

Section

SYNTHESIS, PROPERTIES AND STRUCTURE OF INORGANIC COMPOUNDS

1. *E.A. Abramovich, A.F. Selevich. Synthesis and characterization of ammonium-vanadium(III) double cyclophosphates $(\text{NH}_4)_2\text{V}_2\text{P}_8\text{O}_{24}$ and $(\text{NH}_4)_3\text{V}_3\text{P}_{12}\text{O}_{36}$.* Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.

<https://drive.google.com/file/d/1sB8BIqec4IyLsp0km0gyy29VtwzmQJ6r/view?usp=sharing>

2. *M.A. Avaliani, E.V. Shapakidze, V.A. Chagelishvili, G.A. Todradze. Investigating the influence of the trivalent and monovalent metals ionic radius on the structure of the synthesized double condensed phosphates.* I. Javakhishvili Tbilisi State University, R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Tbilisi, Georgia; I. Javakhishvili Tbilisi State University A. Tvalchrelidze Caucasian Institute of mineral Resources, Tbilisi, Georgia

<https://drive.google.com/file/d/1r6WGFkXPkRXi2u7A6oUMbNk17K6cQKVz/view?usp=sharing>

3. *A. Bakavets, Y. Aniskevich, G. Ragoisha, N. Tsyntsaru, H. Cesiulis, E. Streltsov. Electrochemical route to $\text{Bi-Bi}_2\text{Te}_3$ superlattice.* Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus; Faculty of Chemistry, Belarusian State University, Minsk, Belarus; Vilnius University, Faculty of Chemistry and Geosciences, Vilnius, Lithuania; Institute of Applied Physics, Chisinau, Moldova JSC Elektronikos Perdirbimo Technologijos, Vilnius, Lithuania.

<https://drive.google.com/file/d/1-pXfa1nqmHth1E7hPxQCCo9pCH08CTem/view?usp=sharing>

4. *D. Bekchanov, H. Kawakita, M. Mukhamediev, T. Savitskaya, G. Babajonova, A. Inkhanova, S. Botirov. Kinetics sorption of Co(II) and Cr(III) ions on ion exchange resin from acidic solutions.* National University of Uzbekistan, Tashkent; Uzbekistan Saga university, Saga, Japan; Belarusian State University, Minsk, Belarus.

5. *A.V. Blokhin, M.D. Kutuzau, Y.N. Yurkshovich, M.V. Yarmolich, N.A. Kalanda, S.E. Demyanov, A.V. Petrov. Low temperature heat capacity and phase transition parameters of strontium and barium ferromolybdates.* Belarusian State University, Belarus; Chemical Faculty, SSPA «Scientific-Practical Materials Research Centre of NAS of Belarus», Belarus Minsk, Belarus.

https://drive.google.com/file/d/1wWHy1pEW1Or4RbFbqM_ozRU8cUNUwFPN/view?usp=sharing

6. *V.E. Gaishun, Y.A. Kosenok, O.I. Tulenkova, P.S. Yanochkin, T.A. Savitskaya, I.M. Kimlenko. Colloidal silica slurries preparation by ion exchange method for microelectronics application.*

https://drive.google.com/file/d/1bp_IL7phZlnVxbpbyDiLmta4sMk27ZP/view?usp=sharing

7. *Y.V. Grigoriev, E.Y. Grigoriev, I.M. Grigorieva. Synthesis of nanosized Cu , Co and Ni stabilized by poly-5-vinyltetrazole.* Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.

8. *N.A. Zhuk, L.O. Karlova. Thermal behavior and dielectric properties of $\text{Bi}_2\text{CaNb}_{2-x}\text{FexO}_{9-\delta}$.* Syktyvkar State University, Syktyvkar, Russia.

9. *N.A. Zhuk, L.V. Rychkova, L.S. Feltsinger, I.E. Vasileva, M.V. Arteeva, Ya.A. Busargina, E.M. Overin, L.O. Karlova, N.V. Chezhina, V.P. Lutoev, B.A. Makeev, V.A. Belyy, S.V. Nekipelov. Mn doped BiNbO_4 ceramics: phase transitions, magnetic properties, NEXAFS and EPR spectra.* Syktyvkar State University, Syktyvkar, Komi Republic, Russia; Institute of Geology, Komi Scientific Center UB RAS, Syktyvkar, Komi Republic, Russia; Institute of Chemistry of the Komi Science Center UB RAS, Syktyvkar, Komi Republic, Russia; Institute of Physics and Mathematics of the Komi Science Center UB RAS, Syktyvkar, Komi Republic, Russia.

10. *A.V. Kobets, A.A. Kudaka, V.P. Novikov, M.G. Galuza, T.N. Vorobyova. Conductive composites based on copper- and nickel-containing powders deposited from solutions instead of silver pastes.* Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus; Belarusian State University, Minsk, Belarus; SSPA “Scientific-Practical Materials Research Center of NAS of Belarus”, Minsk, Belarus.

https://drive.google.com/file/d/11Em_sgWOGJ3WRpckngcysOWRATAIw_e/view?usp=sharing

11. O.I. Kokits, U.V. Siamionau, Y.M. Aniskevich, G.A. Ragoisha, E.A. Streltsov. **Metal hexacyanoferrates as cathode materials for Zn-ion batteries.** Faculty of Chemistry, Belarusian State University, Minsk, Belarus; Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus. <https://drive.google.com/file/d/1ZGy9A-buAB2y7ibIF-10Wsqwirghs3q0/view?usp=sharing>

12. A.S. Korsakova, E.V. Korobko, K.A. Shevcova, Yu.S. Haiduk, V.V. Pankov. **Synthesis, structure and magnetic properties of $Mn_xFe_{3-x}O_4$ ($x = 0,1 - 0,6$) for magnetorheological liquids.** Belarusian State University, Minsk, Belarus; A.V.Luikov Heat and Mass Transfer Institute NAS of Belarus, Minsk, Belarus. <https://drive.google.com/file/d/1fdjr35VM3Sg8k4DpguXbmuuZO5gRUnYs/view?usp=sharing>

13. A.S. Korsakova, D.A. Kotsikau, V.V. Pankov, K.S. Livanovich, T.G. Shutava, A.V. Nikitina, Y.V. Bogachev. **Nuclear magnetic resonance relaxation efficiency of $Mn_{0.3}Fe_{2.7}O_4$ magnetic nanoparticles.** Belarusian State University, Minsk, Belarus; Institute of Chemistry of New Materials, NAS of Belarus, Minsk, Republic of Belarus; Saint Petersburg Electrotechnical University «LETI», Saint Petersburg, Russia. <https://drive.google.com/file/d/1XX0XFtGSSDl3EzakYlThbkSVO5a3rhFZ/view?usp=sharing>

14. A.V. Kulsha. **Theoretical limits of basicity in condensed state and in gas phase.** Lyceum of Belarusian State University, Minsk, Belarus.

15. K.N. Lapko, N.S. Apanasevich, A.N. Kudlash, A.A. Sokal, Yu.D. Kliaulin, A.Yu. Siomukha. **Thermostable heat-insulating materials based on solid phosphate binders and hollow microspheres.** Belarusian State University (BSU), Minsk, Belarus; Research Institute for Physical Chemical Problems of the BSU, Minsk, Belarus. <https://drive.google.com/file/d/11h6I9LTETT73ER2BArlZ809i5fc9HIF8/view?usp=sharing>

16. G.A. Mamedova. **Hydrothermal crystallization in the natural mineral of Nakhchivan – LiOH + LiCl system.** Institute of Natural Resources, Nakhchivan Department of the Azerbaijan National Academy of Sciences, Nakhchivan, Azerbaijan.

17. S.V. Petrichenko, A.M. Yushchishina, O.P. Mitryasova. **Electrospark purification of waste waters from heavy metals.** Institute of Impulse Processes and Technologies of NAS of Ukraine, Mykolaiv, Ukraine; Ecology Department, Petro Mohyla Black Sea National University, Mykolaiv, Ukraine. <https://drive.google.com/file/d/1gf86R3EhIaAQkfOYgqNCDb1HuUMzP0t0/view?usp=sharing>

18. Y.V. Osika, M.B. Shundalau. **Theoretical insights into the low-lying states of the RaF molecule promising for laser cooling.** Faculty of Physics, Belarusian State University, Minsk, Belarus. <https://drive.google.com/file/d/1T03QXOCiUpZt5vcaSaLny7CFU7w-8OZD/view?usp=sharing>

19. A.S. Paramonova, I.M. Grigorieva, A.N. Bogatkov, M.M. Degtyarik. **Direct synthesis and isolation of complex compounds of Cu(II) nitrate and thiocyanate with 1-ethyltetrazole.** Belarusian State University, Minsk, Belarus; Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.

20. V. Paientko, A. Matkovsky, L. Babenko, V. Kostur, V. Zadorozniy, O. Yesypchuk, O.I. Oranska, E. Skwarek. **Composite materials on the base of zeolite, clay minerals and highly dispersed silica.** Chuiko Institute of Surface Chemistry, NAS of Ukraine, Kyiv, Ukraine; N.G. Kholodny Institute of Botany, NAS of Ukraine, Kyiv, Ukraine; Limited Liability Company «AX MINERAL», Lviv, Ukraine; Naturel Medical Aesthetic, Chernivtsi, Ukraine; Maria Curie-Skłodowska University, Lublin, Poland.

21. O.G. Polyachenok, A.A. Iorbalidi, E.N. Dudkina, L.D. Polyachenok. **Formation and thermal stability of neodymium hydroxychloride.** Department of Chemistry, Mogilev State University of Food Technologies, Mogilev, Belarus. https://drive.google.com/file/d/1qu9u_o1Q8b5KKX1VkrVwH8tqWBSInX1n/view?usp=sharing

22. O.V. Reva., V.V. Bogdanova, A.V. Vrublevsky. **Stability and activating ability of non-aqueous $SnCl_2$ sols.** State Educational Institution «University of Civil Protection» Ministry of Emergency Situations of Belarus, Minsk, Belarus; Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.

23. *O.I. Salychits*. **IR absorption spectra of $(2-X)\text{MgO}\cdot X(\text{MnO}, \text{FeO})\cdot 2\text{Al}_2\text{O}_3\cdot 5\text{SiO}_2$ ($X = 0 - 2$) ceramic materials**. Belarusian State Technological University, Minsk, Belarus.
<https://drive.google.com/file/d/16mbwPPMiaDgsK81b7NigoQCPEOqRPoyq/view?usp=sharing>
24. *Ya.O. Shablovsky*. Crystal structure priority controlling topochemical reactions. Gomel State Technical University, Gomel.
<https://drive.google.com/file/d/1ZwZK70Qq5h-0oII2XSpqJhgT8bEReYhb/view?usp=sharing>
25. *G.P. Shevchenko, N.V. Varapay, O.P. Frolova, S.V. Vashchenko*. **Synthesis of phosphors based on strontium aluminates codoped with Ce^{3+} and Mn^{2+} ions**. Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.
<https://drive.google.com/file/d/1UEInL959guWqhlgyWM9QYZ2HZ-Y6NLH5/view?usp=sharing>
26. *G.P. Shevchenko, Y.V. Bokshits, E.A. Kovel, N.V. Shinkevich, A.V. Mazanik, D.A. Sherban, N.N. Kurmey, L.I. Brook, V.A. Zhuravkov*. **Luminescent Films for Silicon Solar Cells**. Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus; BSU, Faculty of Physics, Minsk, Belarus; Institute of Applied Physics, Kishinev, Moldova.
27. *L.V. Tabulina, T.G. Rusalskaya, Yu.P. Shaman*. **Influence of liquid-phase oxidation treatments on the purity and hydrophilicity of single-walled carbon nanotubes**. Belarusian State University of Informatics and Radioelectronics, Minsk; Technological Center MIET, Zelenograd, Moscow, Russian Federation.
28. *A.S. Tsimanenkava, T.G. Shutava, V.V. Pankov*. **Metal-organic framework/ magnetite composites for electronic devices**. Belarusian State University, Minsk, Belarus; Institute of Chemistry of New Materials, NAS of Belarus, Minsk, Belarus.
https://drive.google.com/file/d/1RA4hG_OVN2eN5HWCd09VRrYAzB6oadM4/view?usp=sharing
29. *V. Zhuravkov, G. Shevchenko, Y. Tratsiak, H. Shishko*. **Luminescent properties of phosphor $\text{SrAl}_2\text{O}_4:\text{Bi}_2\text{O}_4$** . Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus.
https://drive.google.com/file/d/1sUOcFj_An-tPbieEWtcUU3qRARfb8LKU/view?usp=sharing