

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

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, MAY (2019), s. 189-201. ISSN 0920-5861

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; CD - Macromolecular Chemistry

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

Impact factor: 4.888, year: 2018

Bakardjieva, Snejana

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

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

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; CF - Physical & Theoretical Chemistry

Obor OECD: Inorganic and nuclear chemistry; 1.4 Chemical sciences (UCHP-M); Physical chemistry (UFCH-W)

Impact factor: 3.049, year: 2018

Bakardjieva, Snejana

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

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

0502083 - ÚACH 2020 RIV US eng J - Journal Article

Bakardjiev, Mario - Růžicka, A. - Růžicková, 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: dicarboraboranes

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

Štíbr, Bohumil

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

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

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)₅O₁₂: 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

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 1.435, year: 2018

Bárta, Jan

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

- [SCOPUS](#)
- [WOS](#)
- [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 Carboraboranes 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 1521-3765

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

Hnyk, Drahomír

- Vishnevskiy, Y. V.

- Mitzel, N. W.

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

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

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

Beneš, Hynek

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

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

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. 55, č. 9 (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

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

Grüner, Bohumír

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

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

0501494 - ÚACH 2020 RIV US eng J - Journal Article

Ettler, V. - Cihlová, M. - Jarošíková, A. - Mihaljevič, M. - Drahotka, P. - Kříbek, B. - Vaněk, A. - Penížek, V. - Šraček, 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

Ettler, V.

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

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

Obor OECD: Physical chemistry

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](#)
- [WOS](#)
- [PUBMED](#)
- [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

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

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

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

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

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. - Někvienda, Jan - Holub, Josef - Pospíšilová, B. - Fábry, Milan - Pachtl, 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

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 6.054, year: 2018

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

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

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

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

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

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

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

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. - Růžičková, 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) GA17-080455

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

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, Vasyi - 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](#)

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

Hradilová, J. Hradil, David

- Neděla, Vilém

- Targowski, P.

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

- [SCOPUS](#)
- [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

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

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

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

Černý, R.

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

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

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

Kadlec, Christelle - Knížek, Karel - Hejtmánek, Jiří - Goian, Veronica - Buršík, Josef - Sokora, M. - 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

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 mitochondriatargeting 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 * nanoparticulates * 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

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

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 $M(\text{Fe}_{0.5}\text{Nb}_{0.5})\text{O}_3$ ($M = \text{Pb}, \text{Ba}$) 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

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

Kohout, J.

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

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 - Dřinec, Vladislav - Jandová, Věra - Klementová, Mariana - Bakardžieva, 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

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

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

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

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

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-I).

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

Wang, X. B.

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

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

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

Nováková, V.

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

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

0507933 - ÚACH 2020 RIV US eng J - Journal Article

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

Londesborough, Michael Geoffrey Stephen

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

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

0509827 - ÚACH 2020 RIV US eng J - Journal Article

Londesborough, Michael Geoffrey Stephen - Marcias, R. - Kennedy, John David - Clegg, W. - Bould, Jonathan

Macropolyhedral Nickelaboranes from the Metal-Assisted Fusion of KB9H14.

Inorganic Chemistry. Roč. 58, č. 19 (2019), s. 13258-13267. ISSN 0020-1669

R&D Projects: GA ČR(CZ) GA18-20286S

AV ČR(CZ) StrategieAV21/10

StrategieAV

Institutional Support: RVO:61388980

Keywords: metallaborane clusters * nuclear-magnetic-resonance

Subject RIV: CA - Inorganic Chemistry

Obor OECD: Inorganic and nuclear chemistry

Impact factor: 4.850, year: 2018

Londesborough, Michael Geoffrey Stephen

Permanent link: <http://hdl.handle.net/11104/0300436>

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

0506108 - ÚACH 2020 RIV GB eng J - Journal Article

Macháček, Jan - Frances-Monerris, A. - Karmodak, N. - Roca-Sanjuan, D. - Fanfrlík, Jindřich - Londesborough, Michael Geoffrey Stephen - Hnyk, Drahomír - Jemmis, E. D.

A theoretical analysis of the structure and properties of B26H30 isomers. Consequences to the laser and semiconductor doping capabilities of large borane clusters.

Physical Chemistry Chemical Physics. Roč. 21, č. 24 (2019), s. 12916-12923. ISSN 1463-9076

R&D Projects: GA ČR(CZ) GA17-08045S; GA ČR(CZ) GA18-20286S

Institutional Support: RVO:61388980 ; RVO:61388963

Keywords: nido-macropolyhedral boranes * synthetic route * metallaboranes

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

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

Impact factor: 3.567, year: 2018

Frances-Monerris, A.

- Hnyk, Drahomír

- Jemmis, E. D.

Permanent link: <http://hdl.handle.net/11104/0297373>

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

0508513 - ÚACH 2020 RIV DE eng J - Journal Article

Mamoň, Filip - Fajgar, Radek - Jandová, Věra - Kočí, Eva - Jakubec, Ivo - Zhigunov, Alexander - Brovdiová, T. - Bakardjieva, Snejana

TiO₂ microrods with stacked 3D nanovoids for photoelectrochemical water splitting.

Pure and Applied Chemistry. Roč. 91, č. 11 (2019), s. 1733-1747. ISSN 0033-4545.

[International Conference on Solid State Chemistry /13./, Pardubice, 16.09.2018-21.09.2018]

R&D Projects: GA ČR(CZ) GA18-15613S

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

Keywords: nanovoids * photoelectrochemistry * SSC-2018 * TiO₂ microrods * water splitting

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

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

Impact factor: 2.350, year: 2018

Bakardjieva, Snejana

Permanent link: <http://hdl.handle.net/11104/0302580>

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

0501824 - ÚACH 2019 RIV NL eng J - Journal Article

Matys Grygar, Tomáš - Mach, K. - Martinez, M.

Checklist for the use of potassium concentrations in siliciclastic sediments as paleoenvironmental archives.

Sedimentary geology. Roč. 382, MAR (2019), s. 75-84. ISSN 0037-0738

R&D Projects: GA ČR(CZ) GA16-00800S

Institutional Support: RVO:61388980

Keywords: Chemostratigraphy * Lake sediments * Major elements * Past climate * Potassium * Stratigraphy

Subject RIV: DD - Geochemistry

Obor OECD: Environmental sciences (social aspects to be 5.7)

Impact factor: 3.244, year: 2018

Matys Grygar, Tomáš Mach, K.

- Martinez, M.

Permanent link: <http://hdl.handle.net/11104/0294467>

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

0496960 - ÚACH 2019 RIV NL eng J - Journal Article

Matys Grygar, Tomáš - Mach, K. - Schnabl, Petr - Martinez, M. - Zeeden, Ch.

Orbital forcing and abrupt events in a continental weathering proxy from central Europe (Most Basin, Czech Republic, 17.7–15.9 Ma) recorded beginning of the Miocene Climatic Optimum.

Palaeogeography, Palaeoclimatology, Palaeoecology. Roč. 514, JAN (2019), s. 423-440. ISSN 0031-0182

R&D Projects: GA ČR(CZ) GA16-00800S

Institutional Support: RVO:61388980 ; RVO:67985831

Keywords: Continental weathering * Eccentricity * Geochemistry * Miocene * Polarity time scale * Precession

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

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

Impact factor: 2.616, year: 2018

Matys Grygar, Tomáš

Permanent link: <http://hdl.handle.net/11104/0291148>

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

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

0502479 - ÚCHP 2020 RIV US eng J - Journal Article

Moravec, Pavel - Kupčík, Jaroslav - Vodička, Petr - Schwarz, Jaroslav

Generation of ZnO Nanoparticles for Long-term Exposure Experiments.

Aerosol Science and Technology. Roč. 53, č. 2 (2019), s. 172-183. ISSN 0278-6826

R&D Projects: GA ČR(CZ) GBP503/12/G147

Institutional Support: RVO:67985858 ; RVO:61388980

Keywords: evaporation * flow rate * metal nanoparticles

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

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

Impact factor: 2.435, year: 2018

Moravec, Pavel

Permanent link: <http://hdl.handle.net/11104/0294413>

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