Embedded in Curved Paraphenylene Units: Singlet versus Triplet State and In-Plane Aromaticity. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 2021, vol. 143, no. 19, pp. 7426-7439. ISSN 0002-7863. Dostupné na: <https://doi.org/10.1021/jacs.1c01329>, Registrované v: WOS
23. [1.1] NEZHAD, Parvaneh Delir Kheirollahi - YOUSEFTABAR-MIRI, Leila - AHMADI, Sheida - EBRAHIMI ASL, Saeideh - VESSALLY, Esmail. A DFT quest for effects of fused rings on the stability of remoteN-heterocyclic carbenes. In STRUCTURAL CHEMISTRY. ISSN 1040-0400, 2021, vol. 32, no. 2, pp. 787-798. Dostupné na: <https://doi.org/10.1007/s11224-020-01650-5>, Registrované v: WOS
24. [1.1] ONO, Kosuke - IWASAWA, Nobuharu. Oligoboroxine-based architectures. In JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, 2021, vol. 101, no. 1-2, pp. 19-29. ISSN 1388-3127. Dostupné na: <https://doi.org/10.1007/s10847-021-01074-6>, Registrované v: WOS
25. [1.1] OTA, Kei - KINJO, Rei. Aromatic nature of neutral and dianionic 1,4-diaza-2,3,5,6-tetraborinine derivatives. In RSC ADVANCES, 2021, vol. 11, no. 1, pp. 592-598. Dostupné na: <https://doi.org/10.1039/d0ra09040a>, Registrované v: WOS
26. [1.1] OTA, Kei - KINJO, Rei. Heavier element-containing aromatics of [4n+2]-electron systems. In CHEMICAL SOCIETY REVIEWS, 2021, vol. 50, no. 18, pp. 10594-10673. ISSN 0306-0012. Dostupné na: <https://doi.org/10.1039/d0cs01354d>, Registrované v: WOS
27. [1.1] PARIDA, Rakesh - DASH, Mrinal Kanti - GIRI, Santanab - ROYMAHAPATRA, Gourisankar. Aromatic N-Heterocyclic superalkali M@C4H4N2 complexes (M=Li, Na, K): A promising potential hydrogen storage system. In JOURNAL OF THE INDIAN CHEMICAL SOCIETY, 2021, vol. 98, no. 5, pp. ISSN 0019-4522. Dostupné na: <https://doi.org/10.1016/j.jics.2021.100065>, Registrované v: WOS
28. [1.1] PINO-RIOS, Ricardo - BAEZ-GREZ, Rodrigo - SOLA, Miquel. Acenes and phenacenes in their lowest-lying triplet states. Does kinked remain more stable than straight? In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 24, pp. 13574-13582. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp01441b>, Registrované v: WOS

29. [1.1] PINO-RIOS, Ricardo - SOLA, Miquel. The Relative Stability of Indole Isomers Is a Consequence of the Glidewell-Lloyd Rule. In JOURNAL OF PHYSICAL CHEMISTRY A, 2021, vol. 125, no. 1, pp. 230-234. ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.0c09549>., Registrované v: WOS
30. [1.1] QIU, Rulin - ZHU, Jun. Adaptive aromaticity in 16-valence-electron metallazapentalenes. In DALTON TRANSACTIONS, 2021, vol. 50, no. 45, pp. 16842-16848. ISSN 1477-9226. Dostupné na: <https://doi.org/10.1039/d1dt03244e>., Registrované v: WOS
31. [1.1] ROSTAMI, Zahra - ASNAASHARIISFAHANI, Manzarbanou - AHMADI, Sheida - HOSSEINIAN, Akram - EBADI, Abdolghaffar. A density functional theory investigation on 1H-4-germapyridine-4-ylidene & the unsaturated heterocyclic substituted ones. In JOURNAL OF MOLECULAR STRUCTURE, 2021, vol. 1238, no., pp. ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2021.130427>., Registrované v: WOS
32. [1.1] SOGUTLU, Inci - SOLTANZADEH, Mehdi - MERT, Handan - MERT, Nihat - VESSALLY, Esmail. Substituent effects on the stability of cyclic unsaturated remote N-heterocyclic Hammick carbenes using density functional theory. In JOURNAL OF MOLECULAR STRUCTURE, 2021, vol. 1230, no., pp. ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2020.129821>., Registrované v: WOS
33. [1.1] SOURI, Maryam. Theoretical investigation of the NLO properties of a series of (C5N)(n) bare graphene nanoribbons. In JOURNAL OF NANOPHOTONICS, 2021, vol. 15, no. 4, pp. ISSN 1934-2608. Dostupné na: <https://doi.org/10.1117/1.JNP.15.046012>., Registrované v: WOS
34. [1.1] STOJANOVIC, Milovan - ALEKSIC, Jovana - BARANAC-STOJANOVIC, Marija. Singlet/Triplet State Anti/Aromaticity of CyclopentadienylCation: Sensitivity to Substituent Effect. In CHEMISTRY-SWITZERLAND, 2021, vol. 3, no. 3, pp. 765-782. Dostupné na: <https://doi.org/10.3390/chemistry3030055>., Registrované v: WOS
35. [1.1] VESSALLY, Esmail - EBADI, Abdol Ghaffar - HERAVI, Mohammad Reza Poor - HABIBZADEH, Sepideh - ROSTAMI, Zahra. Investigation of fused remote N-heterocyclic silylenes (frNHSis), at DFT. In JOURNAL OF MOLECULAR MODELING, 2021, vol. 27, no. 10, pp. ISSN 1610-2940. Dostupné na: <https://doi.org/10.1007/s00894-021-04899-7>., Registrované v: WOS
36. [1.1] ZHANG, Yuwei - ZHANG, Caiyun - MO, Yirong - CAO, Zexing. Planar Tetracoordinate Silicon in Organic Molecules As Carbenoid-Type Amphoteric Centers: A Computational Study. In CHEMISTRY-A EUROPEAN JOURNAL. ISSN 0947-6539, 2021, vol. 27, no. 4, pp. 1402-1409. Dostupné na: <https://doi.org/10.1002/chem.202004298>., Registrované v: WOS

ADCA423

SCHOLTZOVA, Eva - LANGER, Vratislav - SMRČOK, Ľubomír - KOŇŠ, Miroslav - SASINKOVÁ, Vlasta - HIRSCH, Ján. Crystal structure, infrared spectra and DFT study of benzyl 2,3-anhydro-beta-D-ribosepyranoside. In Journal of Chemical Crystallography, 2011, vol. 41, no. 2, p. 167-174. (2010: 0.666 - IF, Q4 - JCR, 0.247 - SJR, Q3 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 1074-1542. Dostupné na: <https://doi.org/10.1007/s10870-010-9858-8>

Citácie:

1. [1.1] JIANG, Xiangqian - BAN, Chuncheng - LI, Ling - WANG, Chong - CHEN, Weiping - LIU, Xiaowei. Thermoelectric properties study on the BN nanoribbons via BoltzTrap first-principles. In AIP ADVANCES, 2021, vol. 11, no. 5, pp. Dostupné na: <https://doi.org/10.1063/5.0042555>., Registrované v: WOS

ADCA424

SCHOLTZOVA, Eva** - TUNEGA, Daniel - SPEZIALE, S. Mechanical properties of ettringite and thaumasite - DFT and experimental study. In Cement and Concrete Research, 2015, vol. 77, p. 9-15. (2014: 2.864 - IF, Q1 - JCR, 4.128 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0008-8846. Dostupné na: <https://doi.org/10.1016/j.cemconres.2015.06.008>

Citácie:

1. [1.1] FU, Qiang - BU, Mengxin - LI, Dan - XU, Wenrui - HE, Jiaqi - NIU, Ditao. Resistance to Sulfate Attack and Chemo-Damage-Transport Model of Sulfate Ions for Tunnel Lining Concrete under the Action of Loading and Flowing Groundwater. In ACS SUSTAINABLE CHEMISTRY & ENGINEERING, 2021, vol. 9, no. 42, pp. 14307-14326. ISSN 2168-0485. Available on: <https://doi.org/10.1021/acssuschemeng.1c05794>., Registrované v: WOS
2. [1.1] HONORIO, Tulio - MAAROUFI, Maroua - AL DANDACHLI, Sirine - BOURDOT, Alexandra. Ettringite hysteresis under sorption from molecular simulations. In CEMENT AND CONCRETE RESEARCH, 2021, vol. 150, no., pp. ISSN 0008-8846. Available on: <https://doi.org/10.1016/j.cemconres.2021.106587>., Registrované v: WOS
3. [1.1] NIYASOM, Samit - TANGBORIBOON, Nuchnapa. Development of biomaterial fillers using eggshells, water hyacinth fibers, and banana fibers for green concrete construction. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 283, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.122627>., Registrované v: WOS
4. [1.1] ZHU, Jianping - CHEN, Yang - ZHANG, Li - GUO, Benkai - FAN, Guangxin - GUAN, Xuemao - ZHAO, Ruiqi. Revealing the doping mechanism of barium in sulfoaluminate cement clinker phases. In JOURNAL OF CLEANER PRODUCTION, 2021, vol. 295, no., pp. ISSN 0959-

- ADCA425 6526. Available on: <https://doi.org/10.1016/j.jclepro.2021.126405>., Registrované v: WOS
 SCHOLTZOVA, Eva** - KUCKOVA, Lenka - KOŽIŠEK, Jozef - TUNEGA, Daniel. Structural and spectroscopic characterization of ettringite mineral - combined DFT and experimental study. In *Journal of Molecular Structure*, 2015, vol. 1100, p. 215-224. (2014: 1.602 - IF, Q3 - JCR, 0.446 - SJR, Q3 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0022-2860. Dostupné na: <https://doi.org/10.1016/j.molstruc.2015.06.075>
- Citácie:
- [1.1] AKULA, Pavan - LITTLE, Dallas N. Mineralogical characterization and thermodynamic modeling of synthesized ettringite from Ca-Al-SO₄ suspensions. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 269, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2020.121304>., Registrované v: WOS
 - [1.1] ASPIOTIS, Konstantinos - SOTIRIADIS, Konstantinos - NTASKA, Anna - MACOVA, Petra - BADOGLIANNIS, Efstratios - TSIVILIS, Sotirios. Durability assessment of self-healing in ordinary Portland cement concrete containing chemical additives. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 305, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.124754>., Registrované v: WOS
 - [1.1] DAI, Xiaodi - AYDIN, Serdar - YARDIMCI, Mert Yucel - LESAGE, Karel - DE SCHUTTER, Geert. Effect of Ca(OH)₂ Addition on the Engineering Properties of Sodium Sulfate Activated Slag. In *MATERIALS*, 2021, vol. 14, no. 15, pp. Available on: <https://doi.org/10.3390/ma14154266>., Registrované v: WOS
 - [1.1] HONORIO, Tulio - MAAROUFI, Maroua - AL DANDACHLI, Sirine - BOURDOT, Alexandra. Ettringite hysteresis under sorption from molecular simulations. In *CEMENT AND CONCRETE RESEARCH*, 2021, vol. 150, no., pp. ISSN 0008-8846. Available on: <https://doi.org/10.1016/j.cemconres.2021.106587>., Registrované v: WOS
 - [1.1] OGORODOVA, L. P. - GRITSENKO, Yu. D. - KOSOVA, D. A. - VIGASINA, M. F. - MELCHAKOVA, L. V. - KSENOFONTOV, D. A. - DEDUSHENKO, S. K. Physicochemical and Thermochemical Study of Ettringite. In *GEOCHEMISTRY INTERNATIONAL*, 2021, vol. 59, no. 12, pp. 1188-1197. ISSN 0016-7029. Available on: <https://doi.org/10.1134/S0016702921100050>., Registrované v: WOS
 - [1.1] PAN, Du - YASEEN, Sarah Abduljabbar - CHEN, Keyou - NIU, Ditao - LEUNG, Christopher Kin Ying - LI, Zongjin. Study of the influence of seawater and sea sand on the mechanical and microstructural properties of concrete. In *JOURNAL OF BUILDING ENGINEERING*, 2021, vol. 42, no., pp. Available on: <https://doi.org/10.1016/j.job.2021.103006>., Registrované v: WOS
 - [1.1] SHAFEEK, Ahmed M. - KHEDR, M. H. - EL-DEK, S. - SHEHATA, Nabila. Influences of calcium sulfate bearing material and zinc oxide nanoparticle on hydration properties of white cement clinker. In *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 2021, vol. 11, no., pp. 2003-2014. ISSN 2238-7854. Available on: <https://doi.org/10.1016/j.jmrt.2021.02.023>., Registrované v: WOS
 - [1.1] XU, Xingang - BI, Haifeng - YU, Yang - FU, Xinghua - WANG, Shoude - LIU, Yu - HOU, Pengkun - CHENG, Xin. Low leaching characteristics and encapsulation mechanism of Cs⁺ and Sr²⁺ from SAC matrix with radioactive IER. In *JOURNAL OF NUCLEAR MATERIALS*, 2021, vol. 544, no., pp. ISSN 0022-3115. Available on: <https://doi.org/10.1016/j.jnucmat.2020.152701>., Registrované v: WOS
 - [1.1] XU, Xingang - LIU, Hao - BI, Haifeng - WANG, Shoude - ZHAO, Piqui - HUANG, Yongbo - CHENG, Xin. Stability and leaching resistance performance of SAC repair and solidification materials exposed to gamma irradiation. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 302, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2021.124309>., Registrované v: WOS
- ADCA426 SCHOLTZOVA, Eva** - JANKOVIČ, Ľuboš - TUNEGA, Daniel*. Stability of tetrabutylphosphonium beidellite organoclay. In *Journal of Physical Chemistry C*, 2018, vol. 122, no. 15, p. 8380-8389. (2017: 4.484 - IF, Q1 - JCR, 2.135 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.8b01042>
- Citácie:
- [1.1] PLEVOVA, Eva - VALLOVA, Silvie - VACULIKOVA, Lenka - HUNDAKOVA, Marianna - GABOR, Roman - SMUTNA, Katerina - ZEBRAK, Radim. Organobeidellites for Removal of Anti-Inflammatory Drugs from Aqueous Solutions. In *NANOMATERIALS*, 2021, vol. 11, no. 11, pp. Available on: <https://doi.org/10.3390/nano11113102>., Registrované v: WOS
- ADCA427 SCHOLTZOVA, Eva** - TUNEGA, Daniel*. Prediction of mechanical properties of grafted kaolinite - A DFT study. In *Applied Clay Science*, 2020, vol. 193, p. 105692-1-105692-7. (2019: 4.605 - IF, Q1 - JCR, 1.069 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105692>
- Citácie:

1. [1.1] HAO, Min - QIAO, Zhen - ZHANG, Heng. *Mechanical Properties of Coal Adsorbing Methane: A Study Based on Molecular Simulation*. In *CHEMISTRY LETTERS*. ISSN 0366-7022, 2021, vol. 50, no. 12, pp. 2022-2024. Dostupné na: <https://doi.org/10.1246/cl.210545>, Registrované v: WOS
 2. [1.1] ZHANG, Li-Lan - ZHENG, Yuan-Yuan - WEI, Peng-Chang - DIAO, Qiu-Feng - YIN, Zhen-Yu. *Nanoscale mechanical behavior of kaolinite under uniaxial strain conditions*. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 201, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105961>, Registrované v: WOS
- ADCA428 SCHOLTZOVA, Eva** - KUCKOVÁ, Lenka - KOŽÍŠEK, Jozef - PÁLKOVÁ, Helena - TUNEGA, Daniel. Experimental and computational study of thaumasite structure. In *Cement and Concrete Research*, 2014, vol. 59, p. 66-72. (2013: 3.848 - IF, Q1 - JCR, 4.335 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0008-8846. Dostupné na: <https://doi.org/10.1016/j.cemconres.2014.02.002>
- Citácie:
1. [1.1] KOSTOVA, B. - PETKOVA, V - KOSTOV-KYTIN, VI - TZVETANOVA, Y. - AVDEEV, G. *TG/DTG-DSC and high temperature in-situ XRD analysis of natural thaumasite*. In *THERMOCHIMICA ACTA*, 2021, vol. 697, no., pp. ISSN 0040-6031. Available on: <https://doi.org/10.1016/j.tca.2021.178863>, Registrované v: WOS
 2. [1.1] TANG, Chenxi - LING, Tung-Chai - MO, Kim Hung. *Raman spectroscopy as a tool to understand the mechanism of concrete durability-A review*. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 268, no., pp. ISSN 0950-0618. Available on: <https://doi.org/10.1016/j.conbuildmat.2020.121079>, Registrované v: WOS
- ADCA429 SCHOLTZOVA, Eva - TUNEGA, Daniel - MADEJOVA, Jana - PÁLKOVÁ, Helena - KOMADEL, Peter. Theoretical and experimental study of montmorillonite intercalated with tetramethylammonium cation. In *Vibrational Spectroscopy*, 2013, vol. 66, p. 123-131. (2012: 1.747 - IF, Q2 - JCR, 0.549 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2013.02.006> (APVV-0362-10 : Organoily a ich kompozity s polymérmi. APVV SK-AT-0020-10 : Molekulové simulácie vybraných organoílov - charakterizácia štruktúry a vlastností)
- Citácie:
1. [1.1] LUNA, Carla Romina - REIMERS, Walter Guillermo - AVENA, Marcelo Javier - JUAN, Alfredo. *Theoretical study of the octahedral substitution effect in delaminated pyrophyllite: physicochemical properties and applications*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2021, vol. 23, no. 27, pp. 14601-14607. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp01032h>, Registrované v: WOS
 2. [1.1] MARGI, Nikhil H. - YADAV, Ganapati D. *Molybdenum oxide modified montmorillonite K10 clay as novel solid acid for flow synthesis of ionone isomers*. In *MOLECULAR CATALYSIS*, 2021, vol. 501, no., pp. ISSN 2468-8231. Dostupné na: <https://doi.org/10.1016/j.mcat.2020.111362>, Registrované v: WOS
 3. [1.1] SUN, Xiaopeng - LIU, Wenli - YANG, Zongyi - ZHUO, Qiming - ZHANG, He - GENG, Pengyue. *DFT study of the adsorption of 2,3-epoxypropyltrimethylammonium chloride on montmorillonite surfaces*. In *JOURNAL OF MOLECULAR LIQUIDS*, 2021, vol. 334, no., pp. ISSN 0167-7322. Dostupné na: <https://doi.org/10.1016/j.molliq.2021.116145>, Registrované v: WOS
 4. [1.1] ZHANG, Hongling - XU, Haihua - XIA, Mingzhu - WANG, Fengyun - WAN, Xia. *The adsorption and mechanism of benzothiazole and 2-hydroxybenzothiazole onto a novel ampholytic surfactant modified montmorillonite: Experimental and theoretical study*. In *ADVANCED POWDER TECHNOLOGY*, 2021, vol. 32, no. 4, pp. 1219-1232. ISSN 0921-8831. Dostupné na: <https://doi.org/10.1016/j.appt.2021.02.022>, Registrované v: WOS
 5. [1.1] ZHANG, Zhijun - YUAN, Ziting - ZHUANG, Li - CHAI, Jun. *Adsorption mechanism of polyacrylamide on kaolinite surface in the presence of Ca²⁺: Insights from DFT calculation*. In *CHEMICAL PHYSICS LETTERS*, 2021, vol. 776, no., pp. ISSN 0009-2614. Dostupné na: <https://doi.org/10.1016/j.cplett.2021.138672>, Registrované v: WOS
- ADCA430 SCHOLTZOVA, Eva** - MADEJOVA, Jana - TUNEGA, Daniel. Structural properties of montmorillonite intercalated with tetraalkylammonium cations - Computational and experimental study. In *Vibrational Spectroscopy*, 2014, vol. 74, p. 120-126. (2013: 1.547 - IF, Q3 - JCR, 0.490 - SJR, Q3 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0924-2031. Dostupné na: <https://doi.org/10.1016/j.vibspec.2014.07.010>
- Citácie:
1. [1.1] QUERO-JIMENEZ, Pedro C. - ARIAS FELIPE, Lester A. - PRIETO GARCIA, Julio O. - JORGE RODRIGUEZ, Maria E. - DE LA TORRE, Jorge - MONTENEGRO, Osvaldo N. - MOLINA-RUIZ, Reinaldo - TISCORNIA, Ines S. *Local Cuban bentonite clay: composition, structure and textural characterization*. In *ANDEAN GEOLOGY*, 2021, vol. 48, no. 3, pp. 546-

556. ISSN 0718-7106. Available on: <https://doi.org/10.5027/geoV48n3-3362>., Registrované v: WOS
- ADCA431 SCHOLTZOVA, Eva - SMRČOK, Ľubomír. On local structural changes in lizardite-1T: {Si4+/Al3+}, {Si4+/Fe3+}, [Mg2+/Al3+], [Mg2+/Fe3+] substitutions. In *Physics and chemistry of minerals*, 2005, vol. 32, no. 5-6, p. 362-373. ISSN 0342-1791. Dostupné na: <https://doi.org/10.1007/s00269-005-0006-5>
Citácie:
1. [1.1] BALAN, Etienne - FRITSCH, Emmanuel - RADTKE, Guillaume - PAULATTO, Lorenzo - JUILLOT, Farid - BARON, Fabien - PETIT, Sabine. First-principles modeling of the infrared spectrum of Fe- and Al-bearing lizardite. In *EUROPEAN JOURNAL OF MINERALOGY*, 2021, vol. 33, no. 5, pp. 647-657. ISSN 0935-1221. Dostupné na: <https://doi.org/10.5194/ejm-33-647-2021>., Registrované v: WOS
- ADCA432 SCHOLTZOVA, Eva** - TUNEGA, Daniel. Density functional theory study of the stability of the tetrabutylphosphonium and tetrabutylammonium montmorillonites. In *Clay Minerals*, 2019, vol. 54, no. 1, p. 41-48. (2018: 1.787 - IF, Q3 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/clm.2019.5>
Citácie:
1. [1.1] MADEJOVA, Jana - BARLOG, Martin - JANKOVIC, Lubos - SLANY, Michal - PALKOVA, Helena. Comparative study of alkylammonium- and alkylphosphonium-based analogues of organo-montmorillonites. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 200, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105894>., Registrované v: WOS
- ADCA433 SINGH, Meinam Annebushan** - SARMA, Deba Kumar - HANZEL, Ondrej - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Surface characteristics enhancement of MWCNT alumina composites using multi-pass WEDM process. In *Journal of the European Ceramic Society*, 2018, vol. 38, no. 11, p. 4035-4042. (2017: 3.794 - IF, Q1 - JCR, 1.068 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2018.04.062>
Citácie:
1. [1.1] KARMAKAR, Ranit - MAJI, Pabitra. Research advancements in machining of metal matrix composites through wire electro discharge machining technique. In *MATERIALS TODAY-PROCEEDINGS*. ISSN 2214-7853, 2021, vol. 44, no., pp. 4457-4461. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.10.717>., Registrované v: WOS
2. [1.1] VISHWAKARMA, Rahul - VERMA, Rajesh Kumar. Micro electric discharge machining (mu-EDM) of polymer nanocomposites modified by graphene nanoplatelets/carbon using rotating electrode tool. In *JOURNAL OF MICROMECHANICS AND MICROENGINEERING*. ISSN 0960-1317, 2021, vol. 31, no. 8, pp. Dostupné na: <https://doi.org/10.1088/1361-6439/ac11cb>., Registrované v: WOS
- ADCA434 SINGH, Meinam Annebushan - SARMA, Deba Kumar - HANZEL, Ondrej - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Machinability analysis of multi walled carbon nanotubes filled alumina composites in wire electrical discharge machining process. In *Journal of the European Ceramic Society*, 2017, vol. 37, no. 9, p. 3107-3114. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.03.058>
Citácie:
1. [1.1] LIU, Yourong - SHEN, Jinrong - SHEN, Tong - ZHENG, Jihong - ZHUANG, Songlin. Electro-optical properties and frequency response of polymer-dispersed liquid crystal gratings doped with multi-walled carbon nanotubes. In *JOURNAL OF MATERIALS SCIENCE*. ISSN 0022-2461, 2021, vol. 56, no. 22, pp. 12660-12670. Dostupné na: <https://doi.org/10.1007/s10853-021-06104-9>., Registrované v: WOS
2. [1.1] PAN, Hongwei - LIU, Zhidong - QIU, Mingbo - ZHANG, Ming - DENG, Cong. Extreme wire electrical discharge machining based on semiconductor characteristics. In *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*. ISSN 0268-3768, 2021, vol. 115, no. 7-8, pp. 2477-2489. Dostupné na: <https://doi.org/10.1007/s00170-021-07019-0>., Registrované v: WOS
3. [1.1] VISHWAKARMA, Rahul - VERMA, Rajesh Kumar. Micro electric discharge machining (mu-EDM) of polymer nanocomposites modified by graphene nanoplatelets/carbon using rotating electrode tool. In *JOURNAL OF MICROMECHANICS AND MICROENGINEERING*. ISSN 0960-1317, 2021, vol. 31, no. 8, pp. Dostupné na: <https://doi.org/10.1088/1361-6439/ac11cb>., Registrované v: WOS
- ADCA435 SINGH, Meinam Annebushan - JOSHI, Kamlesh - HANZEL, Ondrej - SINGH, Ramesh Kumar - ŠAJGALÍK, Pavol - MARLA, Deepak**. Identification of wire electrical discharge machinability of SiC sintered using rapid hot pressing technique. In *Ceramics International*, 2020, vol. 46, no. 11, p. 17261-17271. (2019: 3.830 - IF, Q1 - JCR, 0.891 - SJR, Q1 - SJR, karentované - CCC). (2020 -

Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.04.013>

Citácie:

1. [1.1] CHAUDHARI, Rakesh - KHANNA, Sakshum - VORA, Jay - PATEL, Vivek K. - PANELIYA, Sagar - PIMENOV, Danil Yu - GIASIN, Khaled - WOJCIECHOWSKI, Szymon. Experimental investigations and optimization of MWCNTs-mixed WEDM process parameters of nitinol shape memory alloy. In JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T. ISSN 2238-7854, 2021, vol. 15, no., pp. 2152-2169. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.09.038>, Registrované v: WOS
2. [1.1] PAN, Hongwei - LIU, Zhidong - QIU, Mingbo - ZHANG, Ming - DENG, Cong. Extreme wire electrical discharge machining based on semiconductor characteristics. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2021, vol. 115, no. 7-8, pp. 2477-2489. Dostupné na: <https://doi.org/10.1007/s00170-021-07019-0>, Registrované v: WOS
3. [1.1] VISHWAKARMA, Rahul - VERMA, Rajesh Kumar. Micro electric discharge machining (mu-EDM) of polymer nanocomposites modified by graphene nanoplatelets/carbon using rotating electrode tool. In JOURNAL OF MICROMECHANICS AND MICROENGINEERING. ISSN 0960-1317, 2021, vol. 31, no. 8, pp. Dostupné na: <https://doi.org/10.1088/1361-6439/ac11cb>, Registrované v: WOS
4. [1.1] WEN, Z. X. - ZHANG, X. H. - YUE, X. W. - ZHANG, C. J. - ZHANG, Y. L. - YUE, Z. F. Monotonic tension behavior of 2D woven oxide/oxide ceramic matrix composites at ultra-high temperature. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 6, pp. 3535-3546. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.01.001>, Registrované v: WOS

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SKLENÁK, Štěpán - ANDRIKOPOULOS, Prokopis C. - WHITTLETON, Sarah R. - JIRGLOVÁ, Hana - SAZAMA, Petr - BENCO, Ľubomír - BUČKO, Tomáš - HAFNER, Jürgen - SOBALÍK, Zdeněk. Effect of the Al siting on the structure of Co(II) and Cu(II) cationic sites in ferrierite. A periodic DFT molecular dynamics and FTIR study. In Journal of Physical Chemistry C, 2013, vol. 117, no. 8, p. 3958-3968. (2012: 4.814 - IF, Q1 - JCR, 2.529 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/jp310236d>

Citácie:

1. [1.1] KWAK, Seung Jae - KIM, Hyo Seok - PARK, Namjun - PARK, Myung-June - LEE, Won Bo. Recent progress on Al distribution over zeolite frameworks: Linking theories and experiments. In KOREAN JOURNAL OF CHEMICAL ENGINEERING. ISSN 0256-1115, 2021, vol. 38, no. 6, pp. 1117-1128. Dostupné na: <https://doi.org/10.1007/s11814-021-0796-2>, Registrované v: WOS
2. [1.1] OLSZOWKA, Joanna E. - LEMISHKA, Mariia - MLEKODAJ, Kinga - KUBAT, Pavel - RUTKOWSKA-ZBIK, Dorota - DEDECEK, Jiri - TABOR, Edyta. Determination of Zn Speciation, Siting, and Distribution in Ferrierite Using Luminescence and FTIR Spectroscopy. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2021, vol. 125, no. 17, pp. 9060-9073. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c00543>, Registrované v: WOS

ADCA437

SLANÝ, Michal** - JANKOVIČ, Ľuboš - MADEJOVÁ, Jana. Structural characterization of organo-montmorillonites prepared from a series of primary alkylamines salts: Mid-IR and near-IR study. In Applied Clay Science, 2019, vol. 176, p. 11-20. (2018: 3.890 - IF, Q1 - JCR, 0.990 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2019.04.016>

Citácie:

1. [1.1] ABOELFETOH, Eman F. - ELABEDIEN, Mohamed E. Zain - EBEID, El-Zeiny M. Effective treatment of industrial wastewater applying SBA-15 mesoporous silica modified with graphene oxide and hematite nanoparticles. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104817>, Registrované v: WOS
2. [1.1] AKHTAR, Athar N. - MURTAZA, G. - SHAFIQUE, M. Ahsan - HAIDYRAH, Ahmed S. Effect of Cu Ions Implantation on Structural, Electronic, Optical and Dielectric Properties of Polymethyl Methacrylate (PMMA). In POLYMERS, 2021, vol. 13, no. 6, pp. Dostupné na: <https://doi.org/10.3390/polym13060973>, Registrované v: WOS
3. [1.1] ANTICO, Enriqueta - VERA, Ruben - VAZQUEZ, Francisco - FONTAS, Claudia - LU, Changyong - ROS, Josep. Preparation and Characterization of Nanoparticle-Doped Polymer Inclusion Membranes. Application to the Removal of Arsenate and Phosphate from Waters. In MATERIALS, 2021, vol. 14, no. 4, pp. Dostupné na: <https://doi.org/10.3390/ma14040878>, Registrované v: WOS
4. [1.1] ARIFIN, N. F. T. - YUSOF, N. - NORDIN, N. A. H. M. - BILAD, M. Roil - JAAFAR, J. - ISMAIL, A. F. - AZIZ, F. - SALLEH, W. N. W. Comparison of different activated agents on biomass-derived graphene towards the hybrid nanocomposites with zeolitic imidazolate

- framework-8 for room temperature hydrogen storage. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105118>., Registrované v: WOS
5. [1.1] BASHIR, Arshid - PANDITH, Altaf Hussain - MALIK, Lateef Ahmad - QUREASHI, Aaliya - GANAIE, Firdous Ahmad - DAR, Ghulam Nabi. Magnetically recyclable L-cysteine capped Fe₃O₄ nanoadsorbent: A promising pH guided removal of Pb(II), Zn(II) and HCrO₄-contaminants. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105880>., Registrované v: WOS
6. [1.1] BHAT, Akash P. - GOGATE, Parag R. Cavitation-based pre-treatment of wastewater and waste sludge for improvement in the performance of biological processes: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104743>., Registrované v: WOS
7. [1.1] BHATT, Mukesh - CHAKINALA, Anand Gupta - JOSHI, Jyeshtharaj B. - SHARMA, Anita - PANT, K. K. - SHAH, Kalpit - SHARMA, Abhishek. Valorization of solid waste using advanced thermo-chemical process: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105434>., Registrované v: WOS
8. [1.1] BOMPADRE, Francesca - SCHEFFLER, Christina - UTECH, Toni - DONNINI, Jacopo. Polymeric Coatings for AR-Glass Fibers in Cement-Based Matrices: Effect of Nanoclay on the Fiber-Matrix Interaction. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 12, pp. Dostupné na: <https://doi.org/10.3390/app11125484>., Registrované v: WOS
9. [1.1] CASTANEDA RAMIREZ, Aldo Arturo - ROJAS GARCIA, Elizabeth - LOPEZ MEDINA, Ricardo - CONTRERAS LARIOS, Jose L. - SUAREZ PARRA, Raul - MAUBERT FRANCO, Ana Marisela. Selective Adsorption of Aqueous Diclofenac Sodium, Naproxen Sodium, and Ibuprofen Using a Stable Fe₃O₄-FeBTC Metal-Organic Framework. In *MATERIALS*, 2021, vol. 14, no. 9, pp. Dostupné na: <https://doi.org/10.3390/ma14092293>., Registrované v: WOS
10. [1.1] CHEN, Qiang - WANG, Hong - TANG, Xiaodong - BA, Zihan - ZHAO, Xiaoqiang - WANG, Yi - DENG, Hong. One-step synthesis of carbon quantum dot-carbon nanotube composites on waste eggshell-derived catalysts for enhanced adsorption of methylene blue. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106222>., Registrované v: WOS
11. [1.1] CHEN, Yan - NIE, Zeguang - GAO, Junkai - WANG, Jiaqi - CAI, Miaomiao. A novel adsorbent of bentonite modified chitosan-microcrystalline cellulose aerogel prepared by bidirectional regeneration strategy for Pb(II) removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105755>., Registrované v: WOS
12. [1.1] CHENG, Zhanqi - YAN, Wenhao - SUI, Zhibo - TANG, Jiyu - YUAN, Chengfang - CHU, Liusheng - FENG, Hu. Effect of Fiber Content on the Mechanical Properties of Engineered Cementitious Composites with Recycled Fine Aggregate from Clay Brick. In *MATERIALS*, 2021, vol. 14, no. 12, pp. Dostupné na: <https://doi.org/10.3390/ma14123272>., Registrované v: WOS
13. [1.1] CHOWDHURY, Arif - KUMARI, Sunita - KHAN, Afaq Ahmad - HUSSAIN, Sahid. Synthesis of mixed phase crystalline CoNi₂S₄ nanomaterial and selective mechanism for adsorption of Congo red from aqueous solution. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106554>., Registrované v: WOS
14. [1.1] COVALI, Pavel - RAAVE, Henn - ESCUER-GATIUS, Jordi - KAASIK, Allan - TONUTARE, Tonu - ASTOVER, Alar. The Effect of Untreated and Acidified Biochar on NH₃-N Emissions from Slurry Digestate. In *SUSTAINABILITY*, 2021, vol. 13, no. 2, pp. Dostupné na: <https://doi.org/10.3390/su13020837>., Registrované v: WOS
15. [1.1] CRISTIANI, Cinzia - BELLOTTO, Maurizio - DOTELLI, Giovanni - LATORRATA, Saverio - RAMIS, Gianguido - GALLO STAMPINO, Paola - ZUBIANI, Elena Maria Iannicelli - FINOCCHIO, Elisabetta. Rare Earths (La, Y, and Nd) Adsorption Behaviour towards Mineral Clays and Organoclays: Monoionic and Trionic Solutions. In *MINERALS*, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.3390/min11010030>., Registrované v: WOS
16. [1.1] CRISTIANI, Cinzia - FINOCCHIO, Elisabetta - ROSSI, Luciana - GIROMINI, Carlotta - DELL'ANNO, Matteo - PANSERI, Sara - BELLOTTO, Maurizio. Natural Clays as Potential Amino Acids Carriers for Animal Nutrition Application. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 12, pp. Dostupné na: <https://doi.org/10.3390/app11125669>., Registrované v: WOS
17. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In *JOURNAL OF*

- ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>., Registrované v: WOS
18. [1.1] CUKROWICZ, Sylwia - SITARZ, Maciej - KORNAUS, Kamil - KACZMARSKA, Karolina - BOBROWSKI, Artur - GUBERNAT, Agnieszka - GRABOWSKA, Beata. Organobentonites Modified with Poly(Acrylic Acid) and Its Sodium Salt for Foundry Applications. In *MATERIALS*, 2021, vol. 14, no. 8, pp. Dostupné na: <https://doi.org/10.3390/ma14081947>., Registrované v: WOS
19. [1.1] DA COSTA, Talles Barcelos - CARLOS DA SILVA, Meuris Gurgel - ADEODATO VIEIRA, Melissa Gurgel. Lanthanum biosorption using sericin/alginate particles crosslinked by poly (vinyl alcohol): Kinetic, cation exchange, and desorption studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105551>., Registrované v: WOS
20. [1.1] DA SILVA, Jefferson C. S. - FRANCA, D. B. - RODRIGUES, Francisco - OLIVEIRA, Dyego M. - TRIGUEIRO, Pollyana - SILVA FILHO, E. C. - FONSECA, M. G. What happens when chitosan meets bentonite under microwave-assisted conditions? Clay-based hybrid nanocomposites for dye adsorption. In *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*. ISSN 0927-7757, 2021, vol. 609, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.125584>., Registrované v: WOS
21. [1.1] DE SOUZA, Ana Paula Nazar - LICEA, Yordy E. - COLACO, Marcos V. - SENRA, Jaqueline D. - CARVALHO, Naledia M. F. Green iron oxides/amino-functionalized MCM-41 composites as adsorbent for anionic azo dye: Kinetic and isotherm studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105062>., Registrované v: WOS
22. [1.1] DU, Weichao - WANG, Xiangyun - BI, Taifei - LIU, Man - ZHANG, Jie - CHEN, Gang. Synthesis and Inhibitive Mechanism of a Novel Clay Hydration Inhibitor for Water-based Drilling Fluids. In *MATERIALS SCIENCE-MEDZIAGOTYRA*. ISSN 1392-1320, 2021, vol. 27, no. 2, pp. 210-216. Dostupné na: <https://doi.org/10.5755/j02.ms.23947>., Registrované v: WOS
23. [1.1] EZ-ZAKI, Hassan - MARANGU, Joseph Mwiti - BELLOTTO, Maurizio - DALCONI, Maria Chiara - ARTIOLI, Gilberto - VALENTINI, Luca. A Fresh View on Limestone Calcined Clay Cement (LC3) Pastes. In *MATERIALS*, 2021, vol. 14, no. 11, pp. Dostupné na: <https://doi.org/10.3390/ma14113037>., Registrované v: WOS
24. [1.1] FACHINI, Joisman - COSER, Thais Rodrigues - DE ARAUJO, Alyson Silva - DO VALE, Ailton Teixeira - JINDO, Keiji - DE FIGUEIREDO, Cicero Celio. One Year Residual Effect of Sewage Sludge Biochar as a Soil Amendment for Maize in a Brazilian Oxisol. In *SUSTAINABILITY*, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/su13042226>., Registrované v: WOS
25. [1.1] FAISAL, Ayad A. H. - SHIHAB, Ahmed H. - NAUSHAD, Mu - AHAMAD, Tansir - SHARMA, Gaurav - AL-SHEETAN, Khalid M. Green synthesis for novel sorbent of sand coated with (Ca/Al)-layered double hydroxide for the removal of toxic dye from aqueous environment. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105342>., Registrované v: WOS
26. [1.1] GAMIZ, Beatriz - CELIS, Rafael. S-Carvone Formulation Based on Granules of Organoclay to Modulate Its Losses and Phytotoxicity in Soil. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 8, pp. Dostupné na: <https://doi.org/10.3390/agronomy11081593>., Registrované v: WOS
27. [1.1] GONZALEZ-LOPEZ, Martin Esteban - LAUREANO-ANZALDO, Cesar Mario - PEREZ-FONSECA, Aida Alejandra - GOMEZ, Cesar - ROBLEDO-ORTIZ, Jorge Ramon. Congo red adsorption with cellulose-graphene nanoplatelets beads by differential column batch reactor. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105029>., Registrované v: WOS
28. [1.1] GUEGAN, Regis - LE FORESTIER, Lydie. Performance evaluation of organoclays for the amoxicillin retention in a dynamic context. In *CHEMICAL ENGINEERING JOURNAL*. ISSN 1385-8947, 2021, vol. 406, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.126859>., Registrované v: WOS
29. [1.1] HASSAAN, Mohamed A. - EL NEMR, Ahmed - ELKATORY, Marwa R. - RAGAB, Safaa - EL-NEMR, Mohamed A. - PANTALEO, Antonio. Synthesis, Characterization, and Synergistic Effects of Modified Biochar in Combination with alpha-Fe2O3 NPs on Biogas Production from Red Algae *Pterocladia capillacea*. In *SUSTAINABILITY*, 2021, vol. 13, no. 16, pp. Dostupné na: <https://doi.org/10.3390/su13169275>., Registrované v: WOS
30. [1.1] HEJNA, Aleksander. Clays as Inhibitors of Polyurethane Foams'; Flammability. In *MATERIALS*, 2021, vol. 14, no. 17, pp. Dostupné na: <https://doi.org/10.3390/ma14174826>., Registrované v: WOS
31. [1.1] HOSHYARMANESH, Parisa - MOHAMMADBAGHERI, Zahra - RAHMATI, Abbas. Synthesis and application of bisurea derivatives: Effect of structural differences on the gelation properties. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929,

- 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105220>., Registrované v: WOS
32. [1.1] HUO, Jin-hua - YU, Bai-song - PENG, Zhi-gang - WU, Zhan-sheng - ZHANG, Luo-hong. Thermal control effects and mechanism of slag and fly ash on heat development of cement slurry used in hydrate formation. In JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING. ISSN 1875-5100, 2021, vol. 91, no., pp. Dostupné na: <https://doi.org/10.1016/j.jngse.2021.103967>., Registrované v: WOS
33. [1.1] JEYASEELAN, Antonysam - ALBAQAMI, Munirah D. - VISWANATHAN, Natrayasamy. Facile design of metal ion fabricated benzene-1,3,5-tricarboxylic acid based metal organic frameworks for defluoridation of water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104995>., Registrované v: WOS
34. [1.1] KACZYNSKA, Katarzyna - KACZYNSKI, Konrad - PELKA, Piotr. Calcination of Clay Raw Materials in a Fluidized Bed. In MATERIALS, 2021, vol. 14, no. 14, pp. Dostupné na: <https://doi.org/10.3390/ma14143989>., Registrované v: WOS
35. [1.1] KHAN, Amzad - SINGH, Raghuvir - GUPTA, Piyush - GUPTA, Kanika - KHATRI, Om P. Aminoguanidine-based deep eutectic solvents as environmentally-friendly and high-performance lubricant additives. In JOURNAL OF MOLECULAR LIQUIDS. ISSN 0167-7322, 2021, vol. 339, no., pp. Dostupné na: <https://doi.org/10.1016/j.molliq.2021.116829>., Registrované v: WOS
36. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>., Registrované v: WOS
37. [1.1] KITIK, A. - PROTSENKO, V. - DANILOV, F. - PAVLIK, V. - HNATKO, M. - SOLTYS, J. Enhancement of the surface characteristics of Ti-based biomedical alloy by electropolishing in environmentally friendly deep eutectic solvent (Ethaline). In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2021, vol. 613, no., pp. Dostupné na: <https://doi.org/10.1016/j.colsurfa.2020.126125>., Registrované v: WOS
38. [1.1] KLOPROGGE, J. Theo - PONCE, Concepcion P. - ORTILLO, Danilo O. X-ray Photoelectron Spectroscopic Study of Some Organic and Inorganic Modified Clay Minerals. In MATERIALS, 2021, vol. 14, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ma14237115>., Registrované v: WOS
39. [1.1] KODALI, Deepa - UDDIN, Md-Jamal - MOURA, Esperidiana A. B. - RANGARI, Vijay K. Mechanical and thermal properties of modified Georgian and Brazilian clay infused biobased epoxy nanocomposites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 257, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2020.123821>., Registrované v: WOS
40. [1.1] LA NOCE, Michele - LO FARO, Alessandro - SCIUTO, Gaetano. Clay-Based Products Sustainable Development: Some Applications. In SUSTAINABILITY, 2021, vol. 13, no. 3, pp. Dostupné na: <https://doi.org/10.3390/su13031364>., Registrované v: WOS
41. [1.1] LACH, Michal - GADO, Reda A. - MARCZYK, Joanna - ZIEJEWSKA, Celina - DOGAN-SAGLAMTIMUR, Neslihan - MIKULA, Janusz - SZECHYNSKA-HEBDA, Magdalena - HEBDA, Marek. Process Design for a Production of Sustainable Materials from Post-Production Clay. In MATERIALS, 2021, vol. 14, no. 4, pp. Dostupné na: <https://doi.org/10.3390/ma14040953>., Registrované v: WOS
42. [1.1] LI, Chuan - LI, Zilong - WU, Tao - LUO, Yaqin - ZHAO, Jun - LI, Xinren - YANG, Wencai - CHEN, Xuegang. Metallogenic Characteristics and Formation Mechanism of Naomugeng Clay-Type Lithium Deposit in Central Inner Mongolia, China. In MINERALS, 2021, vol. 11, no. 3, pp. Dostupné na: <https://doi.org/10.3390/min11030238>., Registrované v: WOS
43. [1.1] LI, Hongping - YANG, Lanwen - CAO, Jianxin - NIE, Chenchen - LIU, Hao - TIAN, Juan - CHEN, Wenxing - GENG, Pinglan - XIE, Guiming. Water-Preserving and Salt-Resistant Slow-Release Fertilizers of Polyacrylic Acid-Potassium Humate Coated Ammonium Dihydrogen Phosphate. In POLYMERS, 2021, vol. 13, no. 17, pp. Dostupné na: <https://doi.org/10.3390/polym13172844>., Registrované v: WOS
44. [1.1] LI, Jingjing - DOU, Binlin - ZHANG, Hua - ZHANG, Hao - CHEN, Haisheng - XU, Yujie. Thermochemical characteristics and non-isothermal kinetics of camphor biomass waste. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105311>., Registrované v: WOS
45. [1.1] LIN, Zongkun - YANG, Yuru - LIANG, Zizhan - ZENG, Lei - ZHANG, Aiping. Preparation of Chitosan/Calcium Alginate/Bentonite Composite Hydrogel and Its Heavy Metal Ions Adsorption Properties. In POLYMERS, 2021, vol. 13, no. 11, pp. Dostupné na: <https://doi.org/10.3390/polym13111891>., Registrované v: WOS

46. [1.1] LIU, Mingwei - WANG, Chunze - GUO, Jingbo - ZHANG, Lanhe. Removal of phosphate from wastewater by lanthanum modified bio-ceramisite. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106123>., Registrované v: WOS
47. [1.1] LIU, Zhihan - CAI, Xiunan - FAN, Songlin - ZHANG, Yanjuan - HU, Huayu - HUANG, Zuqiang - LIANG, Jing - QIN, Yuben. Preparation of a stable polyurethane sponge supported Sn-doped ZnO composite via double-template-regulated bionic mineralization for visible-light-driven photocatalytic degradation of tetracycline. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105541>., Registrované v: WOS
48. [1.1] MA, Liwa - XUE, Yuying - DU, Weichao - ZHANG, Jie - QU, Chengtun - CHEN, Gang. Catalytic oxidation of polymer used in oilfield by bentonite supported Cu(II) complexes in a wide pH range. In DESALINATION AND WATER TREATMENT. ISSN 1944-3994, 2021, vol. 229, no., pp. 314-321. Dostupné na: <https://doi.org/10.5004/dwt.2021.27379>., Registrované v: WOS
49. [1.1] MA, Liwa - ZHAO, Furong - ZHANG, Jianqing - MA, Guoyan - ZHAO, Yifei - ZHANG, Jie - CHEN, Gang. Catalytic oxidation of polymer used in oilfield by supported Co(II) complex within a high pH range. In COMPTES RENDUS CHIMIE. ISSN 1631-0748, 2021, vol. 24, no. 2, pp. 61-68. Dostupné na: <https://doi.org/10.5802/crchim.65>., Registrované v: WOS
50. [1.1] MAHMUD, Md Arafat - PHAM, Huyen T. - DUONG, The - YIN, Yanting - PENG, Jun - WU, Yiliang - LIANG, Wensheng - LI, Li - KUMAR, Anand - SHEN, Heping - WALTER, Daniel - NGUYEN, Hieu T. - MOZAFFARI, Naeimeh - TABI, Grace Dansoa - ANDERSSON, Gunther - CATCHPOLE, Kylie R. - WEBER, Klaus J. - WHITE, Thomas P. Combined Bulk and Surface Passivation in Dimensionally Engineered 2D-3D Perovskite Films via Chlorine Diffusion. In ADVANCED FUNCTIONAL MATERIALS. ISSN 1616-301X, 2021, vol. 31, no. 46, pp. Dostupné na: <https://doi.org/10.1002/adfm.202104251>., Registrované v: WOS
51. [1.1] MANFRIN, Jessica - GONCALVES JR, Affonso Celso - SCHWANTES, Daniel - CONRADI JR, Elcio - ZIMMERMANN, Juliano - ZIEMER, Guilherme Lindner. Development of biochar and activated carbon from cigarettes wastes and their applications in Pb²⁺ adsorption. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104980>., Registrované v: WOS
52. [1.1] MISHRA, Gourav - MUKHOPADHYAY, Mausumi. Well dispersed CeO₂@HNTs nanofiller in the poly (vinyl chloride) membrane matrix and enhanced its antifouling properties and rejection performance. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104734>., Registrované v: WOS
53. [1.1] MUHAMMED, Nasiru Salahu - OLAYIWOLA, Teslim - ELKATATNY, Salaheldin. A review on clay chemistry, characterization and shale inhibitors for water-based drilling fluids. In JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING. ISSN 0920-4105, 2021, vol. 206, no., pp. Dostupné na: <https://doi.org/10.1016/j.petrol.2021.109043>., Registrované v: WOS
54. [1.1] NONG, Yingyi - SUN, Jinlong - FU, Meng - CHEN, Huiwen - ZHANG, Zepeng. Effects of cationic modifier type on the structure and morphology of organo-montmorillonite and its application properties in a high-temperature white oil system. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.105995>., Registrované v: WOS
55. [1.1] NUNES, Nuno - RAGONEZI, Carla - GOUVEIA, Carla S. S. - PINHEIRO DE CARVALHO, Miguel A. A. Review of Sewage Sludge as a Soil Amendment in Relation to Current International Guidelines: A Heavy Metal Perspective. In SUSTAINABILITY, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/su13042317>., Registrované v: WOS
56. [1.1] PAREJA-RODRIGUEZ, Raul - FREILE-PELEGRIN, Yolanda - ROBLEDO, Daniel - RUIZ-GOMEZ, Miguel - MARTINEZ-FLORES, Rocio - RODRIGUEZ-GATTORNO, Geonel. Self-generated active sites in graphene oxide-like materials by controlling the oxidative decomposition reactions of Sargassum. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106551>., Registrované v: WOS
57. [1.1] PERELOMOV, Leonid - MANDZHIEVA, Saglara - MINKINA, Tatiana - ATROSHCHENKO, Yury - PERELOMOVA, Irina - BAUER, Tatiana - PINSKY, David - BARAKHOV, Anatoly. The Synthesis of Organoclays Based on Clay Minerals with Different Structural Expansion Capacities. In MINERALS, 2021, vol. 11, no. 7, pp. Dostupné na: <https://doi.org/10.3390/min11070707>., Registrované v: WOS
58. [1.1] PIZARRO, Carmen - ESCUDEY, Mauricio - BRAVO, Camila - GACITUA, Manuel - PAVEZ, Lynda. Sulfate Kinetics and Adsorption Studies on a Zeolite/Polyammonium Cation Composite for Environmental Remediation. In MINERALS, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020180>., Registrované v: WOS

59. [1.1] PLUANGKLANG, Chutima - RANGSRIWATANANON, Kunwadee. Facile Method by Bentonite Treated with Heat and Acid to Enhance Pesticide Adsorption. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/app11115147>., Registrované v: WOS
60. [1.1] QIU, Jun - CUI, Kaibo - WU, Peng - CHEN, Guowei - WANG, Yueting - LIU, Dongliang - JIANG, Shan - WANG, Guifang. The adsorption characteristics and mechanism of montmorillonite with different layer charge density for alkyl ammonium with different carbon chain length. In *NEW JOURNAL OF CHEMISTRY*. ISSN 1144-0546, 2021, vol. 45, no. 23, pp. 10331-10339. Dostupné na: <https://doi.org/10.1039/d1nj01683k>., Registrované v: WOS
61. [1.1] RAHMAN, Muhammad M. - LAW, David W. - PATNAIKUNI, Indubhushan - GUNASEKARA, Chamila - YANCHELOU, Morteza Tahmasebi. Low-Grade Clay as an Alkali-Activated Material. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 4, pp. Dostupné na: <https://doi.org/10.3390/app11041648>., Registrované v: WOS
62. [1.1] RASOULZADEH, Hassan - SHEIKHMOHAMMADI, Amir - ABTAHI, Mehrnoosh - ROSHAN, Bahram - JOKAR, Rezvan. Eco-friendly rapid removal of palladium from aqueous solutions using alginate-diatomite magnano composite. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105954>., Registrované v: WOS
63. [1.1] REGHIOUA, Abdallah - BARKAT, Djamel - JAWAD, Ali H. - ABDULHAMEED, Ahmed Saud - AL-KAHTANI, Abdullah A. - ALOTHMAN, Zeid A. Parametric optimization by Box-Behnken design for synthesis of magnetic chitosan-benzil/ZnO/Fe₃O₄ nanocomposite and textile dye removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105166>., Registrované v: WOS
64. [1.1] SAKTI, Satya Candra Wibawa - WIJAYA, Rizki Ainuna - INDRASARI, Nindayu - FAHMI, Mochamad Zakki - WIDATI, Alfa Akustia - ABDULLOH - NURYONO - CHEN, Chun-Hu. Magnetic hollow buoyant alginate beads achieving rapid remediation of oil contamination on water. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104935>., Registrované v: WOS
65. [1.1] SHEN, Hang - ZHU, Lingdan - LIN, Qi - GUO, Shujun - ZHANG, Huagui. Urushiol-resourced dopamine analogue as a trigger to construct clay-hexacyanoferrate hydrogel for cesium removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106140>., Registrované v: WOS
66. [1.1] SOLTANI, Amin - RAEESI, Ramin - TAHERI, Abbas - DENG, An - MIRZABABAEI, Mehdi. Improved Shear Strength Performance of Compacted Rubberized Clays Treated with Sodium Alginate Biopolymer. In *POLYMERS*, 2021, vol. 13, no. 5, pp. Dostupné na: <https://doi.org/10.3390/polym13050764>., Registrované v: WOS
67. [1.1] SUN, Hongwei - YANG, Jingjie - WANG, Yue - LIU, Yucan - CAI, Chenjian - DAVARPANAH, Afshin. Study on the Removal Efficiency and Mechanism of Tetracycline in Water Using Biochar and Magnetic Biochar. In *COATINGS*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/coatings11111354>., Registrované v: WOS
68. [1.1] SUN, Liwei - YIN, Meilin - TANG, Shaokun. Bi-functionalized ionic liquid-grafted mesoporous alumina: Synthesis, characterization and CO₂/N₂ selectivity. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105829>., Registrované v: WOS
69. [1.1] TEIXEIRA, Paulo F. - COVAS, Jose A. - HILLIOU, Loic. In-Line Rheo-Optical Investigation of the Dispersion of Organoclay in a Polymer Matrix during Twin-Screw Compounding. In *POLYMERS*, 2021, vol. 13, no. 13, pp. Dostupné na: <https://doi.org/10.3390/polym13132128>., Registrované v: WOS
70. [1.1] TOMMALIEH, M. J. Electrical conductivity characterization of Chitosan/Poly (vinyl alcohol) doped by bismuth oxide nanoparticles. In *COMPOSITES COMMUNICATIONS*. ISSN 2452-2139, 2021, vol. 25, no., pp. Dostupné na: <https://doi.org/10.1016/j.coco.2021.100692>., Registrované v: WOS
71. [1.1] TORRES-AVALOS, Josue A. - CAJERO-ZUL, Leonardo R. - VAZQUEZ-LEPE, Milton - LOPEZ-DELLAMARY, Fernando A. - MARTINEZ-RICHA, Antonio - BARRERA-RIVERA, Karla A. - LOPEZ-SERRANO, Francisco - NUNO-DONLUCAS, Sergio M. Synthesis of Poly(methacrylic acid-co-butyl acrylate) Grafted onto Functionalized Carbon Nanotube Nanocomposites for Drug Delivery. In *POLYMERS*, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/polym13040533>., Registrované v: WOS
72. [1.1] VOLKOV, Dmitry S. - ROGOVA, Olga B. - PROSKURNIN, Mikhail A. Organic Matter and Mineral Composition of Silicate Soils: FTIR Comparison Study by Photoacoustic, Diffuse Reflectance, and Attenuated Total Reflection Modalities. In *AGRONOMY-BASEL*, 2021, vol. 11,

- no. 9, pp. Dostupné na: <https://doi.org/10.3390/agronomy11091879>., Registrované v: WOS
73. [1.1] WANG, Chongqing - HUANG, Rong - SUN, Ruirui - YANG, Jiapeng - SILLANPAA, Mika. A review on persulfates activation by functional biochar for organic contaminants removal: Synthesis, characterizations, radical determination, and mechanism. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106267>., Registrované v: WOS
74. [1.1] WIJAYA, Karna - KURNIAWAN, Muhammad Ahan - SAPUTRI, Wahyu Dita - TRISUNARYANTI, Wega - MIRZAN, Mohammad - HARIANI, Poedji Loekitowati - TIKOALU, Alfrets Daniel. Synthesis of nickel catalyst supported on ZrO₂/SO₄ pillared bentonite and its application for conversion of coconut oil into gasoline via hydrocracking process. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105399>., Registrované v: WOS
75. [1.1] WOJCIK-BANIA, Monika - MATUSIK, Jakub. The Effect of Surfactant-Modified Montmorillonite on the Cross-Linking Efficiency of Polysiloxanes. In MATERIALS, 2021, vol. 14, no. 10, pp. Dostupné na: <https://doi.org/10.3390/ma14102623>., Registrované v: WOS
76. [1.1] XIAO, Guiyuan - XU, Guangli - WEI, Tongzhong - ZENG, Jian - LIU, Wenjun - ZHANG, Lu. The Effect of Cu (II) on Swelling and Shrinkage Characteristics of Sodium Bentonite in Landfills. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/app11093881>., Registrované v: WOS
77. [1.1] YIN, Kexin - LIU, Jiangxin - VASILESCU, Andreea-Roxana - DI FILIPPO, Eugenia - OTHMANI, Khaoula. A Procedure to Prepare Sand-Clay Mixture Samples for Soil-Structure Interface Direct Shear Tests. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 12, pp. Dostupné na: <https://doi.org/10.3390/app11125337>., Registrované v: WOS
78. [1.1] YOUSEFI, Mahmood - GHOLAMI, Mitra - OSKOEI, Vahide - MOHAMMADI, Ali Akbar - BAZIAR, Mansour - ESRAFI, Ali. Comparison of LSSVM and RSM in simulating the removal of ciprofloxacin from aqueous solutions using magnetization of functionalized multi-walled carbon nanotubes: Process optimization using GA and RSM techniques. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105677>., Registrované v: WOS
79. [1.1] ZANELLI, Chiara - MARROCCHINO, Elena - GUARINI, Guia - TOFFANO, Alice - VACCARO, Carmela - DONDI, Michele. Recycling Construction and Demolition Residues in Clay Bricks. In APPLIED SCIENCES-BASEL, 2021, vol. 11, no. 19, pp. Dostupné na: <https://doi.org/10.3390/app11198918>., Registrované v: WOS
80. [1.1] ZHU, Wenjuan - YANG, Zhiyong - YASIN, Akram - LIU, Yanxia - ZHANG, Letao. Preparation of Poly(acrylic acid-acrylamide/starch) Composite and Its Adsorption Properties for Mercury (II). In MATERIALS, 2021, vol. 14, no. 12, pp. Dostupné na: <https://doi.org/10.3390/ma14123277>., Registrované v: WOS
81. [1.2] PARK, Sung Sik - LEE, Jung Shin - YOON, Keun Byoung - WOO, Seung Wook - LEE, Dong Eun. Application of an acrylic polymer and epoxy emulsion to red clay and sand. In Polymers, 2021-10-01, 13, 19, pp. Dostupné na: <https://doi.org/10.3390/polym13193410>., Registrované v: SCOPUS

ADCA438 SMEACETTO, Federico** - D'ISANTO, Fabiana - CASALEGNO, Valentina - TATARKO, Peter - SALVO, Milena. Ytterbium disilicate-based glass-ceramic as joining material for ceramic matrix composites. In Journal of the European Ceramic Society, 2021, vol. 41, no. 2, p. 1099-1106. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.022>

Citácie:

- [1.1] CAO, Jian - HE, Zongjing - GUO, Wanbo - LI, Chun - GAI, Lei - QI, Junlei. Joining of Al₂O₃ to ZTA using a B₂O₃-Al₂O₃-SiO₂ glass with in-situ precipitated whiskers. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 18, pp. 25541-25550. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.278>., Registrované v: WOS
- [1.1] FANG, Jian - SUN, Liangbo - GUO, Songsong - SHAN, Tipeng - WEN, Yue - LIU, Chunfeng - ZHANG, Jie. Wetting and joining of surface-oxidized SiC ceramic with calcium lithium aluminosilicate glass filler. In APPLIED SURFACE SCIENCE, 2021, vol. 568, no., pp. ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2021.150951>., Registrované v: WOS
- [1.1] YILIN, Pi - WENHUA, Zhang - YUNSHENG, Zhang - WANTING, Zou - ZAIXIANG, Zhang - FAN, Wu. Migration and transformation of heavy metals in glass-ceramics and the mechanism of stabilization. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 17, pp. 24663-24674. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.188>., Registrované v: WOS

ADCA439 SMRČOK, Ľubomír - SLÁDKOVIČOVÁ, Mariana - LANGER, Vratislav - WILSON, Chick C. - KOŠ, Miroslav. On hydrogen bonding in 1,6-anhydro-beta-D-glucopyranose (levoglucosan): X-ray and neutron diffraction and DFT study. In Acta Crystallographica Section B, 2006, vol. 62, p. 912-

918. (2005: 1.910 - IF, Q1 - JCR, 3.021 - SJR, Q1 - SJR). ISSN 0108-7681. Dostupné na: <https://doi.org/10.1107/S010876810602489X>

Citácie:

1. [1.1] JURKIEWICZ, Karolina - GLAJCAR, Wojciech - KAMINSKI, Kamil - TEMLEITNER, Laszlo - BURIAN, Andrzej. Structure of 1,6-anhydro-beta-D-glucopyranose in plastic crystal, orientational glass, liquid and ordinary glass forms: molecular modeling and X-ray diffraction studies. In ACTA CRYSTALLOGRAPHICA SECTION B-STRUCTURAL SCIENCE CRYSTAL ENGINEERING AND MATERIALS, 2021, vol. 77, no., pp. 138-149. Dostupné na: <https://doi.org/10.1107/S205252062001656X>, Registrované v: WOS

ADCA440

SMRČOK, Ľubomír** - KUCHARÍK, Marián - TOVAR, M. - ŽIŽAK, I. High temperature powder diffraction and solid state DFT study of beta-cryolite (Na₃AlF₆). In Crystal Research and Technology, 2009, vol. 44, no. 8, p. 834-840. (2008: 0.921 - IF, Q3 - JCR, 0.421 - SJR, Q2 - SJR). ISSN 0232-1300. Dostupné na: <https://doi.org/10.1002/crat.200900141>

Citácie:

1. [1.1] PARKER, Stewart F. - RAMIREZ-CUESTA, Anibal J. - DAEMEN, Luke L. The structure and vibrational spectroscopy of cryolite, Na₃AlF₆. In RSC ADVANCES, 2020, vol. 10, no. 43, pp. 25856-25863. Available on: <https://doi.org/10.1039/d0ra04804f>, Registrované v: WOS
2. [1.1] RAKHMATULLIN, Aydar - SIMKO, Frantisek - VERON, Emmanuel - ALLIX, Mathieu - MARTINEAU-CORCOS, Charlotte - FITCH, Andy - FAYON, Franck - SHAKHOVOY, Roman A. - OKHOTNIKOV, Kirill - SAROU-KANIAN, Vincent - KORENKO, Michal - NETRIOVA, Zuzana - POLOVOV, Ilja B. - BESSADA, Catherine. X-ray Diffraction, NMR Studies, and DFT Calculations of the Room and High Temperature Structures of Rubidium Cryolite, Rb₃AlF₆. In INORGANIC CHEMISTRY. ISSN 0020-1669, 2020, vol. 59, no. 9, pp. 6308-6318. Available on: <https://doi.org/10.1021/acs.inorgchem.0c00415>, Registrované v: WOS

ADCA441

SMRČOK, Ľubomír - RIEDER, Milan - KOLESNIKOV, Alexander I. - GRANROTH, Garrett E. Combined inelastic neutron scattering and solid-state density functional theory study of dynamics of hydrogen atoms in muscovite 2M1. In American Mineralogist, 2011, vol. 96, no. 2-3, p. 301-307. (2010: 2.026 - IF, Q2 - JCR, 1.591 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0003-004X. Dostupné na: <https://doi.org/10.2138/am.2011.3618>

Citácie:

1. [1.1] FALL, Alireza - GAMAGE, Sampath - HOWARD, Marquez - FOLLAND, Thomas G. - MAHADIK, Nadeemullah A. - TIWALD, Tom - BOLOTIN, Kirill - CALDWELL, Joshua D. - ABATE, Yohannes. Nanoscale Spectroscopy of Dielectric Properties of Mica. In ACS PHOTONICS. ISSN 2330-4022, 2021, vol. 8, no. 1, pp. 175-181. Dostupné na: <https://doi.org/10.1021/acsphotonics.0c00951>, Registrované v: WOS
2. [1.1] NIU, He - ZHANG, Kaitao - MYLLYMAKI, Sami - ISMAIL, Mostafa Y. - KINNUNEN, Paivo - ILLIKAINEN, Mirja - LIIMATAINEN, Henriikki. Nanostructured and Advanced Designs from Biomass and Mineral Residues: Multifunctional Biopolymer Hydrogels and Hybrid Films Reinforced with Exfoliated Mica Nanosheets. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, 2021, vol. 13, no. 48, pp. 57841-57850. Dostupné na: <https://doi.org/10.1021/acsami.1c18911>, Registrované v: WOS

ADCA442

SMRČOK, Ľubomír**. Rietveld refinement of Y₂O₃ using the Pearson VII profile shape function. In Crystal Research and Technology, 1989, vol. 24, no. 6, p. 607-611. ISSN 0232-1300. Dostupné na: <https://doi.org/10.1002/crat.2170240609>

Citácie:

1. [1.1] YOSHIDA, Hidehiro - HAYASAKA, Hitoshi - SOGA, Kohei - MORITA, Koji - KIM, Byung-Nam - YAMAMOTO, Takahisa. Original Article Doping effect on the flash sintering of Y₂O₃: Promotion of densification and optical translucency. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2020, vol. 40, no. 15, pp. 6053-6060. Available on: <https://doi.org/10.1016/j.jeurceramsoc.2020.06.041>, Registrované v: WOS

ADCA443

SMRČOK, Ľubomír - TUNEGA, Daniel - RAMIREZ-CUESTA, Anibal Javier - IVANOV, Alexander - VALÚCHOVÁ, Jana. The combined inelastic neutron scattering (INS) and solid-state DFT study of hydrogen-atoms dynamics in kaolinite-dimethylsulfoxide intercalate. In Clays and Clay Minerals, 2010, vol. 58, no. 1, p. 52-61. (2009: 1.431 - IF, Q2 - JCR, 0.767 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1007/s00269-010-0358-3>

Citácie:

1. [1.1] DE ARAUJO, Denis T. - CIUFFI, Katia J. - NASSAR, Eduardo J. - VICENTE, Miguel A. - TRUJILLANO, Raquel - RIVES, Vicente - BERNAL, Elena P. - DE FARIA, Emerson H. Grafting of L-proline and L-phenylalanine amino acids on kaolinite through synthesis catalyzed by boric acid. In APPLIED SURFACE SCIENCE ADVANCES. ISSN 2666-5239, 2021, vol. 4, no., pp. Dostupné na: <https://doi.org/10.1016/j.apsadv.2021.100081>, Registrované v: WOS

ADCA444

SMRČOK, Ľubomír - SALAMON, D. - SCHOLTZOVA, Eva - RICHARDSON, James W., Jr. Time-

of-flight Rietveld neutron structure refinement and quantum chemistry study of Y-alpha-sialon. In Journal of the European Ceramic Society, 2006, vol. 26, no. 16, p. 3925-3931. (2005: 1.567 - IF, Q1 - JCR, 1.095 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2005.11.006>

Citácie:

1. [1.1] TAKAHASHI, Takuma - SANO, Yuki - TATAMI, Junichi - IJIMA, Motoyuki - YOKOUCHI, Masahiro. Transparent Y-alpha SiAlON:Ce³⁺ Ceramics Fabricated by Low-Temperature Liquid Phase Sintering Technique. In ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY, 2021, vol. 10, no. 8, pp. ISSN 2162-8769. Dostupné na: <https://doi.org/10.1149/2162-8777/ac1e6f>, Registrované v: WOS

ADCA445

SMRČOK, Lubomír - TUNEGA, Daniel - RAMIREZ-CUESTA, Anibal Javier - SCHOLTZOVA, Eva. The combined inelastic neutron scattering and solid state DFT study of hydrogen atoms dynamics in a highly ordered kaolinite. In Physics and Chemistry of Minerals, 2010, vol. 37, no. 8, p. 571-579. (2009: 1.597 - IF, karentované - CCC). (2010 - Current Contents). Dostupné na: <https://doi.org/10.1007/s00269-010-0358-3>

Citácie:

1. [1.1] RICHARD, Diego - RENDTORFF, Nicolas Maximiliano. Local Environments in Iron-Bearing Clay Minerals by DFT Approaches: The Case of Structural Fe in Kaolinite. In APPLIED CLAY SCIENCE, 2021, vol. 213, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106251>, Registrované v: WOS

2. [1.1] WANG, Jie - FU, Liangjie - YANG, Huaming - ZUO, Xiaochao - WU, Di. Energetics, Interlayer Molecular Structures, and Hydration Mechanisms of Dimethyl Sulfoxide (DMSO)-Kaolinite Nanoclay Guest-Host Interactions. In JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 2021, vol. 12, no. 40, pp. 9973-9981. ISSN 1948-7185. Dostupné na: <https://doi.org/10.1021/acs.jpclett.1c02729>, Registrované v: WOS

ADCA446

STRAKA, Martin** - KORENKO, Michal - SZATMÁRY, Lórant. Electrochemistry of praseodymium in LiF-CaF₂. In Journal of Radioanalytical and Nuclear Chemistry-Articles, 2011, vol. 289, no. 2, p. 591-593. (2010: 0.777 - IF, Q3 - JCR, 0.493 - SJR, Q2 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0236-5731. Dostupné na: <https://doi.org/10.1007/s10967-011-1128-5>

Citácie:

1. [1.1] CVETKOVIC, Vesna S. - FELDHAUS, Dominic - VUKICEVIC, Natasa M. - BARUDZIJA, Tanja S. - FRIEDRICH, Bernd - JOVICEVIC, Jovan N. Electrochemical Study of Nd and Pr Co-Deposition onto Mo and W from Molten Oxyfluorides. In METALS, 2021, vol. 11, no. 9, pp. Available on: <https://doi.org/10.3390/met11091494>, Registrované v: WOS

ADCA447

STRAKA, Martin** - KORENKO, Michal - LISÝ, František - SZATMÁRY, Lórant. Electrochemistry of samarium in lithium-beryllium fluoride salt mixture. In Journal of Rare Earths, 2011, vol. 29, no. 8, p. 798-803. (2010: 1.086 - IF, Q2 - JCR, 0.372 - SJR, Q2 - SJR). ISSN 1002-0721. Dostupné na: [https://doi.org/10.1016/S1002-0721\(10\)60545-5](https://doi.org/10.1016/S1002-0721(10)60545-5)

Citácie:

1. [1.1] STULOV, Yu - KUZNETSOV, S. A. Electrochemical Behavior of SmF₃ in Alkali Chloride Melts. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2021, vol. 168, no. 5, pp. Available on: <https://doi.org/10.1149/1945-7111/abf694>, Registrované v: WOS

2. [1.1] WANG, Chenyang - CHEN, Xiuting - GONG, Yu. On the Structures of Thorium Fluoride and Oxyfluoride Anions in Molten FLiBe and FLiNaK. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, 2021, vol. 125, no. 6, pp. 1640-1646. Available on: <https://doi.org/10.1021/acs.jpcc.0c10197>, Registrované v: WOS

ADCA448

STRAKA, Martin** - SZATMÁRY, Lórant - MAREČEK, Martin - KORENKO, Michal. Uranium recovery from LiF-CaF₂-UF₄-GdF₃ system on Ni electrode. In Journal of Radioanalytical and Nuclear Chemistry, 2013, vol. 298, no. 1, p. 393-397. (2012: 1.467 - IF, Q1 - JCR, 0.542 - SJR, Q2 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0236-5731. Dostupné na: <https://doi.org/10.1007/s10967-013-2436-8>

Citácie:

1. [1.1] STULOV, Yu - KUZNETSOV, S. A. Electrochemical Behavior of SmF₃ in Alkali Chloride Melts. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2021, vol. 168, no. 5, pp. Available on: <https://doi.org/10.1149/1945-7111/abf694>, Registrované v: WOS

ADCA449

SUESS, Manuela - WILHELMI, Christian - SALVO, Milena - CASALEGNO, Valentina - TATARKO, Peter - FUNKE, Matthias. Effect of pulsed laser irradiation on the SiC surface. In International Journal of Applied Ceramic Technology, 2017, vol. 14, no. 3, p. 313-322. (2016: 1.048 - IF, Q2 - JCR, 0.381 - SJR, Q2 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/ijac.12655>

Citácie:

1. [1.1] XIE, Xiaozhu - ZHANG, Yuliang - HUANG, Qingpeng - HUANG, Yajun - ZHANG, Wei -

- ZHANG, Jiafa - LONG, Jiangyou. Monitoring method for femtosecond laser modification of silicon carbide via acoustic emission techniques. In *JOURNAL OF MATERIALS PROCESSING TECHNOLOGY*. ISSN 0924-0136, 2021, vol. 290, no., pp. Dostupné na: <https://doi.org/10.1016/j.jmatprotec.2020.116990>, Registrované v: WOS
- ADCA450 SVOBODA, Roman - BRANDOVÁ, Daniela - CHROMČÍKOVÁ, Mária - SETNÍČKA, Michal - CHOVANEC, Jozef - ČERNÁ, Andrea - LIŠKA, Marek - MÁLEK, Jiří. Se-doped GeTe₄ glasses for far-infrared optical fibers. In *Journal of Alloys and Compounds*, 2017, vol. 695, p. 2434-2443. (2016: 3.133 - IF, Q1 - JCR, 0.954 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0925-8388. Dostupné na: <https://doi.org/10.1016/j.jallcom.2016.11.139>
- Citácie:
- [1.1] GONCALVES, Claudia - MEREAU, Raphael - NAZABAL, Virginie - BOUSSARD-PLEDEL, Catherine - ROILAND, Claire - FURET, Eric - DESCHAMPS, Michael - BUREAU, Bruno - DUSSAUZE, Marc. Study of the Ge₂₀Te_{80-x}Se_x glassy structures by combining solid state NMR, vibrational spectroscopies and DFT modelling. In *JOURNAL OF SOLID STATE CHEMISTRY*, 2021, vol. 297, no., pp. ISSN 0022-4596. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122062>, Registrované v: WOS
 - [1.1] MICOULAUT, M. - PIARRISTEGUY, A. - MASSON, O. - ESCALIER, R. - FLORES-RUIZ, H. - PRADEL, A. Alteration of structural, electronic, and vibrational properties of amorphous GeTe by selenium substitution: An experimentally constrained density functional study. In *PHYSICAL REVIEW B*, 2021, vol. 104, no. 14, pp. ISSN 2469-9950. Dostupné na: <https://doi.org/10.1103/PhysRevB.104.144204>, Registrované v: WOS
- ADCA451 SVOBODA, Roman** - CHROMČÍKOVÁ, Mária - HRUŠKA, Branislav - LIŠKA, Marek. Correlation between the activation energies of structural relaxation and viscous flow for BaO–P₂O₅–Al₂O₃ glasses. In *Journal of Non-Crystalline Solids*, 2020, vol. 536, art. no. 119998. (2019: 2.929 - IF, Q1 - JCR, 0.712 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2020.119998>
- Citácie:
- [1.1] ZHU, Qingong - ZHAO, Gaoling - CAO, Zhiqiang - JIN, Junteng - HAN, Gaorong. A novel method for preparing phase-separated P₂O₅-Al₂O₃ glass with high Young's modulus. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 22, pp. 32202-32209. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.113>, Registrované v: WOS
- ADCA452 SVOBODA, Roman** - MÁLEK, Jiří - LIŠKA, Marek. Correlation between the structure and structural relaxation data for (GeSe₂)_y(Sb₂Se₃)_{1-y} glasses. In *Journal of Non-Crystalline Solids*, 2019, vol. 505, p. 162-169. (2018: 2.600 - IF, Q1 - JCR, 0.689 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0022-3093. Dostupné na: <https://doi.org/10.1016/j.jnoncrysol.2018.11.013>
- Citácie:
- [1.1] KOVALSKIY, Andriy - ALLEN, Joshua A. - GOLOVCHAK, Roman - OELGOETZ, Justin - SHPOTYUK, Oleh - VLCEK, Miroslav - PALKA, Karel. Parameterization of photobleaching and photodarkening in-situ kinetics in thermally deposited GeSe₂ thin films. In *THIN SOLID FILMS*, 2021, vol. 726, no., pp. ISSN 0040-6090. Dostupné na: <https://doi.org/10.1016/j.tsf.2021.138659>, Registrované v: WOS
- ADCA453 SVOBODA, Roman** - OLMROVÁ ZMRHALOVÁ, Zuzana - GALUSEK, Dušan - BRANDOVÁ, Daniela - CHOVANEC, Jozef. Thermal decomposition of mixed calcium oxalate hydrates – kinetic deconvolution of complex heterogeneous processes. In *Physical Chemistry Chemical Physics*, 2020, vol. 22, no. 16, p. 8889-8901. (2019: 3.430 - IF, Q1 - JCR, 1.143 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/c9cp06867h>
- Citácie:
- [1.1] CAMPOSTRINI, Renzo - GRIGIANTE, Maurizio - BRIGHENTI, Marco. Potentialities of mass spectrometry on activation energy and secondary reactions determination of calcium oxalate thermal decomposition. In *INTERNATIONAL JOURNAL OF CHEMICAL KINETICS*, 2021, vol. 53, no. 10, pp. 1082-1100. ISSN 0538-8066. Available on: <https://doi.org/10.1002/kin.21504>, Registrované v: WOS
 - [1.1] GABAL, M. A. Non-isothermal decomposition of lead oxalate-iron (II) oxalate mixture. DTA-TG, XRD, FT-IR and Mossbauer studies. In *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 2021, vol. 15, no., pp. 5841-5848. ISSN 2238-7854. Available on: <https://doi.org/10.1016/j.jmrt.2021.11.012>, Registrované v: WOS
 - [1.1] YAO, Junxuan - CAO, Yibo - WANG, Jiancheng - ZHANG, Changming - WANG, Wenjun - BAO, Weiren - CHANG, Liping. Successive calcination-oxalate acid leaching treatment of spent SCR catalyst: A highly efficient and selective method for recycling tungsten element. In *HYDROMETALLURGY*, 2021, vol. 201, no., pp. ISSN 0304-386X. Available on: <https://doi.org/10.1016/j.hydromet.2021.105576>, Registrované v: WOS
- ADCA454 SVOBODA, Roman** - BULÁNEK, Roman - GALUSEK, Dušan - HADIDIMASOULEH,

Roghayeh - GANJKHANLOU, Yadolah. Crystal formation in vanadium-doped zirconia ceramics. In CrystEngComm, 2018, vol. 20, no. 22, p. 3105-3116. (2017: 3.304 - IF, Q2 - JCR, 0.998 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1466-8033. Dostupné na: <https://doi.org/10.1039/c8ce00538a>

Citácie:

1. [1.1] HU, Zhiwei - WANG, Qikun - LIU, Jianlei - LIU, Kun - ZHANG, Wenjie - YANG, Yulong - WANG, Yongqing - CHANG, Qibing. Synthesis and chromatic properties of V-doped and V/Y-codoped ZrO₂ yellow pigments. In JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 856, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2020.157397>., Registrované v: WOS

ADCA455 SZALAY, Zsolt - BODIŠOVÁ, Katarína - PÁLKOVÁ, Helena - ŠVANČÁREK, Peter - ĐURINA, P. - RÁHEL, Jozef - ZAHORANOVÁ, Anna - GALUSEK, Dušan. Atmospheric pressure air plasma treated alumina powder for ceramic sintering. In Ceramics International, 2014, vol. 40, no. 8, p. 12737-12743. (2013: 2.086 - IF, Q1 - JCR, 0.812 - SJR, Q1 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2014.04.124>

Citácie:

1. [1.1] WILLIS, Simon A. - MCGUINNESS, Emily K. - LI, Yi - LOSEGO, Mark D. Re-examination of the Aqueous Stability of Atomic Layer Deposited (ALD) Amorphous Alumina (Al₂O₃) Thin Films and the Use of a Postdeposition Air Plasma Anneal to Enhance Stability. In LANGMUIR, 2021, vol. 37, no. 49, pp. 14509-14519. ISSN 0743-7463. Available on: <https://doi.org/10.1021/acs.langmuir.1c02574>., Registrované v: WOS

ADCA456 SZATMÁRY, Lórant - BAKARDJEVA, Snežana - ŠUBRT, Jan - BEZDIČKA, P. - JIRKOVSKÝ, Jaromír - BASTL, Zdeněk - BREZOVÁ, Vlasta - KORENKO, Michal. Sulphur doped nanoparticles of TiO₂. In Catalysis Today, 2011, vol. 161, no. 1, p. 23-28. (2010: 2.993 - IF, Q1 - JCR, 1.761 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0920-5861. Dostupné na: <https://doi.org/10.1016/j.cattod.2010.11.082>

Citácie:

1. [1.1] DWIYANNA, R. - ROTO, R. - SUWONDO, K. P. - WAHYUNI, E. T. Enhanced photocatalytic degradation of Remazol Black under visible light illumination through S doped TiO₂ (S-TiO₂) nanoparticles: operational factors and kinetic study. In GLOBAL NEST JOURNAL. ISSN 1790-7632, 2021, vol. 23, no. 2, pp. 323-332. Available on: <https://doi.org/10.30955/gnj.003586>., Registrované v: WOS
2. [1.1] IMRAN, Muhammad - SAEED, Zohaib - PERVAIZ, Muhammad - MEHMOOD, Kashif - EJAZ, Rabia - YOUNAS, Umer - NADEEM, Hafiz Amir - HUSSAIN, Shah. Enhanced visible light photocatalytic activity of TiO₂ co-doped with Fe, Co, and S for degradation of Congo red. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, 2021, vol. 255, no., pp. Available on: <https://doi.org/10.1016/j.saa.2021.119644>., Registrované v: WOS
3. [1.1] NEZAMI, Zahra - ESHGHI, Hossein. Nanomagnetic catalysis (Fe₃O₄@S-TiO₂): a novel magnetically nano catalyst for the synthesis of new highly substituted tetrahydropyridine derivatives under solvent-free conditions. In JOURNAL OF THE IRANIAN CHEMICAL SOCIETY. ISSN 1735-207X, 2021, vol. 18, no. 8, pp. 1997-2008. Available on: <https://doi.org/10.1007/s13738-021-02170-7>., Registrované v: WOS

ADCA457 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČEŠ, Zoltán - DUSZA, Ján - KAŠIAROVÁ, Monika. In situ preparation of Si₃N₄/SiC nanocomposites for cutting tools application. In International Journal of Applied Ceramic Technology, 2006, vol. 3, no. 1, p. 41-46. (2005: 0.795 - IF, Q1 - JCR, 0.590 - SJR, Q1 - SJR). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/j.1744-7402.2006.02061.x>

Citácie:

1. [1.1] KANTH, Y. Ravi - MURTHY, I. Narasimha - NAGAPPA, S. - RAO, J. Babu. Influence of mould materials on wear behavior of A356 alloy. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2021, vol. 45, no., pp. 5177-5182. Dostupné na: <https://doi.org/10.1016/j.matpr.2021.01.696>., Registrované v: WOS

ADCA458 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LOFAJ, František - HVIŽDOŠ, Pavol - DUSZA, Ján - WARBICHLER, P. - HOFFER, F. - RIEDEL, Ralf - LECOMTE, E. - HOFFMANN, M.J. SiC/Si₃N₄ nano/micro-composite - processing, RT and HT mechanical properties. In Journal of the European Ceramic Society, 2000, vol. 20, no. 4, p. 453-462.

Citácie:

1. [1.1] ZHANG, Ye - YAO, Dongxu - ZUO, Kaihui - XIA, Yongfeng - YIN, Jinwei - LIANG, Hanqin - ZENG, Yu-Ping. Self-propagating high temperature synthesis (SHS) of porous Si₃N₄-based ceramics with considerable dimensions and study on mechanical properties and oxidation behavior. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 8, pp. 4452-4461., Registrované v: WOS

- ADCA459 ŠAJGALÍK, Pavol - PÁNEK, Zdeněk - UHRÍK, M. The surface diffusion coefficients of MgO and Al₂O₃. In Journal of Materials Science, 1987, vol. 22, no. 12, p. 4460-4464. (1986: 0.924 - IF, karentované - CCC). (1987 - Current Contents, WOS, SCOPUS). ISSN 0022-2461. Dostupné na: <https://doi.org/10.1007/BF01132047>
Citácie:
1. [1.1] *CHATZIMICHAIL, R. - CHRISTOGEROU, A. - BEBELIS, S. - NIKOLOPOULOS, P.* Surface and Grain Boundary Energies as well as Surface Mass Transport in Polycrystalline MgO. In JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE. ISSN 1059-9495, 2021, vol. 30, no. 12, pp. 9130-9139. Dostupné na: <https://doi.org/10.1007/s11665-021-06120-5>, Registrované v: WOS
- ADCA460 ŠAJGALÍK, Pavol - DUSZA, Ján - HOFFMANN, M.J. Relationship between microstructure, toughening mechanisms and fracture toughness of reinforced Si₃N₄ ceramics. In Journal of the American Ceramic Society, 1995, vol. 78, no. 10, p. 2619-2624. ISSN 0002-7820.
Citácie:
1. [1.1] *FAN ZHI-BIN - CHEN ZE-MING - ZHOU XIN - HE XIN-TAO - JIANG SHAO-JI - DONG JIAN-WEN.* Recent advances in silicon nitride-based photonic devices and applications. In CHINESE OPTICS. ISSN 2095-1531, 2021, vol. 14, no. 4, pp. 998-1018. Dostupné na: <https://doi.org/10.37188/CO.2021-0093>, Registrované v: WOS
2. [1.1] *ZHANG, Jing - WANG, Wenxue - SUN, Feng - ZHANG, Weiru - LI, Boheng - ZHANG, Mingshuai.* Effect of particle size of Y₂O₃-Al₂O₃ additives on microstructure and mechanical properties of Si₃N₄ ceramic balls for bearing applications. In PROCESSING AND APPLICATION OF CERAMICS. ISSN 1820-6131, 2021, vol. 15, no. 3, pp. 297-305. Dostupné na: <https://doi.org/10.2298/PAC2103297Z>, Registrované v: WOS
3. [1.1] *ZHOU, Jie - CHENG, Laifei - YE, Fang - ZHANG, Litong - LIU, Yongsheng - CUI, Xuefeng - FU, Zhiqiang.* The control of interfacial bonding state and optimization of mechanical properties of Si₃N₄/BN/Si₃N₄ composites via different synthesis technologies. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 2, pp. 1739-1746., Registrované v: WOS
4. [1.2] *HAN, Yao - LI, Haiyan - XIE, Zhipeng - WANG, Huadong - DONG, Heng - SUN, Zhiqiang - ZHANG, Bingqing - ZHANG, Jian - LV, Yi.* Effect of Oscillatory Pressure on Sintering Densification of High Quality Silicon Nitride Ceramics. In Kuei Suan Jen Hsueh Pao/Journal of the Chinese Ceramic Society. ISSN 04545648, 2021-04-01, 49, 4, pp. 673-680., Registrované v: SCOPUS
5. [1.2] *ZHANG, Jing - SUN, Feng - ZHANG, Weiru - DONG, Tingxia.* Effect of Titania Additives on Densification and Mechanical Properties of Si₃N₄-SiC_w Composites. In Kuei Suan Jen Hsueh Pao/Journal of the Chinese Ceramic Society. ISSN 04545648, 2021-12-01, 49, 12, pp. 2790-2796. Dostupné na: <https://doi.org/10.14062/j.issn.0454-5648.20210512>, Registrované v: SCOPUS
- ADCA461 ŠAJGALÍK, Pavol. alpha-beta-phase transformation of silicone-nitride computer-simulation. In The Journal of Materials Science, 1991, vol. 26, no. 22, p. 6083-6090. (1991 - Current Contents). ISSN 0022-2461. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.169>
Citácie:
1. [1.1] *KONG, Jung Hoon - MA, Ho Jin - JUNG, Wook Ki - HONG, Juseop - JUN, Kisoo - KIM, Do Kyung.* Self-reinforced and high-thermal conductivity silicon nitride by tailoring α - β phase ratio with pressureless multi-step sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 13057-13064. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.169>, Registrované v: WOS
- ADCA462 ŠAJGALÍK, Pavol - GALUSEK, Dušan. α/β Phase transformation of silicon nitride: homogeneous and heterogeneous nucleation. In Journal of Materials Science Letters, 1993, vol. 12, no. 24, p. 1937-1939. (1992: 0.510 - IF, karentované - CCC). (1993 - Current Contents). ISSN 0261-8028. Dostupné na: <https://doi.org/10.1007/BF00882548>
Citácie:
1. [1.1] *KONG, Jung Hoon - MA, Ho Jin - JUNG, Wook Ki - HONG, Juseop - JUN, Kisoo - KIM, Do Kyung.* Self-reinforced and high-thermal conductivity silicon nitride by tailoring α - β phase ratio with pressureless multi-step sintering. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 9, pp. 13057-13064. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.169>, Registrované v: WOS
- ADCA463 ŠAJGALÍK, Pavol - HNATKO, Miroslav - ČOPAN, Peter - LENČEŠ, Zoltán - HUANG, J.-L. Influence of graphite additives on wear properties of hot pressed Si₃N₄ ceramics. In Journal of the Ceramic Society of Japan, 2006, vol. 114, no. 1335, p. 1061-1068. (2005: 0.437 - SJR, Q2 - SJR). Dostupné na: <https://doi.org/10.2109/jcersj.114.1061>
Citácie:
1. [1.1] *LIAO, Zhongquan - STANDKE, Yvonne - GLUCH, Juergen - BALAZSI, Katalin -*

- PATHAK, Onkar - HOEHN, Soeren - HERRMANN, Mathias - WERNER, Stephan - DUSZA, Jan - BALAZSI, Csaba - ZSCHECH, Ehrenfried. *Microstructure and Fracture Mechanism Investigation of Porous Silicon Nitride-Zirconia-Graphene Composite Using Multi-Scale and In-Situ Microscopy*. In *NANOMATERIALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/nano11020285>, Registrované v: WOS
- ADCA464 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČEŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Additive-free hot-pressed silicon carbide ceramics - A material with exceptional mechanical properties. In *Journal of the European Ceramic Society*, 2016, vol. 36, no. 6, p. 1333-1341. (2015: 2.933 - IF, Q1 - JCR, 1.135 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2015.12.013>
- Citácie:
- [1.1] GRINCHUK, P. S. - KIYASHKO, M. V. - ABUHIM, H. M. - ALSHAHRANI, M. S. - SOLOVEI, D. V. - STEPIN, M. O. - AKULICH, A. V. - SHASHKOV, M. D. - KUZNETSOVA, T. A. - DANILOVA-TRETIK, S. M. - EVSEEVA, L. E. - NIKOLAEVA, K. V. *Advanced technology for fabrication of reaction-bonded SiC with controlled composition and properties*. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 12, pp. 5813-5824. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.017>, Registrované v: WOS
 - [1.1] KONG, Linchun - CHAI, Changchun - SONG, Yanxing - ZHANG, Wei - ZHANG, Zheren - YANG, Yintang. *Structural, elastic, electronic, and anisotropic properties of Pbca-SiC and Pbcn-SiC*. In *AIP ADVANCES*, 2021, vol. 11, no. 4, pp., Registrované v: WOS
 - [1.1] LI, Jingren - LU, Wenzhong - JIANG, Hai. *Effects of rare earth oxides and fluorides on flexural strength and thermal conductivity of hot-pressed SiC ceramics*. In *JOURNAL OF THE CERAMIC SOCIETY OF JAPAN*. ISSN 1882-0743, 2021, vol. 129, no. 11, pp. 654-659. Dostupné na: <https://doi.org/10.2109/jcersj2.21081>, Registrované v: WOS
 - [1.1] LUO, Si-Chun - GUO, Wei-Ming - ZHOU, Yu-Zhang - PLUCKNETT, Kevin - LIN, Hua-Tay. *Textured and toughened high-entropy (Ti_{0.2}Zr_{0.2}Hf_{0.2}Nb_{0.2}Ta_{0.2})C-SiCw ceramics*. In *JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY*. ISSN 1005-0302, 2021, vol. 94, no., pp. 99-103. Dostupné na: <https://doi.org/10.1016/j.jmst.2021.02.073>, Registrované v: WOS
 - [1.1] MATOVIC, Branko - MALETASKIC, Jelena - PRIKHNA, Tatiana - URBANOVICH, Vladimir - GIRMAN, Vladimir - LISNICHUK, Maksym - TODOROVIC, Bratislav - YOSHIDA, Kutsami - CVIJOVIC-ALAGIC, Ivana. *Characterization of B₄C-SiC ceramic composites prepared by ultra-high pressure sintering*. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 9, pp. 4755-4760., Registrované v: WOS
 - [1.1] WANG, Xiulei - GAO, Xiaodong - ZHANG, Zhenghe - CHENG, Lisheng - MA, Haopeng - YANG, Weimin. *Advances in modifications and high-temperature applications of silicon carbide ceramic matrix composites in aerospace: A focused review*. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*. ISSN 0955-2219, 2021, vol. 41, no. 9, pp. 4671-4688., Registrované v: WOS
 - [1.1] YASAR, Zeynep Ayguz - DELUCCA, Vincent A. - HABER, Richard A. *Effect of boron carbide additive and sintering temperature Dwelling time on silicon carbide properties*. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 5, pp. 7177-7182., Registrované v: WOS
 - [1.1] YASAR, Zeynep Ayguz - HABER, Richard A. *Evaluating the role of uniformity on the properties of B₄C-SiC composites*. In *CERAMICS INTERNATIONAL*. ISSN 0272-8842, 2021, vol. 47, no. 4, pp. 4838-4844., Registrované v: WOS
 - [1.1] ZEYNEP AYGUZER YASAR - RICHARD A. HABER. *Effect of Sintering Temperature and Applied Pressure on the Properties of Boron Carbide-Silicon Carbide Composites*. In *JOURNAL OF SUPERHARD MATERIALS*. ISSN 1063-4576, 2021, vol. 43, no. 6, pp. 392-404. Dostupné na: <https://doi.org/10.3103/S1063457621060022>, Registrované v: WOS
 - [1.2] LI, Jingren - LU, Wenzhong. *Effects of aln and rare earth fluorides on the thermal conductivity of sic ceramics with impedance spectroscopy analysis*. In *Journal of Physics: Conference Series*. ISSN 17426588, 2021-09-08, 2011, 1, pp. Dostupné na: <https://doi.org/10.1088/1742-6596/2011/1/012054>, Registrované v: SCOPUS
- ADCA465 ŠIMEG VETERNÍKOVÁ, Jana - DEGMOVÁ, J. - PEKARČÍKOVÁ, M. - ŠIMKO, František - PETRISKA, Martin - SKARBA, M. - MIKULA, P. - PUPALA, Martin. *Thermal stability study for candidate stainless steels of GEN IV reactors*. In *Applied Surface Science*, 2016, vol. 387, p. 965-970. (2015: 3.150 - IF, Q1 - JCR, 0.890 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2016.06.151>
- Citácie:
- [1.1] ROY, Trishita - SHIVAM, Vikas - CHATTOPADHYAY, Kausik - MANNA, R. - MUKHOPADHYAY, N. K. *Microstructural Evolution and Mechanical Properties of Nano-Yttria Dispersed 316 L Austenitic Stainless Steel by Mechanical Alloying and Sintering*. In *TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS*. ISSN 0972-2815, 2021, vol. 74, no. 8, pp. 2093-2104. Dostupné na: <https://doi.org/10.1007/s12666-021-02317-3>, Registrované v:

- WOS**
- ADCA466 ŠIMKO, František** - RAKHMATULLIN, Aydar** - VERON, Emmanuel - ALLIX, Mathieu - FLORIAN, Pierre - KONTRÍK, Martin - NETRIOVÁ, Zuzana - KORENKO, Michal - KAVEČANSKÝ, Viktor - BESSADA, Catherine. Oxo- and oxofluoroaluminates in the RbF-Al₂O₃ system: Synthesis and structural characterization. In *Inorganic Chemistry*, 2018, vol. 57, no. 21, p. 13702-13712. (2017: 4.700 - IF, Q1 - JCR, 1.892 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0020-1669. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.8b02275>
- Citácie:
1. [1.1] DING, Fenghua - CHARLES, Nenian - HARADA, Jaye K. - MALLIAKAS, Christos D. - ZHANG, Chi - DOS REIS, Roberto - GRIFFITH, Kent J. - NISBET, Matthew L. - ZHANG, Weiguo - HALASYAMANI, P. Shiv - DRAVID, Vinayak P. - RONDINELLI, James M. - POEPELMEIER, Kenneth R. Perovskite-like K₃TiOF₅ Exhibits (3+1)-Dimensional Commensurate Structure Induced by Octahedrally Coordinated Potassium Ions. In *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*. ISSN 0002-7863, 2021, vol. 143, no. 45, pp. 18907-18916. Available on: <https://doi.org/10.1021/jacs.1c05704>, Registrované v: WOS
- ADCA467 ŠIMKO, František - RAKHMATULLIN, Aydar - BOČA, Miroslav - DANĚK, Vladimír - BESSADA, Catherine. A high-temperature multinuclear NMR study of Na₃AlF₆-FeO and Na₃AlF₆-Fe₂O₃ melts. In *European Journal of Inorganic Chemistry*, 2006, no. 22, p. 4528-4532. (2005: 2.514 - IF, Q2 - JCR, 1.169 - SJR, Q1 - SJR). ISSN 1434-1948. Dostupné na: <https://doi.org/10.1002/ejic.200600538>
- Citácie:
1. [1.1] PARSHIN, Sergey G. - LEVCHENKO, Alexey M. - WANG, Pengfei. Metallurgy and Mechanism of Underwater Wet Cutting Using Oxidizing and Exothermic Flux-Cored Wires. In *MATERIALS*, 2021, vol. 14, no. 16, pp. Dostupné na: <https://doi.org/10.3390/ma14164655>, Registrované v: WOS
- ADCA468 ŠIMKO, František - STAŠ, M. Material balance of silicon in aluminum reduction cells. In *Canadian Metallurgical Quarterly*, 2009, vol. 48, no. 2, p. 109-114. (2008: 0.255 - IF, Q4 - JCR, 0.325 - SJR, Q2 - SJR). ISSN 0008-4433. Dostupné na: <https://doi.org/10.1007/s40831-021-00345-3>
- Citácie:
1. [1.1] LIU, Fengqin - XIE, Mingzhuang - LI, Rongbin - ZHAO, Hongliang. Impurity Migrations in Aluminum Reduction Process and Quality Improvement by Anti-oxidized Prebaked Anode. In *JOURNAL OF SUSTAINABLE METALLURGY*. ISSN 2199-3823, 2021, vol. 7, no. 2, pp. 427-436. Dostupné na: <https://doi.org/10.1007/s40831-021-00345-3>, Registrované v: WOS
- ADCA469 ŠTEVULA, Ladislav - MADEJ, J. - KOZÁNKOVÁ, Jarmila - MADEJOVÁ, Jana. Hydration products at the blastfurnace slag aggregate – cement paste interface. In *Cement and Concrete Research*, 1994, vol. 24, no. 3, p. 413-423. ISSN 0008-8846. Dostupné na: [https://doi.org/10.1016/0008-8846\(94\)90128-7](https://doi.org/10.1016/0008-8846(94)90128-7)
- Citácie:
1. [1.1] CARDENAS, Carlos - MACOVA, Petra - GOMEZ, Maryory - ZARYBNICKA, Lucie - SEVCIK, Radek - VIANI, Alberto. Formation, Properties, and Microstructure of a New Steel Slag-Based Phosphate Cement. In *JOURNAL OF MATERIALS IN CIVIL ENGINEERING*. ISSN 0899-1561, 2021, vol. 33, no. 11, pp. Dostupné na: [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0003958](https://doi.org/10.1061/(ASCE)MT.1943-5533.0003958), Registrované v: WOS
2. [1.1] FRYBORT, Ales - STULIROVA, Jana - ZAVREL, Tomas - GREGEROVA, Miroslava - VSLANSKY, Dalibor. Reactivity of slag in 15 years old self-compacting concrete. In *CONSTRUCTION AND BUILDING MATERIALS*, 2021, vol. 267, no., pp. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2020.120914>, Registrované v: WOS
3. [1.1] POLAT, Berivan Yilmazer - UYSAL, Mucteba. Bacterial crack healing in metakaolin based geopolymer mortars. In *JOURNAL OF BUILDING ENGINEERING*. ISSN 2352-7102, 2021, vol. 39, no., pp. Dostupné na: <https://doi.org/10.1016/j.job.2021.102291>, Registrované v: WOS
- ADCA470 ŠTYRIAKOVÁ, Iveta - MOCKOVČIAKOVÁ, Annamária - ŠTYRIAK, Igor - KRAUS, Ivan - UHLÍK, Peter - MADEJOVÁ, Jana - DANKOVÁ, Zuzana. Bioleaching of clays and iron oxide coatings from quartz sands. In *Applied Clay Science*, 2012, vol. 61, p. 1-7. (2011: 2.474 - IF, Q1 - JCR, 1.159 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2012.02.020>
- Citácie:
1. [1.1] DU, Xin - YANG, Dashan - ZHENG, Shuilin - SUN, Zhiming - LI, Chunquan. Deep insight into the reductive roasting treatment on iron removing from quartz. In *ADVANCED POWDER TECHNOLOGY*, 2021, vol. 32, no. 12, pp. 4825-4832. ISSN 0921-8831. Dostupné na: <https://doi.org/10.1016/j.ap.2021.10.036>, Registrované v: WOS
2. [1.1] HAYNES, Haydn M. - BAILEY, Matthew T. - LLOYD, Jonathan R. Bentonite barrier

- materials and the control of microbial processes: Safety case implications for the geological disposal of radioactive waste. In CHEMICAL GEOLOGY. ISSN 0009-2541, 2021, vol. 581, no., pp. Dostupné na: <https://doi.org/10.1016/j.chemgeo.2021.120353>., Registrované v: WOS*
3. [1.1] VAHUR, Signe - KIUDORV, Lisett - SOMELAR, Peeter - CAYME, Jan-Michael - RETRATO, Mark Dennis Chico - REMIGIO, Rady Jazmin - SHARMA, Varun - ORAS, Ester - LEITO, Ivo. *Quantitative mineralogical analysis of clay-containing materials using ATR-FT-IR spectroscopy with PLS method. In ANALYTICAL AND BIOANALYTICAL CHEMISTRY. ISSN 1618-2642, 2021, vol. 413, no. 26, pp. 6535-6550. Dostupné na: <https://doi.org/10.1007/s00216-021-03617-9>., Registrované v: WOS*
4. [1.2] SULISTIYONO, Eko - HANDAYANI, Murni - PRASETYO, Agus Budi - IRAWAN, Januar - FEBRIANA, Eni - FIRDIYONO, Florentinus - YUSTANTI, Erlina - SEMBIRING, Safetyana Nazaretha - NUGROHO, Firdaus - MUSLIH, Ersan Yudhapratama. *Implementation Of Sulfuric Acid Leaching For Aluminum And Iron Removal For Improvement Of Lowgrade Silica From Quartz Sand Of Sukabumi, Indonesia. In Eastern-European Journal of Enterprise Technologies. ISSN 17293774, 2021-01-01, 3, 6-111, pp. 32-40. Dostupné na: <https://doi.org/10.15587/1729-4061.2021.226267>., Registrované v: SCOPUS*
5. [3.1] TOSUN, Y.C. - TUNCUK, A. - OKUDAN, M.D. - AKCİL, A. *Fiziksel Zenginleştirme ve Hidrometalurjik Yöntemlerle Kuvars Cevherinden Demir Uzaklaştırma / Removal of Iron from Quartz Ore by Physical Enrichment and Hydrometallurgical Methods. In: Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi (DEU FMD) / Dokuz Eylül University Faculty of Engineering Journal of Science and Engineering, 2020, Volume 22, Issue 64, pp. 187-197, ISSN: 1302-9304, e-ISSN: 2547-958X. DOI: 10.21205/deufmd.2020226419. (inTurkish)*
- ADCA471 ŠUCHA, Vladimír - KRAUS, Ivan - MADEJOVÁ, Jana. *Ammonium illite from anchimetamorphic shales associated with anthracite in the zemplinicum of the Western Carpathians. In Clay Minerals, 1994, vol. 29, no. 3, p. 369-377. ISSN 0009-8558.*
- Citácie:
1. [1.1] SAVITRI, Kartika P. - HECKER, Christoph - VAN DER MEER, Freek D. - SIDIK, Ridwan P. *VNIR-SWIR infrared (imaging) spectroscopy for geothermal exploration: Current status and future directions. In GEOTHERMICS, 2021, vol. 96, no., pp. ISSN 0375-6505. Dostupné na: <https://doi.org/10.1016/j.geothermics.2021.102178>., Registrované v: WOS*
- ADCA472 ŠUCHA, Vladimír - ŠRODOŇ, J. - CLAUSER, N. - ELSASS, Francoise - EBERL, Dennis D. - KRAUS, Ivan - MADEJOVÁ, Jana. *Weathering of smectite and illite-smectite under temperate climatic conditions. In Clay Minerals, 2001, vol. 36, no. 3, p. 403-419. (2001 - Current Contents). ISSN 0009-8558. Dostupné na: <https://doi.org/10.1180/000985501750539490>*
- Citácie:
1. [1.1] JO, Jaeguk - PARK, Chanhong - KIM, Changhwan - SHIN, Dongbok. *Clay mineral characteristics in volcanic tuffs of Dokdo, South Korea: implication on their genesis and evolution. In ENVIRONMENTAL EARTH SCIENCES, 2021, vol. 80, no. 7, pp. ISSN 1866-6280. Dostupné na: <https://doi.org/10.1007/s12665-021-09583-w>., Registrované v: WOS*
2. [1.1] MAGHSOUDI MOUD, Fardad - DEON, Fiorenza - VAN DER MEIJDE, Mark - VAN RUITENBEEK, Frank - HEWSON, Rob. *Mineral Interpretation Discrepancies Identified between Infrared Reflectance Spectra and X-ray Diffractograms. In SENSORS, 2021, vol. 21, no. 20, pp. Dostupné na: <https://doi.org/10.3390/s21206924>., Registrované v: WOS*
3. [1.1] ZHAO, Chenlei - WANG, Chaowen - HONG, Hanlie - ALGEO, Thomas J. - YIN, Ke - JI, Kaipeng - SONG, Bowen - ABELS, Hemmo A. - CHRISTIDIS, George E. *Origin of dioctahedral smectites in Lower Eocene Lulehe Formation paleosols (Qaidam Basin, China). In APPLIED CLAY SCIENCE, 2021, vol. 203, no., pp. ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106026>., Registrované v: WOS*
- ADCA473 ŠVANČÁREK, Peter - LENDVAYOVÁ, S. - GALUSEK, Dušan - HNATKO, Miroslav - VÁVRA, Ivo - WANG, X. *Abrasive wear resistance of SiO₂-doped polycrystalline alumina. In Wear : an international journal on the science and technology of friction, lubrication and wear, 2011, vol. 271, no. 5-6, p. 760-769. (2010: 1.635 - IF, Q1 - JCR, 1.475 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0043-1648. Dostupné na: <https://doi.org/10.1016/j.wear.2011.03.016>*
- Citácie:
1. [1.1] RASHEED, I. Abdul - RAMAR, Venkadeshkumar - CHHABRA, Inder Mohan - GUPTA, Mahender Kumar - KARTHIKEYAN, B. *Optical and strong blue emission properties of alumina abrasive grains mediated grinding induced SiO₂ glass surfaces for navigation grade sensors. In OPTICAL MATERIALS. ISSN 0925-3467, 2021, vol. 117, no., pp. Dostupné na: <https://doi.org/10.1016/j.optmat.2021.111181>., Registrované v: WOS*
- ADCA474 ŠVANČÁREK, Peter - GALUSEK, Dušan - CALVERT, Clair - LOUGHRAN, Fiona - BROWN, Andy - BRYDSON, R. - RILEY, F.L. *A comparison of the microstructure and mechanical properties of two liquid phase sintered aluminas containing different molar ratios of calcia-silica sintering*

additives. In *Journal of the European Ceramic Society*, 2004, vol. 24, no. 12, p. 3453-3463. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2003.10.032>

Citácie:

1. [1.1] KERAMAT, Ehsan - HASHEMI, Babak. *Modelling and optimizing the liquid phase sintering of alumina/CaO-SiO₂-Al₂O₃ ceramics using response surface methodology*. In *CERAMICS INTERNATIONAL*, 2021, vol. 47, no. 3, pp. 3159-3172. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.09.153>, Registrované v: WOS
2. [1.1] LI, He - LIU, Yongsheng - LIU, Yansong - ZENG, Qingfeng - LIANG, Jingjing. *Silica strengthened alumina ceramic cores prepared by 3D printing*. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 4, pp. 2938-2947. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.11.050>, Registrované v: WOS
3. [1.2] HUANG, Baoteng - LI, Changhe - ZHANG, Yanbin - DING, Wenfeng - YANG, Min - YANG, Yuying - ZHAI, Han - XU, Xuefeng - WANG, Dazhong - DEBNATH, Sujana - JAMIL, Muhammad - LI, Hao Nan - ALI, Hafiz Muhammad - GUPTA, Munish Kumar - SAID, Zafar. *Advances in fabrication of ceramic corundum abrasives based on sol-gel process*. In *Chinese Journal of Aeronautics*, 2021-06-01, 34, 6, pp. 1-17. ISSN 10009361. Dostupné na: <https://doi.org/10.1016/j.cja.2020.07.004>, Registrované v: SCOPUS

ADCA475

ŠVANČÁREK, Peter - GALUSEK, Dušan - LOUGHRAN, Fiona - BROWN, Andy - BRYDSON, R. - ATKINSON, A. - RILEY, F.L. *Microstructure-stress relationships in liquid-phase sintered alumina modified by the addition of 5 wt.% of calcia-silica additives*. In *Acta Materialia*, 2006, vol. 54, no. 18, p. 4853-4863. (2005: 3.430 - IF, Q1 - JCR, 3.220 - SJR, Q1 - SJR). ISSN 1359-6454. Dostupné na: <https://doi.org/10.1016/j.actamat.2006.06.022>

Citácie:

1. [1.1] HUANG, Baoteng - LI, Changhe - ZHANG, Yanbin - DING, Wenfeng - YANG, Min - YANG, Yuying - ZHAI, Han - XU, Xuefeng - WANG, Dazhong - DEBNATH, Sujana - JAMIL, Muhammad - LI, Hao Nan - ALI, Hafiz Muhammad - GUPTA, Munish Kumar - SAID, Zafar. *Advances in fabrication of ceramic corundum abrasives based on sol-gel process*. In *CHINESE JOURNAL OF AERONAUTICS*, 2021, vol. 34, no. 6, pp. 1-17. ISSN 1000-9361. Dostupné na: <https://doi.org/10.1016/j.cja.2020.07.004>, Registrované v: WOS
2. [1.1] RASHEED, I. Abdul - RAMAR, Venkadeshkumar - CHHABRA, Inder Mohan - GUPTA, Mahender Kumar - KARTHIKEYAN, B. *Optical and strong blue emission properties of alumina abrasive grains mediated grinding induced SiO₂ glass surfaces for navigation grade sensors*. In *OPTICAL MATERIALS*, 2021, vol. 117, no., pp. ISSN 0925-3467. Dostupné na: <https://doi.org/10.1016/j.optmat.2021.111181>, Registrované v: WOS

ADCA476

TAIFAN, William E. - BUČKO, Tomáš - BALTRUSAITIS, Jonas. *Catalytic conversion of ethanol to 1,3-butadiene on MgO: A comprehensive mechanism elucidation using DFT calculations*. In *Journal of Catalysis*, 2017, vol. 346, p. 78-91. (2016: 6.844 - IF, Q1 - JCR, 2.451 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0021-9517. Dostupné na: <https://doi.org/10.1016/j.jcat.2016.11.042>

Citácie:

1. [1.1] ANPO, M. - COSTENTIN, G. - GIAMELLO, E. - LAURON-PERNOT, H. - SOJKA, Z. *Characterisation and reactivity of oxygen species at the surface of metal oxides*. In *JOURNAL OF CATALYSIS*. ISSN 0021-9517, 2021, vol. 393, no., pp. 259-280. Dostupné na: <https://doi.org/10.1016/j.jcat.2020.10.011>, Registrované v: WOS
2. [1.1] CABELLO GONZALEZ, G. M. - VILLANUEVA PERALES, A. L. - CAMPOY, M. - LOPEZ BELTRAN, J. R. - MARTINEZ, A. - VIDAL-BARRERO, F. *Kinetic modelling of the one-step conversion of aqueous ethanol into 1,3-butadiene over a mixed hemimorphite-HfO₂/SiO₂ catalyst*. In *FUEL PROCESSING TECHNOLOGY*. ISSN 0378-3820, 2021, vol. 216, no., pp. Dostupné na: <https://doi.org/10.1016/j.fuproc.2021.106767>, Registrované v: WOS
3. [1.1] CHUNG, Sang-Ho - RAMIREZ, Adrian - SHOINKHOROVA, Tuiana - MUKHAMBETOV, Ildar - ABOU-HAMAD, Edy - TELALOVIC, Selevedin - GASCON, Jorge - RUIZ-MARTINEZ, Javier. *The Importance of Thermal Treatment on Wet-Kneaded Silica-Magnesia Catalyst and Lebedev Ethanol-to-Butadiene Process*. In *NANOMATERIALS*, 2021, vol. 11, no. 3, pp. Dostupné na: <https://doi.org/10.3390/nano11030579>, Registrované v: WOS
4. [1.1] HUO, Xiangchen - CONKLIN, Davis R. - ZHOU, Mingxia - VOROTNIKOV, Vassili - ASSARY, Rajeev S. - PURDY, Stephen C. - PAGE, Katharine - LI, Zhenglong - UNOCIC, Kinga A. - BALDERAS, Raiven - RICHARDS, Ryan M. - VARDON, Derek R. *Catalytic activity and water stability of the MgO(111) surface for 2-pentanone condensation*. In *APPLIED CATALYSIS B-ENVIRONMENTAL*. ISSN 0926-3373, 2021, vol. 294, no., pp. Dostupné na: <https://doi.org/10.1016/j.apcatb.2021.120234>, Registrované v: WOS
5. [1.1] KHIVANTSEV, Konstantin - VITYUK, Artem - ALEKSANDROV, Hristiyan A. - VAYSSILOV, Georgi N. - ALEXEEV, Oleg S. - AMIRIDIS, Michael D. *Catalytic conversion of ethene to butadiene or hydrogenation to ethane on HY zeolite-supported rhodium complexes*:

- Cooperative support/Rh-center route. In *JOURNAL OF CHEMICAL PHYSICS*. ISSN 0021-9606, 2021, vol. 154, no. 18, pp. Dostupné na: <https://doi.org/10.1063/5.0042322>, Registrované v: WOS
6. [1.1] LI, Houqian - PANG, Jifeng - JAEGER, Nicholas R. - KOVARIK, Libor - ENGELHARD, Mark - SAVOY, Anthony W. - HU, Jianzhi - SUN, Junming - WANG, Yong. Conversion of ethanol to 1,3-butadiene over Ag-ZrO₂/SiO₂ catalysts: The role of surface interfaces. In *JOURNAL OF ENERGY CHEMISTRY*. ISSN 2095-4956, 2021, vol. 54, no., pp. 7-15. Dostupné na: <https://doi.org/10.1016/j.jechem.2020.05.038>, Registrované v: WOS
7. [1.1] LIU, Cheng - LI, Iran - WU, Linlin - GENG, Zhongfeng. Synthesis of 1,3-butadiene from ethanol/acetaldehyde over ZrO₂-MgO-SiO₂ catalyst: The thermodynamics and reaction kinetics analysis. In *CHEMICAL ENGINEERING JOURNAL*. ISSN 1385-8947, 2021, vol. 421, no., pp. Dostupné na: <https://doi.org/10.1016/j.cej.2020.127861>, Registrované v: WOS
8. [1.1] METZKER, Gustavo - MORA VARGAS, Jorge Andres - BOSCOLO, Mauricio. Heterogeneous catalytic ethanol transformation into chemicals: Some Brazilian contributions. In *CATALYSIS IN BIOMASS CONVERSION*. ISSN 0898-8838, 2021, vol. 77, no., pp. 343-375. Dostupné na: <https://doi.org/10.1016/bs.adioch.2021.02.005>, Registrované v: WOS
9. [1.1] TIAN, Xiang - TIAN, Hengshui. Roles of ethanol and Si-OH in the aldol condensation of ethyl acetate over a Cs/SBA-15 catalyst. In *REACTION CHEMISTRY & ENGINEERING*. ISSN 2058-9883, 2021, vol. 6, no. 6, pp. 1002-1015. Dostupné na: <https://doi.org/10.1039/d1re00020a>, Registrované v: WOS
10. [1.1] TIEWCHAROEN, Supakit - MAIHOM, Thana - SITTIWONG, Jarinya - LIMTRAKUL, Jumras. The influence of cation exchange and tetravalent metal substitutions in Lewis acidic BEA zeolites for phenol adsorption and Tautomerization: A computational study. In *CHEMICAL PHYSICS LETTERS*. ISSN 0009-2614, 2021, vol. 780, no., pp. Dostupné na: <https://doi.org/10.1016/j.cplett.2021.138886>, Registrované v: WOS
11. [1.1] XIA, Wei - WANG, Junguo - WANG, Longxiang - QIAN, Chen - MA, Chao - HUANG, Yaxin - FAN, Yu - HOU, Mengda - CHEN, Kun. Ethylene and propylene production from ethanol over Sr/ZSM-5 catalysts: A combined experimental and computational study. In *APPLIED CATALYSIS B-ENVIRONMENTAL*. ISSN 0926-3373, 2021, vol. 294, no., pp. Dostupné na: <https://doi.org/10.1016/j.apcatb.2021.120242>, Registrované v: WOS
12. [1.1] YAN, Hao - YAO, Shuang - ZHAO, Siming - LIU, Mengyuan - ZHANG, Wenxiang - ZHOU, Xin - ZHANG, Guangyu - JIN, Xin - LIU, Yibin - FENG, Xiang - CHEN, Xiaobo - CHEN, De - YANG, Chaohe. Insight into the basic strength-dependent catalytic performance in aqueous phase oxidation of glycerol to glyceric acid. In *CHEMICAL ENGINEERING SCIENCE*. ISSN 0009-2509, 2021, vol. 230, no., pp. Dostupné na: <https://doi.org/10.1016/j.ces.2020.116191>, Registrované v: WOS
13. [1.1] ZHANG, Minhua - LI, Ruishen - WU, Yufei - YU, Yingzhe. Mechanistic Insights into the Meerwein-Ponndorf-Verley Reaction and Relative Side Reactions over MgO in the Process of Ethanol to 1,3-Butadiene: A DFT Study. In *INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH*. ISSN 0888-5885, 2021, vol. 60, no. 7, pp. 2871-2880. Dostupné na: <https://doi.org/10.1021/acs.iecr.0c05915>, Registrované v: WOS
14. [1.2] BUTERA, Valeria - TANABE, Yusuke - SHINKE, Yu - MIYAZAWA, Tomohisa - FUJITANI, Tadahiro - KAYANUMA, Megumi - CHOE, Yoong Kee. Mechanistic investigation on ethanol-to-butadiene conversion reaction over metal oxide clusters. In *International Journal of Quantum Chemistry*. ISSN 00207608, 2021-03-05, 121, 5, pp. Dostupné na: <https://doi.org/10.1002/qua.26494>, Registrované v: SCOPUS

ADCA477

TALIMIAN, Ali** - EL-MAGHRABY, Hesham F. M. Aldelrehim - MICHÁLKOVÁ, Monika - GALUSEK, Dušan. Sintering and grain growth behaviour of magnesium aluminate spinel: Effect of lithium hydroxide addition. In *Journal of the European Ceramic Society*, 2021, vol. 41, no. 11, p. 5634-5643. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.05.003>

Citácie:

1. [1.1] JIANG, Guanyu - XU, Donghai - YANG, Wanpeng - LIU, Lu - GUO, Shuwei - WANG, Shuzhong. Incipient corrosion of FeCrAl alloys in H₃BO₃- and LiOH-containing pure water at 360 degrees C and 18.5 MPa. In *JOURNAL OF NUCLEAR MATERIALS*, 2021, vol. 557, no., pp. ISSN 0022-3115. Available on: <https://doi.org/10.1016/j.jnucmat.2021.153299>, Registrované v: WOS

ADCA478

TALIMIAN, Ali** - GALUSEK, Dušan. Aqueous slip casting of translucent magnesium aluminate spinel: Effects of dispersant concentration and solid loading. In *Ceramics International*, 2019, vol. 45, no. 6, p. 10646-10653. (2018: 3.450 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na:

<https://doi.org/10.1016/j.ceramint.2019.02.134>

Citácie:

1. [1.1] ZHANG, Zhigang - ZU, Guoyin - CAO, Zhuokun - XU, Jianrong. Fabrication and

- properties of U-shaped NiFe₂O₄ ceramic tube produced by slip casting and pressureless sintering. In JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY. ISSN 2510-1560, 2021, vol. 57, no. 2, pp. 459-467. Dostupné na: <https://doi.org/10.1007/s41779-020-00542-5>, Registrované v: WOS*
2. [1.1] ZUBRZYCKA, Paulina - RADECKA, Marta - GRAULE, Thomas - STUER, Michael. Metal cation complexes as dispersing agents for non-aqueous powder suspensions. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 13, pp. 18443-18454. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.168>, Registrované v: WOS
- ADCA479 TALIMIAN, Ali** - POUCHLÝ, Václav - EL-MAGHRABY, Hesham F. M. Aldelrehim - MACA, Karel - GALUSEK, Dušan. Impact of high energy ball milling on densification behaviour of magnesium aluminate spinel evaluated by master sintering curve and constant rate of heating approach. In Ceramics International, 2019, vol. 45, no. 17, p. 23467-23474. (2018: 3.450 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2019.08.051>
- Citácie:
1. [1.1] KERBART, Gabriel - HARNOIS, Christelle - MARINEL, Sylvain - MANIERE, Charles. Modeling the sintering trajectories of MgAl₂O₄ Spinel. In SCRIPTA MATERIALIA. ISSN 1359-6462, 2021, vol. 203, no., pp. Dostupné na: <https://doi.org/10.1016/j.scriptamat.2021.114048>, Registrované v: WOS
2. [1.1] KERBART, Gabriel - MANIERE, Charles - HARNOIS, Christelle - MARINEL, Sylvain. Master sintering curve with dissimilar grain growth trajectories: A case study on MgAl₂O₄. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 1, pp. 1048-1051. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.09.003>, Registrované v: WOS
3. [1.1] MANIERE, Charles - HARNOIS, Christelle - MARINEL, Sylvain. Porous stage assessment of pressure assisted sintering modeling parameters: a ceramic identification method insensitive to final stage grain growth disturbance. In ACTA MATERIALIA. ISSN 1359-6454, 2021, vol. 211, no., pp. Dostupné na: <https://doi.org/10.1016/j.actamat.2021.116899>, Registrované v: WOS
4. [1.1] PEDDARASI, Surendra - SARKAR, Debasish. Mechanochemical effect on synthesis and sintering behavior of MgAl₂O₄ spinel. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 262, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.124275>, Registrované v: WOS
5. [1.2] HORSTH, Dienifer F.L. - PRIMO, Julia O. - DALPASQUALE, Mariane - BITTENCOURT, Carla - ANAISSI, Fauze J. Colored aluminates pigments obtained from metallic aluminum waste, an opportunity in the circular economy. In Cleaner Engineering and Technology, 2021-12-01, 5, pp. Available on: <https://doi.org/10.1016/j.clet.2021.100313>, Registrované v: SCOPUS
- ADCA480 TALIMIAN, Ali** - POUCHLÝ, Václav - EL-MAGHRABY, Hesham F. M. Aldelrehim - MACA, Karel - GALUSEK, Dušan. Transparent magnesium aluminate spinel: Effect of critical temperature in two-stage spark plasma sintering. In Journal of the European Ceramic Society, 2020, vol. 40, no. 6, p. 2417-2425. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.02.012>
- Citácie:
1. [1.1] ADUMBUMKULATH, Aparna - SHIN, Crystal - ACHARYA, Ghanashyam S. - BISWAS, Papiya - SIRISALA, Mamatha - JOHNSON, Roy - GADE, Padmanabham. 3D Printing of MgAl₂O₄ Spinel Mesh and Densification Through Pressure-Less Sintering and Hot Isostatic Pressing. In 3D PRINTING AND ADDITIVE MANUFACTURING. ISSN 2329-7662, 2021, vol., no., pp. Dostupné na: <https://doi.org/10.1089/3dp.2021.0034>, Registrované v: WOS
2. [1.1] EL-AMIR, Ahmed A. M. - LI, Shufeng - ABDELGAWAD, Mahmoud - EWAIS, Emad M. M. MgAl₂O₄-reinforced c-ZrO₂ ceramics prepared by spark plasma sintering. In JOURNAL OF THE KOREAN CERAMIC SOCIETY. ISSN 1229-7801, 2021, vol. 58, no. 5, pp. 574-582. Dostupné na: <https://doi.org/10.1007/s43207-021-00126-4>, Registrované v: WOS
3. [1.1] IZADBAKSH, H. - SHEIKH, H. - SHARIFI, E. Mohammad - SARDARIAN, M. - LOGHMAN-ESTARKI, M. R. - RAMAZANI, Mazaher. Low-pressure injection molding of magnesium aluminate nanoparticles: Rheological behavior and flexural properties of sintered component. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 18, pp. 25932-25941. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.324>, Registrované v: WOS
4. [1.1] IZADBAKSH, H. - SHEIKH, Hassan - SHARIFI, E. Mohammad - ALHAJI, A. - LOGHMAN-ESTARKI, M. R. - RAMAZANI, Mazaher. Development of mechanical and visible transparency properties of spark plasma sintered spinel fabricated by powder injection molding of MgAl₂O₄ nanoparticles. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 21, pp. 29707-29711. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.07.142>, Registrované v: WOS

5. [1.1] LEE, Ji-Hwoan - KIM, Byung-Nam - JANG, Byung-Koog. Fabrication of transparent Y₂O₃ ceramics by two-step spark plasma sintering. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN 0002-7820, 2021, vol. 104, no. 11, pp. 5501-5508. Dostupné na: <https://doi.org/10.1111/jace.17947>., Registrované v: WOS
 6. [1.1] MANIVANNAN, Swathi - BISWAS, Papiya - BARICK, Prasenjit - KUMARI, Sweetie - SAHA, Bhaskar Prasad - JOHNSON, Roy. Comparative Study on Compaction and Sintering Behavior of Spray and Freeze Granulated Magnesium Aluminate Spinel Powder. In TRANSACTIONS OF THE INDIAN CERAMIC SOCIETY. ISSN 0371-750X, 2021, vol. 80, no. 2, pp. 110-117. Dostupné na: <https://doi.org/10.1080/0371750X.2021.1887765>., Registrované v: WOS
 7. [1.2] HOSTAŠA, Jan - PICELLI, Francesco - HRÁBALOVÁ, Soňa - NEČINA, Vojtěch. Sintering aids, their role and behaviour in the production of transparent ceramics. In Open Ceramics, 2021-09-01, 7, pp. Dostupné na: <https://doi.org/10.1016/j.oceram.2021.100137>., Registrované v: SCOPUS
 8. [2.2] NGUYEN, Yen Ngoc - LE, Hai Minh - DAO, Tu Anh - TRAN, Hung Ngoc - NGUYEN, Tue Ngoc - HONGLE, Thang - QUOCDANG, Khanh. Preparation of transparent mgalo ceramics by pulsed elec-tric current sintering using two-step heating method. In Acta Metallurgica Slovaca. ISSN 13351532, 2021-12-07, 27, 4, pp. 203-206. Dostupné na: <https://doi.org/10.36547/ams.27.4.1212>., Registrované v: SCOPUS
- ADCA481 TALIMIAN, Ali - POUCHLÝ, Václav - MACA, Karel - GALUSEK, Dušan**. Densification of magnesium aluminate spinel using manganese and cobalt fluoride as sintering aids. In Materials, 2020, vol. 13, no. 1, art. no. 102. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13010102>
- Citácie:
1. [1.1] DEWITT, D. M. - SHACHAR, M. H. - KODERA, Y. - GARAY, J. E. From nanoporous to transparent MgAl₂O₄ spinel-Nanostructural flexibility by reaction densification of metastable powders. In MATERIALS & DESIGN. ISSN 0264-1275, 2021, vol. 211, no., pp. Dostupné na: <https://doi.org/10.1016/j.matdes.2021.110147>., Registrované v: WOS
 2. [1.1] EL-AMIR, Ahmed A. M. - LI, Shufeng - ABDELGAWAD, Mahmoud - EWAIS, Emad M. M. MgAl₂O₄-reinforced c-ZrO₂ ceramics prepared by spark plasma sintering. In JOURNAL OF THE KOREAN CERAMIC SOCIETY. ISSN 1229-7801, 2021, vol. 58, no. 5, pp. 574-582. Dostupné na: <https://doi.org/10.1007/s43207-021-00126-4>., Registrované v: WOS
 3. [1.1] XUAN, Changji - MU, Wangzhong. A mechanism theory of dissolution profile of oxide particles in oxide melt. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN 0002-7820, 2021, vol. 104, no. 1, pp. 57-75. Dostupné na: <https://doi.org/10.1111/jace.17435>., Registrované v: WOS
- ADCA482 TATARKO, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of rare-earth oxide additives on the oxidation resistance of Si₃N₄-SiC nanocomposites. In Journal of the European Ceramic Society, 2013, vol. 33, p. 2259-2268. (2012: 2.360 - IF, Q1 - JCR, 1.293 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2013.01.008>
- Citácie:
1. [1.1] MA, Haiqiang - BAO, Chonggao. Preparation, oxidation property and mechanism of Si₃N₄/O₂-SiAlON composite ceramics. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 11, pp. 15383-15391., Registrované v: WOS
 2. [1.1] WANG, Jinfang - ZUO, Dunwen - ZHU, Liu - TU, Zhibiao - LIN, Xiao - WU, Yinan - LI, Weiwei - ZHANG, Xiaoqiong. Effect of Y₂O₃ Addition on High-Temperature Oxidation of Binderless Tungsten Carbide. In FRONTIERS IN MATERIALS. ISSN 2296-8016, 2021, vol. 8, no., pp., Registrované v: WOS
 3. [1.1] WU, Jianfeng - DING, Chunjiang - XU, Xiaohong - MI, Kaifeng. Effects of Gd₂O₃ and Yb₂O₃ on the microstructure and performances of O₂-SiAlON/Si₃N₄ ceramics for concentrated solar power. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 4, pp. 5054-5060., Registrované v: WOS
 4. [1.1] ZHANG, Ye - YAO, Dongxu - ZUO, Kaihui - XIA, Yongfeng - YIN, Jinwei - LIANG, Hanqin - ZENG, Yu-Ping. Self-propagating high temperature synthesis (SHS) of porous Si₃N₄-based ceramics with considerable dimensions and study on mechanical properties and oxidation behavior. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 8, pp. 4452-4461., Registrované v: WOS
- ADCA483 TATARKO, Peter - KAŠIAROVÁ, Monika - CHLUP, Zdeněk - DUSZA, Ján - ŠAJGALÍK, Pavol - VÁVRA, Ivo. Influence of rare-earth oxide additives and SiC nanoparticles on the wear behaviour of Si₃N₄-based composites at temperatures up to 900 C. In Wear : an international journal on the science and technology of friction, lubrication and wear, 2013, vol. 300, p. 155-162. (2012: 1.262 -

IF, Q2 - JCR, 1.345 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0043-1648. Dostupné na: <https://doi.org/10.1016/j.wear.2013.01.030>

Citácie:

1. [1.1] LIU, Qiang - WANG, Yang - GAO, Zhu-Qing - ZHANG, Biao - HOU, Zhao-Ping - ZHANG, Hai-Jiao - YE, Feng - WANG, Wen. Fabrication of electrically conductive barium aluminum silicate/silicon nitride composites with enhanced strength and toughness. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, 2021, vol. 56, no. 2, pp. 1221-1230., Registrované v: WOS

2. [1.1] MIR, Aqib Hussain - AHMAD, S. N. A study on fabrication of silicon nitride-based advanced ceramic composite materials via spark plasma sintering. In PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS. ISSN 1464-4207, 2021, vol. 235, no. 8, pp. 1739-1756. Dostupné na: <https://doi.org/10.1177/14644207211013560>., Registrované v: WOS

ADCA484

TATARKO, Peter - LOJANOVÁ, Š. - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of various rare-earth oxide additives on microstructure and mechanical properties of silicon nitride based nanocomposites. In Materials Science and Engineering A - Structural Materials Properties Microstructure and Processing, 2010, vol. 527, p. 4771-4778. (2009: 1.901 - IF, Q1 - JCR, 1.570 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0921-5093. Dostupné na: <https://doi.org/10.1016/j.msea.2010.04.069>

Citácie:

1. [1.1] DEHGHANI, Hadi - KHODAEI, Mahdi - YAGHOBIZADEH, Omid - EHSANI, Nasser - BAHARVANDI, Hamid Reza - ALHOSSEINI, S. Hojat Naghavi - JAVI, Hassan. The effect of AlN-Y2O3 compound on properties of pressureless sintered SiC ceramics-A review. In INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS. ISSN 0263-4368, 2021, vol. 95, no., pp., Registrované v: WOS

2. [1.1] KHODAEI, Mahdi - YAGHOBIZADEH, Omid - EHSANI, Naser - BAHARVANDI, Hamid Reza - BAYATI, Mohammad Bagher - ESMAEELI, Sadeq - JAVI, Hassan. Improvement toughness of SiC ceramic by adding Cr2O3 and annealing process. In JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY. ISSN 2510-1560, 2021, vol. 57, no. 4, pp. 1097-1106. Dostupné na: <https://doi.org/10.1007/s41779-021-00608-y>., Registrované v: WOS

3. [1.1] LIANG, Guandong - SUN, Guoxun - BI, Jianqiang - WANG, Weili - YANG, Xiangning - LI, Yonghan. Mechanical and dielectric properties of functionalized boron nitride nanosheets/silicon nitride composites. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 2, pp. 2058-2067., Registrované v: WOS

4. [1.1] LUO, Si-Chun - GUO, Wei-Ming - PLUCKNETT, Kevin - LIN, Hua-Tay. Improved toughness of spark-plasma-sintered Si3N4 ceramics by adding HfB2. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 6, pp. 8717-8721., Registrované v: WOS

5. [1.1] MIR, Aqib Hussain - AHMAD, S. N. A study on fabrication of silicon nitride-based advanced ceramic composite materials via spark plasma sintering. In PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS. ISSN 1464-4207, 2021, vol. 235, no. 8, pp. 1739-1756. Dostupné na: <https://doi.org/10.1177/14644207211013560>., Registrované v: WOS

6. [1.1] PAWLOWSKA, Sandra - GIEROWSKI, Jakub - STONIO, Bartłomiej - JUCHNIEWICZ, Marcin - FICEK, Mateusz - KRUCZKOWSKI, Michal - SZCZERSKA, Malgorzata. Implementation of SiN thin film in fiber-optic sensor working in telecommunication range of wavelengths. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2021, vol. 11, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41598-021-00195-9>., Registrované v: WOS

ADCA485

TATARKO, Peter - GRASSO, Salvatore - SAUNDERS, Theo G. - FERRARIS, Monica - REECE, Michael J. Flash joining of CVD-SiC coated Cf/SiC composites with a Ti interlayer. In Journal of the European Ceramic Society, 2017, vol. 37, no. 13, p. 3841-3848. (2016: 3.454 - IF, Q1 - JCR, 1.142 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2017.05.016>

Citácie:

1. [1.1] KIM, Jisu - RAJ, Michael Ruby - LEE, Gibaek. High-Defect-Density Graphite for Superior-Performance Aluminum-Ion Batteries with Ultra-Fast Charging and Stable Long Life. In NANO-MICRO LETTERS. ISSN 2311-6706, 2021, vol. 13, no. 1, pp. Dostupné na: <https://doi.org/10.1007/s40820-021-00698-0>., Registrované v: WOS

2. [1.1] LI, Huaxin - KOYANAGI, Takaaki - ANG, Caen - KATO, Yutai. Electric current-assisted direct joining of silicon carbide. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 5, pp. 3072-3081. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.05.072>., Registrované v: WOS

3. [1.1] VIKRANT, K. S. N. - PHUAH, X. L. - LUND, J. - WANG, Han - HELLBERG, C. S. - BERNSTEIN, N. - RHEINHEIMER, W. - BISHOP, C. M. - WANG, H. - GARCIA, R. E. Modeling

of flash sintering of ionic ceramics. In MRS BULLETIN. ISSN 0883-7694, 2021, vol. 46, no. 1, pp. 67-75. Dostupné na: <https://doi.org/10.1557/s43577-020-00012-0>, Registrované v: WOS
 4. [1.2] JONES, Gareth M. - BIESUZ, Mattia - JI, Wei - JOHN, Sandra Fisher - GRIMLEY, Carolyn - MANIÈRE, Charles - DANCER, Claire E.J. Promoting microstructural homogeneity during flash sintering of ceramics through thermal management. In MRS Bulletin. ISSN 08837694, 2021-01-01, 46, 1, pp. 59-66. Dostupné na: <https://doi.org/10.1557/s43577-020-00010-2>, Registrované v: SCOPUS

ADCA486 TATARKO, Peter** - GRASSO, Salvatore - KOVALČÍKOVÁ, Alexandra - MEDVEĎ, Dávid - DLOUHÝ, Ivo - REECE, Michael J. Highly textured and strongly anisotropic TiB₂ ceramics prepared using magnetic field alignment (9T). In Journal of the European Ceramic Society, 2020, vol. 40, no. 4, p. 1111-1118. (2019: 4.495 - IF, Q1 - JCR, 1.164 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2019.11.006>

Citácie:

1. [1.1] GUO, Wenchao - HE, Qianglong - WANG, Aiyang - TIAN, Tian - LIU, Chun - HU, Lanxin - WANG, Hao - WANG, Weimin - FU, Zhengyi. Effects of ball milling on the densification behavior, microstructure, and mechanical properties of TiB₂-SiC ceramics. In JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T. ISSN 2238-7854, 2021, vol. 15, no., pp. 6700-6712. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.11.106>, Registrované v: WOS
2. [1.1] LE FERRAND, Hortense. Magnetic slip casting for dense and textured ceramics: A review of current achievements and issues. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 1, pp. 24-37., Registrované v: WOS
3. [1.1] WANG, Wen. Effects of TiN content on the properties of hot pressed TiB₂-SiC ceramics. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 12, pp. 16762-16769., Registrované v: WOS
4. [1.1] ZHANG, Linyan - LUO, Hongyun - LUO, Jun. Coupling magnetic-thermal field effect on precipitation kinetics of Al-Cu-Mg alloy investigated by SAXS and WAXS. In JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T. ISSN 2238-7854, 2021, vol. 15, no., pp. 2611-2624. Dostupné na: <https://doi.org/10.1016/j.jmrt.2021.09.055>, Registrované v: WOS

ADCA487 TATARKO, Peter** - VALENZA, Fabrizio - ÜNSAL, Hakan - KOVALČÍKOVÁ, Alexandra - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Design of Lu₂O₃-reinforced Cf/SiC-ZrB₂-ZrC ultra-high temperature ceramic matrix composites: Wetting and interfacial reactivity by ZrSi₂ based alloys. In Journal of the European Ceramic Society, 2021, vol. 41, p. 3051-3060. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.05.055> (APVV-17-0328 : Vývoj žiaruvzdorných pyrochlorných fáz pre vysokoteplotné aplikácie neoxidovej keramiky)

Citácie:

1. [1.1] LIU, Lei - LI, Boyan - FENG, Wei - TANG, Chengwei - ZHANG, Jiaping - YAO, Xiyuan - YANG, Zhong - GUO, Yongchun - WANG, Ping - ZHANG, Yang. Effect of loading spectrum with different single pulsing time on the cyclic ablation of C/C-SiC-ZrB₂-ZrC composites in plasma. In CORROSION SCIENCE. ISSN 0010-938X, 2021, vol. 192, no., pp. Dostupné na: <https://doi.org/10.1016/j.corsci.2021.109817>, Registrované v: WOS

ADCA488 TAVERI, Gianmarco** - HANZEL, Ondrej - SEDLÁČEK, Jaroslav - TOUŠEK, Jaromír - NEŠČÁKOVÁ, Z. - MICHÁLEK, Martin - DLOUHÝ, Ivo - HNATKO, Miroslav. Consolidation of Bioglass (R) 45S5 suspension through cold isostatic pressing. In Ceramics International, 2021, vol. 47, no. 3, p. 4090-4096. (2020: 4.527 - IF, Q1 - JCR, 0.936 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents, WOS, SCOPUS). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.09.283>

Citácie:

1. [1.1] ZHOU, Wen-Yu - ZHOU, Yi-Bo - WANG, Shu-Wen - WANG, Peng - TENG, Shu-Hua. Porous and self-strengthened poly(epsilon-caprolactone)/calcium sulfate hemihydrate composite fibers for bone regeneration. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 17, pp. 23814-23820. ISSN 0272-8842. Available on: <https://doi.org/10.1016/j.ceramint.2021.05.088>, Registrované v: WOS

ADCA489 TUNEGA, Daniel - BENCO, Ľubomír - HABERHAUER, Georg - GERZABEK, Martin H. - LISCHKA, H. Ab initio molecular dynamics study of adsorption sites on the (001) surfaces of 1 : 1 dioctahedral clay minerals. In Journal of Physical Chemistry B, 2002, vol. 106, no. 44, p. 11515-11525. (2001: 3.386 - IF). ISSN 1520-6106. Dostupné na: <https://doi.org/10.1021/jp026391g>

Citácie:

1. [1.1] AL-YASERI, Ahmed - WOLFF-BOENISCH, Domenik - FAUZIAH, Cut Aja - IGLAUER, Stefan. Hydrogen wettability of clays: Implications for underground hydrogen storage. In INTERNATIONAL JOURNAL OF HYDROGEN ENERGY. ISSN 0360-3199, 2021, vol. 46, no. 69, pp. 34356-34361. Dostupné na: <https://doi.org/10.1016/j.ijhydene.2021.07.226>, Registrované v:

WOS

2. [1.1] CAO, Pingqiang - LI, Tianshu - NING, Fulong - WU, Jianyang. *Mechanical Instability of Methane Hydrate-Mineral Interface Systems*. In *ACS APPLIED MATERIALS & INTERFACES*. ISSN 1944-8244, 2021, vol. 13, no. 38, pp. 46043-46054. Dostupné na: <https://doi.org/10.1021/acsami.1c08114>., Registrované v: WOS
3. [1.1] CHEN, Yiqi - SCHULTZ, Andrew J. - ERRINGTON, Jeffrey R. *Coupled Monte Carlo and Molecular Dynamics Simulations on Interfacial Properties of Antifouling Polymer Membranes*. In *JOURNAL OF PHYSICAL CHEMISTRY B*. ISSN 1520-6106, 2021, vol. 125, no. 29, pp. 8193-8204. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c01966>., Registrované v: WOS
4. [1.1] DASH, Bibek - RATH, Swagat S. *Density Functional Theory and Molecular Dynamics insights into the site-dependent adsorption of hydrogen fluoride on kaolinite*. In *JOURNAL OF MOLECULAR LIQUIDS*. ISSN 0167-7322, 2020, vol. 299, no., pp. Dostupné na: <https://doi.org/10.1016/j.molliq.2019.112265>., Registrované v: WOS
5. [1.1] DZIADKOWIEC, Joanna - ROYNE, Anja. *Nanoscale Forces between Basal Mica Surfaces in Dicarboxylic Acid Solutions: Implications for Clay Aggregation in the Presence of Soluble Organic Acids*. In *LANGMUIR*. ISSN 0743-7463, 2020, vol. 36, no. 49, pp. 14978-14990. Dostupné na: <https://doi.org/10.1021/acs.langmuir.0c02290>., Registrované v: WOS
6. [1.1] GARCIA, Karien - QUEZADA, Gonzalo R. - ARUMI, Jose L. - URRUTIA, Roberto - TOLEDO, Pedro G. *Adsorption of Phosphate Ions on the Basal and Edge Surfaces of Kaolinite in Low Salt Aqueous Solutions Using Molecular Dynamics Simulations*. In *JOURNAL OF PHYSICAL CHEMISTRY C*. ISSN 1932-7447, 2021, vol. 125, no. 38, pp. 21179-21190. Dostupné na: <https://doi.org/10.1021/acs.jpcc.1c05995>., Registrované v: WOS
7. [1.1] PAN, Bin - YIN, Xia - IGLAUER, Stefan. *A review on clay wettability: From experimental investigations to molecular dynamics simulations*. In *ADVANCES IN COLLOID AND INTERFACE SCIENCE*. ISSN 0001-8686, 2020, vol. 285, no., pp. Dostupné na: <https://doi.org/10.1016/j.cis.2020.102266>., Registrované v: WOS
8. [1.1] REN, Bao - MIN, Fanfei - LIU, Lingyun - CHEN, Jun - LIU, Chunfu - LV, Kai. *Adsorption of different PAM structural units on kaolinite (001) surface: Density functional theory study*. In *APPLIED SURFACE SCIENCE*. ISSN 0169-4332, 2020, vol. 504, no., pp. Dostupné na: <https://doi.org/10.1016/j.apsusc.2019.144324>., Registrované v: WOS
9. [1.1] SZCZERBA, Marek - KALINICHEV, Andrey G. - KOWALIK, Mariola. *Intrinsic hydrophobicity of smectite basal surfaces quantitatively probed by molecular dynamics simulations*. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2020, vol. 188, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2020.105497>., Registrované v: WOS
10. [1.1] ZHANG, Yingchun - LIU, Xiandong - ZHANG, Chi - LU, Xiancai. *A combined first principles and classical molecular dynamics study of clay-soil organic matters (SOMs) interactions*. In *GEOCHIMICA ET COSMOCHIMICA ACTA*. ISSN 0016-7037, 2020, vol. 291, no., pp. 110-125. Dostupné na: <https://doi.org/10.1016/j.gca.2019.12.022>., Registrované v: WOS

ADCA490

TUNEGA, Daniel - BUČKO, Tomáš - ZAOUI, Ali. Assessment of ten DFT methods in predicting structures of sheet silicates: Importance of dispersion corrections. In *Journal of Chemical Physics*, 2012, vol. 137, no. 11, p. 114105-1-114105-9. (2011: 3.333 - IF, Q1 - JCR, 1.845 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.4752196>

Citácie:

1. [1.1] BALAN, Etienne - FRITSCH, Emmanuel - RADTKE, Guillaume - PAULATTO, Lorenzo - JUILLLOT, Farid - BARON, Fabien - PETIT, Sabine. *First-principles modeling of the infrared spectrum of Fe- and Al-bearing lizardite*. In *EUROPEAN JOURNAL OF MINERALOGY*, 2021, vol. 33, no. 5, pp. 647-657. ISSN 0935-1221. Available on: <https://doi.org/10.5194/ejm-33-647-2021>., Registrované v: WOS
2. [1.1] BLASKO, Martin - PASTEKA, Lukas F. - URBAN, Miroslav. *DFT Functionals for Modeling of Polyethylene Chains Cross-Linked by Metal Atoms. DLPNO-CCSD(T) Benchmark Calculations*. In *JOURNAL OF PHYSICAL CHEMISTRY A*, 2021, vol. 125, no. 34, pp. 7382-7395. ISSN 1089-5639. Available on: <https://doi.org/10.1021/acs.jpca.1c04793>., Registrované v: WOS
3. [1.1] DIAZ-ANICHTCHENKO, Daniel - TURNBULL, Robin - BANDIELLO, Enrico - ANZELLINI, Simone - ACHARY, Srungarpu Nagabhusan - ERRANDONEA, Daniel. *Pressure-induced chemical decomposition of copper orthovanadate (alpha-Cu3V2O8)*. In *JOURNAL OF MATERIALS CHEMISTRY C*, 2021, vol. 9, no. 38, pp. 13402-13409. ISSN 2050-7526. Available on: <https://doi.org/10.1039/d1tc02901k>., Registrované v: WOS
4. [1.1] HEIMANN, Jessica E. - GRIMES, Ryan T. - ROSENZWEIG, Zeev - BENNETT, Joseph W. *A density functional theory (DFT) investigation of how small molecules and atmospheric pollutants relevant to art conservation adsorb on kaolinite*. In *APPLIED CLAY SCIENCE*, 2021, vol. 206, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106075>.,

Registrované v: WOS

5. [1.1] LUO, Qing - LIU, Wenli - ZHUO, Qiming - HAN, Yonghua. Interaction mechanism of organic carboxylate with kaolinite and montmorillonite: A density functional theory study. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, 2021, vol. 613, no., pp. ISSN 0927-7757. Available on: <https://doi.org/10.1016/j.colsurfa.2020.126047>., Registrované v: WOS

6. [1.1] MATKOVIC, Aleksandar - LUDESCHER, Lukas - PEIL, Oleg E. - SHARMA, Apoorva - GRADWOHL, Kevin-P - KRATZER, Markus - ZIMMERMANN, Maik - GENSER, Jakob - KNEZ, Daniel - FISSLTHALER, Evelin - GAMMER, Christoph - LUGSTEIN, Alois - BAKKER, Ronald J. - ROMANER, Lorenz - ZAHN, Dietrich R. T. - HOFER, Ferdinand - SALVAN, Georgeta - RAITH, Johann G. - TEICHERT, Christian. Iron-rich talc as air-stable platform for magnetic two-dimensional materials. In NPJ 2D MATERIALS AND APPLICATIONS, 2021, vol. 5, no. 1, pp. Available on: <https://doi.org/10.1038/s41699-021-00276-3>., Registrované v: WOS

7. [1.1] NONEMAN, Heidi F. - HOLLINGSWORTH, Meghan E. - SINGH, Jaspreet - WHITE, Robert L. A high sensitivity variable temperature infrared spectroscopy investigation of kaolinite structure changes. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, 2021, vol. 247, no., pp. ISSN 1386-1425. Available on: <https://doi.org/10.1016/j.saa.2020.119113>., Registrované v: WOS

8. [1.1] RESENDE, Geovani C. - RIBEIRO, Guilherme A. S. - SILVEIRA, Orlando J. - LEMOS, Jessica S. - RHODES, Daniel - BALICAS, Luis - TERRONES, Mauricio - MAZZONI, Mario S. C. - FANTINI, Cristiano - CARVALHO, Bruno R. - PIMENTA, Marcos A. Effects of dimensionality and excitation energy on the Raman tensors of triclinic ReSe₂. In JOURNAL OF RAMAN SPECTROSCOPY, 2021, vol. 52, no. 12, pp. 2068-2080. ISSN 0377-0486. Available on: <https://doi.org/10.1002/jrs.6212>., Registrované v: WOS

9. [1.1] RICHARD, Diego - RENDTORFF, Nicolas Maximiliano. Local Environments in Iron-Bearing Clay Minerals by DFT Approaches: The Case of Structural Fe in Kaolinite. In APPLIED CLAY SCIENCE, 2021, vol. 213, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106251>., Registrované v: WOS

10. [1.1] SCHLIEMANN, Rene - CHURAKOV, Sergey. Atomic scale mechanism of clay minerals dissolution revealed by ab initio simulations. In GEOCHIMICA ET COSMOCHIMICA ACTA, 2021, vol. 293, no., pp. 438-460. ISSN 0016-7037. Available on: <https://doi.org/10.1016/j.gca.2020.10.026>., Registrované v: WOS

11. [1.1] SONG, Lai - LIU, Weihua - XIN, Fanghai - LI, Yingmin. Study of adhesion properties and mechanism of sodium silicate binder reinforced with silicate fume. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, 2021, vol. 106, no., pp. ISSN 0143-7496. Available on: <https://doi.org/10.1016/j.ijadhadh.2021.102820>., Registrované v: WOS

12. [1.1] TORAMAN, Hilal Ezgi - ALEXOPOULOS, Konstantinos - OH, Su Cheun - CHENG, Sichao - LIU, Dongxia - VLACHOS, Dionisios G. Ethylene production by direct conversion of methane over isolated single active centers. In CHEMICAL ENGINEERING JOURNAL, 2021, vol. 420, no., pp. ISSN 1385-8947. Available on: <https://doi.org/10.1016/j.cej.2021.130493>., Registrované v: WOS

13. [1.1] ULIAN, Gianfranco - MORO, Daniele - VALDRE, Giovanni. Electronic and optical properties of graphene/molybdenite bilayer composite. In COMPOSITE STRUCTURES, 2021, vol. 255, no., pp. ISSN 0263-8223. Available on: <https://doi.org/10.1016/j.compstruct.2020.112978>., Registrované v: WOS

14. [1.1] ULIAN, Gianfranco - MORO, Daniele - VALDRE, Giovanni. Water adsorption behaviour on (001) pyrophyllite surface from ab initio Density Functional Theory simulations. In APPLIED CLAY SCIENCE, 2021, vol. 212, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106221>., Registrované v: WOS

15. [1.1] WANG, Jie - FU, Liangjie - YANG, Huaming - ZUO, Xiaochao - WU, Di. Energetics, Interlayer Molecular Structures, and Hydration Mechanisms of Dimethyl Sulfoxide (DMSO)-Kaolinite Nanoclay Guest-Host Interactions. In JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 2021, vol. 12, no. 40, pp. 9973-9981. ISSN 1948-7185. Available on: <https://doi.org/10.1021/acs.jpclett.1c02729>., Registrované v: WOS

ADCA491

URBAN, Miroslav - NOGA, Jozef - COLE, S.J. - BARTLETT, Rodney J. Towards a full CCSDT model for electron correlation. In Journal of Chemical Physics, 1985, vol. 83, no. 8, p. 4041-4046. ISSN 0021-9606.

Citácie:

1. [1.1] PELUCCHI, Matteo - CAVALLOTTI, Carlo - FRASSOLDATI, Alessio - RANZI, Eliseo - GLARBORG, Peter - FARAVELLI, Tiziano. Theoretical and kinetic modeling study of chloromethane (CH₃Cl) pyrolysis and oxidation. In INTERNATIONAL JOURNAL OF CHEMICAL KINETICS. ISSN 0538-8066, 2021, vol. 53, no. 3, pp. 403-418. Dostupné na: <https://doi.org/10.1002/kin.21452>., Registrované v: WOS

- ADCA492 VAARA, Juha - MALKINA, Oľga - STOLL, H. - MALKIN, Vladimír - KAUPP, Martin. Study of relativistic effects on nuclear shieldings using density-functional theory and spin-orbit pseudopotentials. In *Journal of Chemical Physics*, 2001, vol. 114, no. 1, p. 61-71. (2001 - Current Contents). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.1330208>
Citácie:
1. [1.2] *RUSAKOVA, Irina L. - RUSAKOV, Yuriy Yu. Quantum chemical calculations of sup77/supSe and sup125/supTe nuclear magnetic resonance spectral parameters and their structural applications. In Magnetic Resonance in Chemistry, 2021-04-01, 59, 4, pp. 359-407. ISSN 07491581. Dostupné na: https://doi.org/10.1002/mrc.5111., Registrované v: SCOPUS*
- ADCA493 VARGA, Peter** - UHLÍK, Peter* - LEXA, Jaroslav - ŠURKA, Juraj - KUREKOVÁ, Valéria - HUDEC, Pavol - PÁLKOVÁ, Helena. The influence of porosity on the release of water from perlite glass. In *Monatshefte für Chemie*, 2019, vol. 150, no. 6, p. 1025-1040. (2018: 1.501 - IF, Q3 - JCR, 0.337 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0026-9247. Dostupné na: <https://doi.org/10.1007/s00706-019-02410-w>
Citácie:
1. [1.1] *BOBROWSKI, Artur - KACZMARSKA, Karolina - SITARZ, Maciej - DROZYNSKI, Dariusz - LESNIAK, Magdalena - GRABOWSKA, Beata - NOWAK, Daniel. Dehydroxylation of Perlite and Vermiculite: Impact on Improving the Knock-Out Properties of Moulding and Core Sand with an Inorganic Binder. In MATERIALS, 2021, vol. 14, no. 11, pp. Dostupné na: https://doi.org/10.3390/ma14112946., Registrované v: WOS*
- ADCA494 VARGA, Štefan. On robust density fitting in molecules and extended systems. In *Journal of Mathematical Chemistry*, 2011, vol. 49, no. 1, p. 1-5. (2010: 1.259 - IF, Q2 - JCR, 0.567 - SJR, Q2 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0259-9791. Dostupné na: <https://doi.org/10.1007/s10910-010-9736-9>
Citácie:
1. [1.1] *YE, Hong-Zhou - BERKELBACH, Timothy C. Fast periodic Gaussian density fitting by range separation. In JOURNAL OF CHEMICAL PHYSICS, 2021, vol. 154, no. 13, pp. ISSN 0021-9606. Dostupné na: https://doi.org/10.1063/5.0046617., Registrované v: WOS*
- ADCA495 VARGA, Štefan. Long-range analysis of density fitting in extended systems. In *International Journal of Quantum Chemistry*, 2008, vol. 108, no. 9, p. 1518-1527. (2007: 1.368 - IF, Q1 - JCR, 0.790 - SJR, Q2 - SJR). ISSN 0020-7608. Dostupné na: <https://doi.org/10.1002/qua.21682>
Citácie:
1. [1.1] *YE, Hong-Zhou - BERKELBACH, Timothy C. Fast periodic Gaussian density fitting by range separation. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 13, pp. Dostupné na: https://doi.org/10.1063/5.0046617., Registrované v: WOS*
- ADCA496 VARGA, Štefan. Density fitting of Coulomb integrals in electronic structure calculations of solids. In *Physical Review B*, 2005, vol. 71, no. 7, p. 073103-1-073103-3. (2004: 3.075 - IF, karentované - CCC). (2005 - Current Contents). ISSN 1550-235X. Dostupné na: <https://doi.org/10.1103/PhysRevB.71.073103>
Citácie:
1. [1.1] *YE, Hong-Zhou - BERKELBACH, Timothy C. Fast periodic Gaussian density fitting by range separation. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 13, pp. Dostupné na: https://doi.org/10.1063/5.0046617., Registrované v: WOS*
- ADCA497 VARGA, Štefan - MILKO, Matúš - NOGA, Jozef. Density fitting of two-electron integrals in extended systems with translational periodicity: The coulomb problem. In *Journal of Chemical Physics*, 2006, vol. 124, no. 3, p. 034106-1-034106-7. (2005: 3.138 - IF, Q1 - JCR, 2.323 - SJR, Q1 - SJR). ISSN 0021-9606. Dostupné na: <https://doi.org/10.1063/1.2145877>
Citácie:
1. [1.1] *YE, Hong-Zhou - BERKELBACH, Timothy C. Fast periodic Gaussian density fitting by range separation. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2021, vol. 154, no. 13, pp. Dostupné na: https://doi.org/10.1063/5.0046617., Registrované v: WOS*
- ADCA498 VASKOVÁ, Zuzana - KITANOVSKI, Nives - JAGLIČIĆ, Zvonko - STRAUCH, Peter - RŮŽIČKOVÁ, Zdeňka - VALIGURA, D. - KOMAN, M. - KOZLEVČAR, Bojan - MONCOL, J. Synthesis and magneto-structural characterization of copper(II) nitrobenzoate complexes containing nicotinamide or methylnicotinamide ligands. In *Polyhedron*, 2014, vol. 81, p. 555-563. (2013: 2.047 - IF, Q2 - JCR, 0.548 - SJR, Q2 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0277-5387. Dostupné na: <https://doi.org/10.1016/j.poly.2014.07.017>
Citácie:
1. [1.1] *OBALEYE, Joshua Ayoola - LAWAL, Misitira - JADEJA, Rajendrasinh N. - GUPTA, Vivek Kumar - NNABUIKE, Ginikachukwu Grace - BAMIGBOYE, Mercy Oluwaseyi - ROY, Hetal - YUSUFF, Olaniyi Kamil - BHAGARIYA, Poonam. Crystal structure, spectroscopic, DFT calculations and antimicrobial study of the Cu(II) complex bearing second-generation quinolone ofloxacin and 2,2';-bipyridine. In INORGANICA CHIMICA ACTA, 2021, vol. 519, no., pp. ISSN*

- 0020-1693. Available on: <https://doi.org/10.1016/j.ica.2021.120264>., Registrované v: WOS
2. [1.1] XU, Weiqiang - HU, KaiKai - JIN, Shouwen - ZHANG, Yuting - WANG, Daqi. Constructions of seven noncovalent-bonded supramolecules from reactions of Cu(II)/Cd(II)/Zn(II) with isonicotinamide and carboxylates. In *INORGANIC AND NANO-METAL CHEMISTRY*, 2021, vol. 51, no. 12, pp. 1842-1859. ISSN 2470-1556. Available on: <https://doi.org/10.1080/24701556.2020.1862207>., Registrované v: WOS
- ADCA499 VASKOVÁ, Zuzana - KONTRÍK, Martin - MLYNÁRIKOVÁ, Jarmila - BOČA, Miroslav. Density of low-temperature KF-AlF₃ aluminum baths with Al₂O₃ and AlPO₄ additives. In *Metallurgical and Materials Transactions B : Process Metallurgy and Materials Processing Science*, 2015, vol. 46, no. 1, p. 485-493. (2014: 1.461 - IF, Q1 - JCR, 0.796 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1073-5615. Dostupné na: <https://doi.org/10.1007/s11663-014-0218-5>
- Citácie:
1. [1.1] SUZDALTSEV, Andrey - NIKOLAEV, Andrey Yu - ZAIKOV, Yuriy P. Towards the Stability of Low-Temperature Aluminum Electrolysis. In *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*, 2021, vol. 168, no. 4, pp. ISSN 0013-4651. Available on: <https://doi.org/10.1149/1945-7111/abf87f>., Registrované v: WOS
2. [1.1] YASINSKIY, Andrey - SUZDALTSEV, Andrey - PADAMATA, Sai Krishna - POLYAKOV, Petr - ZAIKOV, Yuriy. Electrolysis of Low-temperature Suspensions: An Update. In *LIGHT METALS* 2020, 2020, vol., no., pp. 626-636. ISSN 2367-1181. Available on: https://doi.org/10.1007/978-3-030-36408-3_85., Registrované v: WOS
- ADCA500 VELÁZQUEZ, José Joaquín** - BALDA, Rolindes - FERNÁNDEZ, Joaquín - GORNI, Giulio - SEDANO, Mercedes - DURÁN, Alicia - GALUSEK, Dušan - PASCUAL, María Jesús. Structural and optical properties in Tm³⁺/Tm³⁺-Yb³⁺ doped NaLuF₄ glass-ceramics. In *International Journal of Applied Glass Science*, 2021, vol. 12, no. 4, p. 485-496. (2020: 2.029 - IF, Q2 - JCR, 0.383 - SJR, Q3 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 2041-1286. Dostupné na: <https://doi.org/10.1111/ijag.16322>
- Citácie:
1. [1.1] TERESA, P. Evangelin - MARIMUTHU, K. Structural and spectroscopic analyses on the multi former glasses developed with Eu³⁺ ions in favor of red laser gain medium applications. In *OPTICAL MATERIALS*, 2021, vol. 122, no., pp. ISSN 0925-3467. Available on: <https://doi.org/10.1016/j.optmat.2021.111704>., Registrované v: WOS
- ADCA501 VÍCHA, Jan** - KOMOROVSKÝ, Stanislav - REPISKÝ, Michal - MAREK, Radek - STRAKA, Michal**. Relativistic spin-orbit heavy atom on the light atom NMR chemical shifts: General trends across the periodic table explained. In *Journal of Chemical Theory and Computation*, 2018, vol. 14, no. 6, p. 3025-3039. (2017: 5.399 - IF, Q1 - JCR, 2.497 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1549-9618. Dostupné na: <https://doi.org/10.1021/acs.jctc.8b00144>
- Citácie:
1. [1.1] AKOPOV, Georgiy - HEWAGE, Nethmi W. - YOX, Philip - VISWANATHAN, Gayatri - LEE, Shannon J. - HULSEBOSCH, Liam P. - CADY, Sarah D. - PATERSON, Alexander L. - PERRAS, Frederic A. - XU, Wenqian - WU, Kui - MUDRYK, Yaroslav - KOVNIR, Kirill. Synthesis-enabled exploration of chiral and polar multivalent quaternary sulfides. In *CHEMICAL SCIENCE*. ISSN 2041-6520, 2021, vol. 12, no. 44, pp. 14718-14730. Dostupné na: <https://doi.org/10.1039/d1sc03685h>., Registrované v: WOS
2. [1.1] BALMER, Markus - FRANZKE, Yannick J. - WEIGEND, Florian - VON HAENISCH, Carsten. Low-Valent Group 14 Phosphinidenide Complexes [(*SiDipp*)P(2)M] Exhibit P-M π - π Interaction (M=Ge, Sn, Pb). In *CHEMISTRY-A EUROPEAN JOURNAL*. ISSN 0947-6539, 2020, vol. 26, no. 1, pp. 192-197. Dostupné na: <https://doi.org/10.1002/chem.201905061>., Registrované v: WOS
3. [1.1] BUMBERGER, Andreas E. - GORDON, Christopher P. - TRUMMER, David - COPERET, Christophe. C-H Activation and Olefin Insertion in d(8) and d(0) Complexes: Same Elementary Steps, Different Electronics. In *HELVETICA CHIMICA ACTA*. ISSN 0018-019X, 2020, vol. 103, no. 2, pp. Dostupné na: <https://doi.org/10.1002/hlca.201900278>., Registrované v: WOS
4. [1.1] CASTRO, Abril C. - SWART, Marcel. Recent Advances in Computational NMR Spectrum Prediction. In *COMPUTATIONAL TECHNIQUES FOR ANALYTICAL CHEMISTRY AND BIOANALYSIS*, 2021, vol. 20, no., pp. 41-68., Registrované v: WOS
5. [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCp⁺] Complexes. In *ORGANOMETALLICS*. ISSN 0276-7333, 2021, vol. 40, no. 10, pp. 1443-1453. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>., Registrované v: WOS
6. [1.1] KRIVDIN, Leonid B. Computational H-1 NMR: Part 2. Chemical applications. In *MAGNETIC RESONANCE IN CHEMISTRY*. ISSN 0749-1581, 2020, vol. 58, no. 1, pp. 5-14. Dostupné na: <https://doi.org/10.1002/mrc.4896>., Registrované v: WOS
7. [1.1] LATYPOV, Shamil K. - KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. -

- SINYASHIN, Oleg G. *Quantum Chemical Calculations of P-31 NMR Chemical Shifts in Nickel Complexes: Scope and Limitations*. In *ORGANOMETALLICS*. ISSN 0276-7333, 2020, vol. 39, no. 8, pp. 1413-1422. Dostupné na: <https://doi.org/10.1021/acs.organomet.0c00127>., Registrované v: WOS
8. [1.1] MARIN-LUNA, Marta - CLARAMUNT, Rosa M. - LOPEZ, Concepcion - PEREZ-TORRALBA, Marta - SANZ, Dionisia - REVIRIEGO, Felipe - ALKORTA, Ibon - ELGUERO, Jose. *A GIPAW versus GIAO-ZORA-SO study of C-13 and N-15 CPMAS NMR chemical shifts of aromatic and heterocyclic bromo derivatives*. In *SOLID STATE NUCLEAR MAGNETIC RESONANCE*. ISSN 0926-2040, 2020, vol. 108, no., pp. Dostupné na: <https://doi.org/10.1016/j.ssnmr.2020.101676>., Registrované v: WOS
9. [1.1] MELO, Juan - MALDONADO, Alejandro F. - AUCAR, Gustavo A. *Performance of the LRESC Model on top of DFT Functionals for Relativistic NMR Shielding Calculations*. In *JOURNAL OF CHEMICAL INFORMATION AND MODELING*. ISSN 1549-9596, 2020, vol. 60, no. 2, pp. 722-730. Dostupné na: <https://doi.org/10.1021/acs.jcim.9b00912>., Registrované v: WOS
10. [1.1] MIRZAEVA, I. V. *Large relativistic effects in 119Sn NMR parameters: A case study of complex anions [Cp*M(SnCl3)(n)Cl3-n]-, where M = Rh, Ir; n=1, 2, 3*. In *COMPUTATIONAL AND THEORETICAL CHEMISTRY*. ISSN 2210-271X, 2021, vol. 1205, no., pp. Dostupné na: <https://doi.org/10.1016/j.comptc.2021.113432>., Registrované v: WOS
11. [1.1] PIETRASIAK, Ewa - GORDON, Christopher P. - COPERET, Christophe - TOGNI, Antonio. *Understanding Te-125 NMR chemical shifts in disymmetric organo-telluride compounds from natural chemical shift analysis*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2020, vol. 22, no. 4, pp. 2319-2326. Dostupné na: <https://doi.org/10.1039/c9cp05934b>., Registrované v: WOS
12. [1.1] PIVETEAU, Laura - DIRIN, Dmitry N. - GORDON, Christopher P. - WALDER, Brennan J. - ONG, Ta-Chung - EMSLEY, Lyndon - COPERET, Christophe - KOVALENKO, Maksym. *Colloidal-ALD-Grown Core/Shell CdSe/CdS Nanoplatelets as Seen by DNP Enhanced PASS-PIETA NMR Spectroscopy*. In *NANO LETTERS*. ISSN 1530-6984, 2020, vol. 20, no. 5, pp. 3003-3018. Dostupné na: <https://doi.org/10.1021/acs.nanolett.9b04870>., Registrované v: WOS
13. [1.1] SUNDHOLM, Dage - DIMITROVA, Maria - BERGER, Raphael J. F. *Current density and molecular magnetic properties*. In *CHEMICAL COMMUNICATIONS*. ISSN 1359-7345, 2021, vol. 57, no. 93, pp. 12362-12378. Dostupné na: <https://doi.org/10.1039/d1cc03350f>., Registrované v: WOS
14. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. *Inverse halogen dependence in anion C-13 NMR*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 3019-3030. Dostupné na: <https://doi.org/10.1039/d0cp05891b>., Registrované v: WOS
15. [1.1] YANG, Le - GU, Xiaojiao - LI, Bo - NIU, Kai - JIN, Peng. *Small Amount Makes a Big Difference: Critical (n-1)d Valence Orbitals of Heavy Alkaline Earth Metals inside Cage Clusters*. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 12, pp. 8621-8630. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c00606>., Registrované v: WOS
- ADCA502 VÍCHA, Jan - NOVOTNÝ, Jan - KOMOROVSKÝ, Stanislav - STRAKA, Michal** - KAUPP, Martin** - MAREK, Radek**. *Relativistic heavy-neighbor-atom effects on NMR shifts: Concepts and trends across the periodic table*. In *Chemical Reviews*, 2020, vol. 120, no. 15, p. 7065-7103. (2019: 52.758 - IF, Q1 - JCR, 20.847 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0009-2665. Dostupné na: <https://doi.org/10.1021/acs.chemrev.9b00785>

Citácie:

1. [1.1] ALKORTA, Ibon - CLARAMUNT, Rosa M. - SANZ, Dionisia - ELGUERO, Jose - HOLZER, Wolfgang. *A C-13 chemical shifts study of iodopyrazoles: experimental results and relativistic and non-relativistic calculations*. In *STRUCTURAL CHEMISTRY*. ISSN 1040-0400, 2021, vol. 32, no. 3, pp. 925-937. Dostupné na: <https://doi.org/10.1007/s11224-021-01755-5>., Registrované v: WOS
2. [1.1] BATISTA, Patrick R. - DUCATI, Lucas C. - AUTSCHBACH, Jochen. *Solvent effect on the Pt-195 NMR properties in pyridonate-bridged Pt-III dinuclear complex derivatives investigated by ab initio molecular dynamics and localized orbital analysis*. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 22, pp. 12864-12880. Dostupné na: <https://doi.org/10.1039/d0cp05849a>., Registrované v: WOS
3. [1.1] BURSCH, Markus - GASEVIC, Thomas - STUECKRATH, Julius B. - GRIMME, Stefan. *Comprehensive Benchmark Study on the Calculation of Si-29 NMR Chemical Shifts*. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 1, pp. 272-285. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.0c02907>., Registrované v: WOS
4. [1.1] CASTRO, Abril C. - BALCELLS, David - REPISKY, Michal - HELGAKER, Trygve - CASCELLA, Michele. *First-Principles Calculation of H-1 NMR Chemical Shifts of Complex Metal Polyhydrides: The Essential Inclusion of Relativity and Dynamics*. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2020, vol. 59, no. 23, pp. 17509-17518. Dostupné na:

- <https://doi.org/10.1021/acs.inorgchem.0c02753>., Registrované v: WOS
5. [1.1] DITTMER, Anneke - STOYCHEV, Georgi L. - MAGANAS, Dimitrios - AUER, Alexander A. - NEESE, Frank. Computation of NMR Shielding Constants for Solids Using an Embedded Cluster Approach with DFT, Double-Hybrid DFT, and MP2. In JOURNAL OF CHEMICAL THEORY AND COMPUTATION. ISSN 1549-9618, 2020, vol. 16, no. 11, pp. 6950-6967. Dostupné na: <https://doi.org/10.1021/acs.jctc.0c00067>., Registrované v: WOS
6. [1.1] DU, Jingzhen - SEED, John A. - BERRYMAN, Victoria E. J. - KALTSOYANNIS, Nikolas - ADAMS, Ralph W. - LEE, Daniel - LIDDLE, Stephen T. Exceptional uranium(VI)-nitride triple bond covalency from N-15 nuclear magnetic resonance spectroscopy and quantum chemical analysis. In NATURE COMMUNICATIONS, 2021, vol. 12, no. 1, pp. Dostupné na: <https://doi.org/10.1038/s41467-021-25863-2>., Registrované v: WOS
7. [1.1] GLENT-MADSEN, Iben - REINHOLDT, Anders - BENDIX, Jesper - SAUER, Stephan P. A. Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCpT] Complexes. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 10, pp. 1443-1453. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00079>., Registrované v: WOS
8. [1.1] GORDON, Christopher P. - LAETSCH, Lukas - COPERET, Christophe. Nuclear Magnetic Resonance: A Spectroscopic Probe to Understand the Electronic Structure and Reactivity of Molecules and Materials. In JOURNAL OF PHYSICAL CHEMISTRY LETTERS. ISSN 1948-7185, 2021, vol. 12, no. 8, pp. 2072-2085. Dostupné na: <https://doi.org/10.1021/acs.jpcllett.0c03520>., Registrované v: WOS
9. [1.1] GUTHARDT, Robin - BRUHN, Clemens - SIEMELING, Ulrich. N-heterocyclic olefins as dative carbon donor ligands for diaminoplumblylenes: Syntheses and crystal structures of adducts with 1,3,4,5-tetramethyl-2-methyleneimidazoline. In POLYHEDRON. ISSN 0277-5387, 2021, vol. 194, no., pp. Dostupné na: <https://doi.org/10.1016/j.poly.2020.114959>., Registrované v: WOS
10. [1.1] KASHIHARA, Myuto - GORDON, Christopher P. - COPERET, Christophe. Reactivity of Substituted Benzenes toward Oxidative Addition Relates to NMR Chemical Shift of the Ipso-Carbon. In ORGANIC LETTERS. ISSN 1523-7060, 2020, vol. 22, no. 22, pp. 8910-8915. Dostupné na: <https://doi.org/10.1021/acs.orglett.0c03300>., Registrované v: WOS
11. [1.1] KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - GANUSHEVICH, Yulia S. - LATYPOV, Shamil K. DFT Approach for Predicting C-13 NMR Shifts of Atoms Directly Coordinated to Nickel. In ORGANOMETALLICS. ISSN 0276-7333, 2021, vol. 40, no. 11, pp. 1614-1625. Dostupné na: <https://doi.org/10.1021/acs.organomet.1c00074>., Registrované v: WOS
12. [1.1] KRIVDIN, Leonid B. Computational NMR of heavy nuclei involving Ag-109, Cd-113, Sn-119, Te-125, Pt-195, Hg-199, Tl-205, and Pb-207. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2021, vol. 90, no. 9, pp. 1166-1212. Dostupné na: <https://doi.org/10.1070/RCR4976>., Registrované v: WOS
13. [1.1] LU, Jia - SCHEINER, Steve. Relationships between Bond Strength and Spectroscopic Quantities in H-Bonds and Related Halogen, Chalcogen, and Pnictogen Bonds. In JOURNAL OF PHYSICAL CHEMISTRY A. ISSN 1089-5639, 2020, vol. 124, no. 38, pp. 7716-7725. Dostupné na: <https://doi.org/10.1021/acs.jpca.0c05936>., Registrované v: WOS
14. [1.1] MIRZAEVA, I. V. Large relativistic effects in 119Sn NMR parameters: A case study of complex anions [Cp*M(SnCl3)(n)Cl3-n]-, where M = Rh, Ir; n=1, 2, 3. In COMPUTATIONAL AND THEORETICAL CHEMISTRY. ISSN 2210-271X, 2021, vol. 1205, no., pp. Dostupné na: <https://doi.org/10.1016/j.comptc.2021.113432>., Registrované v: WOS
15. [1.1] ORDONEZ, Osvaldo - YU, Xiaojuan - WU, Guang - AUTSCHBACH, Jochen - HAYTON, Trevor W. Homoleptic Perchlorophenyl "Ate" Complexes of Thorium(IV) and Uranium(IV). In INORGANIC CHEMISTRY. ISSN 0020-1669, 2021, vol. 60, no. 16, pp. 12436-12444. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c01686>., Registrované v: WOS
16. [1.1] PANG, Yue - LEUTZSCH, Markus - NOETHLING, Nils - KATZENBURG, Felix - CORNELLA, Josep. Catalytic Hydrodefluorination via Oxidative Addition, Ligand Metathesis, and Reductive Elimination at Bi(I)/Bi(III) Centers. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, 2021, vol. 143, no. 32, pp. 12487-12493. Dostupné na: <https://doi.org/10.1021/jacs.1c06735>., Registrované v: WOS
17. [1.1] RAYNAUD, Christophe - NORBERT-AGAISSE, Elliott - JAMES, Brian R. - EISENSTEIN, Odile. P-31 Chemical Shifts in Ru(II) Phosphine Complexes. A Computational Study of the Influence of the Coordination Sphere. In INORGANIC CHEMISTRY. ISSN 0020-1669, 2020, vol. 59, no. 23, pp. 17038-17048. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.0c02256>., Registrované v: WOS
18. [1.1] REANT, Benjamin L. L. - BERRYMAN, Victoria E. J. - BASFORD, Annabel R. - NODARAKI, Lydia E. - WOOLLES, Ashley J. - TUNA, Floriana - KALTSOYANNIS, Nikolas - MILLS, David P. - LIDDLE, Stephen T. Si-29 NMR Spectroscopy as a Probe of s- and f-Block Metal(II)-Silanide Bond Covalency. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, 2021, vol. 143, no. 26, pp. 9813-9824. Dostupné na:

<https://doi.org/10.1021/jacs.1c03236>, Registrované v: WOS

19. [1.1] SARKAR, Debotra - WEETMAN, Catherine - MUNZ, Dominik - INOUE, Shigeyoshi. Reversible Activation and Transfer of White Phosphorus by Silyl-Stannylene. In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*. ISSN 1433-7851, 2021, vol. 60, no. 7, pp. 3519-3523.

Dostupné na: <https://doi.org/10.1002/anie.202013423>, Registrované v: WOS

20. [1.1] VIESSER, Renan V. - TORMENA, Claudio F. Inverse halogen dependence in anion C-13 NMR. In *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*. ISSN 1463-9076, 2021, vol. 23, no. 4, pp. 3019-3030. Dostupné na: <https://doi.org/10.1039/d0cp05891b>, Registrované v: WOS

21. [1.1] WEISS, Sebastian - WIDEMANN, Max - EICHELE, Klaus - SCHUBERT, Hartmut - WESEMANN, Lars. Low valent lead and tin hydrides in reactions with heteroallenes. In *DALTON TRANSACTIONS*. ISSN 1477-9226, 2021, vol. 50, no. 14, pp. 4952-4958. Dostupné na:

<https://doi.org/10.1039/d1dt00542a>, Registrované v: WOS

22. [1.1] WIDEMANN, Max - EICHELE, Klaus - SCHUBERT, Hartmut - SINDLINGER, Christian P. - KLENNER, Steffen - POETTGEN, Rainer - WESEMANN, Lars. Synthesis and Hydrogenation of Heavy Homologues of Rhodium Carbynes: [(Me3P)(2)(Ph3P)Rh equivalent to E-Ar*] (E=Sn, Pb). In *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*. ISSN 1433-7851, 2021, vol. 60, no. 11, pp. 5882-5889. Dostupné na: <https://doi.org/10.1002/anie.202015725>, Registrované v: WOS

23. [1.1] YANG, Le - GU, Xiaojiao - LI, Bo - NIU, Kai - JIN, Peng. Small Amount Makes a Big Difference: Critical (n-1)d Valence Orbitals of Heavy Alkaline Earth Metals inside Cage Clusters. In *INORGANIC CHEMISTRY*. ISSN 0020-1669, 2021, vol. 60, no. 12, pp. 8621-8630. Dostupné na: <https://doi.org/10.1021/acs.inorgchem.1c00606>, Registrované v: WOS

24. [1.2] COPERET, Christophe - GORDON, Christopher P. - KASHIHARA, Myuto. Reactivity of substituted benzenes toward oxidative addition relates to NMR chemical shift of the ipso-carbon. In *Organic Letters*, 2020-11-20, 22, 22, pp. 8910-8915. ISSN 15237060. Dostupné na:

<https://doi.org/10.1021/acs.orglett.0c03300>, Registrované v: SCOPUS

25. [1.2] GUAN, Yeqin - ZHANG, Weijin - WANG, Qianru - WEIDENTHALER, Claudia - WU, Anan - GAO, Wenbo - PEI, Qijun - YAN, Hanxue - CUI, Jirong - WU, Han - FENG, Sheng - WANG, Runze - CAO, Hujun - JU, Xiaohua - LIU, Lin - HE, Teng - GUO, Jianping - CHEN, Ping. Barium chromium nitride-hydride for ammonia synthesis. In *Chem Catalysis*, 2021-10-21, 1, 5, pp. 1042-1054. ISSN 26671107. Dostupné na: <https://doi.org/10.1016/j.checat.2021.08.006>,

Registrované v: SCOPUS

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WANG, Quan - SHAHEEN, Sabry M. - JIANG, Yahui - LI, Ronghua - SLANÝ, Michal - ABDELRAHMAN, Hamada - KWON, Eilhann - BOLAN, Nanthi - RINKLEBE, Jörg - ZHANG, Zengqiang**. Fe/Mn- and P-modified drinking water treatment residuals reduced Cu and Pb phytoavailability and uptake in a mining soil. In *Journal of Hazardous Materials*, 2021, vol. 403, p.123628-1-123628-9. (2020: 10.588 - IF, Q1 - JCR, 2.034 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0304-3894. Dostupné na:

<https://doi.org/10.1016/j.jhazmat.2020.123628>

Citácie:

1. [1.1] ABD EL-MAGEED, Taia A. - BELAL, Eman E. - RADY, Mohamed O. A. - ABD EL-MAGEED, Shima A. - MANSOUR, Elsayed - AWAD, Mohamed F. - SEMIDA, Wael M. Acidified Biochar as a Soil Amendment to Drought Stressed (*Vicia faba* L.) Plants: Influences on Growth and Productivity, Nutrient Status, and Water Use Efficiency. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 7, pp. Dostupné na: <https://doi.org/10.3390/agronomy11071290>, Registrované v: WOS

2. [1.1] ABOELFETO, Eman F. - ELABEDIEN, Mohamed E. Zain - EBEID, El-Zeiny M. Effective treatment of industrial wastewater applying SBA-15 mesoporous silica modified with graphene oxide and hematite nanoparticles. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104817>, Registrované v: WOS

3. [1.1] AHMAD, Munir - REHMAN, Wajid - KHAN, Mohammad Mansoob - QURESHI, Muhammad Tauseef - GUL, Anadil - HAQ, Sirajul - ULLAH, Rizwan - RAB, Abdur - MENAA, Farid. Phytogenic fabrication of ZnO and gold decorated ZnO nanoparticles for photocatalytic degradation of Rhodamine B. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na:

<https://doi.org/10.1016/j.jece.2020.104725>, Registrované v: WOS

4. [1.1] ALLAMIN, Ibrahim Alkali - YASID, Nur Adeela - ABDULLAH, Siti Rozaimah Sheikh - HALMI, Mohd Izuan Effendi - SHUKOR, Mohd Yunus. Phyto-Tolerance Degradation of Hydrocarbons and Accumulation of Heavy Metals by of *Cajanus cajan* (Pigeon Pea) in Petroleum-Oily-Sludge-Contaminated Soil. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/agronomy11061138>, Registrované v: WOS

5. [1.1] AWAD, Mahrous - EL-DESOKY, M. A. - GHALLAB, A. - KUBES, Jan - ABDEL-MAWLY, S. E. - DANISH, Subhan - RATNASEKERA, Disna - ISLAM, Mohammad Sohikul - SKALICKY,

- Milan - BRESTIC, Marian - BAAZEEM, Alaa - ALOTAIBI, Saqer S. - JAVED, Talha - SHABBIR, Rubab - FAHAD, Shah - RAHMAN, Muhammad Habib ur - EL SABAGH, Ayman. Ornamental Plant Efficiency for Heavy Metals Phytoextraction from Contaminated Soils Amended with Organic Materials. In *MOLECULES*, 2021, vol. 26, no. 11, pp. Dostupné na: <https://doi.org/10.3390/molecules26113360>., Registrované v: WOS
6. [1.1] BASHIR, Arshid - PANDITH, Altaf Hussain - MALIK, Lateef Ahmad - QUREASHI, Aaliya - GANAIE, Firdous Ahmad - DAR, Ghulam Nabi. Magnetically recyclable L-cysteine capped Fe₃O₄ nanoadsorbent: A promising pH guided removal of Pb(II), Zn(II) and HCrO₄-contaminants. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105880>., Registrované v: WOS
7. [1.1] BHATT, Mukesh - CHAKINALA, Anand Gupta - JOSHI, Jyeshtharaj B. - SHARMA, Anita - PANT, K. K. - SHAH, Kalpit - SHARMA, Abhishek. Valorization of solid waste using advanced thermo-chemical process: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105434>., Registrované v: WOS
8. [1.1] CASTANEDA RAMIREZ, Aldo Arturo - ROJAS GARCIA, Elizabeth - LOPEZ MEDINA, Ricardo - CONTRERAS LARIOS, Jose L. - SUAREZ PARRA, Raul - MAUBERT FRANCO, Ana Marisela. Selective Adsorption of Aqueous Diclofenac Sodium, Naproxen Sodium, and Ibuprofen Using a Stable Fe₃O₄-FeBTC Metal-Organic Framework. In *MATERIALS*, 2021, vol. 14, no. 9, pp. Dostupné na: <https://doi.org/10.3390/ma14092293>., Registrované v: WOS
9. [1.1] CERVEN, Vasile - NOVAK, Jeff M. - SZOGI, Ariel A. - PANTUCK, Kenneth - WATTS, Don W. - JOHNSON, Mark G. The Occurrence of Legacy P Soils and Potential Mitigation Practices Using Activated Biochar. In *AGRONOMY-BASEL*, 2021, vol. 11, no. 7, pp. Dostupné na: <https://doi.org/10.3390/agronomy11071289>., Registrované v: WOS
10. [1.1] CHEN, Qiang - WANG, Hong - TANG, Xiaodong - BA, Zihan - ZHAO, Xiaoqiang - WANG, Yi - DENG, Hong. One-step synthesis of carbon quantum dot-carbon nanotube composites on waste eggshell-derived catalysts for enhanced adsorption of methylene blue. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106222>., Registrované v: WOS
11. [1.1] CHEN, Yan - NIE, Zeguang - GAO, Junkai - WANG, Jiaqi - CAI, Miaomiao. A novel adsorbent of bentonite modified chitosan-microcrystalline cellulose aerogel prepared by bidirectional regeneration strategy for Pb(II) removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105755>., Registrované v: WOS
12. [1.1] CHOWDHURY, Arif - KUMARI, Sunita - KHAN, Afaq Ahmad - HUSSAIN, Sahid. Synthesis of mixed phase crystalline CoNi₂S₄ nanomaterial and selective mechanism for adsorption of Congo red from aqueous solution. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106554>., Registrované v: WOS
13. [1.1] CRISTIANI, Cinzia - IANNICELLI-ZUBIANI, Elena Maria - BELLOTTO, Maurizio - DOTELLI, Giovanni - FINOCCHIO, Elisabetta - LATORRATA, Saverio - RAMIS, Gianguido - STAMPINO, Paola Gallo. Capture and release mechanism of La ions by new polyamine-based organoclays: A model system for rare-earths recovery in urban mining process. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104730>., Registrované v: WOS
14. [1.1] DARGAHI, Abdollah - HASANI, Kamal - MOKHTARI, S. Ahmad - VOSOUGHI, Mehdi - MORADI, Mina - VAZIRI, Yaser. Highly effective degradation of 2,4-Dichlorophenoxyacetic acid herbicide in a three-dimensional sono-electro-Fenton (3D/SEF) system using powder activated carbon (PAC)/Fe₃O₄ as magnetic particle electrode. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105889>., Registrované v: WOS
15. [1.1] DE SOUZA, Ana Paula Nazar - LICEA, Yordy E. - COLACO, Marcos V. - SENRA, Jaqueline D. - CARVALHO, Naledia M. F. Green iron oxides/amino-functionalized MCM-41 composites as adsorbent for anionic azo dye: Kinetic and isotherm studies. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105062>., Registrované v: WOS
16. [1.1] FACHINI, Joisman - COSER, Thais Rodrigues - DE ARAUJO, Alyson Silva - DO VALE, Ailton Teixeira - JINDO, Keiji - DE FIGUEIREDO, Cicero Celio. One Year Residual Effect of Sewage Sludge Biochar as a Soil Amendment for Maize in a Brazilian Oxisol. In *SUSTAINABILITY*, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/su13042226>., Registrované v: WOS
17. [1.1] FAISAL, Ayad A. H. - SHIHAB, Ahmed H. - NAUSHAD, Mu - AHAMAD, Tansir -

- SHARMA, Gaurav - AL-SHEETAN, Khalid M. Green synthesis for novel sorbent of sand coated with (Ca/Al)-layered double hydroxide for the removal of toxic dye from aqueous environment. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105342>., Registrované v: WOS
18. [1.1] GONZALEZ-LOPEZ, Martin Esteban - LAUREANO-ANZALDO, Cesar Mario - PEREZ-FONSECA, Aida Alejandra - GOMEZ, Cesar - ROBLEDO-ORTIZ, Jorge Ramon. Congo red adsorption with cellulose-graphene nanoplatelets beads by differential column batch reactor. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105029>., Registrované v: WOS
19. [1.1] HOSHYARMANESH, Parisa - MOHAMMADBAGHERI, Zahra - RAHMATI, Abbas. Synthesis and application of bisurea derivatives: Effect of structural differences on the gelation properties. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105220>., Registrované v: WOS
20. [1.1] JEYASEELAN, Antonysam - ALBAQAMI, Munirah D. - VISWANATHAN, Natrayasamy. Facile design of metal ion fabricated benzene-1,3,5-tricarboxylic acid based metal organic frameworks for defluoridation of water. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104995>., Registrované v: WOS
21. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>., Registrované v: WOS
22. [1.1] LI, Xiaojun - YANG, Ruizhi - LI, Hao - YI, Hao - JING, Hongjun. Experimental Study on Solidification and Stabilization of Heavy-Metal-Contaminated Soil Using Cementitious Materials. In MATERIALS, 2021, vol. 14, no. 17, pp. Dostupné na: <https://doi.org/10.3390/ma14174999>., Registrované v: WOS
23. [1.1] LIKUS, Magdalena - KOMOROWSKA-KAUFMAN, Malgorzata - PRUSS, Alina - ZYCH, Lukasz - BAJDA, Tomasz. Iron-Based Water Treatment Residuals: Phase, Physicochemical Characterization, and Textural Properties. In MATERIALS, 2021, vol. 14, no. 14, pp. Dostupné na: <https://doi.org/10.3390/ma14143938>., Registrované v: WOS
24. [1.1] LIN, Zongkun - YANG, Yuru - LIANG, Zizhan - ZENG, Lei - ZHANG, Aiping. Preparation of Chitosan/Calcium Alginate/Bentonite Composite Hydrogel and Its Heavy Metal Ions Adsorption Properties. In POLYMERS, 2021, vol. 13, no. 11, pp. Dostupné na: <https://doi.org/10.3390/polym13111891>., Registrované v: WOS
25. [1.1] LIU, Zhihan - CAI, Xiunan - FAN, Songlin - ZHANG, Yanjuan - HU, Huayu - HUANG, Zuqiang - LIANG, Jing - QIN, Yuben. Preparation of a stable polyurethane sponge supported Sn-doped ZnO composite via double-template-regulated bionic mineralization for visible-light-driven photocatalytic degradation of tetracycline. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105541>., Registrované v: WOS
26. [1.1] MANFRIN, Jessica - GONCALVES JR, Affonso Celso - SCHWANTES, Daniel - CONRADI JR, Elio - ZIMMERMANN, Juliano - ZIEMER, Guilherme Lindner. Development of biochar and activated carbon from cigarettes wastes and their applications in Pb²⁺ adsorption. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 2, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104980>., Registrované v: WOS
27. [1.1] MIDYA, Ashim - SAREN, Binoy Kumar - DEY, Joy Kumar - MAITRA, Sagar - PRAHARAJ, Subhashisa - GAIKWAD, Dinkar Jagannath - GABER, Ahmed - ALSANIE, Walaa F. - HOSSAIN, Akbar. Crop Establishment Methods and Integrated Nutrient Management Improve: Part I. Crop Performance, Water Productivity and Profitability of Rice (Oryza sativa L.) in the Lower Indo-Gangetic Plain, India. In AGRONOMY-BASEL, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/agronomy11091860>., Registrované v: WOS
28. [1.1] MISHRA, Gourav - MUKHOPADHYAY, Mausumi. Well dispersed CeO₂@HNTs nanofiller in the poly (vinyl chloride) membrane matrix and enhanced its antifouling properties and rejection performance. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104734>., Registrované v: WOS
29. [1.1] NUNES, Nuno - RAGONEZI, Carla - GOUVEIA, Carla S. S. - PINHEIRO DE CARVALHO, Miguel A. A. Review of Sewage Sludge as a Soil Amendment in Relation to Current International Guidelines: A Heavy Metal Perspective. In SUSTAINABILITY, 2021, vol. 13, no. 4, pp. Dostupné na: <https://doi.org/10.3390/su13042317>., Registrované v: WOS
30. [1.1] PAREJA-RODRIGUEZ, Raul - FREILE-PELEGRIN, Yolanda - ROBLEDO, Daniel - RUIZ-GOMEZ, Miguel - MARTINEZ-FLORES, Rocio - RODRIGUEZ-GATTORNO, Geonel. Self-

- generated active sites in graphene oxide-like materials by controlling the oxidative decomposition reactions of *Sargassum*. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106551>., Registrované v: WOS
31. [1.1] PIZARRO, Carmen - ESCUDEY, Mauricio - BRAVO, Camila - GACITUA, Manuel - PAVEZ, Lynda. Sulfate Kinetics and Adsorption Studies on a Zeolite/Polyammonium Cation Composite for Environmental Remediation. In *MINERALS*, 2021, vol. 11, no. 2, pp. Dostupné na: <https://doi.org/10.3390/min11020180>., Registrované v: WOS
32. [1.1] RASOULZADEH, Hassan - SHEIKHMOHAMMADI, Amir - ABTAHI, Mehrnoosh - ROSHAN, Bahram - JOKAR, Rezvan. Eco-friendly rapid removal of palladium from aqueous solutions using alginate-diatomite magnano composite. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105954>., Registrované v: WOS
33. [1.1] REGHIOUA, Abdallah - BARKAT, Djamel - JAWAD, Ali H. - ABDULHAMEED, Ahmed Saud - AL-KAHTANI, Abdullah A. - ALOTHMAN, Zeid A. Parametric optimization by Box-Behnken design for synthesis of magnetic chitosan-benzil/ZnO/Fe₃O₄ nanocomposite and textile dye removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 3, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105166>., Registrované v: WOS
34. [1.1] SAKTI, Satya Candra Wibawa - WIJAYA, Rizki Ainuna - INDRASARI, Nindayu - FAHMI, Mochamad Zakki - WIDATI, Alfa Akustia - ABDULLOH - NURYONO - CHEN, Chun-Hu. Magnetic hollow buoyant alginate beads achieving rapid remediation of oil contamination on water. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104935>., Registrované v: WOS
35. [1.1] SHARIB, Ahmed S. A. Abu - BONILLA-PETRICIOLET, Adrian - SELIM, Ali Q. - MOHAMED, Essam A. - SELIEM, Moaz K. Utilizing modified weathered basalt as a novel approach in the preparation of Fe₃O₄ nanoparticles: Experimental and theoretical studies for crystal violet adsorption. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106220>., Registrované v: WOS
36. [1.1] SHARIFAN, Hamidreza - MA, Xingmao. Foliar Application of Zn Agrichemicals Affects the Bioavailability of Arsenic, Cadmium and Micronutrients to Rice (*Oryza sativa* L.) in Flooded Paddy Soil. In *AGRICULTURE-BASEL*, 2021, vol. 11, no. 6, pp. Dostupné na: <https://doi.org/10.3390/agriculture11060505>., Registrované v: WOS
37. [1.1] SUN, Hongwei - YANG, Jingjie - WANG, Yue - LIU, Yucan - CAI, Chenjian - DAVARPANAH, Afshin. Study on the Removal Efficiency and Mechanism of Tetracycline in Water Using Biochar and Magnetic Biochar. In *COATINGS*, 2021, vol. 11, no. 11, pp. Dostupné na: <https://doi.org/10.3390/coatings11111354>., Registrované v: WOS
38. [1.1] WANG, Dongfang - YI, Chuan - XU, Meng - PARK, Joon-Seok - KIM, Daeik - SHIN, Chul-Ho - RYU, Moon-Hee - ZHAO, Yufeng. Adsorption of As(III) and As(V) by using the Fenton reaction modified kapok fiber. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105918>., Registrované v: WOS
39. [1.1] WIJAYA, Karna - KURNIAWAN, Muhammad Ahan - SAPUTRI, Wahyu Dita - TRISUNARYANTI, Wega - MIRZAN, Mohammad - HARIANI, Poedji Loekitowati - TIKOALU, Alfrets Daniel. Synthesis of nickel catalyst supported on ZrO₂/SO₄ pillared bentonite and its application for conversion of coconut oil into gasoline via hydrocracking process. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105399>., Registrované v: WOS
40. [1.1] XIAO, Guiyuan - XU, Guangli - WEI, Tongzhong - ZENG, Jian - LIU, Wenjun - ZHANG, Lu. The Effect of Cu (II) on Swelling and Shrinkage Characteristics of Sodium Bentonite in Landfills. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/app11093881>., Registrované v: WOS
41. [1.1] YIN, Hongmin - MA, Jiayi - LI, Zhidong - LI, Yonghong - MENG, Tong - TANG, Zhenwu. Polybrominated Diphenyl Ethers and Heavy Metals in a Regulated E-Waste Recycling Site, Eastern China: Implications for Risk Management. In *MOLECULES*, 2021, vol. 26, no. 8, pp. Dostupné na: <https://doi.org/10.3390/molecules26082169>., Registrované v: WOS
42. [1.2] PEREIRA, Wyllamanney Da S. - DESTRO, Fabrício B. - GOZZO, Cipriano B. - LEITE, Edson R. - SCZANCOSKI, Júlio C. Insight into the enhanced photocatalytic properties of AgBr/Ag₂O composites synthesized via in situ ion exchange reaction. In *Journal of Environmental Chemical Engineering*, 2021-02-01, 9, 1, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2020.104889>., Registrované v: SCOPUS

new cumulenlic carbon iodide. In *Angewandte Chemie*, 2002, vol. 41, no. 16, p. 3011-3014. ISSN 1433-7851. Dostupné na: [https://doi.org/10.1002/1521-3773\(20020816\)41:16::AID-ANIE3011o.0.CO;2-0](https://doi.org/10.1002/1521-3773(20020816)41:16::AID-ANIE3011o.0.CO;2-0)

Citácie:

1. [1.1] BAYKOV, Sergey V. - GEYL, Kirill K. - IVANOV, Daniil M. - GOMILA, Rosa M. - FRONTERA, Antonio - KUKUSHKIN, Vadim Y. Azine Steric Hindrances Switch Halogen Bonding to N-Arylation upon Interplay with sigma-Hole Donating Haloarenenitriles. In *CHEMISTRY-AN ASIAN JOURNAL*, 2021, vol. 16, no. 11, pp. 1445-1455. ISSN 1861-4728. Dostupné na: <https://doi.org/10.1002/asia.202100282>., Registrované v: WOS

ADCA505

WISNIEWSKI, Wolfgang** - ŠVANČÁREK, Peter - PARCHOVIANSKÝ, Milan - THIEME, Christian - RÜSSEL, Christian. Hindering the kinetic selection of dendritic Ba-fresnoite by phase separation in a glass of the near-eutectic composition Ba₂TiSi₂O₈-2.625SiO₂. In *Crystal Growth & Design*, 2019, vol. 19, no. 6, p. 3559-3566. (2018: 4.153 - IF, Q1 - JCR, 1.046 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1528-7483. Dostupné na: <https://doi.org/10.1021/acs.cgd.9b00418>

Citácie:

1. [1.1] TIAN, Wei - LI, Guyao - LV, Shuang - MA, Ning - WANG, Zongrong - TANG, Yu - DU, Piya. In situ formation of composite thin film with (111) oriented Ni_{0.5}Zn_{0.5}Fe₂O₄ pillar array surrounded by BaTiO₃ for ferroelectric-ferromagnetic coupling. In *JOURNAL OF ALLOYS AND COMPOUNDS*, 2021, vol. 885, no., pp. ISSN 0925-8388. Available on: <https://doi.org/10.1016/j.jallcom.2021.161068>., Registrované v: WOS

ADCA506

WISNIEWSKI, Wolfgang** - ŠVANČÁREK, Peter - PRNOVÁ, Anna - PARCHOVIANSKÝ, Milan - GALUSEK, Dušan. Y₂O₃-Al₂O₃ microsphere crystallization analyzed by electron backscatter diffraction (EBSD). In *Scientific Reports*, 2020, vol. 10, no. 1, art. no. 11122. (2019: 3.998 - IF, Q1 - JCR, 1.341 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 2045-2322. Dostupné na: <https://doi.org/10.1038/s41598-020-67816-7>

Citácie:

1. [1.1] EDE, Jeffrey M. Deep learning in electron microscopy. In *MACHINE LEARNING-SCIENCE AND TECHNOLOGY*, 2021, vol. 2, no. 1, pp. Available on: <https://doi.org/10.1088/2632-2153/abd614>., Registrované v: WOS

2. [1.1] GUO, Yongchang - ZHANG, Ying - ALLIX, Mathieu - FENG, Shaowei - SUN, Hong - GENEVOIS, Cecile - VERON, Emmanuel - LI, Jianqiang. Rapid solidification synthesis of novel (La,Y)(2)(Zr,Ti)(2)O-7 pyrochlore-based glass-ceramics for the immobilization of high-level wastes. In *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, 2021, vol. 41, no. 14, pp. 7253-7260. ISSN 0955-2219. Available on: <https://doi.org/10.1016/j.jeurceramsoc.2021.07.051>., Registrované v: WOS

ADCA507

WODYŃSKI, Artur - MALKINA, Olga - PECUL, Magdalena. The relativistic effects on the carbon-carbon coupling constants mediated by a heavy atom. In *Journal of Physical Chemistry A.Molecules, spectroscopy, kinetics, environment, and general theory*, 2016, vol. 120, no. 28, p. 5624-5634. (2015: 2.883 - IF, Q2 - JCR, 1.148 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/acs.jpca.5b10258>

Citácie:

1. [1.2] JAZWIŃSKI, Jarosław. Theoretical and practical aspects of indirect spin-spin couplings. In *Nuclear Magnetic Resonance*, 2021-01-01, 46, pp. 34-75. ISSN 03059804. Available on: <https://doi.org/10.1039/9781788010665-00034>., Registrované v: SCOPUS

ADCA508

YADAV, S.** - KUŘITKA, Ivo - HAVLICA, Jaromír - HNATKO, Miroslav - CIGÁŇ, Alexander - MASILKO, J. - KALINA, L. - HAJDÚCHOVÁ, M. - RUSNÁK, Jaroslav - ENEV, V. Structural, magnetic, elastic, dielectric and electrical properties of hot-press sintered Co_{1-x}Zn_xFe₂O₄ (x=0.0, 0.5) spinel ferrite nanoparticles. In *Journal of Magnetism and Magnetic Materials*, 2018, vol. 447, p. 48-57. (2017: 3.046 - IF, Q2 - JCR, 0.786 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0304-8853. Dostupné na: <https://doi.org/10.1016/j.jmmm.2017.09.033>

Citácie:

1. [1.1] ANDHARE, Deepali D. - PATADE, Supriya R. - JADHAV, Swapnil A. - SOMVANSHI, Sandeep B. - JADHAV, K. M. Rietveld refined structural, morphological, Raman and magnetic investigations of superparamagnetic Zn-Co nanospinel ferrites prepared by cost-effective co-precipitation route. In *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*. ISSN 0947-8396, 2021, vol. 127, no. 6, pp. Dostupné na: <https://doi.org/10.1007/s00339-021-04603-9>., Registrované v: WOS

2. [1.1] ASOGEKAR, Pratik A. - GAONKAR, Sanket K. - KUMAR, Arun - VERENKAR, V. M. S. Influence of Co over magnetically benign Zn ferrite system and study of its structural, dielectric, superparamagnetic and antibacterial efficacy. In *MATERIALS RESEARCH BULLETIN*. ISSN 0025-5408, 2021, vol. 141, no., pp. Dostupné na:

- <https://doi.org/10.1016/j.materresbull.2021.111330>., Registrované v: WOS
3. [1.1] GAO, Chun Yan - BAEK, Eunchong - YOU, Chun Yeol - CHOI, Hyoungh Jin. Magnetic-stimuli rheological response of soft-magnetic manganese ferrite nanoparticle suspension. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, 2021, vol. 299, no. 5, pp. 865-872. Dostupné na: <https://doi.org/10.1007/s00396-021-04808-7>., Registrované v: WOS
 4. [1.1] KAKDE, A. S. - BELEKAR, R. M. - WAKDE, G. C. - BORIKAR, M. A. - REWATKAR, K. G. - SHINGADE, B. A. Evidence of magnetic dilution due to unusual occupancy of zinc on B-site in NiFe₂O₄ spinel nano-ferrite. In JOURNAL OF SOLID STATE CHEMISTRY. ISSN 0022-4596, 2021, vol. 300, no., pp. Dostupné na: <https://doi.org/10.1016/j.jssc.2021.122279>., Registrované v: WOS
 5. [1.1] KUMAR, Naveen - BHARTI, Ajaya - KUMAR, Abhishek - NIGAM, Abhishek. EFFECT OF PROCESS PARAMETERS ON THE CRYSTAL-PARAMETERS OF Cu-Zn SPINEL-FERRITES. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 1, pp. 65-73. Dostupné na: https://doi.org/10.18149/MPM.4712021_7., Registrované v: WOS
 6. [1.1] KUMAR, Naveen - SINGH, Deepak - NIGAM, Abhishek - RAJPOOT, Omprakash - YADAV, Mayank Kumar - SINGH, Yogendra Pratap - PRAKASH, P. Shakti - SINGH, Samarjit. p STRUCTURAL AND MAGNETIC PROPERTIES OF ZINC DOPED COPPER FERRITE SYNTHESIZED BY SOL-GEL AND HYDROTHERMAL ROUTE. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 2, pp. 306-314. Dostupné na: https://doi.org/10.18149/MPM.4722021_12., Registrované v: WOS
 7. [1.1] LUNIOV, S. - NAZARCHUK, P. F. - BURBAN, O. Electrical Properties of Strained Germanium Nanofilm. In PHYSICS AND CHEMISTRY OF SOLID STATE. ISSN 1729-4428, 2021, vol. 22, no. 2, pp. 313-320. Dostupné na: <https://doi.org/10.15330/pcss.22.2.313-320>., Registrované v: WOS
 8. [1.1] MAKSOUD, M. I. A. Abdel - FAHIM, Ramy Amer - SHALAN, Ahmed Esmail - ABD ELKODOUS, M. - OLOJEDE, S. O. - OSMAN, Ahmed - FARRELL, Charlie - AL-MUHTASEB, Ala'a H. - AWED, A. S. - ASHOUR, A. H. - ROONEY, David W. Advanced materials and technologies for supercapacitors used in energy conversion and storage: a review. In ENVIRONMENTAL CHEMISTRY LETTERS, 2021, vol. 19, no. 1, pp. 375-439. ISSN 1610-3653. Dostupné na: <https://doi.org/10.1007/s10311-020-01075-w>., Registrované v: WOS
 9. [1.1] MAZURENKO, Ju S. Tailoring of Magnesium Substitution on Structure and Magnetic Properties of Lithium Ferrites. In PHYSICS AND CHEMISTRY OF SOLID STATE. ISSN 1729-4428, 2021, vol. 22, no. 2, pp. 217-223. Dostupné na: <https://doi.org/10.15330/pcss.22.2.217-223>., Registrované v: WOS
 10. [1.1] NASRIN, Sharifa - SHARMIN, Most. - HOSSAIN, A. K. M. Akther - RAHAMAN, Md. D. Fabrication and unravelling the impact of iron-deficiency amount on crystal structure, micromorphology, elastic and electromagnetic properties of Ni_{0.25}Cu_{0.13}Zn_{0.62}Fe_{2-x}O_{4-3x/2} ferrites under different sintering temperatures. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 4, pp. 4592-4628. Dostupné na: <https://doi.org/10.1007/s10854-020-05200-x>., Registrované v: WOS
 11. [1.1] NIGAM, Abhishek - SINGH, Deepak - SINHA, Ankur - SACHAN, Deepak - ANISHA - VISHAL, Ankur - KUMAR, Deepak - KUMAR, Naveen. STRUCTURAL AND MAGNETIC PROPERTIES OF ZINC DOPED NICKEL FERRITE Ni(1-X)ZnXFe₂O₄ SYNTHESIZED USING SOL-GEL AUTO-COMBUSTION AND HYDROTHERMAL METHODS. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 3, pp. 493-500. Dostupné na: https://doi.org/10.18149/MPM.4732021_10., Registrované v: WOS
 12. [1.1] RAMAKRISHNA, K. S. - SRINIVAS, Ch. - PRASAD, S. A. V. - KUMAR, E. Ranjith - RAO, K. Ramachandra - PRAJAPAT, C. L. - RAO, T. V. Chandrasekhara - MEENA, Sher Singh - SASTRY, D. L. Evaluation of Structural, Micro-structural, Vibrational and Elastic Properties of Ni-Cu-Zn Nanoferrites: Role of Dopant Cu(2+) at Constant 0.1 mol% in Ni-Zn Spinel Structure. In JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 2021, vol. 31, no. 3, pp. 1336-1346. ISSN 1574-1443. Dostupné na: <https://doi.org/10.1007/s10904-020-01773-6>., Registrované v: WOS
 13. [1.1] SHAIKH, B. B. Raje - CHISHTY, Syed Qadeeruddin. Auto-ignition synthesis of rare-earth metal-doped Ni-Zn spinel ferrites for electronic applications. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 19, pp. 23999-24010. Dostupné na: <https://doi.org/10.1007/s10854-021-06863-w>., Registrované v: WOS
 14. [1.1] SHAIKH, B. B. Raje - TOKSHA, Bhagwan G. - SHIRSATH, Sagar E. - CHATTERJEE, Aniruddha - TONDE, Shyam - CHISHTY, Syed Qadeeruddin. Microstructure, magnetic, and dielectric interplay in NiCuZn ferrite with rare earth doping for magneto-dielectric applications. In JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. ISSN 0304-8853, 2021, vol. 537, no., pp. Dostupné na: <https://doi.org/10.1016/j.jmmm.2021.168229>., Registrované v: WOS
 15. [1.1] SHWETA, G. M. - NAIK, L. R. - PUJAR, R. B. - MATHAD, S. N. Influence of magnesium

- doping on structural and elastic parameters of Nickel Zinc nanoferrites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 257, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2020.123825>., Registrované v: WOS*
16. [1.1] SRINIVAS, Ch - DEEPTY, M. - PRASAD, S. A. - PRASAD, G. - KUMAR, E. Ranjith - MEENA, Sher Singh - SEETALA, Naidu - WILLAMS, Darnel D. - SASTRY, D. L. Study of structural, vibrational, elastic and magnetic properties of uniaxial anisotropic Ni-Zn nanoferrites in the context of cation distribution and magnetocrystalline anisotropy. In JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 873, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2021.159748>., Registrované v: WOS
17. [1.1] SURENDRAN, P. - LAKSHMANAN, A. - PRIYA, S. Sakthy - BALAKRISHNAN, K. - HEGDE, Tejaswi Ashok - VINITHA, G. - RAMALINGAM, G. - RAMESHKUMAR, P. - KAVIYARASU, K. Optical and nonlinear optical properties of Zn_{0.96}Cu_{0.04}Al₂O₄ nanocomposites prepared by combustion method. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2021, vol. 36, no., pp. 175-178. Dostupné na: <https://doi.org/10.1016/j.matpr.2020.02.722>., Registrované v: WOS
18. [1.1] VAISH, Garima - KRIPAL, Ram - KUMAR, Lokendra. Comprehensive study of magnetic and optoelectronic properties of MgFe₂O₄-TiO₂ nanocomposites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, 2021, vol. 271, no., pp. Dostupné na: <https://doi.org/10.1016/j.matchemphys.2021.124911>., Registrované v: WOS
19. [3.1] MAZURENKO, J. - KAYKAN, L. Influence of cobalt substitution on the structure and physical properties of substituted lithium iron spinel. In PROSPECTS AND PRIORITIES OF RESEARCH IN SCIENCE AND TECHNOLOGY, 2020, p.78-98. Dostupné na: <http://dx.doi.org/10.30525/978-9934-26-008-7.2-5>.

ADCA509

YADAV, S. - HAVLICA, J. - HNATKO, Miroslav - ŠAJGALÍK, Pavol - CIGÁŇ, Alexander - PALOU, M. - BARTONÍČKOVÁ, E. - BOHÁČ, M. - FRAJKOROVÁ, F. - MASILKO, J. - ZMRZLÝ, M. - KALINA, L. - HAJDÚCHOVÁ, M. - ENEV, V. Magnetic properties of Co_{1-x}Zn_xFe₂O₄ spinel ferrite nanoparticles synthesized by starch-assisted sol-gel autocombustion method and its ball milling. In Journal of Magnetism and Magnetic Materials, 2015, vol. 378, p. 190-199. (2014: 1.970 - IF, Q2 - JCR, 0.815 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents, WOS, SCOPUS). ISSN 0304-8853. Dostupné na: <https://doi.org/10.1016/j.jmmm.2014.11.027>

Citácie:

- [1.1] ABOUZIR, El - BELAICHE, M. - ELANSARY, M. - FERDI, C. Ahmani - BSOU, I. Novel magnetic nanomaterial Co_{0.7}Zn_{0.3}Fe_{2-x}Gd_xO₄ for nanotechnology applications: experimental and theoretical investigations. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 20, pp. 24748-24765. Dostupné na: <https://doi.org/10.1007/s10854-021-06913-3>., Registrované v: WOS
- [1.1] AKHTER, Shahida - HAKIM, M. A. - HOQUE, S. M. - DAS, H. N. Disorder magnetic behavior of Zn-substituted Cu_{1-x}Zn_xFe₂O₄ spinel ferrites. In SOLID STATE COMMUNICATIONS. ISSN 0038-1098, 2021, vol. 326, no., pp. Dostupné na: <https://doi.org/10.1016/j.ssc.2020.114181>., Registrované v: WOS
- [1.1] ANDHARE, Deepali D. - PATADE, Supriya R. - JADHAV, Swapnil A. - SOMVANSHI, Sandeep B. - JADHAV, K. M. Rietveld refined structural, morphological, Raman and magnetic investigations of superparamagnetic Zn-Co nanospinel ferrites prepared by cost-effective co-precipitation route. In APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING. ISSN 0947-8396, 2021, vol. 127, no. 6, pp. Dostupné na: <https://doi.org/10.1007/s00339-021-04603-9>., Registrované v: WOS
- [1.1] BOURZAMI, Riadh - GUEDIRI, Mohamed Khalil - CHEBLI, Derradji - BOUGUETTOUCHA, Abdallah - AMRANE, Abdeltif. Bottom-up construction of reduced-graphene-oxide-anchored spinel magnet Fe_{2.02}Ni_{1.01}O_{3.22}, anatase TiO₂ and metallic Ag nanoparticles and their synergy in photocatalytic water reduction. In JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING. ISSN 2213-2929, 2021, vol. 9, no. 4, pp. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105307>., Registrované v: WOS
- [1.1] DOS SANTOS GARRIDO, Francisco Manoel - SPITZ ARGOLLO, Maria Isabel - MEDEIROS, Marta Eloisa - SIQUEIRA JR, Jose Marcio. Starch as a Sustainable Fuel for Solution Combustion Synthesis: Nanomaterials for Energy and Environmental Applications. In CURRENT NANOSCIENCE. ISSN 1573-4137, 2021, vol. 17, no. 4, pp. 505-524. Dostupné na: <https://doi.org/10.2174/1573413716999201106150041>., Registrované v: WOS
- [1.1] KAKATI, S. - RENDALE, M. K. - MATHAD, S. N. Synthesis, Characterization, and Applications of CoFe₂O₄ and M-CoFe₂O₄ (M = Ni, Zn, Mg, Cd, Cu, RE) Ferrites: A Review. In INTERNATIONAL JOURNAL OF SELF-PROPAGATING HIGH-TEMPERATURE SYNTHESIS. ISSN 1061-3862, 2021, vol. 30, no. 4, pp. 189-219. Dostupné na: <https://doi.org/10.3103/S1061386221040038>., Registrované v: WOS
- [1.1] KUMAR, Naveen - BHARTI, Ajaya - KUMAR, Abhishek - NIGAM, Abhishek. Effect of

- Process Parameters on the Crystal-Parameters of Cu-Zn Spinel-Ferrites. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 1, pp. 65-73. Dostupné na: https://doi.org/10.18149/MPM.4712021_7, Registrované v: WOS*
8. [1.1] KUMAR, Naveen - SINGH, Deepak - NIGAM, Abhishek - RAJPOOT, Omprakash - YADAV, Mayank Kumar - SINGH, Yogendra Pratap - PRAKASH, P. Shakti - SINGH, Samarjit. *p* STRUCTURAL AND MAGNETIC PROPERTIES OF ZINC DOPED COPPER FERRITE SYNTHESIZED BY SOL-GEL AND HYDROTHERMAL ROUTE. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 2, pp. 306-314. Dostupné na: https://doi.org/10.18149/MPM.4722021_12, Registrované v: WOS
9. [1.1] LI, Jincheng - TAN, Guoqiang - REN, Xixi - AO, Di - LIU, Chenjun - REN, Huijun - XIA, Ao - LIU, Wenlong. The enhanced multiferroic properties of BiFeO₃ composite film by doping ions in the magnetic layer. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 4, pp. 4639-4650. Dostupné na: <https://doi.org/10.1007/s10854-020-05203-8>, Registrované v: WOS
10. [1.1] MONISHA, P. - PRIYADHARSHINI, P. - GOMATHI, S. S. - PUSHPANATHAN, K. Ferro to superparamagnetic transition: Outcome of Ni doping in polyethylene glycol capped CoFe₂O₄ nanoparticles. In JOURNAL OF ALLOYS AND COMPOUNDS. ISSN 0925-8388, 2021, vol. 856, no., pp. Dostupné na: <https://doi.org/10.1016/j.jallcom.2020.157447>, Registrované v: WOS
11. [1.1] NIGAM, Abhishek - SINGH, Deepak - SINHA, Ankur - SACHAN, Deepak - ANISHA - VISHAL, Ankur - KUMAR, Deepak - KUMAR, Naveen. STRUCTURAL AND MAGNETIC PROPERTIES OF ZINC DOPED NICKEL FERRITE Ni(1-X)ZnXFe₂O₄ SYNTHESIZED USING SOL-GEL AUTO-COMBUSTION AND HYDROTHERMAL METHODS. In MATERIALS PHYSICS AND MECHANICS. ISSN 1605-2730, 2021, vol. 47, no. 3, pp. 493-500. Dostupné na: https://doi.org/10.18149/MPM.4732021_10, Registrované v: WOS
12. [1.1] SAGAYARAJ, R. - ARAVAZHI, S. - CHANDRASEKARAN, G. Review on structural and magnetic properties of (Co-Zn) ferrite nanoparticles. In INTERNATIONAL NANO LETTERS. ISSN 2008-9295, 2021, vol. 11, no. 4, pp. 307-319. Dostupné na: <https://doi.org/10.1007/s40089-021-00343-z>, Registrované v: WOS
13. [1.1] SATHIYAMURTHY, K. - RAJEEVGANDHI, C. - GUGANATHAN, L. - BHARANIDHARAN, S. - SAVITHIRI, S. Enhancement of magnetic, supercapacitor applications and theoretical approach on cobalt-doped zinc ferrite nanocomposites. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, 2021, vol. 32, no. 9, pp. 11593-11606. Dostupné na: <https://doi.org/10.1007/s10854-021-05764-2>, Registrované v: WOS
14. [1.1] SOUZA, Anita D. - VAGADIA, Megha - DAIVAJNA, Mamatha D. Finite-size effects on the evolution of magnetic correlations and magnetocaloric properties of Pr_{0.4}Bi_{0.2}Sr_{0.4}MnO₃. In APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING. ISSN 0947-8396, 2021, vol. 127, no. 9, pp. Dostupné na: <https://doi.org/10.1007/s00339-021-04828-8>, Registrované v: WOS
15. [1.1] THAKUR, Preeti - TANEJA, Shilpa - CHAHAR, Deepika - RAVELO, Blaise - THAKUR, Atul. Recent advances on synthesis, characterization and high frequency applications of Ni-Zn ferrite nanoparticles. In JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. ISSN 0304-8853, 2021, vol. 530, no., pp. Dostupné na: <https://doi.org/10.1016/j.jmmm.2021.167925>, Registrované v: WOS
16. [1.1] VINOSHA, P. Annie - MANIKANDAN, A. - CEICILIA, A. Sherley Judith - DINESH, A. - NIRMALA, G. Francisco - PREETHA, A. Christy - SLIMANI, Y. - ALMESSIERE, M. A. - BAYKAL, A. - XAVIER, Belina. Review on recent advances of zinc substituted cobalt ferrite nanoparticles: Synthesis characterization and diverse applications. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 8, pp. 10512-10535. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.12.289>, Registrované v: WOS
17. [1.1] YALCIN, O. - BAYRAKDAR, H. - OZUM, S. Origin of Cross-Over Phenomenon of Hysteresis Loops and High Absorption Loss Properties for Spinel Ferrite Nanoparticles. In ACTA PHYSICA POLONICA A. ISSN 0587-4246, 2021, vol. 139, no. 1, pp. 31-38. Dostupné na: <https://doi.org/10.12693/APhysPolA.139.31>, Registrované v: WOS
18. [1.1] YIN, Xiangchun - HUANG, Jianguo - PU, Zidie - LI, Jinfeng - FENG, Hao - WANG, Xiaoyang - WANG, Yiqun. Effect of the calcination temperature on the cation distribution and optical properties of Mg_{0.5}Co_{0.5}CrAlO₄ spinel pigment. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 12, pp. 17167-17176. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.03.027>, Registrované v: WOS
19. [3.1] JUMAA, M.B. - MUBARAK, T.H. - MOHAMMAD, A.M. Synthesis and Characterization of Spinel Ferrite Co_{0.8}Fe_{2.2}O₄ Nanoparticle. In JOURNAL OF UNIVERSITY OF ANBAR FOR PURE SCIENCE (JUAPS). ISSN 1991-8941, 2021, vol. 15, no. 2, p. 74-82. Dostupné na: <http://dx.doi.org/10.37652/juaps.2022.172456>.

20. [3.1] KATOCH, G. - RANA, R. - SINGH, M. - GARCIA-PENAS, A. - BHARDWAJ, S. - SHARMA, I. - SHARMA, P. - KUMAR, G. Recent Advances in Processing, Characterizations and Biomedical Applications of Spinel Ferrite Nanoparticles. In FERRITE: NANOSTRUCTURES WITH TUNABLE PROPERTIES AND DIVERSE APPLICATIONS. Materials Research Foundations, ISBN 978-1-64490-158-8, 2021, vol. 112, p. 62-120. Dostupné na: <http://dx.doi.org/10.21741/9781644901595-2>.
 21. [3.1] MAZURENKO, J. - KAYKAN, L. Influence of cobalt substitution on the structure and physical properties of substituted lithium iron spinel. In PROSPECTS AND PRIORITIES OF RESEARCH IN SCIENCE AND TECHNOLOGY, 2020, p. 78-98. Dostupné na: <http://dx.doi.org/10.30525/978-9934-26-008-7.2-5>.
 22. [3.1] OSAMONG, G. - KAMWERU, P.K. - GICHUMBI, J.M. - NDIRITU, F.G. Surface potential, fermi level and band gap energy of copper doped magnesium nickel ferrite nanoparticles. In ASIAN JOURNAL OF NANOSCIENCE AND MATERIALS. ISSN 2645-775X, 2021, vol. 4, no. 1, p. 1-14. Dostupné na: <https://doi.org/10.26655/AJNANOMAT.2021.1.1>.
- ADCA510 YAU, Bao-Shun - HUANG, J.-L. - LU, Horng-Hwa - ŠAJGALÍK, Pavol. Investigation of nanocrystal-(Ti_{1-x}Al_x)N-y/amorphous-Si₃N₄ nanolaminate films. In Surface and coatings technology, 2005, vol. 194, no. 1, p. 119-127. ISSN 0257-8972. Dostupné na: <https://doi.org/10.1016/j.surfcoat.2004.05.009>
Citácie:
1. [1.1] LI, Guojian - LU, Wenzhang - LIU, Shiyong - LI, Chao - ZHOU, Yaoyao - WANG, Qiang. Multilayer-growth of TiAlN/WS self-lubricating composite coatings with high adhesion and their cutting performance on titanium alloy. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2021, vol. 211, no., pp. Dostupné na: <https://doi.org/10.1016/j.compositesb.2021.108620>, Registrované v: WOS
- ADCA511 YAZYEV, Oleg V. - HELM, Lothar - MALKIN, Vladimír - MALKINA, Olga. Quantum chemical investigation of hyperfine coupling constants on first coordination sphere water molecule of gadolinium(III) aqua complexes. In Journal of Physical Chemistry A.Molecules, spectroscopy, kinetics, environment, and general theory, 2005, vol. 109, no. 48, p. 10997-11005. ISSN 1089-5639. Dostupné na: <https://doi.org/10.1021/jp053825+>
Citácie:
1. [1.1] GONCALVES, Mateus A. - JUNIOR, Arismar M. G. - DA CUNHA, Elaine F. F. - RAMALHO, Teodorico C. Investigating an efficient and accurate protocol for sampling structures from molecular dynamics simulations: a close look by different wavelet families. In THEORETICAL CHEMISTRY ACCOUNTS, 2021, vol. 140, no. 8, pp. ISSN 1432-881X. Dostupné na: <https://doi.org/10.1007/s00214-021-02816-y>, Registrované v: WOS
- ADCA512 YU, Min** - BERNARDO, Enrico - COLOMBO, Paolo - ROMERO, Acacio Rincon - TATARKO, Peter - KANNUCHAMY, Vasanth K. - TITIRICI, Maria-Magdalena - CASTLE, Elinor - PICOT, Olivier T. - REECE, Michael J.**. Preparation and properties of biomorphic potassium-based geopolymer (KGP)-biocarbon (CB) composite. In Ceramics International, 2018, vol. 44, no. 11, p. 12957-12964. (2017: 3.057 - IF, Q1 - JCR, 0.784 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2018.04.111>
Citácie:
1. [1.1] HEMRA, Khanthima - KOBAYASHI, Takaomi - AUNGKAVATTANA, Pavadee - JIEMSIRILERS, Sirithan. Enhanced mechanical and thermal properties of fly ash-based geopolymer composites by wollastonite reinforcement. In JOURNAL OF METALS MATERIALS AND MINERALS. ISSN 0857-6149, 2021, vol. 31, no. 4, pp. 13-25. Dostupné na: <https://doi.org/10.14456/jmmm.2021.52>, Registrované v: WOS
2. [1.1] YU, Min - LI, Guoqing - SAUNDERS, Theo. Biomorphic wood-derived titanium carbides prepared by physical vapor infiltration-reaction synthesis. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 8, pp. 11459-11464. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.12.273>, Registrované v: WOS
- ADCA513 YU, Teng - KWON, Heejin - SHI, Linkun - ZHOU, Xiaobing** - YOON, Dang-Hyok** - TATARKO, Peter - XU, Xin - HUANG, Zhengren - HUANG, Qing. Joining of Ti-coated monolithic SiC using a SiCw/Ti₃SiC₂ filler by electric field-assisted sintering. In Journal of the European Ceramic Society, 2021, vol. 41, no. 3, p. 1834-1840. (2020: 5.302 - IF, Q1 - JCR, 1.204 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents). ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.10.059>
Citácie:
1. [1.1] WANG, Hao - XU, Xiaojing - LIU, Yangguang - CAI, Chengbin - SUN, Zhiwei - HAN, Mengnan - SHA, Shaohui - TABIE, Vitus Mwinterbo. Effect of SiC Content on Hot Corrosion Resistance of TiC and Ti₅Si₃ Reinforced Ti-Al-Sn-Zr Titanium Matrix Composites. In JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, 2021, vol. 30, no. 4, pp. 2439-2448. ISSN 1059-9495. Dostupné na: <https://doi.org/10.1007/s11665-021-05515-8>, Registrované v:

WOS

ADCA514

ZHOU, Ling - SLANÝ, Michal* - BAI, Bingbing - DU, Weichao - QU, Chengtun - ZHANG, Jie - TANG, Ying**. Enhanced removal of sulfonated lignite from oil wastewater with multidimensional MgAl-LDH nanoparticles. In *Nanomaterials-Basel*, 2021, vol. 11, no. 4, p. 861-1-861-18. (2020: 5.076 - IF, Q1 - JCR, 0.919 - SJR, Q1 - SJR, karentované - CCC). (2021 - Current Contents, WOS, SCOPUS). ISSN 2079-4991. Dostupné na: <https://doi.org/10.3390/nano11040861>

Citácie:

1. [1.1] BUATES, Jitrera - IMAI, Tsuyoshi. Application of Biochar Functionalized with Layered Double Hydroxides: Improved Plant Growth Performance after Use as Phosphate Adsorbent. In *APPLIED SCIENCES-BASEL*, 2021, vol. 11, no. 14, art. no. 6489. Dostupné na: <https://doi.org/10.3390/app11146489>., Registrované v: WOS
2. [1.1] CHEN, Qiang - WANG, Hong - TANG, Xiaodong - BA, Zihan - ZHAO, Xiaoqiang - WANG, Yi - DENG, Hong. One-step synthesis of carbon quantum dot-carbon nanotube composites on waste eggshell-derived catalysts for enhanced adsorption of methylene blue. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 106222. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106222>., Registrované v: WOS
3. [1.1] CHEN, Yan - NIE, Zeguang - GAO, Junkai - WANG, Jiaqi - CAI, Miaomiao. A novel adsorbent of bentonite modified chitosan-microcrystalline cellulose aerogel prepared by bidirectional regeneration strategy for Pb(II) removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 4, art. no. 105755. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105755>., Registrované v: WOS
4. [1.1] CHOWDHURY, Arif - KUMARI, Sunita - KHAN, Afaq Ahmad - HUSSAIN, Sahid. Synthesis of mixed phase crystalline CoNi2S4 nanomaterial and selective mechanism for adsorption of Congo red from aqueous solution. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 6, art. no. 106554. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106554>., Registrované v: WOS
5. [1.1] DARGAHI, Abdollah - HASANI, Kamal - MOKHTARI, S. Ahmad - VOSOUGHI, Mehdi - MORADI, Mina - VAZIRI, Yaser. Highly effective degradation of 2,4-Dichlorophenoxyacetic acid herbicide in a three-dimensional sono-electro-Fenton (3D/SEF) system using powder activated carbon (PAC)/Fe3O4 as magnetic particle electrode. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 105889. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105889>., Registrované v: WOS
6. [1.1] KACZYNSKA, Katarzyna - KACZYNSKI, Konrad - PELKA, Piotr. Calcination of Clay Raw Materials in a Fluidized Bed. In *MATERIALS*, 2021, vol. 14, no. 14, art. no. 3989. Dostupné na: <https://doi.org/10.3390/ma14143989>., Registrované v: WOS
7. [1.1] KHAN, Suhail Ayoub - KHAN, Tabrez Alam. Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 2021, vol. 9, no. 4, art. no. 105575. ISSN 2213-2929. Dostupné na: <https://doi.org/10.1016/j.jece.2021.105575>., Registrované v: WOS
8. [1.1] LI, Hongping - YANG, Lanwen - CAO, Jianxin - NIE, Chenchen - LIU, Hao - TIAN, Juan - CHEN, Wenxing - GENG, Pinglan - XIE, Guiming. Water-Preserving and Salt-Resistant Slow-Release Fertilizers of Polyacrylic Acid-Potassium Humate Coated Ammonium Dihydrogen Phosphate. In *POLYMERS*, 2021, vol. 13, no. 17, art. no. 2844. Dostupné na: <https://doi.org/10.3390/polym13172844>., Registrované v: WOS
9. [1.1] LIU, Mingwei - WANG, Chunze - GUO, Jingbo - ZHANG, Lanhe. Removal of phosphate from wastewater by lanthanum modified bio-ceramisite. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 106123. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106123>., Registrované v: WOS
10. [1.1] SHEN, Hang - ZHU, Lingdan - LIN, Qi - GUO, Shujun - ZHANG, Huagui. Urushiol-resourced dopamine analogue as a trigger to construct clay-hexacyanoferrate hydrogel for cesium removal. In *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*. ISSN 2213-2929, 2021, vol. 9, no. 5, art. no. 106140. Dostupné na: <https://doi.org/10.1016/j.jece.2021.106140>., Registrované v: WOS
11. [1.1] WANG, Kailin - WANG, Tianqi - ISLAM, Quazi Arif - WU, Yan. Layered double hydroxide photocatalysts for solar fuel production. In *CHINESE JOURNAL OF CATALYSIS*. ISSN 0253-9837, 2021, vol. 42, no. 11, pp. 1944-1975. Dostupné na: [https://doi.org/10.1016/S1872-2067\(21\)63861-5](https://doi.org/10.1016/S1872-2067(21)63861-5)., Registrované v: WOS

ADCA515

ZHOU, You - ZHU, Xinwen - HIRAO, Kiyoshi - LENČEŠ, Zoltán. Sintered reaction-bonded silicon nitride with high thermal conductivity and high strength. In *International Journal of Applied Ceramic Technology*, 2008, vol. 5, no. 2, p. 119-126. (2007: 1.366 - IF, Q1 - JCR, 0.695 - SJR, Q1 - SJR). ISSN 1744-7402. Dostupné na: <https://doi.org/10.1111/j.1744-7402.2008.02187.x>

Citácie:

1. [1.1] LI, Yinsheng - KIM, Ha-Neul - WU, Haibo - KIM, Mi-Ju - KO, Jae-Woong - PARK, Young-Jo - HUANG, Zhengren - KIM, Hai-Doo. Microstructure and thermal conductivity of gas-pressure-sintered Si₃N₄ ceramic: the effects of Y₂O₃ additive content. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 1, pp. 274-283. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.08.035>, Registrované v: WOS
 2. [1.1] WU, Li-Xiang - ZHU, Lin-Lin - YOU, Yang - LIN, Rui-Lin - LIU, Qing-Qing - GUO, Wei-Ming - LIN, Hua-Tay - PLUCKNETT, Kevin Paul. Fabrication and properties of pressure-sintered reaction-bonded Si₃N₄ ceramics with addition of Eu₂O₃-MgO-Y₂O₃. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 1, pp. 935-942. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.08.205>, Registrované v: WOS
 3. [1.2] KITAYAMA, Mikito. High thermal conductivity ceramics. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 165-181. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00040-0>, Registrované v: SCOPUS
- ADCA516 ZHOU, You - YOSHIZAWA, Yu-ichi - HIRAO, Kiyoshi - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Preparation of Eu-doped beta-SiAlON phosphors by combustion synthesis. In Journal of the American Ceramic Society, 2008, vol. 91, no. 9, p. 3082-3085. (2007: 1.792 - IF, Q1 - JCR, 1.255 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2008.02531.x>
- Citácie:
1. [1.1] DOU, Kuizhou - JIANG, Yinshan - XUE, Bing - WEI, Cundi - LI, Fangfei. The Effects of Eu₂O₃ Additive Amounts and Addition Methods on the Synthesis of beta-SiAlON Multiphase Materials from Fly Ash Acid Slag. In JOURNAL OF CERAMIC SCIENCE AND TECHNOLOGY. ISSN 2190-9385, 2021, vol. 12, no. 1, pp. 1-7. Dostupné na: <https://doi.org/10.4416/JCST2020-00017>, Registrované v: WOS
- ADCA517 ZHU, Xinwen - ZHOU, You - HIRAO, Kiyoshi - LENČEŠ, Zoltán. Processing and thermal conductivity of sintered reaction-bonded silicon nitride: (II) Effects of magnesium compound and yttria additives. In Journal of the American Ceramic Society, 2007, vol. 90, no. 6, p. 1684-1692. (2006: 1.396 - IF, Q1 - JCR, 1.128 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/j.1551-2916.2006.01462.x>
- Citácie:
1. [1.1] FUKUDA, Yumi - HARADA, Koichi - YONETSU, Maki - ALBESSARD, Ariane K. - HATTORI, Yasushi - ESSAKI, Kenji - GOTO, Yasuhiro - SUETSUNA, Tomohiro. Relation between crystal structure and lattice oxygen content of sintered reaction-bonded silicon nitride. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2021, vol. 104, no. 12, pp. 6563-6571. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.18023>, Registrované v: WOS
 2. [1.1] LI, Yinsheng - KIM, Ha-Neul - WU, Haibo - KIM, Mi-Ju - KO, Jae-Woong - PARK, Young-Jo - HUANG, Zhengren - KIM, Hai-Doo. Microstructure and thermal conductivity of gas-pressure-sintered Si₃N₄ ceramic: the effects of Y₂O₃ additive content. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 1, pp. 274-283. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.08.035>, Registrované v: WOS
 3. [1.1] LIAO, Shengjun - ZHOU, Lijuan - JIANG, Changxi - WANG, Jianjun - ZHUANG, Yinghua - LI, Shuang. Thermal conductivity and mechanical properties of Si₃N₄ ceramics with binary fluoride sintering additives. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 14, pp. 6971-6982. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2021.07.035>, Registrované v: WOS
 4. [1.1] WANG, Weide - YAO, Dongxu - LIANG, Hanqin - XIA, Yongfeng - ZUO, Kaihui - YIN, Jinwei - ZENG, Yu-Ping. Improved thermal conductivity of beta-Si₃N₄ ceramics through the modification of the liquid phase by using GdH₂ as a sintering additive. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 4, pp. 5631-5638. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2020.10.148>, Registrované v: WOS
 5. [1.1] YANG, Ping - WU, Shuangshuang - WU, Haonan - LU, Donglin - ZOU, Wenjing - CHU, Luojing - SHAO, Yuanzhi - WU, Shanghua. Prediction of bending strength of Si₃N₄ using machine learning. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 17, pp. 23919-23926. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.100>, Registrované v: WOS
 6. [1.2] KITAYAMA, Mikito. High thermal conductivity ceramics. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 165-181. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00040-0>, Registrované v: SCOPUS
 7. [1.2] ÇELİK, Ali - TURAN, Servet. Si-Al-O-N ceramics, structure and properties. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 128-143. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00082-5>, Registrované v: SCOPUS
- ADCA518 ZHU, Xinwen - ZHOU, You - HIRAO, Kiyoshi - LENČEŠ, Zoltán. Processing and thermal conductivity of sintered reaction-bonded silicon nitride: (I) Effect of Si powder characteristics. In

Journal of the American Ceramic Society, 2006, vol. 89, no. 11, p. 3331-3339. (2005: 1.586 - IF, Q1 - JCR, 1.211 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0002-7820.

Dostupné na: <https://doi.org/10.1111/j.1551-2916.2006.01195.x>

Citácie:

1. [1.1] CHO, Kyeong-Sik - JANG, Min-Ho. Effect of Y₂O₃ Additive Amount on Densification of Reaction Bonded Silicon Carbides Prepared by Si Melt Infiltration into All Carbon Preform. In KOREAN JOURNAL OF MATERIALS RESEARCH, 2021, vol. 31, no. 5, pp. 301-311. ISSN 1225-0562. Dostupné na: <https://doi.org/10.3740/MRSK.2021.31.5.301>., Registrované v: WOS
2. [1.1] FUKUDA, Yumi - HARADA, Koichi - YONETSU, Maki - ALBESSARD, Ariane K. - HATTORI, Yasushi - ESSAKI, Kenji - GOTO, Yasuhiro - SUETSUNA, Tomohiro. Relation between crystal structure and lattice oxygen content of sintered reaction-bonded silicon nitride. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2021, vol. 104, no. 12, pp. 6563-6571. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.18023>., Registrované v: WOS
3. [1.1] LI, Yinsheng - KIM, Ha-Neul - WU, Haibo - KIM, Mi-Ju - KO, Jae-Woong - PARK, Young-Jo - HUANG, Zhengren - KIM, Hai-Doo. Microstructure and thermal conductivity of gas-pressure-sintered Si₃N₄ ceramic: the effects of Y₂O₃ additive content. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, 2021, vol. 41, no. 1, pp. 274-283. ISSN 0955-2219. Dostupné na: <https://doi.org/10.1016/j.jeurceramsoc.2020.08.035>., Registrované v: WOS
4. [1.1] YANG, Ping - WU, Shuangshuang - WU, Haonan - LU, Donglin - ZOU, Wenjing - CHU, Luojing - SHAO, Yuanzhi - WU, Shanghua. Prediction of bending strength of Si(3)N₄ using machine learning. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 17, pp. 23919-23926. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.05.100>., Registrované v: WOS
5. [1.1] YE, Chaochao - LIU, Yongsheng - WANG, Changchun - WEI, Wenqing - JIA, Hongsheng - LIU, Bingqiang - BAO, Wenke - LU, Haiqing. Investigation on thermal conductivity and mechanical properties of Si₃N₄ ceramics via one-step sintering. In CERAMICS INTERNATIONAL, 2021, vol. 47, no. 23, pp. 33353-33362. ISSN 0272-8842. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.08.238>., Registrované v: WOS
6. [1.2] KITAYAMA, Mikito. High thermal conductivity ceramics. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 165-181. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00040-0>., Registrované v: SCOPUS
7. [1.2] ÇELİK, Ali - TURAN, Servet. Si-Al-O-N ceramics, structure and properties. In Encyclopedia of Materials: Technical Ceramics and Glasses, 2021-05-24, 2-3, pp. 128-143. Dostupné na: <https://doi.org/10.1016/B978-0-12-818542-1.00082-5>., Registrované v: SCOPUS

ADCA519

ZIMOWSKA, Malgorzata** - GURGUL, J. - SCHOLTZOVÁ, Eva - SOCHA, Robert P. - PÁLKOVÁ, Helena - LITYNSKA-DOBRYNSKA, L. - MORKZYCKI, Lukasz - LATKA, K. A precursor approach for the development of lace-like Fe₂O₃ nanocrystallites triggered by pressure dependent nucleation and growth of akaganeite over clay based composites for toluene combustion. In Journal of Physical Chemistry C, 2019, vol. 123, no. 43, p. 26236-26250. (2018: 4.309 - IF, Q1 - JCR, 1.652 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1932-7447. Dostupné na: <https://doi.org/10.1021/acs.jpcc.9b06014>

Citácie:

1. [1.1] CAO, Jiachun - WU, Fugen - WEN, Minru - PENG, Junhao - YANG, Yan - DONG, Huafeng. Adsorption mechanism of typical VOCs on pristine and Al-modified MnO₂ monolayer. In APPLIED SURFACE SCIENCE, 2021, vol. 539, no., pp. ISSN 0169-4332. Dostupné na: <https://doi.org/10.1016/j.apsusc.2020.148164>., Registrované v: WOS
2. [1.1] LIU, Peng - LIAO, Yuxi - LI, Jingjing - CHEN, Longwen - FU, Mingli - WU, Puqiu - ZHU, Runliang - LIANG, Xiaoliang - WU, Tianli - YE, Daiqi. Insight into the effect of manganese substitution on mesoporous hollow spinel cobalt oxides for catalytic oxidation of toluene. In JOURNAL OF COLLOID AND INTERFACE SCIENCE, 2021, vol. 594, no., pp. 713-726. ISSN 0021-9797. Dostupné na: <https://doi.org/10.1016/j.jcis.2021.03.093>., Registrované v: WOS
3. [1.1] WU, Datong - MA, Cong - PAN, Fei - TAO, Yongxin - KONG, Yong. Strategies to Achieve a Ferrocene-Based Polymer with Reversible Redox Activity for Chiral Electroanalysis of Nonelectroactive Amino Acids. In ANALYTICAL CHEMISTRY, 2021, vol. 93, no. 29, pp. 10160-10166. ISSN 0003-2700. Dostupné na: <https://doi.org/10.1021/acs.analchem.1c01158>., Registrované v: WOS
4. [1.1] ZHOU, Yuanbo - HE, Jiaqin - CHEN, Dongyun - LI, Xunxun - WANG, Yaru - XIAO, Jun - LI, Najun - XU, Qingfeng - LI, Hua - HE, Jinghui - LU, Jianmei. Flower-like Pt/Fe₂O₃-CeO₂ Catalysts for Highly Efficient Low-Temperature Catalytic Oxidation of Toluene. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, 2021, vol. 60, no. 15, pp. 5471-5481. ISSN 0888-5885. Dostupné na: <https://doi.org/10.1021/acs.iecr.1c00108>., Registrované v: WOS

ADCA520

ZIMOWSKA, Malgorzata - GURGUL, J. - PÁLKOVÁ, Helena - OLEJNICZAK, Zbigniew - LATKA, K. - LITYNSKA-DOBRYNSKA, L. - MATACHOWSKI, L. Structural rearrangements in

Fe-porous clay heterostructures composites derived from Laponite® - Influence of preparation methods and Fe source. In *Microporous and Mesoporous Materials*, 2016, vol. 231, p. 66-81. (2015: 3.349 - IF, Q1 - JCR, 1.184 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1387-1811. Dostupné na: <https://doi.org/10.1016/j.micromeso.2016.05.013>

Citácie:

1. [1.1] VOICU, Anda I. - GAREA, Sorina A. - GHEBAUR, Adi - NISTOR, Cristina L. - SARBU, Andrei - VASILE, Eugeniu - MITRAN, Raul - IOVU, Horia. New nanocarriers based on Porous Clay Heterostructures (PCH) designed for methotrexate delivery. In *MICROPOROUS AND MESOPOROUS MATERIALS*. ISSN 1387-1811, 2021, vol. 328, no., pp. Dostupné na: <https://doi.org/10.1016/j.micromeso.2021.111434>, Registrované v: WOS

ADCA521 ZIMOWSKA, Malgorzata - PÁLKOVÁ, Helena - MADEJOVÁ, Jana - DULA, Roman - PAMIN, Katarzyna - OLEJNICZAK, Zbigniew - GIL, Barbara - SERWICKA, Ewa M. Laponite-derived porous clay heterostructures: III. The effect of alumination. In *Microporous and Mesoporous Materials*, 2013, vol. 175, p. 67-75. (2012: 3.365 - IF, Q1 - JCR, 1.496 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). Dostupné na: <https://doi.org/10.1016/j.micromeso.2013.02.047> (Vega č. 2/0183/09 : Chemické modifikácie povrchov prírodných nanomateriálov)

Citácie:

1. [1.1] AL DMOUR, Hmoud - KOOLI, Fethi - MOHMOUD, Ahmed - LIU, Yan - POPOOLA, Saheed A. Al and Zr Porous Clay Heterostructures as Removal Agents of Basic Blue-41 Dye from an Artificially Polluted Solution: Regeneration Properties and Batch Design. In *MATERIALS*, 2021, vol. 14, no. 10, pp. Dostupné na: <https://doi.org/10.3390/ma14102528>, Registrované v: WOS

2. [1.1] LEANDRO, Gabriel Coelho - CAPELLO, Cristiane - KOOP, Betina Luiza - GARCEZ, Jussara - MONTEIRO, Alcilene Rodrigues - VALENCIA, German Ayala. Adsorption-desorption of anthocyanins from jambolan (*Syzygium cumini*) fruit in laponite (R) platelets: Kinetic models, physicochemical characterization, and functional properties of biohybrids. In *FOOD RESEARCH INTERNATIONAL*, 2021, vol. 140, no., pp. ISSN 0963-9969. Dostupné na: <https://doi.org/10.1016/j.foodres.2020.109903>, Registrované v: WOS

3. [1.1] SCHOLTZOVA, Eva. Insight into the Structure of TMA-Hectorite: A Theoretical Approach. In *MINERALS*, 2021, vol. 11, no. 5, pp. Dostupné na: <https://doi.org/10.3390/min11050505>, Registrované v: WOS

ADCB Vedecké práce v zahraničných karentovaných časopisoch – neimpaktovaných

ADCB01 FRANKOVSKÁ, J. - ANDREJKOVIČOVÁ, Slávka - JANOTKA, Ivan. Effect of NaCl on hydraulic properties of bentonite and bentonite-palygorskite mixture. In *Geosynthetics International*, 2010, vol. 17, no. 4, p. 250-259. (2009: 1.833 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1072-6349. Dostupné na: <https://doi.org/10.1680/gein.2010.17.4.250>

Citácie:

1. [1.1] AL-ESSA, Khansaa - AL-ESSA, Ethar M. Effective Approach of Activated Jordanian Bentonite by Sodium Ions for Total Phenolic Compounds Removal from Olive Mill Wastewater. In *JOURNAL OF CHEMISTRY*, 2021, vol. 2021, art. no. 7405238. ISSN 2090-9063. Dostupné na: <https://doi.org/10.1155/2021/7405238>, Registrované v: WOS

2. [1.1] BAG, Ramakrishna - JADDA, Koteswaraarao. Influence of water content and dry density on pore size distribution and swelling pressure of two Indian bentonites. In *BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT*, 2021, vol. 80, no. 11, pp. 8597-8614. ISSN 1435-9529. Dostupné na: <https://doi.org/10.1007/s10064-021-02459-0>, Registrované v: WOS

ADDA Vedecké práce v domácich karentovaných časopisoch – impaktovaných

ADDA01 ANDREJKOVIČOVÁ, Slávka - MADEJOVÁ, Jana - CZÍMEROVÁ, Adriana - GALKO, Igor - DOHRMANN, Reiner - KOMADEL, Peter. Mineralogy and chemistry of Fe-rich bentonite from the Lieskovec deposit (Central Slovakia). In *Geologica Carpathica*, 2006, vol. 57, no. 5, p. 371-378. (2005: 0.449 - IF, Q4 - JCR, 0.379 - SJR, Q2 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 1335-0552.

Citácie:

1. [1.1] STARY, Jaromir - JIRASEK, Jakub - PTICEN, Frantisek - ZAHRADNIK, Jan - SIVEK, Martin. Review of production, reserves, and processing of clays (including bentonite) in the Czech Republic. In *APPLIED CLAY SCIENCE*. ISSN 0169-1317, 2021, vol. 205, no., pp. Dostupné na: <https://doi.org/10.1016/j.clay.2021.106049>, Registrované v: WOS

2. [1.2] NOVIKOVA, Lyudmila A. - KHODOSOVA, Natalia A. - BELCHINSKAYA, Larissa I. - ROSSNER, Frank. Effect of activation temperature on surface basicity of natural aluminosilicates.

- In Sorbtionnye i Khromatograficheskie Protsessy, 2021-02-24, 21, 1, pp. 9-16. ISSN 16800613. Available on: <https://doi.org/10.17308/sorpchrom.2021.21/3198>., Registrované v: SCOPUS*
- ADDA02 HRACHOVÁ, Jana - CHODÁK, Ivan - KOMADEL, Peter. Modification and characterization of montmorillonite fillers used in composites with vulcanized natural rubber. In Chemical papers, 2009, vol. 63, no. 1, p. 55-61. (2008: 0.758 - IF, Q3 - JCR, 0.284 - SJR, Q2 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0366-6352. Dostupné na: <https://doi.org/10.2478/s11696-008-0079-y>
- Citácie:
1. [1.1] *SIMONOVA BARANYAIOVA, Timea* - *MESZAROS, Robert* - *SEBECHLEBSKA, Tana* - *BUJDAK, Juraj*. Non-Arrhenius kinetics and slowed-diffusion mechanism of molecular aggregation of a rhodamine dye on colloidal particles. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2021, vol. 23, no. 32, pp. 17177-17185. ISSN 1463-9076. Dostupné na: <https://doi.org/10.1039/d1cp02762j>., Registrované v: WOS
- ADDA03 JANÍKOVÁ, V. - JÓNA, Eugen - JANÍK, R. - PAVLÍK, Viliam - ONDRUŠOVÁ, D. - ĎURČEKOVÁ, Michaela. Formation of coordination compounds with aniline in the interlayer space of Ca²⁺, Cu²⁺ and Fe³⁺-exchanged montmorillonite. In Chemical Papers, 2016, vol. 70, no. 1, p. 131-134. (2015: 1.326 - IF, Q3 - JCR, 0.369 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0366-6352. Dostupné na: <https://doi.org/10.1515/chempap-2015-0196> (International Conference on Coordination and Bioinorganic Chemistry)
- Citácie:
1. [1.1] *KLOPROGGE, J. Theo* - *PONCE, Concepcion P.* - *ORTILLO, Danilo O.* X-ray Photoelectron Spectroscopic Study of Some Organic and Inorganic Modified Clay Minerals. In MATERIALS, 2021, vol. 14, no. 23, pp. Dostupné na: <https://doi.org/10.3390/ma14237115>., Registrované v: WOS
- ADDA04 KORENKO, Michal - KUCHARÍK, Marián - JANIČKOVIČ, Dušan. Rapid solidification processing in molten salts chemistry: X-ray analysis of deeply undercooled cryolite-alumina melts. In Chemical papers, 2008, vol. 62, no. 2, p. 219-222. (2007: 0.367 - IF, Q4 - JCR, 0.176 - SJR, Q2 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0366-6352. Dostupné na: <https://doi.org/10.2478/s11696-008-0014-2>
- Citácie:
1. [1.1] *BUMAJDAD, Ali* - *NAHAR, Shamsun* - *ZAKI, Mohamed I.* Na-Influenced Bulk and Surface Properties of the So-Called Iota(iota)-Alumina: Spectroscopy and Microscopy Studies. In FRONTIERS IN CHEMISTRY. ISSN 2296-2646, 2021, vol. 9, 633877. Dostupné na: <https://doi.org/10.3389/fchem.2021.633877>., Registrované v: WOS
- ADDA05 KORENKO, Michal** - PRIŠČÁK, Jozef - ŠIMKO, František. Electrical conductivity of systems based on Na₃AlF₆-SiO₂ melt. In Chemical Papers, 2013, vol. 67, no. 10, p. 1350-1354. (2012: 0.879 - IF, Q3 - JCR, 0.301 - SJR, Q2 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0366-6352. Dostupné na: <https://doi.org/10.2478/s11696-013-0393-x>
- Citácie:
1. [1.1] *FENG, Yuan* - *LI, Mao* - *HOU, Wenyuan* - *CHENG, Benjun* - *WANG, Jiaoru* - *LI, Hesong*. First-Principles Molecular Dynamics Simulation on High Silica Content Na₃AlF₆-Al₂O₃-SiO₂ Molten Salt. In ACS OMEGA. ISSN 2470-1343, 2021, vol. 6, no. 5, pp. 3745-3751. Dostupné na: <https://doi.org/10.1021/acsomega.0c05339>., Registrované v: WOS
- ADDA06 OSACKÝ, Marek** - BINČÍK, Tomáš - PAĽO, Tomáš - UHLÍK, Peter - MADEJOVÁ, Jana - CZÍMEROVÁ, Adriana. Mineralogical and physico-chemical properties of bentonites from the Jastrabá Formation (Kremnické vrchy Mts., Western Carpathians). In Geologica Carpathica, 2019, vol. 70, no. 5, p. 433-445. (2018: 1.699 - IF, Q3 - JCR, 0.627 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents, WOS, SCOPUS). ISSN 1335-0552.
- Citácie:
1. [1.1] *GORNIK, Katarzyna* - *SZYDLAK, Tadeusz* - *WYSZOMIRSKI, Piotr* - *GAWEL, Adam* - *NIEMIEC, Malgorzata*. Recently Discovered Thick Bentonite Bed Hosted by the Lithothamnium Limestones (Badenian) in the Polish Part of the Carpathian Foredeep: The Evidence for Volcanic Origin. In MINERALS, 2021, vol. 11, no. 12, pp. Available on: <https://doi.org/10.3390/min11121417>., Registrované v: WOS
2. [1.1] *KASPAR, Vlastislav* - *SACHLOVA, Sarka* - *HOFMANOVA, Eva* - *KOMARKOVA, Bara* - *HAVLOVA, Vaclava* - *APARICIO, Claudia* - *CERNA, Katerina* - *BARTAK, Deepa* - *HLAVACKOVA, Veronika*. Geochemical, Geotechnical, and Microbiological Changes in Mg/Ca Bentonite after Thermal Loading at 150 degrees C. In MINERALS, 2021, vol. 11, no. 9, pp. Available on: <https://doi.org/10.3390/min11090965>., Registrované v: WOS
3. [1.1] *STARY, Jaromir* - *JIRASEK, Jakub* - *PTICEN, Frantisek* - *ZAHRADNIK, Jan* - *SIVEK, Martin*. Review of production, reserves, and processing of clays (including bentonite) in the Czech Republic. In APPLIED CLAY SCIENCE, 2021, vol. 205, no., pp. ISSN 0169-1317. Available on: <https://doi.org/10.1016/j.clay.2021.106049>., Registrované v: WOS

4. [1.1] SURANEK, Matej - MELICHOVA, Zuzana - KUREKOVA, Valeria - KLJAJEVIC, Ljiljana - NENADOVIC, Snezana. Removal of Nickel from Aqueous Solutions by Natural Bentonites from Slovakia. In MATERIALS, 2021, vol. 14, no. 2, pp. Available on: <https://doi.org/10.3390/ma14020282>, Registrované v: WOS
- ADDA07 OSACKÝ, Marek - HONTY, Miroslav - MADEJOVÁ, Jana - BAKAS, Thomas - ŠUCHA, Vladimír. Experimental interactions of Slovak bentonites with metallic iron. In Geologica Carpathica, 2009, vol. 60, no. 6, p. 535-543. (2008: 1.081 - IF, Q3 - JCR, 0.494 - SJR, Q2 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1335-0552. Dostupné na: <https://doi.org/10.2478/v10096-009-0039-7>
- Citácie:
1. [1.1] LEUPIN, Olivier X. - SMART, Nick R. - ZHANG, Zhidong - STEFANONI, Matteo - ANGST, Ueli - PAPAFOTIOU, Alexandros - DIOMIDIS, Nikitas. Anaerobic corrosion of carbon steel in bentonite: An evolving interface. In CORROSION SCIENCE, 2021, vol. 187, no., pp. ISSN 0010-938X. Available on: <https://doi.org/10.1016/j.corsci.2021.109523>, Registrované v: WOS
- ADDA08 PENTRÁK, Martin - MADEJOVÁ, Jana - ANDREJKOVIČOVÁ, Slávka - UHLÍK, Peter - KOMADEL, Peter. Stability of kaolin sand from the Vyšný Petrovec deposit (south Slovakia) in an acid environment. In Geologica Carpathica, 2012, vol. 63, no. 6, p. 503-512. (2011: 0.787 - IF, Q4 - JCR, 0.489 - SJR, Q2 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1335-0552. Dostupné na: <https://doi.org/10.2478/v10096-012-0039-x>
- Citácie:
1. [1.2] FEHERVARI, Andras - GATES, Will P. - GALLAGE, Chathuranga - COLLINS, Frank. Suitability of remediated PFAS-affected soil in cement pastes and mortars. In Sustainability (Switzerland), 2020-05-01, 12, 10, pp. Available on: <https://doi.org/10.3390/su12104300>, Registrované v: SCOPUS
- ADDA09 STRÍČEK, Igor - ŠUCHA, Vladimír - UHLÍK, Peter - MADEJOVÁ, Jana - GALKO, Igor. Mineral stability of Fe-rich bentonite in the Mock-Up-CZ experiment. In Geologica Carpathica, 2009, vol. 60, no. 5, p. 431-436. (2008: 1.081 - IF, Q3 - JCR, 0.494 - SJR, Q2 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1335-0552. Dostupné na: <https://doi.org/10.2478/v10096-009-0031-2>
- Citácie:
1. [1.1] LAUFEK, Frantisek - HANUSOVA, Irena - SVOBODA, Jiri - VASICEK, Radek - NAJSER, Jan - KOUBOVA, Magdalena - CURDA, Michal - PTICEN, Frantisek - VACULIKOVA, Lenka - SUN, Haiquan - MASIN, David. Mineralogical, Geochemical and Geotechnical Study of BCV 2017 Bentonite-The Initial State and the State following Thermal Treatment at 200 degrees C. In MINERALS, 2021, vol. 11, no. 8, pp. Dostupné na: <https://doi.org/10.3390/min11080871>, Registrované v: WOS

ADEA Vedecké práce v ostatných zahraničných časopisoch – impaktovaných

- ADEA01 ŽIVICA, Vladimír - BALKOVIC, Svetozár - DRÁBIK, Milan. Properties of metakaolin geopolymer hardened paste prepared by high-pressure compaction. In Construction and Building Materials, 2011, vol. 25, p. 2206-2213. (2010: 1.366 - IF, Q1 - JCR, 1.345 - SJR, Q1 - SJR). (2011 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2010.11.004>
- Citácie:
1. [1.1] GOKCE, H. S. - TUYAN, M. - NEHDI, M. L. Alkali-activated and geopolymer materials developed using innovative manufacturing techniques: A critical review. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 303, art. no. 124483. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.124483>, Registrované v: WOS
2. [1.1] ORTEGA-ZAVALA, D. E. - BURCIAGA-DIAZ, O. - ESCALANTE-GARCIA, J. Chemically bonded ceramic/cementitious materials of alkali activated metakaolin processed by cold pressing. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 279, art. no. 121365. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2020.121365>, Registrované v: WOS
3. [1.1] SCHEINHERROVA, Lenka - VEJMELOVA, Eva - KEPPERT, Martin - DOLEZELOVA, Magdalena - ROVNANIKOVA, Pavla - CERNY, Robert. Effects of accelerated carbonation on properties of ceramic-based geopolymers. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 2021, vol. 145, no. 6, pp. 2951-2966. ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09980-6>, Registrované v: WOS
4. [1.1] TAI, Yating - ZHOU, Jikai - YE, Nengjun. Experimental investigation on the effect of pressure-filtration method on compressive strength and microstructure of cement paste. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 309, art. no. 125148. ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2021.125148>, Registrované v: WOS
5. [1.1] TANG, Danna - WANG, Yushen - CHENG, Kaka. Simulation and optimization of lightweight insulating geopolymer composites via dual gradient slurry deposition. In JOURNAL OF MANUFACTURING PROCESSES, 2021, vol. 71, pp. 249-259. ISSN 1526-6125. Dostupné na:

<https://doi.org/10.1016/j.jmapro.2021.09.034>, Registrované v: WOS

6. [1.1] XU, Xianqing - BAO, Shenxu - ZHANG, Yimin - LUO, Yongpeng - QIN, Lei - LI, Shefeng. Role of particle fineness and reactive silicon-aluminum ratio in mechanical properties and microstructure of geopolymers. In CONSTRUCTION AND BUILDING MATERIALS, 2021, vol. 313, art. no. 125483. ISSN 0950-0618. Dostupné na:

<https://doi.org/10.1016/j.conbuildmat.2021.125483>, Registrované v: WOS

7. [1.2] YONG, Heah Cheng - WEEN, Ong Shee - MING, Liew Yun - ABDULLAH, Mohd Mustafa Al Bakri - EN, Ooi Wan. Development of Ash-Based and Slag-Based Pressed Geopolymer. In Lecture Notes in Civil Engineering, 2021, 129, pp. 51-72. ISSN 23662557. Dostupné na:

https://doi.org/10.1007/978-981-33-4918-6_4, Registrované v: SCOPUS

ADEB Vedecké práce v ostatných zahraničných časopisoch – neimpaktovaných

ADEB01 KARELL, Radovan - CHROMČÍKOVÁ, Mária - LIŠKA, Marek. Structure and properties of selected zirconia silicate glasses. In Advanced Materials Research. - Zurich : Trans. Tech. Publ., 2008, vol. 39-40, p. 173-176. (2007: 0.180 - SJR, Q3 - SJR). ISSN 1022-6680. Dostupné na:

<https://doi.org/10.4028/www.scientific.net/amr.39-40.173>

Citácie:

1. [1.1] DENG, W. - CHRISTOPOULOU, G. - MODARRESIFAR, F. - JONES, A. H. - BINGHAM, P. A. Effects of ZrO₂ on thermal stability and crystallisation of K₂O-Al₂O₃-SiO₂ glasses. In PHYSICS AND CHEMISTRY OF GLASSES-EUROPEAN JOURNAL OF GLASS SCIENCE AND TECHNOLOGY PART B. ISSN 1753-3562, 2021, vol. 62, no. 5, pp. 137-148. Dostupné na:

<https://doi.org/10.13036/17533562.62.5.06>, Registrované v: WOS

2. [1.1] MUELLER, Dirk - DINGWELL, Donald B. The influence of thermal barrier coating dissolution on CMAS melt viscosities. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2021, vol. 41, no. 4, pp. 2746-2752. Dostupné na:

<https://doi.org/10.1016/j.jeurceramsoc.2020.11.037>, Registrované v: WOS

ADEB02 KAUPP, Martin - MALKIN, Vladimír - MALKINA, Oľga - SALAHUB, Dennis R. Ab initio ECP/DFT calculation and interpretation of carbon and oxygen NMR chemical shift tensors in transition-metal carbonyl complexes. In Chemistry -A European Journal, 1996, vol. 2, no. 1, p. 24-30. ISSN 0947-6539. Dostupné na: <https://doi.org/10.1002/chem.19960020108>

Citácie:

1. [1.1] BORTOLI, Marco - RIBAUDO, Giovanni - ORIAN, Laura. Essentials for Combined Experimental and Computational Se-77 NMR of Organoselenium Catalysts and Bioinspired Antioxidants. In MINI-REVIEWS IN ORGANIC CHEMISTRY, 2021, vol. 18, no. 2, pp. 196-211. ISSN 1570-193X. Available on: <https://doi.org/10.2174/1570193X17999200523152708>,

Registrované v: WOS

2. [1.1] KONDRASHOVA, Svetlana A. - POLYANCEV, Fedor M. - GANUSHEVICH, Yulia S. - LATYPOV, Shamil K. DFT Approach for Predicting C-13 NMR Shifts of Atoms Directly Coordinated to Nickel. In ORGANOMETALLICS, 2021, vol. 40, no. 11, pp. 1614-1625. ISSN 0276-7333. Available on: <https://doi.org/10.1021/acs.organomet.1c00074>, Registrované v: WOS

3. [1.2] CHAMKIN, Aleksandr A. Benchmarking DFT Calculations of sup1/supH and sup13/supC Chemical Shifts in Monosubstituted Ferrocenes. In International Journal of Quantum Chemistry, 2021-02-15, 121, 4, pp. ISSN 00207608. Dostupné na: <https://doi.org/10.1002/qua.26456>,

Registrované v: SCOPUS

ADEB03 LENČEŠ, Zoltán - HIRAO, Kiyoshi - ŠAJGALÍK, Pavol - HOFFMANN, M.J. Thermodynamic and dielectric properties of MgSiN₂ ceramics. In Key Engineering Materials, 2006, vol. 317-318, p. 857-860. (2005: 0.224 - IF, Q3 - JCR, 0.221 - SJR, Q2 - SJR). (2006 - SCOPUS). ISSN 1013-9826.

Citácie:

1. [1.1] SEVGILI, Omer. The investigation of the complex dielectric and electric modulus of Al/Mg₂Si/p-Si Schottky diode and its AC electrical conductivity in a wide frequency range. In TURKISH JOURNAL OF PHYSICS. ISSN 1300-0101, 2021, vol. 45, no. 3, pp. 159-168. Dostupné na: <https://doi.org/10.3906/fiz-2101-17>, Registrované v: WOS

ADEB04 PRNOVÁ, Anna - KARELL, Radovan - GALUSEK, Dušan. Y₂O₃-Al₂O₃ binary glass microspheres: Synthesis and characterisation. In Advanced Materials Research, 2008, vol. 39-40, p. 189-192. (2007: 0.180 - SJR, Q3 - SJR). ISSN 1022-6680.

Citácie:

1. [1.1] WISNIEWSKI, Wolfgang - PITCHER, Michael J. - VERON, Emmanuel - FAN, Jintai - SAROU-KANIAN, Vincent - FAYON, Franck - ALLIX, Mathieu. Macroscopic Orientation Domains Grown via Aerodynamic Levitation: A Path toward Single Crystals. In CRYSTAL GROWTH & DESIGN, 2021, vol. 21, no. 6, pp. 3554-3561. ISSN 1528-7483. Available on: <https://doi.org/10.1021/acs.cgd.1c00350>, Registrované v: WOS

ADMA Vedecké práce v zahraničných impaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

- ADMA01 BOČA, Miroslav - GURIŠOVÁ, Veronika - ŠIMKO, František. Some aspects of the wavelength dispersive x-ray determination of fluorine content in various matrices. In *Journal of Applied Spectroscopy*, 2017, vol. 84, no. 2, p. 324-331. (2016: 0.572 - IF, Q4 - JCR, 0.194 - SJR, Q4 - SJR). ISSN 0021-9037. Dostupné na: <https://doi.org/10.1007/s10812-017-0471-x>
Citácie:
1. [1.1] *GUBAL, Anna - CHUCHINA, Victoria - SOROKINA, Angelina - SOLOVYEV, Nikolay - GANEV, Alexander. MASS SPECTROMETRY-BASED TECHNIQUES FOR DIRECT QUANTIFICATION OF HIGH IONIZATION ENERGY ELEMENTS IN SOLID MATERIALS-CHALLENGES AND PERSPECTIVES. In MASS SPECTROMETRY REVIEWS. ISSN 0277-7037, 2021, vol. 40, no. 4, pp. 359-380. Dostupné na: https://doi.org/10.1002/mas.21643., Registrované v: WOS*
- ADMA02 GUAN, Jinzhao - LIU, Aimin - XIE, K. - SHI, Zhongning** - KUBÍKOVÁ, Blanka. Preparation and characterization of Martian soil simulant NEU Mars-1. In *Transactions of Nonferrous Metals Society of China*, 2020, vol. 30, p. 212-222. (2019: 2.615 - IF, Q1 - JCR, 0.793 - SJR, Q1 - SJR). ISSN 1003-6326. Dostupné na: [https://doi.org/10.1016/S1003-6326\(19\)65193-9](https://doi.org/10.1016/S1003-6326(19)65193-9)
Citácie:
1. [1.1] *ZHANG, Yonglei - TAO, Qi - KOMARNENI, Sridhar - LIU, Jiacheng - ZHOU, Yang - YANG, Fan - ZHANG, Baifa. Clay coatings on sands in the western Qaidam Basin, Tibetan Plateau, China: Implications for the Martian clay detection. In APPLIED CLAY SCIENCE, 2021, vol. 205, no., pp. ISSN 0169-1317. Dostupné na: https://doi.org/10.1016/j.clay.2021.106065., Registrované v: WOS*
- ADMA03 KORENKO, Michal** - VASKOVÁ, Zuzana - ŠIMKO, František - ŠIMURDA, Michal - AMBROVÁ, Marta - SHI, Zhong-ning**. Electrical conductivity and viscosity of cryolite electrolytes for solar grade silicon (Si-SoG) electrowinning. In *Transactions of Nonferrous Metals Society of China*, 2014, vol. 24, no. 12, p. 3944-3948. (2013: 1.001 - IF, Q2 - JCR, 0.834 - SJR, Q1 - SJR). ISSN 1003-6326. Dostupné na: [https://doi.org/10.1016/S1003-6326\(14\)63554-8](https://doi.org/10.1016/S1003-6326(14)63554-8)
Citácie:
1. [1.1] *AWAYSSA, Omar - SAEVARSDOTTIR, Gudrun - MEIRBEKOVA, Rauan - HAARBERG, Geir Martin. Electrochemical Production of Al-Si Alloys in Cryolitic Melts in a Laboratory Cell. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2021, vol. 168, no. 4, pp. Available on: https://doi.org/10.1149/1945-7111/abf40e., Registrované v: WOS*
- ADMA04 MAJEROVÁ, Melinda** - KLEMENT, R. - PRNOVÁ, Anna - KRAXNER, J. - BRUNEEL, E. - GALUSEK, Dušan. Crystallization and visible-near-infrared luminescence of Bi-doped gehlenite glass. In *Royal Society Open Science*, 2018, vol. 5, no. 12, p. 181667. (2017: 2.504 - IF, Q2 - JCR, 1.237 - SJR, Q1 - SJR). ISSN 2054-5703. Dostupné na: <https://doi.org/10.1098/rsos.181667>
Citácie:
1. [1.1] *DOUMA, F. - LAKISS, L. - LEBEDEV, O.I. - CARDIN, J. - KOSTOV, K.L. - EL FALLAH, J. - VALTCHEV, V. - EL-ROZ, M. Silver quasi-nanoparticles: bridging the gap between molecule-like clusters and plasmonic nanoparticles. In MATERIALS ADVANCES, 2021, vol. 2, no. 16, p. 5453-5464. Dostupné na: https://doi.org/10.1039/d1ma00382h., Registrované v: WOS*
2. [1.1] *KACZOROWSKA, N. - SZCZESZAK, A. - LIS, S. Bi3+ as an enhancer for down- and upconversion luminescence in ternary vanadate structures. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 17, p. 24182-24190. Dostupné na: https://doi.org/10.1016/j.ceramint.2021.05.129., Registrované v: WOS*
- ADMA05 PATEL, Niketan Sarabhaj** - PAVLÍK, Viliam - KUBÍKOVÁ, Blanka - NOSKO, Martin - DANIELIK, Vladimír - BOČA, Miroslav. Corrosion behaviour of Ni-based superalloys in molten FLiNaK salts. In *Corrosion Engineering, Science and Technology*, 2019, vol. 54, no. 1, p. 46-53. (2018: 1.393 - IF, Q2 - JCR, 0.387 - SJR, Q2 - SJR). ISSN 1478-422X. Dostupné na: <https://doi.org/10.1080/1478422X.2018.1525829>
Citácie:
1. [1.1] *CHENG, Bo - WU, Dong-jiang - ZHANG, Chao - CHAI, Dong-sheng - MA, Guang-yi. Transformation mechanism of secondary phase and its effect on intergranular corrosion in laser wire filling welding Ni-based alloy/304 stainless steel. In TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA. ISSN 1003-6326, 2021, vol. 31, no. 3, pp. 715-725. Dostupné na: https://doi.org/10.1016/S1003-6326(21)65532-2., Registrované v: WOS*
2. [1.1] *IBRAHIM, Adnan - PENG, Hu - RIAZ, Ali - BASIT, Muhammad Abdul - RASHID, Umair - BASIT, Abdul. Molten salts in the light of corrosion mitigation strategies and embedded with nanoparticles to enhance the thermophysical properties for CSP plants. In SOLAR ENERGY MATERIALS AND SOLAR CELLS. ISSN 0927-0248, 2021, vol. 219, no., pp. Dostupné na: https://doi.org/10.1016/j.solmat.2020.110768., Registrované v: WOS*

3. [1.1] WANG, Yanli - WANG, Changxuan - WU, Jiajie. The effect of graphite on the corrosion of Hastelloy N in molten fluorides. In JOURNAL OF NUCLEAR MATERIALS. ISSN 0022-3115, 2021, vol. 557, no., pp. Dostupné na: <https://doi.org/10.1016/j.jnucmat.2021.153277>, Registrované v: WOS

4. [1.1] WANG, Yanli - WANG, Ping - WANG, Changxuan - ZHANG, Shenghua. Preparation and Properties of In Situ Grown Cr₂O₃ Diffusion Barrier Between Ni Coating and 316L Stainless Steel in Molten Fluoride Salts. In CORROSION. ISSN 0010-9312, 2021, vol. 77, no. 7, pp. 753-763. Dostupné na: <https://doi.org/10.5006/3759>, Registrované v: WOS

ADMA06 SINGH, Meinam Annebushan** - SARMA, Deba Kumar - HANZEL, Ondrej - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Surface characteristics and erosion phenomena in WEDM of alumina composites. In Materials and Manufacturing Processes, 2018, vol. 33, no. 16, p. 1815-1821. (2017: 2.669 - IF, Q2 - JCR, 0.948 - SJR, Q1 - SJR). ISSN 1042-6914. Dostupné na: <https://doi.org/10.1080/10426914.2018.1512127>

Citácie:

1. [1.1] KUMAR, Anshuman - UPADHYAY, Chandramani - SHASHIKANT. Experimental investigation on WEDM performance analysis using grey-fuzzy integrated with TLBO algorithm for Inconel 625: comparison with GA and SA. In WORLD JOURNAL OF ENGINEERING. ISSN 1708-5284, 2021, vol. 18, no. 5, pp. 720-733. Dostupné na: <https://doi.org/10.1108/WJE-12-2020-0643>, Registrované v: WOS

ADMA07 SINGH, Meinam Annebushan** - RAJBONGSHI, Sanjib Kr - SARMA, Deba Kumar - HANZEL, Ondrej - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Surface and porous recast layer analysis in μ -EDM of MWCNT-Al₂O₃ composites. In Materials and Manufacturing Processes, 2019, vol. 34, no. 5, p. 567-579. (2018: 3.350 - IF, Q2 - JCR, 1.111 - SJR, Q1 - SJR). ISSN 1042-6914. Dostupné na: <https://doi.org/10.1080/10426914.2019.1566617>

Citácie:

1. [1.1] CHEN, Zhi - ZHOU, Hongbing - YAN, Zhaojun - HAN, Fenglin - YAN, Hongzhi.

Machining characteristics of 65 vol.% SiCp/Al composite in micro-WEDM. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2021, vol. 47, no. 10, pp. 13533-13543. Dostupné na: <https://doi.org/10.1016/j.ceramint.2021.01.212>, Registrované v: WOS

2. [1.1] HUANG, Yuhua - XING, Qixuan - LIU, Ming - ZHANG, Qinhe. Prediction of electrode loss in micro-EDM drilling based on discharge time. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2021, vol. 115, no. 9-10, pp. 3003-3010. Dostupné na: <https://doi.org/10.1007/s00170-021-07100-8>, Registrované v: WOS

3. [1.1] PRABHAKAR, Manoj B. S. - RANJITH, R. - VENKATESAN, S. Characterization of electric discharge machining of titanium alloy utilizing MEIOT technique for orthopedic implants. In MATERIALS RESEARCH EXPRESS, 2021, vol. 8, no. 8, pp. Dostupné na: <https://doi.org/10.1088/2053-1591/ac1a2d>, Registrované v: WOS

4. [1.1] XING, Qixuan - YAO, Zhenyang - ZHANG, Qinhe. Effects of processing parameters on processing performances of ultrasonic vibration-assisted micro-EDM. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2021, vol. 112, no. 1-2, pp. 71-86. Dostupné na: <https://doi.org/10.1007/s00170-020-06357-9>, Registrované v: WOS

ADMB Vedecké práce v zahraničných neimpaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

ADMB01 HAWASH, H. B. I.** - CHMIELEWSKA, Eva - NETRIOVÁ, Zuzana - MAJZLAN, Juraj - PÁLKOVÁ, Helena - HUDEC, Pavol - SOKOLÍK, Róbert. Innovative comparable study for application of iron oxyhydroxide and manganese dioxide modified clinoptilolite in removal of Zn(II) from aqueous medium. In Journal of Environmental Chemical Engineering, 2018, vol. 6, no. 5, p. 6489-6503. (2017: 0.924 - SJR, Q1 - SJR). ISSN 2213-3437. Dostupné na: <https://doi.org/10.1016/j.jece.2018.09.024>

Citácie:

1. [1.1] CHEN, Jian - XIANG, Fuwei - ZHU, Mengjing - LI, Junfeng - YANG, Hongjun - CHE, Yuanyuan - MAO, Zhipeng. Efficient Synthesis of alpha-FeOOH from Pickling Wastewater in Falling Film Tower and Its Kinetics. In ACS OMEGA. ISSN 2470-1343, 2021, vol. 6, no. 12, pp. 8394-8402. Dostupné na: <https://doi.org/10.1021/acsomega.1c00125>, Registrované v: WOS

2. [1.1] DIDUKH-SHADRINA, Svetlana L. - BUYKO, Olga - LOSEV, Vladimir N. Solid-phase extraction and fluorimetric determination of Zn(II) in natural water using novel adsorbent based on silica modified with polyhexamethylene guanidine and Ferron. In INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, 2021, vol. 101, no. 7, pp. 943-955. ISSN 0306-7319. Dostupné na: <https://doi.org/10.1080/03067319.2019.1674846>, Registrované v: WOS

3. [1.1] DIMAS RIVERA, Gloria Lourdes - HERNANDEZ, Annia Martinez - PEREZ CABELLO, Anna Fernanda - RIVAS BARRAGAN, Ericka Lilian - LINAN MONTES, Adriana - FLORES ESCAMILLA, Gerardo Antonio - SANDOVAL RANGEL, Ladislao - SUAREZ VAZQUEZ, Santiago Ivan - DE HARO DEL RIO, David Alejandro. Removal of chromate anions and immobilization using surfactant-modified zeolites. In JOURNAL OF WATER PROCESS ENGINEERING. ISSN 2214-7144, 2021, vol. 39, no., pp. Dostupné na: <https://doi.org/10.1016/j.jwpe.2020.101717>., Registrované v: WOS

4. [1.1] KALEBIC, Barbara - PAVLOVIC, Jelena - DIKIC, Jelena - RECNIK, Aleksander - GYERGYEK, Saso - SKORO, Nikola - RAJIC, Nevenka. Use of Natural Clinoptilolite in the Preparation of an Efficient Adsorbent for Ciprofloxacin Removal from Aqueous Media. In MINERALS, 2021, vol. 11, no. 5, pp. Dostupné na: <https://doi.org/10.3390/min11050518>., Registrované v: WOS

ADMB02 KITYK, Anna** - PROTSENKO, V. - DANILOV, F.I. - PAVLÍK, Viliam - HNATKO, Miroslav. The effect of electropolishing in a deep eutectic solvent (Ethaline) on the surface properties and corrosion resistance of aluminium-magnesium alloy. In Voprosy khimii i khimicheskoi tekhnologii, 2020, no. 4, p. 66-71. (2019: 0.222 - SJR, Q3 - SJR). ISSN 0321-4095. Dostupné na: <https://doi.org/10.32434/0321-4095-2020-131-4-66-71>

Citácie:

1. [1.2] ABDEL-FATTAH, Tarek M. - DEREK LOFTIS, J. Comparison of electropolishing of aluminum in a deep eutectic medium and acidic electrolyte. In Molecules, 2020-12-01, 25, 23, pp. Available on: <https://doi.org/10.3390/molecules25235712>., Registrované v: SCOPUS

2. [1.2] OVECHENKO, D. S. - BOYCHENKO, A. P. - YAKOVENKO, N. A. Features of Electroluminescence of Aluminum and Its Nanoporous Oxide in Esters and Ketones. In Optics and Spectroscopy, 2021-09-01, 129, 9, pp. 969-978. ISSN 0030400X. Available on: <https://doi.org/10.1134/S0030400X21070134>., Registrované v: SCOPUS

ADMB03 KOMADEL, Peter - MADEJOVÁ, Jana - VALÚCHOVÁ, Jana - JANEK, Marián - BUJDÁK, Juraj. Fixation of Li⁺ cations in montmorillonite upon heating. In Solid State Phenomena, 2003, vol. 90-91, p. 497-502. (2003 - Current Contents). ISSN 1012-0394. (Solid State Chemistry V : 5th International Conference on Solid State Chemistry)

Citácie:

1. [1.1] NAJAFI-GHIRI, Mahdi - BOOSTANI, Hamid Reza - HARDIE, Ailsa G. Release of potassium from some heated calcareous soils to different solutions. In ARCHIVES OF AGRONOMY AND SOIL SCIENCE, 2021, vol., no., pp. ISSN 0365-0340. Available on: <https://doi.org/10.1080/03650340.2021.1958321>., Registrované v: WOS

2. [1.1] NAJAFI-GHIRI, Mahdi - BOOSTANI, Hamid Reza. Effect of heating on some soil properties and potassium dynamics in calcareous soils of southern Iran. In SOIL USE AND MANAGEMENT, 2021, vol. 37, no. 3, pp. 519-532. ISSN 0266-0032. Available on: <https://doi.org/10.1111/sum.12593>., Registrované v: WOS

ADMB04 SALAMON, D. - ŠAJGALÍK, Pavol - LIŠKA, Marek. Mechanical properties and microstructure of alpha-sialon based cutting tools. In Key Engineering Materials. - Trans Tech Publications, 2005, vol. 290, p. 250-253. (2004: 0.278 - IF). (2005 - SCOPUS). ISSN 1013-9826. Dostupné na: <https://doi.org/10.4028/0-87849-973-3.250>

Citácie:

1. [1.1] SELEZNEV, Anton - PINARGOTE, Nestor Washington Solis - SMIRNOV, Anton. Ceramic Cutting Materials and Tools Suitable for Machining High-Temperature Nickel-Based Alloys: A Review. In METALS, 2021, vol. 11, no. 9, pp. Dostupné na: <https://doi.org/10.3390/met11091385>., Registrované v: WOS

ADNB Vedecké práce v domácich neimpaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

ADNB01 BUJDÁK, Juraj - SLOSIARIKOVÁ, Hana - NOVÁKOVÁ, L. - ČÍČEL, Blahoslav. Fixation of lithium cations in montmorillonite. In Chemical Papers, 1991, vol. 45, no. 4, p. 499-507. ISSN 0366-6352.

Citácie:

1. [1.1] ZHOU, Mingxuan - ZHAO, Lei - WANG, Xibo - NECHAEV, Victor P. - FRENCH, David - SPIRO, Baruch F. - GRAHAM, Ian T. - HOWER, James C. - DAI, Shifeng. Mineralogy and geochemistry of the Late Triassic coal from the Caotang mine, northeastern Sichuan Basin, China, with emphasis on the enrichment of the critical element lithium. In ORE GEOLOGY REVIEWS. ISSN 0169-1368, 2021, vol. 139, no., pp. Dostupné na: <https://doi.org/10.1016/j.oregeorev.2021.104582>., Registrované v: WOS

*AEC Vedecké práce v zahraničných recenzovaných vedeckých zborníkoch, monografiách

AEC01 SEDLÁČEK, Jaroslav - GALUSEK, Dušan - ŠVANČÁREK, Peter - BROWN, Andy - BRYDSON, R. Alumina-carbon composites with high hardness. In EURO CERAMICS VIII. PTS 1-3. Eds. H. Mandal, L. Ovecoglu. - 2004, p. 841-844. ISBN 0-87849-946-6. ISSN 1013-9826. Dostupné na: <https://doi.org/10.4028/www.scientific.net/kem.264-268.841>

Citácie:

1. [1.1] *MARDER, Rachel - GHOSH, Priyadarshini - REIMANIS, Ivar - KAPLAN, Wayne D. The influence of carbon on the microstructure and wear resistance of alumina. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2021, vol. 104, no. 8, pp. 4214-4225. ISSN 0002-7820. Dostupné na: <https://doi.org/10.1111/jace.17832>, Registrované v: WOS*

AECA Vedecké práce v zahraničných recenzovaných zborníkoch a kratšie kapitoly/state v zahraničných vedeckých monografiách alebo VŠ učebniciach

AECA01 MACHÁČEK, Jan - CHARVÁTOVÁ, Soňa - GEDEON, Ondrej - LIŠKA, Marek. First principles molecular simulations of soda-lime-silica glass. In Glass - The Challenge for the 21st Century : 9th Conference of the European Society of Glass Science and Technology/Annual Meeting of the International Commission on Glass, Trenčín, June 22-26, 2008. - Zurich : TRANS TECH PUBLICATIONS LTD., 2008, p. 85-88. ISBN 978-0-87849-387-6. ISSN 1022-6680.

Citácie:

1. [1.1] *ZHANG, Xiaobo - LIU, Chengjun - JIANG, Maofa. Effect of Na Ions on Melt Structure and Viscosity of CaO-SiO₂-Na₂O by Molecular Dynamics Simulations. In ISIJ INTERNATIONAL, 2021, vol. 61, no. 5, pp. 1389-1395. ISSN 0915-1559. Dostupné na: <https://doi.org/10.2355/isijinternational.ISIJINT-2020-635>, Registrované v: WOS*
2. [1.1] *ZHANG, Xiaobo - LIU, Chengjun - JIANG, Maofa. Molecular Dynamics Simulations of Melt Structure Properties of CaO-Al₂O₃-Na₂O Slag. In METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, 2021, vol. 52, no. 4, pp. 2604-2611. ISSN 1073-5615. Dostupné na: <https://doi.org/10.1007/s11663-021-02184-9>, Registrované v: WOS*

Príloha D - Údaje o pedagogickej činnosti organizácie

Semestrálne prednášky:

Mgr. Stanislav Komorovský, PhD.

Názov semestr. predmetu: Relativistické efekty v chémii

Počet hodín za semester: 20

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra anorganickej chémie

Ing. Blanka Kubíková, PhD.

Názov semestr. predmetu: Metody chemického výskumu

Počet hodín za semester: 2

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Ing. Anna Prnová, PhD.

Názov semestr. predmetu: Anorganická chémia

Počet hodín za semester: 26

Názov katedry a vysokej školy: Trenčianska univerzita Alexandra Dubčeka v Trenčíne, neuvedená

Semestrálne cvičenia:

Ing. Blanka Kubíková, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 5

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

doc. Ing. Zoltán Lenčéš, PhD.

Názov semestr. predmetu: Materiálová chémia

Počet hodín za semester: 4

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra anorganickej chémie

Ing. Jarmila Mlynáriková, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 5

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Ing. Zuzana Netriová, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 5

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Semináre:

James Richard Asher, PhD

Názov semestr. predmetu: General and Inorganic Chemistry

Počet hodín za semester: 44

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra anorganickej chémie

Ing. Blanka Kubíková, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 1

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Ing. Jarmila Mlynáriková, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 1

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Ing. Zuzana Netriová, PhD.

Názov semestr. predmetu: Metodika experimentu vo fyzikálnej chémii

Počet hodín za semester: 1

Názov katedry a vysokej školy: Prírodovedecká fakulta UK, Katedra fyzikálnej a teoretickej chémie

Terénne cvičenia:

Individuálne prednášky:

Príloha E - Medzinárodná mobilita organizácie**(A) Vyslanie vedeckých pracovníkov do zahraničia na základe dohôd:**

Krajina	D r u h d o h o d y					
	MAD, KD, VTS		Medziústavná		Ostatné	
	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní
Česko					Peter Tatarko	1
					Peter Tatarko	4
					Peter Tatarko	3
					Hakan Ünsal	1
Japonsko					Peter Boháč	56
Nemecko					Michal Slaný	8
Srbsko					Inga Zhukova	7
					Inga Zhukova	34
Počet vyslaní spolu					8	114

(B) Prijatie vedeckých pracovníkov zo zahraničia na základe dohôd:

Krajina	D r u h d o h o d y					
	MAD, KD, VTS		Medziústavná		Ostatné	
	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní
Česko					Pikulova	3
					Radek Novotný	8
Ukrajina					Ivanushko	7
Počet prijatí spolu					3	18

(C) Účast' pracovníkov pracoviska na konferenciách v zahraničí (nezahrnutých v "A"):

Krajina	Názov konferencie	Meno pracovníka	Počet dní
Česko	INTER-TRANSFER	Monika Michálková	5
	Molekulová spektroskopia	Jana Madejová	3
		Helena Pálková	3
	NANOCON	Eva Skoura	3
	SAP a PM	Jakub Michalík	3
		Anna Prnová	3
		Jana Valúchová	2
	Termoanalytický seminár	Anna Prnová	3
	Zjazd chemikov	Ramu Ambati	4
		Sanam Bashir	4
		Dhiya Krishnan	4

		Anna Prnová	4
Grécko	EUCHEMSIL	Miroslav Boča	6
		Michal Korenko	6
		Blanka Kubíková	6
		František Šimko	6
Chorvátsko	CEEC-PCMS 1	Michal Slaný	6
Japonsko	ICCCI	Pavol Šajgalík	5
	SSPT	Pavol Šajgalík	5
Luxembursko	ICMS	Eva Scholtzová	4
	SSP MEOPS	Michal Korenko	2
Maďarsko	CESTC	Florian Lemken	4
		Oľga Malkin	4
		Vladimír Malkin	4
Nemecko	ABP	Alper Güneren	4
	Actinides revisited	Stanislav Komorovský	4
Nemecko (online)	Keramik, DKG	Ondrej Hanzel	3
		Michal Hičák	3
		Zoltán Lenčes	3
		Pavol Šajgalík	3
		Peter Tatarko	3
Poľsko	ECerS	Guido de La Torre Olvera	10
		Alper Güneren	5
		Ondrej Hanzel	5
		Naser Hosseini	5
		Zoltán Lenčes	5
		Patrícia Petrisková	5
		Pavol Šajgalík	5
		Peter Tatarko	5
		Monika Tatarková	5
		Hakan Ünsal	5
		Inga Zhukova	8
	MECC	Martin Barlog	5
		Peter Boháč	5
		Juraj Bujdák	5
		Marián Matejdes	5
		Helena Pálková	5
		Eva Scholtzová	5
		Michal Slaný	5
		Peter Škorňa	5
	MECC 2022	Jana Madejová	5
		Daniel Moreno	5
Srbsko	IMEC	Ondrej Hanzel	4
		Michal Hičák	4
		Miroslav Hnatko	4
		Zoltán Lenčes	4
		Peter Tatarko	4
		Hakan Ünsal	4
Španielsko	Workshop YRCGMA	Guido de La Torre Olvera	5

Taliansko	CIMTEC	Pavol Šajgalík	6
		Peter Tatarko	6
	Spea	Patricia Petrisková	7
Turecko	ICC	Peter Boháč	7
		Jana Madejová	8
		Eva Scholtzová	8
Veľká Británia	ICPNCS	Anna Prnová	8
Spolu	25	66	314

Vysvetlivky: MAD - medziakademické dohody, KD - kultúrne dohody, VTS - vedecko-technická spolupráca v rámci vládnych dohôd

Skratky použité v tabuľke C:

ABP - Advanced Battery Power

Actinides revisited - Actinides revisited

CEEC-PCMS 1 - 1st Central and European conference on Physical Chemistry and Materials Science

CESTC - 18th Central European Symposium on Theoretical Chemistry

CIMTEC - 15th International Ceramics Congress

ECerS - 17th Conference and Exhibition of the European Ceramic Society

EUCHEMSIL - 28th EUCHEM Conference on Molten Salts and Ionic Liquids

ICC - XVII International Clay Conference

ICCCI - 7th International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials

ICMS - 31th International Conference on Multidisciplinary Studies "Recent Ideas and Research"

ICPNCS - 16th International Conference of Physics and Non Crystalline Solids

IMEC - 1st International Conference on Innovative Materials in Extreme Conditions

INTER-TRANSFER - seminári projektu INTER-TRANSFER

Keramik, DKG - Keramik/Ceramics 2022 97. DKG-Jahrestagung / 97th DKG Annual Meeting

MECC - Mid-European Clay Conference

MECC 2022 - Mid-European Clay Conference

Molekulová spektroskopia - Molekulová spektroskopia

NANOCON - 14th International Conference on Nanomaterials-Research and Applications

SAP a PM - 24. ročník Konference o Speciálních Anorganických Pigmentech a Práškových Materiálech

Spea - 11th European Conference on Solar Chemistry and Photocatalysis: Environmental Applications

SSP MEOPS - From sand to solar panels: Maana Electric opens production site"

SSPT - 57th Summer Symposium on Powder Technology

Termoanalytický seminár - Termoanalytický seminár

Workshop YRCGMA - II. Workshop for Young Researchers in Ceramic and Glasses for Medical Applications

Zjazd chemikov - 74. Zjazd chemikov

Príloha F - Vedecko-popularizačná činnosť pracovníkov organizácie SAV

Meno	Spoluautori	Typ¹	Názov	Miesto zverejnenia	Dátum alebo počet za rok
Peter Tatarko		PB	Development of advanced ceramic materials at	IIT Madras, Chennai, India	5.12.2022
Peter Tatarko		PB	Svet Moderných Keramických Materiálov	ÚACH SAV, v.v.i. Deň otvorených dverí	8.11.2022
Peter Tatarko	Ondrej Hanzel, Michal Hičák	EX	Exkurzia pre študentov 4.ročníka FCHPT STU	ÚACH SAV, v.v.i.	30.11.2022
Viliam Pavlík		PB	Letná škola mladých vedcov	UACH SAV, v.v.i., 18.-22.7.2022	1
Anna Prnová	Jana Valúchová, Dušan Galusek	PB	Nebojme sa chémie	Gymnázium Nová Dubnica	1

¹ PB - prednáška/beseda, TL - tlač, TV - televízia, RO - rozhlas, IN - internet, EX - exkurzia, PU - publikácia, MM - multimédiá, DO - dokumentárny film