

VMESNO POROČILO O REZULTATIH INFRASTRUKTURNEGA PROGRAMA V LETU 2018

Priloga: Objavljeni članki in članki sprejeti v objavo s podporo programa IO-0002: Infrastruktura dejavnost pri IMFM

4. Realizirana podpora infrastrukturnega programa raziskovalnim programom:

V letu 2018 smo objavili 12 člankov, 2 pa sta bila sprejeta v objavo.

Objavljeni članki:

- [1] S. Koozhad, H. Golchoubian, Z. Jagličič. A new end-on azido-bridged dicopper(II) complex; syntheses, structure, solvatochromism, magnetic properties, and DFT study. *J. Coord. Chem.* **71**: 540-2556, 2018, doi: [10.1016/j.ica.2017.12.026](https://doi.org/10.1016/j.ica.2017.12.026)
- [2] L. Radovanović, J. Rogan, D. Poleti, M. V. Rodić, Z. Jagličič. Diaquabis(2,2'-dipyridylamine)M(II) terephthalate dihydrates, M(II) = Ni, Co: Synthesis, crystal structures, thermal and magnetic properties. *Acta Chim. Slov.* **65**:19V letu 2017 smo objavili v 15 člankov, 2 pa sta bila sprejeta v objavo. 1-198, 2018, doi: [10.17344/acsi.2017.3813](https://doi.org/10.17344/acsi.2017.3813)
- [3] B. Babić-Stojić, V. Jokanović, D. Milivojević, M. Požek, Z. Jagličič, D. Makovec, N. Jović Orsini, M. Marković, K. Arskin, V. Paunović. Ultrasmall iron oxide nanoparticles: Magnetic and NMR relaxometric properties. *Current Applied Physics* **18**:141-149, 2018, doi: [10.1016/j.cap.2017.11.017](https://doi.org/10.1016/j.cap.2017.11.017)
- [4] S. Koozhad, H. Golchoubian, Z. Jagličič. Structural, solvatochromism and magnetic properties of two halogen bridged dinuclear copper (II) complexes: A density functional study. *Inorg. Chim. Acta* **473**:60-69, 2018, doi: [10.1016/j.ica.2017.12.026](https://doi.org/10.1016/j.ica.2017.12.026)
- [5] T. Đorđević, L. Karanović, Z. Jagličič. A new copper(II) arsenate $\text{Na}_2\text{Cu}_3(\text{AsO}_3\text{OH})_4 \cdot 4\text{H}_2\text{O}$ containing discrete $[\text{Cu}_3\text{O}_{12}]^{18-}$ units: synthesis, crystal structure and magnetic properties. *J. Solid State Chem.* **265**:55-63, 2018, doi: [10.1016/j.jssc.2018.05.024](https://doi.org/10.1016/j.jssc.2018.05.024)
- [6] B. R. Čobeljić, A. Pevec, Z. Jagličič, M. Milenković, I. Turel, D. Radanović, M. Milenković, K. Anđelković. Synthesis, characterization and antimicrobial activity of isothiocyanato Fe(III) Girard's T hydrazone complex. *J. Serb. Chem. Soc.* **83**:1327-1337, 2018, doi: [10.2298/JSC180828079C](https://doi.org/10.2298/JSC180828079C)
- [7] E. Safaei, Z. Alaji, F. Panahi, A. Wojtczak, Z. Jagličič. Synthesis and characterization of a novel oxo-bridged binuclear iron(III) complex: its catalytic application in the synthesis of benzoxazoles using benzyl alcohol in water. *New J. Chem.* **42**:7230-7236, 2018, doi: [10.1039/C8NJ00921J](https://doi.org/10.1039/C8NJ00921J)
- [8] B. R. Čobeljić, I. Turel, A. Pevec, Z. Jagličič, D. Radanović, K. Anđelković, M. Milenković. Synthesis, structures and magnetic properties of octahedral Co(III) complexes of heteroaromatic hydrazones with tetraisothoniocyanato Co(II) anions. *Polyhedron* **155**: 425-432, 2018, doi: [10.1016/j.poly.2018.08.070](https://doi.org/10.1016/j.poly.2018.08.070)
- [9] N. Kostevšek, S. Hudoklin, M. Erdani-Kreft, I. Serša, A. Sepe, Z. Jagličič, J. Vidmar, J. Ščančar, S. Šturm, S. Kobe, K. Žužek Rožman. Magnetic interactions and in vitro study of biocompatible hydrocaffeic acid-stabilized Fe-Pt clusters as MRI contrast agents. *RSC Advances* **8**:14694-14704, 2018, doi: [10.1039/c8ra00047f](https://doi.org/10.1039/c8ra00047f)
- [10] K. Žužek Rožman, D. Pečko, Š. Trafela, Z. Samardžija, M. Spreitzer, Z. Jagličič, P. Nadrah, M. Zorko, M. Bele, T. Tišler, A. Pintar, S. Šturm, N. Kostevšek. Austenite-martensite transformation in electrodeposited $\text{Fe}_{70}\text{Pd}_{30}$ NWs: a step towards making bio-nano-actuators tested on in vivo systems. *Smart Mater. Struct.* **27**:035018-1 - 035018-10, 2018, doi: [10.1088/1361-665X/aaacb0](https://doi.org/10.1088/1361-665X/aaacb0)
- [11] S. Gyergyek, D. Pahovnik, E. Žagar, A. Mertelj, R. Kostanjšek, M. Beković, M. Jagodič, H. Hofmann, D. Makovec. Nanocomposites comprised of homogeneously dispersed magnetic iron-oxide nanoparticles and poly(methylmethacrylate). *Beilstein J. Nanotechnol* **9**:1613-1622, 2018, doi: [10.3762/bjnano.9.153](https://doi.org/10.3762/bjnano.9.153)
- [12] B.-Q. Ji, M. Jagodič, H.-Y. Ma, H.-F. Su, Y.-W. Li, C.-H. Tung, D. Sun. Solution behavior and magnetic properties of a novel nonanuclear copper(II) cluster. *New J. Chem.* **42**:17884-17888, 2018, doi: [10.1039/C8NJ04230F](https://doi.org/10.1039/C8NJ04230F)
- T. Gilewski, J. Gawraczynski, M. Derzsi, Z. Jaglicic, Z. Mazej, P. Polczynski, R. Jurczakowski, P. Leszczynski, W. Grochala. $[\text{Ag}(\text{OH}_2)_2][\text{Ag}(\text{SO}_4)_2]$: A hydrate of a silver(II) salt. *Chemistry: A European Journal*, 2017, 23(8): 1805-1813, doi: [10.1002/chem.201604179](https://doi.org/10.1002/chem.201604179)

Sprejeto v objavo:

- [13] H. Feizi, R. Bagheri, Z. Jagličič, J. Pal Singh, K.H. Chae, Z. Song, M.M. Najafpour. A nickel(II) complex under water-oxidation reaction: What is the true catalyst?, sprejeto v *Dalton Transactions*
- [14] Z. Trontelj, J. Lužnik, J. Pirnat, V. Jazbinšek, Z. Lavrič, S. Srčič. Polymorphism in Sulfanilamide: ^{14}N Nuclear Quadrupole Resonance Study. Sprejeto v *J. Pharm. Sci.*

5. Realizirana podpora infrastrukturnega programa raziskovalnim projektom:

V letu 2018 smo objavili 3 članke, eden pa je bil sprejet v objavo.

Objavljeni članki:

- [15] L. Pajek, R. Kunič, Z. Jagličič. Fazno spremenljive snovi (PCM) in njihova uporaba v stavbah. *Gradb. Vestn.* 67:51-62, 2018.
- [16] S. Vrtnik, S. Guo, S. Sheikh, A. Jelen, P. Koželj, J. Luzar, A. Kocjan, Z. Jagličič, A. Meden, H. Guim, H.-J. Kim, J. Dolinšek. Magnetism of CoCrFeNiZr_x eutectic high-entropy alloys. *Intermetallics* **93**:122-133, 2018, doi: [10.1016/j.intermet.2017.11.017](https://doi.org/10.1016/j.intermet.2017.11.017)
- [17] S. Vrtnik, J. Lužnik, P. Koželj, A. Jelen, J. Luzar, Z. Jagličič, A. Meden, M. Feuerbacher, J. Dolinšek. Disordered ferromagnetic state in the Ce-Gd-Tb-Dy-Ho hexagonal high-entropy alloy. *J. Alloys Compd.* **742**:877-886, 2018, doi: [10.1016/j.jallcom.2018.01.331](https://doi.org/10.1016/j.jallcom.2018.01.331)

Sprejeto v objavo:

- [18] S. Vrtnik, J. Lužnik, P. Koželj, A. Jelen, J. Luzar, M. Krnel, Z. Jagličič, A. Meden, M. Feuerbacher, J. Dolinšek. Magnetic phase diagram and magnetoresistance of Gd-Tb-Dy-Ho-Lu hexagonal high-entropy alloy, sprejeto v *Intermetallics*.