

Institute of Inorganic Chemistry of the CAS, v. v. i.

ASEP Publications

Document Type: Impacted Journal Article, Journal Article, Monograph, Monograph Chapter, Proceedings Paper (International conf.), Proceedings Paper (Czech conf.)

Year(s): 2020, 2019

Database: ASEP

0507776 - ÚACH 2020 RIV US eng J - Journal Article

Assaf, K. I. - Begaj, B. - Frank, A. - Nilam, M. - Mougharbel, A. S. - Kortz, U. - Nektivinda, Jan - Grüner, Bohumír - Gabel, D. - Nau, W. M.

High-affinity binding of metallacarborane cobalt bis(dicarbollide) anions to cyclodextrins and application to membrane translocation.

Journal of Organic Chemistry. Roč. 84, č. 18 (2019), s. 11790-11798. ISSN 0022-3263

AV ČR(CZ) DAAD-17-22

Bilaterální spolupráce

Institutional Support: RVO:61388980

Keywords: closo-dodecaborate * gamma-cyclodextrin * boron clusters

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 4.745, year: 2018

<https://pubs.acs.org/doi/abs/10.1021/acs.joc.9b01688>

Nau, W. M.

Permanent link: <http://hdl.handle.net/11104/0299746>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0503773 - ÚACH 2020 RIV NL eng J - Journal Article

Bakardjieva, Snejana - Fajgar, Radek - Jakubec, Ivo - Kočí, Eva - Zhigunov, Alexander - Chatzisyneon, E. - Davididou, K.

Photocatalytic degradation of bisphenol A induced by dense nanocavities inside aligned 2D-TiO₂ nanostructures.

Catalysis Today. Roč. 328, SI (2019), s. 189-201. ISSN 0920-5861.

[European meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA) /10./, Almería, 04.06.2018-08.06.2018]

R&D Projects: GA ČR(CZ) GA18-15613S

Institutional Support: RVO:61388980 ; RVO:67985858 ; RVO:61389013

Keywords: Freeze-drying * Anatase TiO₂ * Nanoconfined water * Nanocavities * Photocatalysis * Emerging pollutants

Subject RIV: CA - Inorganic Chemistry; CA - Inorganic Chemistry; CD - Macromolecular Chemistry

Obor OECD: Inorganic and nuclear chemistry; Inorganic and nuclear chemistry (UHP-M); Polymer science (UMCH-V)

Impact factor: 4.888, year: 2018

<http://hdl.handle.net/11104/0295554>

Bakardjieva, Snejana

Permanent link: <http://hdl.handle.net/11104/0295554>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0507778 - ÚACH 2020 RIV GB eng J - Journal Article

Bakardjieva, Snejana - Mareš, Jakub - Fajgar, Radek - Zenou, V. Y. - Malečková, M. - Chatzisyneon, E. - Bíbová-Lipšová, Hana - Jirkovský, Jaromír

The relationship between microstructure and photocatalytic behavior in lanthanum-modified 2D TiO₂ nanosheets upon annealing of a freeze-cast precursor.

RSC Advances. Roč. 9, č. 40 (2019), s. 22988-23003. ISSN 2046-2069

R&D Projects: GA ČR(CZ) GA18-15613S; GA MŠk(CZ) LM2015073

Institutional Support: RVO:61388980 ; RVO:67985858 ; RVO:61388955

Keywords: lyophilized aqueous colloids * lattice distortion * salicylic-acid * degradation * titania * 4-chlorophenol

Subject RIV: CA - Inorganic Chemistry; CA - Inorganic Chemistry; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; Inorganic and nuclear chemistry (UHP-M); Physical chemistry (UFCH-W)

Impact factor: 3.049, year: 2018

<http://hdl.handle.net/11104/0298752>

Bakardjieva, Snejana

Permanent link: <http://hdl.handle.net/11104/0298752>

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- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0502083 - ÚACH 2020 RIV US eng J - Journal Article

Bakardjiev, Mario - Růžička, A. - Růžičková, Z. - Tok, Oleg L. - Holub, Josef - Hnyk, Drahomír - Fanfrlík, Jindřich - Štíbr, Bohumil

Synthesis of closo-1,2-H₂C₂B₈Me₈ and 1,2-H₂C₂B₈Me₇X (X = I and OTf) Dicarboraboranes and Their Rearrangement Reactions.

Inorganic Chemistry. Roč. 58, č. 4 (2019), s. 2865-2871. ISSN 0020-1669

R&D Projects: GA ČR(CZ) GA16-01618S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: dicarbaboranes

Subject RIV: CA - Inorganic Chemistry; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; Physical chemistry (UOCHB-X)

Impact factor: 4.850, year: 2018

<https://pubs.acs.org/doi/10.1021/acs.inorgchem.8b03550>

Štíbr, Bohumil

Permanent link: <http://hdl.handle.net/11104/0294031>

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- [WOS](#)
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- [DOI](#)
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0507907 - FZÚ 2020 RIV GB eng J - Journal Article

Bárta, Jan - Müllerová, E. - Kuzár, M. - Procházková, Lenka - Kučerková, Romana - Jakubec, Ivo - Čuba, V.

Photochemical synthesis and characterization of multi-component (Gd, Lu)₃(Ga,Al)₃O₁₂: Ce garnet powders.

Radiation Measurements. Roč. 124, May (2019), s. 98-102. ISSN 1350-4487

R&D Projects: GA ČR GA17-06479S

Institutional Support: RVO:68378271 ; RVO:61388980

Keywords: garnet * synthesis * nanomaterial * X-ray diffraction * radioluminescence

Subject RIV: CH - Nuclear & Quantum Chemistry; CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 1.435, year: 2018

<https://doi.org/10.1016/j.radmeas.2019.03.012>

Bárta, Jan

Permanent link: <http://hdl.handle.net/11104/0298869>

- [SCOPUS](#)
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- [DOI](#)
- [Result - R&D](#)

0500942 - ÚACH 2020 RIV DE eng J - Journal Article

Baše, Tomáš - Holub, Josef - Fanfrlík, Jindřich - Hnyk, Drahomír - Lane, P. D. - Wann, D. A. - Vishnevskiy, Y. V. - Tikhonov, D. S. - Reuter, C. G. - Mitzel, N. W.

Icosahedral Carbaboranes with Peripheral Hydrogen-Chalcogenide Groups: Structures from Gas Electron Diffraction and Chemical Shielding in Solution.

Chemistry - A European Journal. Roč. 25, č. 9 (2019), s. 2313-2321. ISSN 0947-6539

R&D Projects: GA ČR(CZ) GA17-08045S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: ab initio calculations * carboranes * electron diffraction * selenols * thiols

Subject RIV: CA - Inorganic Chemistry; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; Physical chemistry (UOCHB-X)

Impact factor: 5.160, year: 2018

<https://onlinelibrary.wiley.com/doi/full/10.1002/chem.201805145>

Hnyk, Drahomír

- Vishnevskiy, Y. V.

- Mitzel, N. W.

Permanent link: <http://hdl.handle.net/11104/0295231>

- [SCOPUS](#)
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- [DOI](#)
- [Result - R&D](#)

0523103 - ÚACH 2021 RIV DE eng J - Journal Article

Beckett, M. A. - Brellochs, B. - Chizhevsky, I. T. - Damhus, Ture - Hellwich, K. H. - Kennedy, John David - Laitinen, R. - Powell, W. H. - Rabinovich, D. - Vinas, C. - Yerin, A.

Nomenclature for boranes and related species (IUPAC Recommendations 2019).

Pure and Applied Chemistry. Roč. 92, č. 2 (2020), s. 355-381. ISSN 0033-4545

International Union of Pure and Applied Chemistry 2012-045-1-800

Institutional Support: RVO:61388980

Keywords: molecular-structure * macropolyhedral metallaboranes * cluster compounds * boron hydrides * carbaboranes * heteroboranes * metallaboranes * IUPAC Chemical Nomenclature and Structural Representation Division

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.350, year: 2018

<http://hdl.handle.net/11104/0307508>

Beckett, M. A.

Permanent link: <http://hdl.handle.net/11104/0307508>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Inst. Repository](#)

0505101 - ÚMCH 2020 RIV CH eng J - Journal Article

Beneš, Hynek - Kredatusová, Jana - Peter, Jakub - Livi, S. - Bujok, Sonia - Pavlova, Ewa - Hodan, Jiří - Abbrent, Sabina - Konefal, Magdalena - Ecorchard, Petra

Ionic liquids as delaminating agents of layered double hydroxide during in-situ synthesis of poly (butylene adipate-co-terephthalate) nanocomposites.

Nanomaterials. Roč. 9, č. 4 (2019), s. 1-16, č. článku 618. ISSN 2079-4991

R&D Projects: GA ČR(CZ) GA17-08273S; GA MŠk(CZ) LO1507

Institutional Support: RVO:61389013 ; RVO:61388980

Keywords: poly (butylene adipate-co-terephthalate) * ionic liquid * layered double hydroxide

Subject RIV: CD - Macromolecular Chemistry; CA - Inorganic Chemistry

Obor OECD: Polymer science; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 4.034, year: 2018

<https://www.mdpi.com/2079-4991/9/4/618/pdf>

Beneš, Hynek

Permanent link: <http://hdl.handle.net/11104/0296618>

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- [WOS](#)
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- [DOI](#)
- [Result - R&D](#)

0506307 - ÚACH 2020 RIV US eng J - Journal Article

Boldog, I. - Reiss, G. - Domasevitch, K.V. - Baše, Tomáš - Bräse, S.

When does a supramolecular synthon fail? Comparison of bridgehead-functionalized adamantanes: the tri- and tetra- amides and amine hydrochlorides.

Crystal Growth & Design. Roč. 19, č. 9 (2019), s. 5218-5227. ISSN 1528-7483

Institutional Support: RVO:61388980

Keywords: adamantane * crystal structure * H-bond, prediction * supramolecular synthon * violation

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 4.153, year: 2018

<https://pubs.acs.org/doi/10.1021/acs.cgd.9b00594>

Boldog, I.

Permanent link: <http://hdl.handle.net/11104/0299089>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0495728 - ÚACH 2019 RIV NL eng J - Journal Article

Buršík, Josef - Uhrecký, Róbert - Soroka, Miroslav - Kužel, R. - Prokleška, J.

The hexaferrite Sr₃Co₂Fe₂₄O₄₁ thin films by chemical solution deposition method: Synthesis and characterization.

Journal of Magnetism and Magnetic Materials. Roč. 469, 1 JAN (2019), s. 245-252. ISSN 0304-8853

R&D Projects: GA ČR(CZ) GA14-18392S; GA MŠk(CZ) LM2015073

Institutional Support: RVO:61388980

Keywords: Hexaferrites * Sr₃Co₂Fe₂₄O₄₁ * Thin films * Chemical solution deposition

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.683, year: 2018

Buršík, Josef

Permanent link: <http://hdl.handle.net/11104/0291149>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0495324 - ÚACH 2019 RIV US eng J - Journal Article

Dolanský, J. - Demel, Jan - Mosinger, Jiří

Multifunctional polystyrene nanofiber membrane with bounded polyethyleneimine and NO photodonor: dark- and light-induced antibacterial effect and enhanced CO₂ adsorption.

Journal of Materials Science. Roč. 54, č. 3 (2019), s. 2740-2753. ISSN 0022-2461

R&D Projects: GA ČR(CZ) GA16-15020S

Institutional Support: RVO:61388980

Keywords: Carbon dioxide therapy * Nitric-oxide release * ambient air

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 3.442, year: 2018

Mosinger, Jiří

Permanent link: <http://hdl.handle.net/11104/0291150>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0509885 - ÚACH 2020 RIV GB eng J - Journal Article

Ederer, J. - Šťastný, Martin - Došek, M. - Henych, Jiří - Janoš, P.

Mesoporous cerium oxide for fast degradation of aryl organophosphate flame retardant triphenyl phosphate.

RSC Advances. Roč. 9, č. 55 (2019), s. 32058-32065. ISSN 2046-2069

R&D Projects: GA ČR(CZ) GA19-07460S

Institutional Support: RVO:61388980

Keywords: cerium oxide * biodegradation * calcination * dioxide

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 3.049, year: 2018

<http://hdl.handle.net/11104/0300548>

Ederer, J.

Permanent link: <http://hdl.handle.net/11104/0300548>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0511495 - ÚACH 2020 RIV GB eng J - Journal Article

El Anwar, Suzan - Assaf, K. I. - Begaj, B. - Samsonov, M. A. - Růžičková, Z. - Holub, Josef - Baval, Dmytro - Nau, W. M. - Gabel, D. - Grüner, Bohumír

Versatile, one-pot introduction of nonahalogenated 2-ammonio-decaborate ions as boron cluster scaffolds into organic molecules, host-guest complexation with γ -cyclodextrin.

Chemical Communications. Roč. 55, č. 91 (2019), s. 13669-13672. ISSN 1359-7345

R&D Projects: GA ČR(CZ) GA19-04630S

AV ČR(CZ) DAAD-17-22

Bilaterální spolupráce

Institutional Support: RVO:61388980

Keywords: closo-decaborane anion * carboranes * coordinating anions

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 6.164, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/CC/C9CC07678F#1divAbstract>

Grüner, Bohumír

Permanent link: <http://hdl.handle.net/11104/0301747>

- [SCOPUS](#)
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- [Result - R&D](#)

0501494 - ÚACH 2020 RIV US eng J - Journal Article

Ettler, V. - Cihlová, M. - Jarošíková, A. - Mihaljevič, M. - Drahota, P. - Kříbek, B. - Vaněk, A. - Penížek, V. - Šráček, O. - Klementová, Mariana - Engel, Z. - Kamona, F. - Mapani, B.

Oral bioaccessibility of metal(loid)s in dust materials from mining areas of northern Namibia.

Environment International. Roč. 124, MAR (2019), s. 205-215. ISSN 0160-4120

Institutional Support: RVO:61388980

Keywords: potentially toxic elements * lead-zinc mine * human exposure * Dust mineralogy * Bioaccessibility * Metal(loid)s * Namibia * Mining * Smelting

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 7.943, year: 2018

<http://hdl.handle.net/11104/0295440>

Ettler, V.

Permanent link: <http://hdl.handle.net/11104/0295440>

- [SCOPUS](#)
- [WOS](#)
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- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0508876 - ÚOCHB 2020 RIV CH eng J - Journal Article

Fanfrlík, Jindřich - Hnyk, Drahomír - Hobza, Pavel

Chalcogen Bonding due to the Exo-Substitution of Icosahedral Dicarborane.

Molecules. Roč. 24, č. 14 (2019), č. článku 2657. ISSN 1420-3049

R&D Projects: GA ČR(CZ) GA17-08045S; GA MŠk(CZ) EF16_019/0000729

Institutional Support: RVO:61388963 ; RVO:61388980

Keywords: sigma hole * heteroborane * co-crystal

Subject RIV: CF - Physical & Theoretical Chemistry; CA - Inorganic Chemistry

Obor OECD: Physical chemistry; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 3.060, year: 2018

<https://www.mdpi.com/1420-3049/24/14/2657>

Fanfrlík, Jindřich Hnyk, Drahomír

Permanent link: <http://hdl.handle.net/11104/0299669>

- [SCOPUS](#)
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- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0518623 - ÚACH 2021 RIV GB eng J - Journal Article

Fořt, J. - Vejmelková, E. - Keppert, M. - Rovnaníková, P. - Bezdička, Petr - Černý, R.

Alkaline activation of low-reactivity ceramics: Peculiarities induced by the precursors' dual character.

Cement and Concrete Composites. Roč. 105, JAN (2020), č. článku 103440. ISSN 0958-9465

Institutional Support: RVO:61388980

Keywords: Alkaline activation * Composite effects * Curing temperature * Low-reactivity ceramics

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 5.172, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0958946519312831?via%3Dihub>

Černý, R.

Permanent link: <http://hdl.handle.net/11104/0304271>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0509234 - ÚACH 2020 RIV US eng J - Journal Article

Frances-Monerris, A. - Holub, Josef - Roca-Sanjuan, D. - Hnyk, Drahomír - Lang, Kamil - Oliva-Enrich, J. M.

Photochromic System among Boron Hydrides: The Hawthorne Rearrangement.

Journal of Physical Chemistry Letters. Roč. 10, č. 20 (2019), s. 6202-6207. ISSN 1948-7185

R&D Projects: GA ČR(CZ) GA17-08045S

Institutional Support: RVO:61388980

Keywords: boron hydrides * photochromic system * isomers

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 7.329, year: 2018

<https://pubs.acs.org/doi/10.1021/acs.jpcllett.9b02290>

Frances-Monerris, A. Roca-Sanjuan, D.

- Hnyk, Drahomír

- Oliva-Enrich, J. M.

Permanent link: <http://hdl.handle.net/11104/0300303>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0505702 - ÚACH 2020 RIV US eng J - Journal Article

Galek, V. - Stoklasa, J. - Hadrava, J. - Hrbek, J. - Bezdička, Petr - Sedlářová, I.

The Behavior of Corundum Ceramic in Molten Salt.

Journal of Nuclear Engineering and Radiation Science. Roč. 5, č. 3 (2019), č. článku 030905. ISSN 2332-8983

Institutional Support: RVO:61388980

Keywords: Molten materials * Corrosion protection * Lithium compounds

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

<https://asmedigitalcollection.asme.org/nuclearengineering/article-abstract/5/3/030905/725882/The-Behavior-of-Corundum-Ceramic-in-Molten-Salt?redirectedFrom=fulltext>

Permanent link: <http://hdl.handle.net/11104/0297118>

- [SCOPUS](#)
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- [Result - R&D](#)

0501214 - ÚACH 2020 RIV NL eng J - Journal Article

Godoy, A. P. - Ecorchard, Petra - Beneš, Hynek - Tolasz, Jakub - Smržová, Darina - Seixas, L. - Pedrotti, J. J. - de Souza, E. A.T. - El Seoud, O. A. - Donato, R. K.

Ultrasound exfoliation of graphite in biphasic liquid systems containing ionic liquids: A study on the conditions for obtaining large few-layers graphene.

Ultrasonics Sonochemistry. Roč. 55, JUL (2019), s. 279-288. ISSN 1350-4177

R&D Projects: GA MŠK(CZ) LM2015073; GA ČR(CZ) GA17-08273S

Institutional Support: RVO:61388980 ; RVO:61389013

Keywords: Biphasic liquid system * Cavitation-based emulsification * Graphene * Ionic liquids * Liquid phase exfoliation

Subject RIV: CA - Inorganic Chemistry; CD - Macromolecular Chemistry

Obor OECD: Inorganic and nuclear chemistry; Polymer science (UMCH-V)

Impact factor: 7.279, year: 2018

<http://hdl.handle.net/11104/0297116>

Donato, R. K.

Permanent link: <http://hdl.handle.net/11104/0297116>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0511473 - ÚACH 2020 RIV US eng J - Journal Article

Grüner, Bohumír - Brynda, Jiří - Das, V. - Šícha, Václav - Štěpánková, J. - Nekvinda, Jan - Holub, Josef - Pospíšilová, B. - Fábry, Milan - Pachel, P. - Král, Vlastimil - Kugler, M. - Mašek, V. - Medvědková, M. - Matějková, S. - Nová, A. - Lišková, B. - Gurská, S. - Džubák, P. - Hajdúch, M. - Řezáčová, Pavlína

Metallacarborane sulfamides: Unconventional, specific, and highly selective inhibitors of carbonic anhydrase IX.

Journal of Medicinal Chemistry. Roč. 62, č. 21 (2019), s. 9560-9575. ISSN 0022-2623

R&D Projects: GA ČR(CZ) GA15-05677S; GA ČR(CZ) GA18-27648S

Institutional Support: RVO:61388980 ; RVO:68378050

Keywords: Anti-tumor agents * Carbonic anhydrase IX * Cobaltacarborane inhibitors * Drug penetration * Multicellular spheroids

Subject RIV: CA - Inorganic Chemistry; EB - Genetics & Molecular Biology

Obor OECD: Inorganic and nuclear chemistry; Medicinal chemistry (UMG-J)

Impact factor: 6.054, year: 2018

<https://pubs.acs.org/doi/abs/10.1021/acs.jmedchem.9b00945>

Grüner, Bohumír Hajdúch, M.

- Řezáčová, Pavlína

Permanent link: <http://hdl.handle.net/11104/0302697>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0505703 - ÚACH 2020 RIV US eng J - Journal Article

Hadrava, J. - Galek, V. - Stoklasa, J. - Hrbek, I. - Kunešova, K. - Bezdička, Petr - Sedlářová, I.

Corrosion Experiments on Ceramic Samples Within Molten Salts.

Journal of Nuclear Engineering and Radiation Science. Roč. 5, č. 3 (2019), č. článku 030910. ISSN 2332-8983

Institutional Support: RVO:61388980

Keywords: Ceramic materials * Corrosion * Flameless oxidation

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

<https://asmedigitalcollection.asme.org/nuclearengineering/article-abstract/5/3/030910/725874/Corrosion-Experiments-on-Ceramic-Samples-Within?redirectedFrom=fulltext>

Permanent link: <http://hdl.handle.net/11104/0297119>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0523138 - ÚACH 2021 RIV CH eng J - Journal Article

Havránek, M. - Samsonov, M. A. - Holub, Josef - Růžičková, Z. - Drož, L. - Růžička, A. - Fanfrlík, Jindřich - Hnyk, Drahomír

The influence of halogenated hypercarbon on crystal packing in the series of 1-Ph-2-X-1,2-dicarba-closo-dodecaboranes (X = F, Cl, Br, I).

Molecules. Roč. 25, č. 5 (2020), č. článku molecules25051200. ISSN 1420-3049

R&D Projects: GA ČR(CZ) GA19-17156S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: Halogen bond * Icosahedral boron cluster * Sigma hole

Subject RIV: CA - Inorganic Chemistry; CC - Organic Chemistry

Obor OECD: Inorganic and nuclear chemistry; Organic chemistry (UOCHB-X)

Impact factor: 3.060, year: 2018

<http://hdl.handle.net/11104/0307530>

Havránek, M. Samsonov, M. A.

- Holub, Josef

- Růžičková, Z.

- Drož, L.

- Růžička, A.

- Fanfrlík, Jindřich

- Hnyk, Drahomír

Permanent link: <http://hdl.handle.net/11104/0307530>

- [SCOPUS](#)
- [DOI](#)
- [Inst. Repository](#)

0507928 - ÚACH 2020 RIV NL eng J - Journal Article

Henych, Jiří - Stehlík, Štěpán - Mazanec, K. - Tolasz, Jakub - Čermák, J. - Rezek, B. - Mattsson, A. - Österlund, L.

Reactive adsorption and photodegradation of soman and dimethyl methylphosphonate on TiO₂/nanodiamond composites.

Applied Catalysis B - Environmental. Roč. 259, DEC (2019), č. článku 118097. ISSN 0926-3373

R&D Projects: GA ČR(CZ) GJ18-11711Y; GA MŠK(CZ) EF16_019/0000760

AV ČR(CZ) MSM200321601; OP VVV - SOLID21(XE) CZ.02.1.01/0.0/0.0/16_019/0000760

Program na podporu mezinárodní spolupráce začínajících výzkumných pracovníků

Institutional Support: RVO:61388980 ; RVO:68378271

Keywords: Chemical warfare agents * Nanocomposites * Nanodiamond * Photocatalysis * Titanium dioxide

Subject RIV: CA - Inorganic Chemistry; CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry; Inorganic and nuclear chemistry (FZU-D)

Impact factor: 14.229, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0926337319308446?via%3Dihub>

Henych, Jiří

Permanent link: <http://hdl.handle.net/11104/0298892>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0472449 - ÚACH 2020 RIV NL eng J - Journal Article

Henych, Jiří - Janoš, P. - Kormunda, M. - Tolasz, Jakub - Štengl, Václav

Reactive adsorption of toxic organophosphates parathion methyl and DMMP on nanostructured Ti/Ce oxides and their composites.

Arabian Journal of Chemistry. Roč. 12, č. 8 (2019), s. 4258-4269. ISSN 1878-5352

Institutional Support: RVO:61388980

Keywords: Ceria * DMMP * Organophosphorus compounds * Parathion methyl * Reactive sorbent * Titania

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 3.298, year: 2018

<https://doi.org/10.1016/j.arabjc.2016.06.002>

Henych, Jiří

Permanent link: <http://hdl.handle.net/11104/0270290>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0504449 - ÚACH 2020 RIV GB eng J - Journal Article

Henych, Jiří - Mattsson, A. - Tolasz, Jakub - Štengl, Václav - Österlund, L.

Solar light decomposition of warfare agent simulant DMMP on TiO₂/graphene oxide nanocomposites.

Catalysis Science & Technology. Roč. 9, č. 8 (2019), s. 1816-1824. ISSN 2044-4753

NATO(US) SPS984599; AV ČR(CZ) MSM200321601

Science for Peace and Security; Program na podporu mezinárodní spolupráce začínajících výzkumných pracovníků

Institutional Support: RVO:61388980

Keywords: dimethyl methylphosphonate * reactive adsorption * graphene oxide * anatase TiO₂ * organophosphorus pesticides * trimethyl phosphate * cerium oxide

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 5.726, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/CY/C9CY00059C#ldivAbstract>

Henych, Jiří

Permanent link: <http://hdl.handle.net/11104/0296078>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0507762 - ÚOCHB 2020 RIV DE eng J - Journal Article

Holec, Jan - Rybáček, Jiří - Vacek, Jaroslav - Karras, Manfred - Bednárová, Lucie - Buděšínský, Miloš - Slušná, Michaela - Holý, Petr - Schmidt, B. - Stará, Irena G. - Starý, Ivo

Chirality-Controlled Self-Assembly of Amphiphilic Dibenzo[6]helicenes into Langmuir-Blodgett Thin Films.

Chemistry - A European Journal. Roč. 25, č. 49 (2019), s. 11494-11502. ISSN 0947-6539

R&D Projects: GA ČR(CZ) GA16-08294S; GA MŠk(CZ) LM2015073

Institutional Support: RVO:61388963 ; RVO:61388980

Keywords: arenes * chirality * helical structures * Langmuir-Blodgett films * self-assembly

Subject RIV: CC - Organic Chemistry; CA - Inorganic Chemistry

Obor OECD: Organic chemistry; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 5.160, year: 2018

<https://onlinelibrary.wiley.com/doi/abs/10.1002/chem.201901695>

Schmidt, B.

- Stará, Irena G.

- Starý, Ivo

Permanent link: <http://hdl.handle.net/11104/0298734>

- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0506139 - ÚACH 2020 RIV DE eng J - Journal Article

Holub, Josef - Vrána, J. - Růžička, A. - Růžicková, Z. - Fanfrlík, Jindřich - Hnyk, Drahomír

Thiaboranes on Both Sides of the Icosahedral Barrier: Retaining and Breaking the Barrier with Carbon Functionalities.

ChemPlusChem. Roč. 84, č. 7 (2019), s. 822-827. ISSN 2192-6506

R&D Projects: GA ČR(CZ) GA17-08045S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: clusters * heats of formation * icosahedra * multicenter bonding * thiaborane

Subject RIV: CA - Inorganic Chemistry; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; Physical chemistry (UOCHB-X)

Impact factor: 3.441, year: 2018

<https://onlinelibrary.wiley.com/doi/full/10.1002/cplu.201900115>

Fanfrlík, Jindřich

- Hnyk, Drahomír

Permanent link: <http://hdl.handle.net/11104/0297556>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0517686 - ÚJF 2020 RIV US eng C - Proceedings Paper (International conf.)

Horák, Pavel - Bakardjieva, Snejana - Vacík, Jiří - Klie, R. - Lavrentiev, Vasyl - Němeček, J. - Plocek, Jiří - Kupčík, Jaroslav - Cannavó, Antonino - Ceccio, Giovanni

Synthesis and modification of Ti₂SnC nanolaminates with high-fluence 35 keV Ar⁺ ions.

AIP Conference Proceedings. Vol. 2160. Melville: American Institute of Physics Inc., 2019, č. článku 060004. ISBN 978-0-7354-1905-6. ISSN 0094-243X.

[25th International Conference on the Application of Accelerators in Research and Industry (CAARI 2018). Grapevine (US), 12.08.2018-17.08.2018]

R&D Projects: GA MŠK(CZ) LTAUSA17128

Institutional Support: RVO:61388980 ; RVO:61389005

Keywords: Ti₂SnC * nanocomposites

Subject RIV: BG - Nuclear, Atomic and Molecular Physics, Colliders; CA - Inorganic Chemistry

Obor OECD: Nuclear physics; Inorganic and nuclear chemistry (UACH-T)

Permanent link: <http://hdl.handle.net/11104/0302989>

- [SCOPUS](#)
- [DOI](#)
- [Result - R&D](#)

0518621 - ÚACH 2021 RIV NL eng J - Journal Article

Hradil, David - Hradilová, J. - Lanterna, G. - Galeotti, M. - Holcová, K. - Jaques, V. - Bezdička, Petr

Clay and alunite-rich materials in painting grounds of prominent Italian masters - Caravaggio and Mattia Preti.

Applied Clay Science. Roč. 185, FEB (2020), č. článku 105412. ISSN 0169-1317

R&D Projects: GA ČR(CZ) GA17-25687S

Institutional Support: RVO:61388980

Keywords: Alunite * Caravaggio * Globigerina limestone * Painting grounds * Powder X-ray micro-diffraction

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 3.890, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0169131719304703?via%3Dihub>

Hradil, David

Permanent link: <http://hdl.handle.net/11104/0306835>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0523431 - ÚACH 2021 RIV CH eng J - Journal Article

Hradil, David - Hradilová, J. - Bezdička, Petr

Clay minerals in european painting of the mediaeval and baroque periods.

Minerals. Roč. 10, č. 3 (2020), č. článku 255. ISSN 2075-163X

R&D Projects: GA ČR(CZ) GA17-25687S

AV ČR(CZ) StrategieAV21/6

StrategieAV

Institutional Support: RVO:61388980

Keywords: Clay-based grounds * Earth pigments * Gilding * Kaolin * Ochres * Painting * Pottery clay * Powder X-ray microdiffraction * Provenance studies

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.250, year: 2018

<http://hdl.handle.net/11104/0307789>

Hradil, David Hradilová, J.

- Bezdička, Petr

Permanent link: <http://hdl.handle.net/11104/0307789>

- [SCOPUS](#)
- [DOI](#)
- [Inst. Repository](#)

0517273 - ÚACH 2021 RIV US eng J - Journal Article

Hradilová, J. - Hradil, David - Pech, M. - Bezdička, Petr - Neděla, Vilém - Tihlaříková, Eva - Targowski, P.

Complementary use of X-ray based imaging and analytical methods in the investigation of miniature portraits.

Microchemical Journal. Roč. 153, MAR (2020), č. článku 104371. ISSN 0026-265X

R&D Projects: GA MŠK(CZ) DG18P02OVV034

Institutional Support: RVO:61388980 ; RVO:68081731

Keywords: Environmental scanning electron microscopy * Miniature portraits * Painting technique * Pigments * X-ray fluorescence mapping * X-ray micro-diffraction

Subject RIV: CA - Inorganic Chemistry; JA - Electronics & Optoelectronics, Electrical Engineering

Obor OECD: Inorganic and nuclear chemistry; Atomic, molecular and chemical physics (physics of atoms and molecules including collision, interaction with radiation, magnetic resonances, Mössbauer effect) (UPT-D)

Impact factor: 3.206, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0026265X19322866?via%3Dihub>

Hradilová, J. Hradil, David

- Neděla, Vilém

- Targowski, P.

Permanent link: <http://hdl.handle.net/11104/0305514>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0503104 - ÚMCH 2020 RIV GB eng J - Journal Article

Chabane, H. - Livi, S. - Beneš, Hynek - Ladaviere, C. - Ecorchard, Petra - Duchet-Rumeau, J. - Gérard, J. F.

Polyhedral oligomeric silsesquioxane-supported ionic liquid for designing nanostructured hybrid organic-inorganic networks.

European Polymer Journal. Roč. 114, May (2019), s. 332-337. ISSN 0014-3057

Institutional Support: RVO:61389013 ; RVO:61388980

Keywords: ionic liquid * polyhedral oligomeric silsesquioxane (POSS) * nanostructured network

Subject RIV: CD - Macromolecular Chemistry; CA - Inorganic Chemistry

Obor OECD: Polymer science; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 3.621, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0014305719302514?via%3Dihub>

Gérard, J. F.

Permanent link: <http://hdl.handle.net/11104/0294938>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0503913 - ÚACH 2020 RIV GB eng J - Journal Article

Ivanov, A. A. - Kononov, D.I. - Pozmogova, T.N. - Solovieva, A.O. - Melnikov, A. - Brylev, K. A. - Kuratieva, N.V. - Yanshole, V.V. - Kirakci, Kaplan - Lang, Kamil - Cheltygmasheva, S.N. - Kitamura, N. - Shestopalova, L.V. - Mironov, Y.V. - Shestopalov, M.A.

Water-soluble Re6-clusters with aromatic phosphine ligands - from synthesis to potential biomedical applications.

Inorganic Chemistry Frontiers. Roč. 6, č. 4 (2019), s. 882-892. ISSN 2052-1553

R&D Projects: GA ČR(CZ) GA18-05076S

Institutional Support: RVO:61388980

Keywords: hexarhenium clusters * rhenium cluster complexes * supramolecular arrays

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 5.934, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/QI/C8QI01216D#!divAbstract>

Shestopalov, M.A.

Permanent link: <http://hdl.handle.net/11104/0296575>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0518330 - ÚACH 2020 RIV GB eng J - Journal Article

Janoš, P. - Ederer, J. - Došek, M. - Štojdl, J. - Henych, Jiří - Tolasz, Jakub - Kormunda, M. - Mazanec, K.

Can cerium oxide serve as a phosphodiesterase-mimetic nanozyme?

Environmental Science-Nano. Roč. 6, č. 12 (2019), s. 3684-3698. ISSN 2051-8153

R&D Projects: GA ČR(CZ) GA19-07460S; GA MŠk(CZ) LM2015073

Institutional Support: RVO:61388980

Keywords: Cerium oxide * Chemical warfare agents * Organophosphate

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 7.704, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/EN/C9EN00815B#ldivAbstract>

Janoš, P.

Permanent link: <http://hdl.handle.net/11104/0303494>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

0508679 - ÚACH 2020 RIV GB eng J - Journal Article

Jerman, M. - Scheinherrová, L. - Medved, I. - Krejsová, J. - Doleželová, M. - Bezdička, Petr - Černý, R.

Effect of cyclic wetting and drying on microstructure, composition and length changes of lime-based plasters.

Cement and Concrete Composites. Roč. 104, NOV (2019), č. článku 103411. ISSN 0958-9465

Institutional Support: RVO:61388980

Keywords: Composition * Drying * Length changes * Lime plasters * Microstructure * Wetting

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 5.172, year: 2018

<http://hdl.handle.net/11104/0299516>

Černý, R.

Permanent link: <http://hdl.handle.net/11104/0299516>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0521685 - FZÚ 2020 RIV US eng C - Proceedings Paper (International conf.)

Kadlec, Christelle - Knížek, Karel - Hejtmánek, Jiří - Goian, Veronica - Buršík, Josef - Soroka, Miroslav - Němec, Hynek

Insulator-metal transition in PrYCaCoO₃ thin films studied by terahertz and infrared spectroscopies.

2019 International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz) /44./. New York: IEEE, 2019, s. 1-2. International Conference on Infrared Millimeter and Terahertz Waves. ISBN 978-1-5386-8286-9. ISSN 2162-2027.

[International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz) /44./, Paris (FR), 01.09.2019-06.09.2019]

R&D Projects: GA ČR GA17-04412S

Institutional Support: RVO:68378271 ; RVO:61388980

Keywords: time-domain spectroscopy THz * metal-insulator transition

Subject RIV: BM - Solid Matter Physics & Magnetism; CA - Inorganic Chemistry

Obor OECD: Condensed matter physics (including formerly solid state physics, supercond.); Inorganic and nuclear chemistry (UACH-T)

<https://ieeexplore.ieee.org/document/8874247>

Permanent link: <http://hdl.handle.net/11104/0306278>

- [SCOPUS](#)
- [DOI](#)
- [Result - R&D](#)

0509609 - ÚACH 2020 RIV CH eng J - Journal Article

Khaydukova, M. - Militsyn, D. - Karnaukh, M. - Grüner, Bohumír - Selucký, P. - Babain, V. - Wilden, A. - Kirsanov, D. - Legin, A.

Modified Diamide and Phosphine Oxide Extracting Compounds as Membrane Components for Cross-Sensitive Chemical Sensors.

Chemosensors. Roč. 7, č. 3 (2019), č. článku 41. E-ISSN 2227-9040

Institutional Support: RVO:61388980

Keywords: diamides of diglycolic acid * CMPO * potentiometric sensors * lanthanides * multisensor system

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

<http://hdl.handle.net/11104/0300301>

Khaydukova, M.

Permanent link: <http://hdl.handle.net/11104/0300301>

- [WOS](#)
- [DOI](#)
- [Result - R&D](#)

- [Inst. Repository](#)

0503707 - ÚACH 2020 RIV GB eng J - Journal Article

Kirakci, Kaplan - Zelenka, J. - Rumlová, M. - Cvačka, Josef - Ruml, T. - Lang, Kamil

Cationic octahedral molybdenum cluster complexes functionalized with mitochondria-targeting ligands: photodynamic anticancer and antibacterial activities.

Biomaterials Science. Roč. 7, č. 4 (2019), s. 1386-1392. ISSN 2047-4830

R&D Projects: GA ČR(CZ) GA18-05076S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: luminescent * nanoparticles * resistance * cytotoxicity * polystyrene

Subject RIV: CA - Inorganic Chemistry; CC - Organic Chemistry

Obor OECD: Inorganic and nuclear chemistry; Organic chemistry (UOCHB-X)

Impact factor: 5.251, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/BM/C8BM01564C#!divAbstract>

Kirakci, Kaplan Lang, Kamil

Permanent link: <http://hdl.handle.net/11104/0295685>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0517993 - ÚACH 2020 RIV US eng J - Journal Article

Kirakci, Kaplan - Demel, Jan - Hynek, Jan - Zelenka, J. - Rumlová, M. - Ruml, T. - Lang, Kamil

Phosphinate Apical Ligands: A Route to a Water-Stable Octahedral Molybdenum Cluster Complex.

Inorganic Chemistry. Roč. 58, č. 24 (2019), s. 16546-16552. ISSN 0020-1669

R&D Projects: GA ČR(CZ) GA18-05076S

AV ČR(CZ) StrategieAV21/10

StrategieAV

Institutional Support: RVO:61388980

Keywords: metal-organic framework * luminescence * clustomesogens

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 4.850, year: 2018

<https://pubs.acs.org/doi/10.1021/acs.inorgchem.9b02569>

Kirakci, Kaplan Lang, Kamil

Permanent link: <http://hdl.handle.net/11104/0303501>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0497826 - ÚACH 2020 RIV NL eng J - Journal Article

Kmjec, T. - Adamec, M. - Kubániová, D. - Plocek, Jiří - Dopita, M. - Česnek, M. - Chlan, V. - Bednarčík, J. - Závěta, K. - Maryško, Miroslav - Kohout, J.

57Fe-enriched perovskites M(Fe_{0.5}Nb_{0.5})O₃ (M = Pb, Ba) studied by Mössbauer spectroscopy, NMR and XRD in the wide temperature range 4.2–533 K.

Journal of Magnetism and Magnetic Materials. Roč. 475, APR (2019), s. 334-344. ISSN 0304-8853.

[Joint European Magnetic Symposia /9./ JEMS 2018. Mainz, 03.09.2018-07.09.2018]

Institutional Support: RVO:61388980 ; RVO:68378271

Keywords: Hyperfine interactions * Lead/barium-iron niobate * Magnetic ordering * Multiferroics * Mössbauer spectroscopy * NMR * Transition temperature * XRD

Subject RIV: CA - Inorganic Chemistry; BM - Solid Matter Physics & Magnetism

Obor OECD: Inorganic and nuclear chemistry; Condensed matter physics (including formerly solid state physics, supercond.) (FZU-D)

Impact factor: 2.683, year: 2018

<http://hdl.handle.net/11104/0293949>

Kmjec, T.

Permanent link: <http://hdl.handle.net/11104/0293949>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0507784 - ÚACH 2020 RIV GB eng J - Journal Article

Kočí, Eva - Rohlíček, Jan - Kobera, Libor - Plocek, Jiří - Švarcová, Silvie - Bezdička, Petr

Mixed lead carboxylates relevant to soap formation in oil and tempera paintings: the study of the crystal structure by complementary XRPD and ssNMR.

Dalton Transactions. Roč. 48, č. 33 (2019), s. 12531-12540. ISSN 1477-9226

R&D Projects: GA ČR(CZ) GA17-15621S; GA ČR(CZ) GA19-05259S

Institutional Support: RVO:61388980 ; RVO:68378271 ; RVO:61389013

Keywords: traditional oil * adiabatic pulses * solid-stateNMR * nuclear-magnetic-resonance * boronic acid

Subject RIV: CA - Inorganic Chemistry; BM - Solid Matter Physics & Magnetism; CB - Analytical Chemistry, Separation

Obor OECD: Inorganic and nuclear chemistry; Analytical chemistry (UMCH-V); Condensed matter physics (including formerly solid state physics, supercond.) (FZU-D)

Impact factor: 4.052, year: 2018

<https://pubs.rsc.org/en/content/articlelanding/2019/DT/C9DT02040C#ldivAbstract>

Švarcová, Silvie

Permanent link: <http://hdl.handle.net/11104/0298897>

- [SCOPUS](#)
- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)

0508744 - ÚCHP 2020 CZ eng C - Proceedings Paper (International conf.)

Koštejn, Martin - Fajgar, Radek - Dřínek, Vladislav - Jandová, Věra - Klementová, Mariana - Bakardjieva, Snejana

Pulsed Laser Deposition under Low Background Gas Pressure.

Programme. Book of Abstracts. Prague: Czech Chemical Society, 2019, č. článku LP-O-5. ISBN N.

[International Conference on Advanced Laser Technologies ALT'19 /27./, Prague (CZ), 15.09.2019-20.09.2019]

AV ČR(CZ) StrategieAV21/3

StrategieAV

Institutional Support: RVO:67985858 ; RVO:68378271 ; RVO:61388980

Keywords: laser deposition * gas pressure * nanoparticles

Subject RIV: CF - Physical & Theoretical Chemistry; CF - Physical & Theoretical Chemistry; CA - Inorganic Chemistry

Obor OECD: Physical chemistry; Physical chemistry (FZU-D); Inorganic and nuclear chemistry (UACH-T)

Koštejn, Martin

Permanent link: <http://hdl.handle.net/11104/0299571>

- [Inst. Repository](#)

0500190 - ÚACH 2020 RIV NL eng J - Journal Article

Kotková, Kristýna - Nováková, Tereza - Tůmová, Štěpánka - Kiss, T. - Popelka, J. - Faměra, Martin

Migration of risk elements within the floodplain of the Litavka River, the Czech Republic.

Geomorphology. Roč. 329, MAR (2019), s. 46-57. ISSN 0169-555X

R&D Projects: GA ČR(CZ) GA15-00340S

Institutional Support: RVO:61388980 ; RVO:67985831

Keywords: Floodplain sediments * Post-depositional migration * Secondary pollution * The Litavka River

Subject RIV: DD - Geochemistry; DB - Geology & Mineralogy

Obor OECD: Environmental sciences (social aspects to be 5.7); Mineralogy (GLU-S)

Impact factor: 3.681, year: 2018

<http://hdl.handle.net/11104/0294721>

Kotková, Kristýna Nováková, Tereza

- Faměra, Martin

Permanent link: <http://hdl.handle.net/11104/0294721>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0505935 - ÚACH 2020 RIV NL eng J - Journal Article

Kubániová, D. - Kubíčková, L. - Kmječ, T. - Závěta, K. - Nižňanský, D. - Brázda, P. - Klementová, Mariana - Kohout, J.

Hematite: Morin temperature of nanoparticles with different size.

Journal of Magnetism and Magnetic Materials. Roč. 475, APR (2019), s. 611-619. ISSN 0304-8853.

[Joint European Magnetic Symposia /9./ JEMS 2018. Mainz, 03.09.2018-07.09.2018]

Institutional Support: RVO:61388980

Keywords: Finite-scaling model * Morin transition * Mössbauer spectroscopy * Spin-reorientation transition * alfa-Fe2O3

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.683, year: 2018

<http://hdl.handle.net/11104/0297265>

Permanent link: <http://hdl.handle.net/11104/0297265>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0510021 - ÚFCH JH 2020 RIV NL eng J - Journal Article

Kubát, Pavel - Henke, P. - Mosinger, Jiří

The effect of iodide and temperature on enhancing antibacterial properties of nanoparticles with an encapsulated photosensitizer.

Colloids and Surfaces B-Biointerfaces. Roč. 176, APR 2019 (2019), s. 334-340. ISSN 0927-7765

R&D Projects: GA ČR(CZ) GA16-15020S

Institutional Support: RVO:61388955 ; RVO:61388980

Keywords: antimicrobial photodynamic inactivation * nanofiber materials * photophysical properties * escherichia-coli * oxygen diffusion * aggregation * polystyrene * surfaces * Nanoparticles * Potassium iodide

Subject RIV: CF - Physical & Theoretical Chemistry; CA - Inorganic Chemistry

Obor OECD: Physical chemistry; Inorganic and nuclear chemistry (UACH-T)

Impact factor: 3.973, year: 2018

<http://hdl.handle.net/11104/0300594>

Permanent link: <http://hdl.handle.net/11104/0300594>

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- [WOS](#)
- [PUBMED](#)
- [DOI](#)
- [Result - R&D](#)
- [Inst. Repository](#)

0504790 - ÚACH 2020 SG eng J - Journal Article

Kupčík, Jaroslav - Mikysek, P. - Pokorná, D. - Fajgar, R. - Cuřínová, P. - Soukup, K. - Pola, J.

Magnetite nanoparticles coat around activated -alumina spheres: A case of novel protection of moisture-sensitive materials against hydration.

Chemical Reports. Roč. 1, č. 2 (2019), s. 67-76. ISSN 2591-7943

Institutional Support: RVO:61388980

Keywords: protection against hydration * activated alumina * magnetite nanoparticles

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

<http://hdl.handle.net/11104/0307531>

Pola, J.

Permanent link: <http://hdl.handle.net/11104/0307531>

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0521907 - ÚACH 2021 RIV CH eng J - Journal Article

Laila, Z. - Yazbeck, O. - Ghaida, F. A. - Diab, M. - El Anwar, Suzan - Srour, M. - Mehdi, A. - Naoufal, D.

Clean-activation of the B-H bond in closo-decahydrodecaborate [B₁₀H₁₀]²⁻ anion via soft-route.

Journal of Organometallic Chemistry. Roč. 910, MAR (2020), č. článku 121132. ISSN 0022-328X

Institutional Support: RVO:61388980

Keywords: Borane * B-H activation and self-catalysis * Decaborate

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.066, year: 2018

<https://www.sciencedirect.com/science/article/pii/S0022328X20300334?via%3Dihub>

Naoufal, D.

Permanent link: <http://hdl.handle.net/11104/0306453>

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0517353 - ÚACH 2020 RIV US eng J - Journal Article

Li, R. Z. - Yuan, Q. - Yang, Z. - Aprà, E. - Li, Z. - Azov, V. A. - Kirakci, Kaplan - Warneke, J. - Wang, X. B.

Photoelectron spectroscopy of [Mo₆X₁₄](²⁻) dianions (X = Cl-).

Journal of Chemical Physics. Roč. 151, č. 19 (2019), č. článku 194310. ISSN 0021-9606

R&D Projects: GA ČR(CZ) GA18-05076S

AV ČR(CZ) StrategieAV21/10

StrategieAV

Institutional Support: RVO:61388980

Keywords: Photoelectron spectroscopy * Multiply-charged anions * Hexanuclear molybdenum

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 2.997, year: 2018

<http://hdl.handle.net/11104/0302671>

Wang, X. B.

Permanent link: <http://hdl.handle.net/11104/0302671>

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0505934 - ÚACH 2020 RIV US eng J - Journal Article

Lochman, L. - Macháček, M. - Miletín, M. - Uhlířová, Š. - Lang, Kamil - Kirakci, Kaplan - Zimčík, P. - Nováková, V.

Red-Emitting Fluorescence Sensors for Metal Cations: The Role of Counteranions and Sensing of SCN⁻ in Biological Materials.

ACS Sensors. Roč. 4, č. 6 (2019), s. 1552-1559. ISSN 2379-3694

Institutional Support: RVO:61388980

Keywords: aza-crown * counteranion * fluorescence * intramolecular-charge transfer * phthalocyanine

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 6.944, year: 2018

<https://pubs.acs.org/doi/10.1021/acssensors.9b00081>

Nováková, V.

Permanent link: <http://hdl.handle.net/11104/0297264>

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0507933 - ÚACH 2020 RIV US eng J - Journal Article

Londesborough, Michael Geoffrey Stephen - Dolanský, Jiří - Bould, Jonathan - Braborec, Jakub - Kirakci, Kaplan - Lang, Kamil -

Čísařová, I. - Kubát, Pavel - Roca-Sanjuan, D. - Frances-Monerris, A. - Slušná, L. - Noskovičová, E. - Lorenc, D.

Effect of Iodination on the Photophysics of the Laser Borane anti-B18H22: Generation of Efficient Photosensitizers of Oxygen.

Inorganic Chemistry. Roč. 58, č. 15 (2019), s. 10248-10259. ISSN 0020-1669

R&D Projects: GA ČR(CZ) GA18-20286S

AV ČR(CZ) StrategieAV21/10

StrategieAV

Institutional Support: RVO:61388980 ; RVO:61388955

Keywords: quantum-chemical calculations * photodynamic therapy * carborane * dyads * photoluminescence

Subject RIV: CA - Inorganic Chemistry; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; Physical chemistry (UFCH-W)

Impact factor: 4.850, year: 2018

<https://pubs.acs.org/doi/10.1021/acs.inorgchem.9b01358>

Londesborough, Michael Geoffrey Stephen

Permanent link: <http://hdl.handle.net/11104/0298896>

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