

## 4. PUBLICATIONS

### PUBLISHED PAPERS

#### DEPARTMENT OF NEUTRON INVESTIGATION OF CONDENSED MATTER

##### Atomic and magnetic structures (diffraction)

- Balagurov Anatoly M., Igor S. Golovin, Ivan A. Bobrikov, Valeria V. Palacheva, Sergej V. Sumnikov, Victor B. Zlokazov "Comparative study of structural phase transitions in bulk and powdered Fe-27Ga alloy by real-time neutron thermodiffraction" *J. Appl. Cryst.* 50 (2017) 198-210.
- Bobrikov I.A., N.Yu. Samoylova, S.V. Sumnikov, O.Yu. Ivanshina, R.N. Vasin, A.I. Beskrovnyi, A.M. Balagurov "In-situ time-of-flight neutron diffraction study of the structure evolution of electrode materials in commercial battery with LiNi<sub>0.8</sub>Co<sub>0.15</sub>Al<sub>0.05</sub>O<sub>2</sub> cathode" *Journal of Power Sources*, 372 (2017) 74-81.
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- Burzo E., P. Vlais, D.P. Kozlenko, S.E. Kichanov, A.V. Rutkauskas, B.N. Savenko «Crystal structure and magnetic behaviour of DyCo<sub>2</sub> compound at high pressures», *Journal of Alloys and Compounds*, 724, 1184-1191 (2017).
- CIRSTEA Cristiana Diana, Marcela MIHAI, Vasile CIRSTEA, Delia PATROI, Haritina CHIVU, Florina RADULESCU, Violeta TSAKIRIS, Otilia CULICOV and Anatol Mihail BALAGUROV "PHASE RELATIONS IN THE NiTiCu SHAPE MEMORY MATERIALS USED IN MEDICINE APPLICATIONS" *Rev. Roum. Chim.* 62 (6-7) (2017) 539-544.
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- Efimov V., V. Sikolenko, E. Efimova, I.O. Troyanchuk, D. Karpinsky, S.I. Tiutiunnikov, B.N. Savenko, D. Novoselov, D. Prabhakaran Anomalous behavior of displacement correlation function and strain in lanthanum cobalt oxide analyzed both from X-ray powder diffraction and EXAFS data *Powder Diffraction* 32 (2017), S151-S154.
- Efimova E.A., V.V. Sikolenko, D.V. Karpinsky, I.O. Troyanchuk, S. Pascarelli, C. Ritter, M. Feygenson, S.I. Tiutiunnikov, and V. Efimov. A combined diffraction and EXAFS study of LaCoO<sub>3</sub> and La<sub>0.5</sub>Sr<sub>0.5</sub>Co<sub>0.75</sub>Nb<sub>0.25</sub>O<sub>3</sub> powders. *Powder Diffraction* 32 (2017), S52-S55.
- Fedorov Victor, Arseniy Berezner, Tatiana Pluzhnikova, Anatolyi Beskrovnyi, Investigation of Inhomogeneous Deformation in Band Amorphous Alloys at Constant Heating Rate, *AIP Conference Proceedings* 1899, 030001 (2017); View online: <https://doi.org/10.1063/1.5009846> View Table of Contents: <http://aip.scitation.org/toc/apc/1899/1> Published by the American Institute of Physics
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#### Nanostructured materials (small-angle scattering and diffraction)

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#### Soft matter, liquids (small angle scattering and diffraction)

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