

3. PUBLICATIONS

PUBLISHED PAPERS

DEPARTMENT OF NEUTRON INVESTIGATION OF CONDENSED MATTER

Atomic and magnetic structures (diffraction)

1. Аксенов В.Л., Балагуров А.М. "Дифракция нейтронов на импульсных источниках". **УФН**, 2016, т. 186 (3), с. 293-320.
2. Аксенов В.Л., Балагуров А.М., Козленко Д.П. "Исследования конденсированного состояния вещества на модернизированном реакторе ИБР-2: от функциональных материалов до нанобиотехнологий". **ЭЧАЯ**, 2016, т.47(4), с. 1154-1191. (Aksenov V.L., Balagurov A.M. and Kozlenko D.P. "Condensed Matter Research at the Modernized IBR-2 Reactor: from Functional Materials to Nanobiotechnologies". **Physics of Particles and Nuclei**, 2016, v. 47 (4), p. 627-646.)
3. Балагуров А.М., Бобриков И.А., Сумников С.В., Юшанхай В.Ю., Миронова-Улмане Н. "Магнитно-структурные фазовые переходы в NiO и MnO: нейтронные дифракционные данные". **Письма в ЖЭТФ**, 2016, т.104 (2), с.84-90.
4. Балагуров А.М., Бобриков И.А., Мухаметулы Б., Сумников С.В., Головин И.С. "Когерентное кластерное упорядочение атомов в интерметаллиде Fe-27Al". **Письма в ЖЭТФ**, 2016, т. 104(8), с. 560-567.
5. Бобриков И. А., Мухаметулы Б., Балагуров А. М. "Нейтроннографический анализ микроструктуры дисперсионно-твердеющих сталей". **ФММ**, 2016, т. 117 (10), с. 1082-1088. (Bobrikov I.A., Mukhametuly B., Balagurov A.M. "Neutron Diffraction Analysis of the Microstructure of Dispersion-Hardening Steels" **The Physics of Metals and Metallography**, 2016, Vol. 117, No. 10, p.1047-1053.)
6. Бобриков И.А., Самойлова Н.Ю., Балагуров Д.А., Иваншина О.Ю., Дрожжин О.А., Балагуров А.М. "Анализ структурных трансформаций в литий-ионном аккумуляторе с помощью дифракции нейтронов". **Электрохимия**, 2017, том 53, № 2, с. 1-10.
7. Сиколенко В.В., Ефимов В.В., Ефимова Е.А., Тютюнников С.И., Карпинский Д.В., Троянчук И.О., Селютин А.Г., Keller L., Ritter C. "Нейтроннографические исследования перехода антиферромагнит-ферромагнит в кобальтах с дефицитом анионов". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**. 2016, № 11, с. 12-16.
8. Ata-Allah S.S., Balagurov A.M., Hashhash A., Bobrikov I.A., Hamdy Sh. "Refinement of atomic and magnetic structures using neutron diffraction for synthesized bulk and nano nickel zinc gallate ferrite". **Physica B**, 2016, v. 481, p. 118-123.
9. Balagurov A.M., Bobrikov I.A., Sumnikov S.V., Yushankhai V.Yu., Grabis J., Kuzmin A., Mironova-Ulmane N., Sildos I. "Neutron diffraction study of microstructural and magnetic effects in fine particle NiO powders". **Physica status solidi (B)**, 2016, vol. 253(8), p. 1529-1536.
10. Balagurov A.M., Bobrikov I.A., Golovin I.S., Cheverikin V.V., Golovin S.A. "Stabilization of bcc-born phases in Fe-27Ga by adding Tb: Comparative in situ neutron diffraction study". **Materials Letters**, 2016, vol.181, p. 67-70.
11. Burzo E., Kozlenko D.P., Dang N.T., Kichanov S.E., Golosova N.O. "Structural and magnetic properties of Ca_{1.5}La_{0.5}FeMoO₆ perovskite at high pressures". **Journal of Alloys and Compounds**, 2016, vol. 664, p. 363-368.
12. Dang N.T., Kozlenko D.P., Phan T.L., Kichanov S.E., Dang N.V., Thanh T.D., Khiem L.H., Jabarov S.H., Tran T.A., Vo D.B., Savenko B.N. "Structural Polymorphism of Mn-Doped BaTiO₃". **Journal of Electronic Materials**, 2016, vol. 45, p. 2477-2483.
13. Dang N.T., Zakhvalinskii V.S., Kozlenko D.P., Nekrasova Yu. S., The-Long Phan, Ta Thu Thang, Kichanov S.E., Thanh T.D., Savenko B.N., Khiem L.H., Taran S.V., Jabarov S.G. "Crystal structure, magnetic properties and conductivity mechanisms of La_{0.7}Ca_{0.3}Mn_{0.5}Fe_{0.5}O₃". **Ferroelectrics**, 2016, vol. 501, p. 129-144.
14. Efimov V.A., Ignatov A., Troyanchuk I.O., Sikolenko V.V., Rogalev A., Wilhelm F., Efimova E., Karpinsky D., Kriventsov V., Yakimchuk E., Molodtsov S., Sainctavit P., Prabhakaran D. "Co K-edge magnetic circular dichroism across the spin state transition in LaCoO₃ single crystal". **Journal of Physics: Conference Series**, 2016, vol. 712, p. 012111.
15. Golosova N.O., Kozlenko D.P., Kichanov S.E., Lukin E.V., Dubrovinsky L.S., Mammadov A.I., Mehdiyeva R.Z., Jabarov S.H., Liermann H-P, Glazyrin K.V., Dang T.N., Smotrakov V.G., Eremkin V.V., Savenko B.N. "Structural, magnetic and vibrational properties of multiferroic GaFeO₃ at high pressure". **Journal of Alloys and Compounds**, 2016, vol. 684, p. 352-358.
16. Golovin I.S., Balagurov A.M., Palacheva V.V., Bobrikov I.A., Zlokazov V.B. "In situ neutron diffraction study of bulk phase transitions in Fe-27Ga alloys". **Materials and Design**, 2016, vol. 98, p. 113-119.
17. Golovin I.S., Balagurov A.M., Bobrikov I.A., Cifre J. "Structure induced anelasticity in Fe₃Me (Me = Al, Ga, Ge) alloys". **Journal of Alloys and Compounds**, 2016, vol. 688, p. 310-319.
18. Golovin I.S., Balagurov A.M., Bobrikov I.A., Palacheva V.V., Cifre J. "Phase transition induced anelasticity in Fe-Ga alloys with 25 and 27%Ga". **Journal of Alloys and Compounds**, 2016, vol. 675, p.393-398.
19. Gridnev S.A., Kamynin A.A., Shportenko A.S., Kulakov P.V., Hahlenkov M.V., Kozlenko D.P., Savenko B.N., Kichanov S.E., Lukin E.V. "Dielectric relaxation in magnetoelectric composite 0.85 BiFeO₃-0.15 MgFe₂O₄". **Bulletin of the Russian Academy of Sciences: Physics**, 2016, vol.80, № 9, p.1092-1096.
20. Istomin S.Ya., Karakulina O.M., Rozova M.G., Kazakov S.M., Gippius A.A., Antipov E.V., Bobrikov I.A., Balagurov A.M., Tsirlin A.A., Micheau A., Biendicho J.J., Svensson G. "Tuning the high-temperature properties of Pr₂NiO_{4±δ} by simultaneous Pr- and Ni- cations replacement". **RSC Advances (Royal Society of Chemistry)**, 2016, vol. 6, p. 33951-33958.
21. Istomin S.Ya., Chernova V.V., Antipov E.V., Lobanov M.V., Bobrikov I.A., Yushankhai V.Yu., Balagurov A.M., Hsu K. Y., Lin J.-Y., Chen J. M., Lee J. F., Volkova O.S., Vasiliev A.N. "Wide range tuning of Mo oxidation state in La_{1-x}Sr_xFe_{2/3}Mo_{1/3}O₃ perovskites". **European Journal of Inorganic Chemistry**, 2016, vol. 2016 (18), p. 2942-2951.
22. Ivanshina O.Yu., Bobrikov I.A., Sumnikov S.V. and Balagurov A.M. "The methodology of electrode manufacturing for special designed lithium-ion cells". **Сборник трудов ОМУС-2016**, 2016, № 181, p. 37.
23. Kamynin A.A., Gridnev S.A., Kozlenko D.P., Kichanov S.E., Lukin E.V., Savenko B.N. "Features of the electrical

- resistance in magnetoelectric ceramics (1-x) BiFeO₃-x MgFe₂O₄". **Ferroelectrics**, 2016, vol. 501, p.114-121.
24. Karpinsky D.V., Troyanchuk I.O., Zheludkevich A.L., Ignatenko O.V., Silibin M.V. and Sikolenko V.V. "Crystal Structure and Piezoelectric and Magnetic Properties of Bi_{1-x}Sm_xFeO₃ Solid Solutions". **Physics of the Solid State**, 2016, vol. 58, p. 1590-1595.
 25. Karpinsky D.V., Troyanchuk I.O., Silibin M.V., Gavrilov S.A., Bushinsky M.V., Sikolenko V., Frontzek M. "Structure and magnetic interactions in (Sr,Sb)-doped lanthanum manganites". **Physica B**, 2016, vol. 489, p. 45-50.
 26. Kosova N.V., Bobrikov I.A., Podgornova O.A., Balagurov A.M., Gutakovskii A.K. "Peculiarities of structure, morphology, and electrochemistry of the doped 5-V spinel cathode materials LiNi_{0.5-x}Mn_{1.5-y}M_{x+y}O₄ (M = Co, Cr, Ti; x+y=0.05) prepared by mechanochemical way". **Journal of Solid State Electrochemistry**, 2016, vol. 20, p. 235-246.
 27. Kosova N.V., Podgornova O.A., Bobrikov I.A., Kaichev V.V., Bukhtiyarov A.V. "Approaching better cycleability of LiCoPO₄ by vanadium modification". **Materials Science and Engineering B**, 2016, vol. 213, p. 105–113.
 28. Kozlenko D.P., Dang N.T., Kichanov S.E., Dang N.V., Khiem L.H., Lukin E.V., Savenko B.N. "Neutron-diffraction study of the crystal structure of BaTiO₃ ferroelectric doped with iron". **Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques**, 2016, vol. 10, № 2, p. 370-374.
 29. Kurlov A.S., Gusev A.I., Gerasimov E.Yu., Bobrikov I.A., Balagurov A.M., Rempel A.A. "Nanocrystalline ordered vanadium carbide: Superlattice and nanostructure". **Superlattices and Microstructures**, 2016, vol. 90, p. 148-164.
 30. Ovsyannikov S.V., Bykov M., Bykova E., Kozlenko D.P., Tsirlin A.A., Karkin A.E., Shchennikov V.V., Kichanov S.E., Gou H., Abakumov A.M., Egoavil R., Verbeeck J., McCammon C., Dyadkin V., Chernyshov D., S. van Smaalen, Dubrovinsky L.S. "Charge-ordering transition in iron oxide Fe₄O₅ involving competing dimer and trimer formation". **Nature Chemistry**, 2016, vol. 8, № 5, p. 501-508.
 31. Sherstobitova E.A., Gubkina A.F., Bobrikov I.A., Kalashnova A.V., Pantyukhin M.I. "Bottle-necked ionic transport in Li₂ZrO₃: high temperature neutron diffraction and impedance spectroscopy". **Electrochimica Acta**, 2016, vol. 209, p. 574–581.
 32. Sikolenko V., Troyanchuk I., Efimov V., Efimova E., Karpinsky D., Pascarelli S., Zakharko O., Ignatov A., Aquilanti D., Selutin A., Shmakov A., Prabhakaran D. "EXAFS and X-Ray diffraction study of LaCoO₃ across the spin-state transition". **Journal of Physics: Conference Series**, 2016, vol. 712, p. 012118.
 33. Sikolenko, V., Troyanchuk I., Karpinsky D., Schorr S., Silibin M., Ritter C., Schilling F.R. "High pressure effects on the magnetic and crystal structure of La_{0.75}Ba_{0.25}CoO₃". **Material Chemistry and Physics**, 2016, vol. 181, p. 78-81.
 34. Troyanchuk I.O., Tereshko N.V., Silibin M.V., Gavrilov S.A., Nekudov K.N., Sikolenko V., Schorr S., Szymczak H. "Magnetic Ordering in Manganites Doped by Ti and Al". **Ceramics International**, 2016, online available DOI: 10.1016/j.ceramint.2016.09.132.
 35. Trukhanov S.V., Trukhanov A.V., Turchenko V.A., Kostishin V.G., Panina L.V., Kazakevich I.S., Balagurov A.M. "Crystal structure and magnetic properties of the BaFe_{12-x}In_xO₁₉ (x=0.1–1.2) solid solutions". **Journal of Magnetism and Magnetic Materials**, 2016, vol. 417, p. 130-136.
 36. Trukhanov S.V., Trukhanov A.V., Turchenko V.A., Kostishyn V.G., Panina L.V., Kazakevich I.S., Balagurov A.M. "Structure and magnetic properties of BaFe_{11.9}In_{0.1}O₁₉ hexaferrite in a wide temperature range". **Journal of Alloys and Compounds**, 2016, vol. 689, p. 383-393.
 37. Turchenko V., Trukhanov A., Trukhanov S., Bobrikov I., Balagurov A.M. "Features of crystal and magnetic structures of solid solutions BaFe_{12-x}D_xO₁₉ (D = Al³⁺, In³⁺; x = 0.1) in a wide temperature range". **The European Physical Journal plus**, 2016, vol. 131, p. 82.
 38. Valkov S., Neov D., Luytov D. and Petrov P. "Neutron Diffraction of Titanium Aluminides Formed by Continuous Electron-Beam Treatment". **19th International Summer School on Vacuum, Electron and Ion Technologies (VEIT2015)**, 21 – 25 September 2015, Sozopol, Bulgaria, **Journal of Physics: Conference Series**, 2016, vol. 700, p. 012034.
 39. Vu M.T., Kozlenko D.P., Kichanov S.E., Troyanchuk I.O., Lukin E.V., Khiem L.H., Savenko B.N. "Pressure induced antiferromagnetism in the manganite La_{0.7}Sr_{0.3}Mn_{0.83}Nb_{0.17}O₃". **Journal of Alloys and Compounds**, 2016, vol. 681, p. 527-531.

Nanostructured materials (small-angle scattering and diffraction)

40. Samoilenko S.O., Kichanov S.E., Kozlenko D.P., Ivankov O.I., Gurin V.S., Rachkovskaya G.E., Zakharevych G.B., Bulavin L.A., Islamov A. Kh., Savenko B.N. "Study of silicate glasses with PbS nanoparticles using small-angle neutron scattering". **Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques**, 2016, vol. 10, № 1, p. 187-190.
41. Doroshkevich O., Shylo A., Lyubchik A., Kirilov A., Glazunova V., Zelenyak T., Burkhovetsky V., Troitskiy G., Vasilenko T., Bacherikov Yu., Sinyakina S., Akhkozov L., Turchenko V., Bodnarchuk V., Doroshkevich V., Kholmurodov Kh. Konstantinova T. "Investigation of nanopowder dispersed system based on zirconia by transmission electron microscopy, electrochemical impedance spectroscopy and spin-echo". **Material Science. Nonequilibrium phase transformations**, 2016, Issue 1, p. 22-25.
42. Doroshkevych A.S., Shilo A.V., Volkova G.K., Glazunova V.A., Perekrestova L.D., Lyubchik S.B., Konstantinova T.E. "Formation of nanostructured state in LaBGeO₅ monolithic glass using pulsed magnetic fields". **Semiconductor Physics, Quantum Electronics and Optoelectronics**, 2016, vol.19, № 3, p. 267-272.

Soft matter, liquids (small angle scattering and diffraction)

43. Кизима Е.А., Кузьменко М.О., Булавин Л.А., Петренко В.И., Михеев И.В., Заболотный М.А., Кубовсікова М., Корсанскы Р., Коробов М.В., Авдеев М.В., Аксенов В.Л. "Влияние физиологической среды на агрегационное состояние фуллеренов C₆₀ и C₇₀". **Поверхность. Рентгеновские, Синхротронные и Нейтронные Исследования**, 2016, № 11, стр. 3–6.
44. Петренко В.И., Авдеев М.В., Булавин Л.А., Алмаши Л., Григорьева Н.А., Аксенов В.Л. "Влияние избытка поверхностно-активных веществ на устойчивость магнитных жидкостей на основе слабополярного растворителя по данным малоуглового рассеяния нейтронов". **Кристаллография**, 2016, т. 61, № 1, стр. 132-137. (Petrenko V.I., Avdeev M.V., Bulavin L.A., Almasy L., Grigoryeva N.A., Aksenov V.L. "Effect of

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- surfactants excess on the stability of low-polarity ferrofluids probed by small-angle neutron scattering". **Crystallography reports**, 2016, vol. 61, Issue 1, p. 121-125).
45. Tropin T.V., Schmelzer J.W.P., Aksenov V.L. "Modern aspects of the kinetic theory of glass transition". **Physics – Uspekhi**, 2016, vol. 59, Issue 1, p. 42-66 (Тропин Т.В., Шмельцер Ю.В.П., Аксенов В.Л. "Современные аспекты кинетической теории стеклования". **Успехи физических наук**, 2016, т. 186, №1, стр. 47-73).
 46. Хусенов М.А., Холмуродов Х.Т. "Молекулярно-динамическое моделирование ван-дер-ваальсовой системы из нуклеотидной цепочки с наночастицами золота в матрице углеродной нанотрубки". **Вестник Воронежского государственного технического университета**, 2016, том 12, Выпуск №1, стр. 81-87.
 47. Anitas E.M., Osipov V.A., Kuklin A.I., Cherny A.Yu. "Influence of randomness on small-angle scattering from deterministic mass fractal". **Romanian Journal of Physics**, 2016, vol.61, nos. 3-4, p. 457-463, Bucharest.
 48. Avdeev M.V., Tomchuk O.V., Ivankov O.I., Alexenskii A.E., Dideikin A.T., Vul' A.Ya. "On the structure of concentrated detonation nanodiamond hydrosols with a positive ζ potential: analysis of small-angle neutron scattering". **Chemical Physics Letters**, 2016, vol. 658, p. 58-62.
 49. Balasoiu M., Bica I., "Composite magnetorheological elastomers as dielectrics for plane capacitors: effects of magnetic field intensity". **Results in Physics**, 2016, vol. 6, p. 199-202.
 50. Bica I., Balasoiu M., Bunoiu M., Iordaconiu I., „Microparticles and electroconductive magnetorheological suspensions". **Romanian Journal of Physics**, 2016, vol. 61, № 5-6.
 51. Bodale I., Oprisan M., Stan C., Tufescu F., Racuciu M., Creanga D., Balasoiu M. "Nanotechnological Application Based on CoFe₂O₄ Nanoparticles and Electromagnetic Exposure on Agrotechnical Plant Growth", **Chapter 3rd International Conference on Nanotechnology and Biomedical Engineering**, 2016, Volume 55, Series IFMBE Proceedings, Springer Singapore, ISBN 978-981-287-735-2, p. 153-156.
 52. Bulavin L., Kutsevol N., Chumachenko V., Soloviov D., Kuklin A. & Marynin A. "SAXS Combined with UV-vis Spectroscopy and QELS: Accurate Characterization of Silver Sols Synthesized in Polymer Matrices". **Nanoscale research letters**, 2016, vol. 11(1), p. 1-8.
 53. Byvshhev I.M., Vangeli I.M., Murugova, T.N., Ivankov O.O., Kuklin A.I., Popov V.I. & Yaguzhinsky L.S. "On the existence of two states of OXPHOS system supercomplex in heart mitochondria". **Biochimica et Biophysica Acta (BBA)-Bioenergetics**, 2016, vol. 1857, e35-e36.
 54. Davide B., Lagana G., Toscano G., Calandra P., Kiselev M.A., Lombardo D., Bellocco E. "The interaction and binding of flavonoids to human serum albumin modify its conformation, stability and resistance against aggregation and oxidative injuries". **Biochimica et Biophysica Acta**, 2016. In press. BBAGEN-28417; No. of pages: 9.
 55. Dordovic V., et al., "Cation-sensitive compartmentalization in metallacarborane containing polymer nanoparticles". **RSC Advances**, 2016, vol. 6 (12), p. 9884-9892.
 56. Egorov V.V., Gorshkov A.N., Murugova T.N., Vasin A.V., Lebedev D.V., Isaev-Ivanov V.V. & Kiselev O.I. "Characterization of oligomerization of a peptide from the ebola virus glycoprotein by small-angle neutron scattering". **Crystallography Reports**, 2016, vol. 61(1), p. 94-97.
 57. Egorov V.V., Shaldzhyan A.A., Gorshkov A.N., Zabrodskaya Y.A., Lebedev D.V., Kuklin A.I. & Isaev-Ivanov V.V. "On the structural features of influenza A nucleoprotein particles from small-angle X-ray scattering data". **Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques**, 2016, vol. 10(2), p. 322-325.
 58. Gorshkova Yu.E., Kuklin A.I. and Gordeliy V.I. "Structure and Phase Transitions of ДМФХ Multilamellar Vesicles in the Presence of Ca²⁺ Ions". **Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques**, 2016, vol. 10, № 6, p. 1154–1164. DOI: 10.1134/S1027451016050499.
 59. Jargalan N., Tropin T.V., Avdeev M.V., Aksenov V.L. "Investigation and modeling of evolution of UV-Vis spectra of C60/NMP solution". **Nanosystems: physics, chemistry, mathematics**, 2016, vol. 7, Issue 1, p. 99-103.
 60. Kadochnikov V.V., Egorov V.V., Shvetsov A.V., Kuklin A.I., Isaev-Ivanov V.V. & Lebedev D.V. "Modeling of conformational transitions of fibrillogenic peptide, homologous to beta-domain of human alpha-lactalbumin". **Crystallography Reports**, 2016, vol. 61(1), p. 98-105.
 61. Khusenov M.A., Dushanov E.B., Kholmurodov Kh.T., Zaki M.M., Sweilam N.H. "On Correlation Effect of the Vander-Waals and Intramolecular Forces for the Nucleotide Chain - Metallic Nanoparticles - Carbon Nanotube Binding". **The Open Biochemistry Journal**, 2016, vol. 10, p.17-26. DOI: 10.2174/1874091X01610010017.
 62. Kulvelis Y.V., et al. "Structure and properties optimization of perfluorinated short side chain membranes for hydrogen fuel cells using orientation stretching". **RSC Advances**, 2016, vol. 6, p. 108864–108875.
 63. Lombardo D., Calandra P., Barreca D., Magazu S., Kiselev M.A. "Soft Interaction in Liposome Nanocarriers for Therapeutic Drug Delivery". **Nanomaterials**, 2016, vol. 6, № 125, p. 2-26; doi:10.3390/nano6070125, www.mdpi.com/journal/nanomaterials.
 64. Lombardo D., Calandra P., Bellocco E., Lagana G., Barreca D., Magazu S., Wanderlingh U., Kiselev M.A. "Effect of anionic and cationic polyamidoamine (PAMAM) dendrimers on a model lipid membrane". **Biochimica et Biophysica Acta**, 2016, vol. 1858, p. 2769–2777. <http://dx.doi.org/10.1016/j.bbamem.2016.08.001>. Elsevier B.V.
 65. Majorosova J., Petrenko V.I., Siposova K., Timko M., Tomasovicova N., Garamus V.M., Koralewski M., Avdeev M.V., Leszczynski B., Jurga S., Gazova Z., Hayryan Sh.,Hu Chin-Kun, Kopcansky P. "On the adsorption of magnetite nanoparticles on lysozyme amyloid fibrils". **Colloids and Surfaces B**, 2016, vol.146, p. 794–800.
 66. Nagornyi A.V., Petrenko V.I., Avdeev M.V., Solopan S.O., Yelenich O.V., Belous A.G., Veligzhanin A.A., Gruzinov A.Yu., Zubavichus Ya.V., Bulavin L.A. "Structure of water-based magnetic liquids by small-angle x-ray scattering". **Romanian Journal of Physics**, 2016, vol. 61, Issues 3-4, p. 483-490.
 67. Ordon M., Gorshkova Y. & Ossowska-Chruściel M.D. "Lithocholic acid derivative in the presence of dimethyl sulfoxide: Morphology and phase transitions". **Thermochemica Acta**, 2016, vol. 643, p. 1-12.
 68. Petrenko V.I., Ivankov O.I., Avdeev M.V., Nikolaienko T.Yu. "Spatial structure of liquid systems with organic-coated magnetite nanoparticles". **Bulletin of Taras Shevchenko National University of Kyiv Series Physics & Mathematics**, 2015, Issue 3, p. 203-206.

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69. Prylutsky Y., Borowik A., Goluński G., Woziwodzka A., Piosik J., Kyzyma O., Pashkova I., Ritter U., Evstigneev M. "Biophysical characterization of the complexation of C60 fullerene with doxorubicin in a prokaryotic model". **Materialwissenschaft und Werkstofftechnik**, 2016, vol. 47, issue 2-3, p. 92–97, <http://onlinelibrary.wiley.com/doi/10.1002/mawe.201600463/full>.
70. Prylutsky Yu.I., Cherepanov V.V., Kostjukov V.V., Evstigneev M.P., Kyzyma O.A., Bulavin L.A., Ivankov O., Davidenko N.A. and Ritter U. "Study of the complexation between Landomycin A and C60 fullerene in aqueous solution". **RSC Advances**, 2016, vol. 6, p. 81231-81236.
71. Puscasu E, Sacarescu L., Lupu N., Grigoras M., Oanca G., Balasoiu M., Creanga D., "Iron oxide-silica nanocomposites yielded by chemical route and sol-gel method". **Journal of Sol-Gel Science and Technology**, 2016, vol. 79(3), p. 457–465, doi10.1007/s10971-016-3996-1.
72. Puscasu E., Sacarescu L., Domocos A., Leostean C., Turcu R., Creanga D., Balasoiu M., "Hydrophilic Versus Hydrophobic Oleate Coated Magnetic Particles". **Romanian Journal of Physics**, 2016, vol. 61, p. 5-6.
73. Rada M., N.Aldea, Z.H.Wu, Z.Jing, S.Rada, E.Culea, S.Macavei, R.Balan, R.C.Suciu, R.V.Erhan, V.Bodnarchuk. "Evolution of the germanium–oxygen coordination number in lithium–lead–germinate glasses". **Journal of Non-Crystalline Solids**, 2016, vol. 437, p. 10–16.
74. Rajewska A., Medrzycka K., Hallmann E. & Soloviov D.V. "Small-angle neutron scattering study of the structure of mixed micellar solutions based on heptaethylene glycol monotetradecyl ether and cesium dodecyl sulfate". **Crystallography Reports**, 2016, vol. 61(1), p. 126-128.
75. Ryzhkov A., Melenev P., Raikher Yu., Balasoiu M., "Structure organization and magnetic properties of microscale ferrogels: the effect of particle magnetic anisotropy". **Journal of Chemical Physics** 2016, vol. 145, p. 074905, <http://dx.doi.org/10.1063/1.4961299>.
76. Schmidt A.E., Shvetsov A.V., Kuklin A.I., Lebedev D.V., Surzhik M.A., Sergeev V.R. & Isaev-Ivanov V.V. "Small-angle scattering study of Aspergillus awamori glycoprotein glucoamylase". **Crystallography Reports**, 2016, vol. 61(1), p. 149-152.
77. Stan C., Balasoiu M., Ivankov A.I., Cristescu C.P., "Multifractal Analysis of CoFe₂O₄/2DBS/H₂O Ferrofluid from TEM and SANS Measurements". **Romanian Reports in Physics**, 2016, vol. 68 (1), p. 270–277.
78. Vlasov A., Kovalev Y., Ryzhykau Y., Frolov F., Zinovev E., Rogachev A., Kuklin A., Gordeliy V. "Light-induced electrical properties of bacteriorhodopsin in purple membranes". **FEBS Journal**, 2016, vol. 283, Issue Supplement S1, p.218.
79. Zelenyak T.Y., Kholmurodov K.T., Tameev A.R. et al. "Molecular dynamics study of perovskite structures with modified interatomic interaction potentials". **High Energy Chemistry**, 2016, vol. 50, p. 400-405, DOI:10.1134/S0018143916050209 <http://link.springer.com/journal/10733>.
80. Zemlyanaya E.V., Kiselev M.A., Zhabitskaya E.I., Gruzinov A.Yu., Aksenov V.L. "SFF analysis of the small angle scattering data for investigation of a vesicle systems structure". **Journal of Physics: Conference series**, 2016, vol. 724, 012056, p. 1-5; DOI: 10.1088/1742-6596/724/1/012056.
81. Zhabitskaya E., Zemlyanaya E., Kiselev M., and Gruzinov A. "The Parallel Asynchronous Differential Evolution Method as a Tool to Analyze Synchrotronous Scattering Experimental Data from Vesicular Solutions". **The European Physical Journal Web of Conferences**, 2016, vol. 108, p.02047, DOI: 10.1051/epjconf/201610802047. Article available at <http://www.epj-conferences.org> or <http://dx.doi.org/10.1051/epjconf/201610802047>.

Thin films (reflectometry, polarized neutrons)

82. Жакетов В.Д., Никитенко Ю.В., Раду Ф., Петренко А.В., Csik A., Борисов М.М., Мухамеджанов Э.Х., Аксёнов В.Л. "Магнетизм в структурах с ферромагнитными и сверхпроводящими слоями". **ЖЭТФ**, 2016, том. 150, Вып. 5(11)1-19.

Atomic and magnetic dynamics (inelastic neutron scattering)

83. Drużbicki K., Pajzderska A., Kiwilsza A., Jencyk J., Chudoba D., Jarek M., Mielcarek J., Wąsicki J., "In search of the mutual relationship between the structure, solid-state spectroscopy and molecular Dynamics In selected calcium channel blockers". **European Journal of Pharmaceutical Sciences**, 2016, vol. 85, p. 68-83.
84. Drużbicki K., Pinna R.S., Rudić S., Jura M, Gorini G., Fernandez-Alonso F. "Unexpected Cation Dynamics in the Low-temperature Phase of Me-thylammonium Lead Iodide – The Need for Improved Models". **The Journal of Physical Chemistry Letters**, 2016, vol. 7 (22), p. 4701–4709. DOI: 10.1021/acs.jpcllett.6b01822.
85. Laine M., Barbosa N.A., Kochel A., Osiecka B., Szewczyk G., Sarna T., Ziółkowski P., Wieczorek R., Filarowski A. "Synthesis, structural, spectroscopic, computational and cytotoxic studies of BODIPY dyes." **Sensors and Actuators B: Chemical**, 2017, vol. 238, p. 548-555.
86. Laine M., Barbosa N.A., Wieczorek R., Melnikov M.Ya., Filarowski A., "Calculations of BODIPY dyes in the ground and excited states by M06-2X and PBE0 functionals". **Journal of Molecular Modeling**, 2016, vol. 22, p. 260. DOI: 10.1007/s00894-016-3108-8.
87. Łuczynska K., Drużbicki K., Lyczko K., Dobrowolski J.Cz. "Structure-Spectra Correlations in Anilate Complexes with Picolines". **Crystal Growth & Design**, 2016, p. 6069–6083.
88. Łuczynska K., Drużbicki K., Lyczko K., Dobrowolski J. Cz. "Computationally assisted low-wavenumber spectroscopy of hydrogen-bonded supramolecular synthons". **Annual Report Institute of Nuclear Chemistry and Technology**, 2015, 2016, p. 46-50.
89. Pajzderska A., Drużbicki K., Kiwilsza A., Gonzalez M.A., Jencyk J., Jurga S., Mielcarek J., Wąsicki J. "On the molecular Dynamics In long-acting calcium channel blocker lacidipine: solid-state NMR, neutron scattering and periodic DFT study". **RSC Advances**, 2016, vol. 6, p. 66617-66629.
90. Zhernenkov M., Bolmatov D., Soloviov D., Zhernenkov K., Toperverg B.P., Cunsolo A., Bosak A. & Cai Yo.Q. "Revealing the mechanism of passive transport in lipid bilayers via phonon-mediated nanometre-scale density fluctuations". **Nature Communications**, 2016, vol. 7, p. 1-9.

3. PUBLICATIONS

Applied studies (texture, stresses, geological materials)

91. Бокучава Г.Д., Петров П., Папушкин И.В., "Применение нейтронной стресс-дифрактометрии для исследования остаточных напряжений и микродеформаций в образцах-свидетелях корпуса реактора, восстановленных методами лучевой сварки". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**, 2016, № 11, с. 22-33. (Bokuchava G.D., Petrov P., Papushkin I.V., "Application of Neutron Stress Diffractometry for Studies of Residual Stresses and Microstrains in Reactor Pressure Vessel Surveillance Specimens Reconstituted by Beam Welding Methods". **Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques**, 2016, vol.10, Issue 6, p. 1143-1153.
92. Зель И.Ю., Иванкина Т.И., Левин Д.М., Локаичек Т. "Лучевые скорости Р-волн и обратная задача акустики применительно к анизотропным средам". **Кристаллография**, 2016, том 61, № 4, с. 601–607.
93. Зель И.Ю., Иванкина Т.И., Локаичек Т., Керн Х., Левин Д.М. "О причинах сейсмической анизотропии горных пород: экспериментально-теоретическое исследование на образцах биотитовых гнейсов". **Геофизические исследования**, 2016, том.17, № 3, с.70-87. DOI: 10.21455/gr2016.3-6.
94. Bokuchava G.D. "Materials microstructure characterization using high resolution time-of-flight neutron diffraction". **Romanian Journal of Physics**, 2016, vol. 61, №. 5-6, p. 903-925.
95. Bokuchava G.D., Papushkin I.V., Tamonov A.V., Kruglov A.A. "Residual stress measurements by neutron diffraction at the IBR-2 pulsed reactor". **Romanian Journal of Physics**, 2016, vol. 61, №. 3-4, p. 491-505.
96. Dului O. G., Ivankina T.I., Herman E., Ricman C., Tiseanu I. "Orientation distribution function of biotite platelets based on optical, thin sections and μ -CT image analysis in an Outokumpu (Finland) biotite gneiss: Comparison with neutron diffraction texture analysis". **Russian Journal of Earth Sciences**, September 2016, vol. 16(3), ES3003. DOI: 10.2205/2016ES000573.
97. Keppler R., Stipp M., Behrmann J.H., Ullemeyer K. & Heidelbach F. "Deformation inside a paleosubduction channel – Insights from microstructures and crystallographic preferred orientations of eclogites and metasediments from the Tauern Window". **Journal of Applied Geology**, 2016, vol. 82, p. 60-79. Austria. DOI: 10.1016/j.jsg.2015.11.006.
98. Lychagina T. & Nikolayev D. "Quantitative comparison of the measured crystallographic textures". **Journal of Applied Crystallography**, 2016, vol. 49 (4), p. 1290-1299.
99. Vilhelm J., Ivankina T., Lokajicek T., Rudajev V. "Comparison of laboratory and field measurements of P and S wave velocities of a peridotite rock". **International Journal of Rock Mechanics and Mining Sciences**, 2016, vol. 88, p. 235–241.

Instruments and Methods

100. Балагуров А.М., Бескровный А.И., Журавлев В.В., Миронова Г.М., Бобриков И.А., Неов Д., Шеверев С.Г. "Дифрактометр для исследований переходных процессов в реальном времени на импульсном источнике нейтронов ИБР-2" **Поверхность**, 2016, вып. 6, стр. 3-16. (Balagurov A.M., Beskrovny A.I., Zhuravlev V.V., Mironova G.M., Bobrikov I.A., Neov D., Sheverev S.G. "Neutron Diffractometer for Real-Time Studies of Transient Processes at the IBR-2 Pulsed Reactor". **Journal of Surface Investigation "X-ray, Synchrotron and Neutron Techniques"**, 2016, vol.10, No. 3, p. 467–479.)
101. Боднарчук В.И., Садилов С.В., Манюшин С.А., Ерхан Р., Авдеев М.В., Ярадайкин С.П. "Геометрический фактор в методе спин эхо малоуглового рассеяния нейтронов с использованием линейно возрастающих во времени магнитных полей". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**, 2016, № 11, с. 7-11.
102. Кожевников С.В., Жакетов В.Д., Петренко А.В., Булавин М.В., Верхоглядов А.Е., Куликов С.А., Шабалин Е.П. "Использование криогенного замедлителя на нейтронном рефлектометре РЕМУР". **Поверхность** 2016, вып. 16 стр. 5-14.
103. Кожевников С.В., Игнатович В.К., Петренко А.В., Раду Ф. "Нейтронные резонансы в плоских волноводах". **ЖЭТФ**, 2016, вып. 150, DOI: 10.7868/S0044451016110000.
104. Козленко Д.П., Кичанов С.Е., Лукин Е.В., Руткаускас А.В., Белушкин А.В., Бокучава Г.Д., Савенко Б.Н. "Экспериментальная установка для исследований с помощью методов нейтронной радиографии и томографии на реакторе ИБР-2". **Письма в ЭЧАЯ**, 2016, т. 13, № 3, с.550-557. (Kozlenko D.P., Kichanov S.E., Lukin E.V., Rutkauskas A.V., Belushkin A.V., Bokuchava G.D., Savenko B.N. "Neutron radiography and tomography facility at IBR-2 reactor". **PEPAN Letters**, 2016, vol. 13, № 3, p. 346-351.)
105. Никитенко Ю.В., Игнатович В.К., Кожевников С.В., Петренко А.В. "Двухзеркальный спин-волновой интерферометр нейтронов". **Поверхность**, 2016, №10, стр. 5-13.
106. Никитенко Ю.В. ЭСпин-эхо спектрометр нейтронов скользящей геометрии". **Поверхность**, 2016, №2, стр. 1-9.
107. Balasoiu M., Kuklin A.I. "Magnetic Scattering Determination from SANS Contrast Variation Experiments at IBR-2 Reactor". **Romanian Journal of Physics**, 2016, vol. 61(3-4), p. 473-482.
108. Kozhevnikov S.V., Ott F., Radu F. "Neutron methods for the direct determination of the magnetic induction in thick films". **Journal of Magnetism and Magnetic Materials**, 2016, vol. 402, p. 83-93.
109. Kozhevnikov S.V., Khaydukov Yu.N., Keller T., Ott F., Radu F. "Polarized neutron channeling for the investigations of weakly magnetic thin films". **Письма в ЖЭТФ**, 2016, vol. 103, p. 38-43.
110. Zlokazov V.B., Bobrikov I.A., Balagurov A.M. "Mathematical methods for the analysis of polycrystal phase evolutions". **The European Physical Journal**, 2016, v. 108, p. 2049. EPJ Web of Conferences, 2016, vol. 108, p. 02049 (pp.1-6).

Articles about the organized conferences

111. Gorshkova Yu.E., Kozlenko D.P., "CMR@IBR-2 - International Conference "Condensed Matter Research at the IBR-2" in FLNP JINR", Dubna", **Neutron News**, 2016, vol. 27(1), pp. 18-20. DOI: 10.1080/10448632.2016.1125734.
112. Kučerka N., Balasoju M. & Kuklin A.I. III International Conference on Small Angle Neutron Scattering Dedicated to the 80th Anniversary of Yu. M. Ostanevich. **Neutron News**, 2016, 27:4, 14-16.

Patents

113. Никитенко Ю.В. Способ измерения спектра переданного импульса нейтронов. Патент на изобретение №2593431 от 12 июля 2016г.

SECTOR OF RAMAN SPECTROSCOPY

114. Arzumanyan G.M., Doroshkevich N.V., Mamatkulov K.Z., Shashkov S.N., Zinovev E.V., Vlasov A., Round E. and Gordeliy V.I. "Highly Sensitive Coherent anti-Stokes Raman Scattering Imaging of Protein Crystals". **JACS**, 2016, vol. 138(41), p. 13457-13460.
115. Arzumanyan G.M., Kuznetsov E.A., Zhilin A.A., Dymshits O.S., Shemchuk D.V., Alekseeva I.P., Mudryi A.V., Zhivulko V.D., Borodavchenko O.V. "Photoluminescence of transparent glass-ceramics based on ZnO nanocrystals and co-doped with Eu³⁺, Yb³⁺ ions". **J. Optical Materials**, DOI information: 10.1016/j.optmat.2016.10.054
116. Girel K., Yantsevich E., Arzumanyan G., Doroshkevich N. and Bandarenka H. "Detection of DNA molecules by SERS spectroscopy with silvered porous silicon as an active substrate". **Physica Status Solidi A**, 2016, vol. 1–5, DOI: 10.1002/pssa.201600432
117. Othman H.A., Arzumanyan G.M., Moncke D. "The influence of different alkaline earth oxides on the structural and optical properties of undoped, Ce-doped, Sm-doped, and Sm/Ce co-doped lithium aluminophosphate glasses". **J. Optical Materials**, <http://dx.doi.org/10.1016/j.optmat.2016.10.051>
118. Arzumanyan G.M., Mamatkulov K.Z., Brozhek A.D., Fabelinsky V.I., Kozlov D.N., Orlov S.N., Polivanov Y.N., Shcherbakov I.A., Smirnov V.V., Vereschagin K.A., Lagarkov A.N., Ryzhikov I.A., Sarychev A.K., Budashov I.A., Kurochkin I.N. "Surface Enhanced CARS from Gold Nanoparticle-Immobilized Molecules at Cerium Dioxide/Aluminium Film". Technical Digest (Nanophotonics and Plasmonics) of International Conference on Coherent and Nonlinear Optics (ICONO)&Conference on Lasers, Applications, and Technologies (LAT) - **ICONO/LAT** 2016, 26–30 September, 2016, p. 88-89, Minsk, Belarus.
119. Канюков Е.Ю., Белоногов Е.К., Якимчук Д.В., Козловский А.Л., Кадыржанов К.К., Арзуманян Г.М., Демьянов С.Е. "Особенности формирования медного осадка в порах диоксида кремния". **Известия НАН Беларуси, серия физико-технических наук**, 2016, №3, стр. 11-15.

DEPARTMENT OF IBR-2 SPECTROMETERS COMPLEX

120. Ananiev V., Beliakov A., Bulavin M., Verkhoglyadov A., Kulagin E., Kulikov S., Mukhin K., Shabalin E. and Loktaev K. "Pelletized cold moderator of the IBR-2 reactor: current status and future development". **Journal of Physics: Conference Series**, September 2016, vol. 746(1):012031, pp.1-6.
121. Булавин М.В., Васин Р.Н., Куликов С.А., Локаичек Т., Левин Д.М. "Использование комбинированного замедлителя на реакторе ИБР-2: преимущества для нейтроннографического текстурного анализа горных пород". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**, 2016, № 5, с. 1-10.
122. Кожевников С.В., Жакетов В.Д., Петренко А.В., Верхоглядов А.Е., Куликов С.А., Шабалин Е.П., Булавин М.В. "Использование криогенного замедлителя на нейтронном рефлектометре РЕМУР". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**, 2016, №1, с. 5-14. (Kozhevnikov S. V. et al. "Application of a cryogenic moderator in the REMUR neutron reflectometer". **Journal of surface investigation X-ray, synchrotron, and neutron techniques**, 2016, vol. 10, № 1, p. 1–9.)
123. Belyakov A.A., Bulavin M.V., Verkhoglyadov A.E., Skuratov V.A., Smelyansky I.A., Kulikov S.A., Kustov A.A., Mukhin K.A., Lyubimtsev A.A., Sirotin A.P., Shirokov V.K and Petukhova T.B., Possibility of loading the chamber of the "central" pelletized cold moderator for IBR-2 reactor beams 1, 4–6, and 9, **Physics of particles and nuclei letters**. – 2016. – Vol. 13, №6. – pp. 774-781.
124. Manoshin S.A., Belushkin A.V., Ioffe A.I. "Development of the methods for simulating the neutron spectrometers and neutron-scattering experiments". **Physics of Particles and Nuclei**, 2016, vol. 47, № 4, p. 667–680.
125. Белушкин А.В., Маношин С.А., Рихвицкий В.С. "Анализ применимости модифицированного кинематического приближения для описания незеркального отражения нейтронов от поверхности микро- и наноструктурированных объектов". **Кристаллография**, 2016, том 61, № 5, с. 736–744. (Belushkin A.V., Manoshin S.A., Rikhvitskiy V.S. "Analysis of the Applicability of the Modified Kinematic Approximation to Describe the Off-Specular Neutron

3. PUBLICATIONS

- Scattering from the Surface of Micro- and Nanostructured Objects". **Crystallography Reports**, 2016, vol. 61, Issue 5, p. 760–767.)
126. Belushkin A.V., Manoshin S.A. "Some peculiarities for grazing incidence neutron diffraction from 3D near-surface nanostructures", Submitted to **Journal of Applied Crystallography**, 2016.
 127. Dobrin I., Chernikov A., Kulikov S., Buzdavin A., Culicov O., Morega A., Nedelcu A., Morega M., Popovici I. and Dobrin A. "A 4 T HTS Magnetic Field Generator, Conduction Cooled, for Neutron Physics Spectrometry", **IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY**, 2016, VOL. 26, NO. 3. <http://ieeexplore.ieee.org/document/7387718/>
 128. Balagurov A.M., Beskrovnyy A.I., Zhuravlev V.V., Mironova G.M., Bobrikov I.A., Neov D., Sheverev S.G. "Neutron diffractometer for real-time studies of transient processes at the IBR-2 pulsed reactor". **Journal of Surface Investigation X-ray Synchrotron and Neutron Techniques**, May 2016, vol. 10, Issue 3, p. 467-479
 129. Куликов С.А., Приходько В.И. "Новое поколение систем сбора и накопления данных комплекса спектрометров реактора ИБР-2". **Физика элементарных частиц и атомного ядра**, 2016, том 47, вып. 4, стр. 1288-1302.
 130. Kulikov S.A., Prikhodko V.I. "New generation of data acquisition and data storage systems of the IBR-2 reactor spectrometers complex". **Physics of Particles and Nuclei**, 07/2016, vol. 47(4), p. 702-710.
 131. Кирилов А.С. "Новые версии программ юстировки и визуализации спектров для рефлектометров ИБР-2". **Письма в ЭЧАЯ**. 2016, Т.13, № 1(199), с. 208-21.
 132. Levchanovskiy F., Murashkevich S. "De-Li-DAQ-2D – a new data acquisition system for position-sensitive neutron detectors with delay-line readout". **Physics of Particles and Nuclei Letters**, 2016, vol. 13, № 5, p. 591–594.
 133. Цулаиа М.И., Саламатин И.М., Саламатин К.М., Беликов Д.Б., Мареев Ю.Д., Сиротин А.П. "Модернизация установки Колхида для исследования взаимодействия поляризованных нейтронов с поляризованными ядрами". **Сообщение ОИЯИ**, 2016, P13-2016-23, Дубна.

NUCLEAR PHYSICS DEPARTMENT

Experimental investigations

134. Adam J., Chilap V.V., Furman V.I. et al., "Study of secondary neutron interactions with ^{232}Th , ^{129}I , and ^{127}I nuclei with the uranium assembly "QUINTA" at 2, 4, and 8 GeV deuteron beams of the JINR Nuclotron accelerator", **Applied Radiation and Isotopes** 107 (2016) 225–233.
135. Artiushenko M.Yu., Baldin A.A., Berlev A.I. et al., "Comparison of neutron-physical characteristics of uranium target of assembly "QUINTA" irradiated by relativistic deuterons and ^{12}C nuclei", **VANT** 2016. №3(103)
136. Данилян Г.В., Копач Ю.Н., Новицкий В.В. и др. "О РОТ-эффектах в тройном и бинарном делении ядер ^{233}U и ^{235}U поляризованными холодными нейтронами", **Proc. International Seminar on Interaction of Neutrons with Nuclei - ISINN24**, May 23-27, 2016, Dubna, Russia.
137. Achakovskiy O.I., Belyshev S.S., Dzhilavyan L.Z., Pokotilovski Yu.N. "Cross sections of the reactions $^{14}\text{N}(\gamma, 2n)^{12}\text{N}$, $^{14}\text{N}(\gamma, 2p)^{12}\text{B}$, $^{13}\text{C}(\gamma, p)^{12}\text{B}$ ". **Izvestija RAN**, 2016, vol. 80, №5, p. 633-640; **Bulletin of the Russian Academy of Science**, 2016, vol. 80, №5, p. 572-578.
138. Barbagallo M., Musummaro A., Consentino L. et al., "The $^7\text{Be}(n, \alpha)^4\text{He}$ reaction and the Cosmological Lithium Problem: measurement of the cross section in a wide energy range at n_TOF (CERN)", **Physical Review Letters** 117:152701 (2016)
139. Belyshev S.S., Dzhilavyan L.Z., Pokotilovski Yu.N. "Emission of quanta, electrons, positrons from characteristic targets at decays of ^{12}N and ^{12}B , produced in these targets". **Izvestija RAN**, 2016, vol. 80 №5, p. 627-632; **Bulletin of the Russian Acad of Science**, 2016, vol. 80 №5, p. 566-571.
140. Bystritsky V.M., Grozdanov D.N., Zontikov A.O., Kopach Yu.N., Rogov Yu.N., Ruskov I.N., Sadovsky A.B., Skoy V.R., Barmakov Yu.N., Bogolyubov E.P., Ryzhkov V.I., Yurkov D.I. "Angular distribution of 4.43-MeV γ -rays produced in inelastic scattering of 14.1-MeV neutrons by ^{12}C nuclei". **Physics of Particles and Nuclei Letters**, 2016, vol. 13/4, p. 504, doi: 10.1134/S154747711604004X. (Быстрицкий В.М. и др. **Письма в ЭЧАЯ**, 2016, том 13, вып. 4).
141. Bystritsky V.M., Grozdanov D.N., Kopatch Yu.N., Ruskov I.N., Skoy V.R., Zontikov A.O. and Ivanov I.Zh. "Response of a hexagonal NaI(Tl) scintillation probe in the attenuated neutron radiation of 14.1 MeV neutron generator ING-27" **23rd International Seminar on Interaction of Neutrons with Nuclei (ISINN-23)**, May 25-29, 2015, Dubna, Russia.
142. Frank A.I. "Interaction of neutrons with birefringent medium moving with an acceleration". **Journal of Physics: Conference Series**, 2016, volume 711, p. 012016.
143. Frank A.I., Kulin G.V., Bushuev V.A. "Non-stationary transformation of neutron energy by a moving grating". **Journal of Physics: Conference Series**, 2016, vol. 746, p. 012053.
144. Frank A.I., Kustov D.V., Kulin G.V., Goryunov S.V., Roshchupkin D.V., Irzhak D.V. "Experiment proposed for the observation of UCN interaction with matter moving with giant acceleration". **Journal of Physics: Conference Series**, 2016, vol. 746, p. 012054.
145. Gledenov Yu. M., Zhang G., Sedysheva M.V., Wang Z., Khuukhenkhuu G., Krupa L., Fan X., Zhang L., Bai H., Chen J. "Cross Sections $^{56}\text{Fe}(n, \alpha)^{53}\text{Cr}$ and $^{54}\text{Fe}(n, \alpha)^{51}\text{Cr}$ Reactions in the MeV Region". In: **Proc. of the 23 International Seminar on Interaction of Neutron with Nuclei (ISINN-23)**, 2016, E3-2016-12, p. 334-337, Dubna.
146. Gledenov Yu.M., Sedysheva M.V., Zhang G., Wang Z., Fan X., Zhang L., Bai H., Chen J., Krupa L., Khuukhenkhuu G. "Cross Sections $^{144}\text{Sm}(n, \alpha)^{141}\text{Nd}$ Reaction at 4.0, 5.0 and 6.0 MeV". In: **Proc. of the 23 International Seminar on**

- Interaction of Neutron with Nuclei (ISINN-23)**, Dubna, 2016, E3-2016-12, pp. 338-345.
147. Gledenov Yu.M., Krupa L., Sansarbayer E., Chuprakov I.A. "Spectrometer of Charged Particles on the EG-5 FLNP JINR". In: **Proc. of the 23 International Seminar on Interaction of Neutron with Nuclei (ISINN-23)**, 2016, E3-2016-12, p. 189-196, Dubna.
 148. Gook A., Geerts W., Hamsch F.-J., Oberstedt S., Zeynalov Sh. "A position-sensitive twin ionization chamber for fission fragment and prompt neutron correlation experiments". **Nuclear Instruments and Methods in Physics**, 2016, A830, p. 366-374.
 149. Grozdanov D.N., Zontikov A.O., Bystritsky V.M., Kopatch Yu.N., Ruskov I.N., Skoy V.R. "Optimization of "Romashka" setup for investigation of (n, n' γ)-reactions with tagged neutrons method". **23rd International Seminar on Interaction of Neutrons with Nuclei (ISINN-23)**, May 25-29, 2015, Dubna, Russia, 346-353.
 150. Gundorin N. A., Zeinalov Sh. S., Kopach Yu. N., Popov A. B., and Furman V. I., "Investigations of Fission Characteristics and Correlation Effects", **Phys. of Part. and Nuclei**, 2016, Vol. 47, No. 4, pp. 681-701.
 151. Gunsing F., Aberle O., Andrzejewski J. et al., "Nuclear data activities at the n TOF facility at CERN", **Eur. Phys. J. Plus** (2016) 131: 371 DOI: 10.1140/epjp/i/2016-16371-4
 152. Khushvaktov J., Adam J., Baldin A.A. et al., "Interactions of secondary particles with thorium samples in the setup QUINTA irradiated with 6 GeV deuterons", **Nuclear Instruments and Methods in Physics Research B** 381 (2016) 84-89
 153. Khuukhenkhoo G., Gledenov Yu.M., Zhang G., Sedysheva M.V., Odsuren M., Zolbadral Ts., Munkhsaikhan J., Sansarbayer E. "Analysis of Fast Neutron Induced (n, α) Reaction Cross Sections and Angular Distributions for Medium Mass Nuclei". In: **Proc. of the 23 International Seminar on Interaction of Neutron with Nuclei (ISINN-23)**, 2016, E3-2016-12, p. 353-360, Dubna.
 154. Khuukhenkhoo G., Odsuren M., Gledenov Y.M., et al. "Statistical model analysis of (n, α) cross sections for 4.0-6.5 MeV neutrons". **13th International Symposium on Origin of Matter and Evolution of Galaxies (OMEG 2015)**, EPJ Web of Conferences, 2016, vol. 109, article number 05004.
 155. Kopatch Yu.N., Bystritsky V.M., Grozdanov D.N., Zontikov A.O., Ruskov I.N., Skoy V.R., Rogov Yu.N., Sadovsky A.B., Barmakov Yu.N., Bogolyubov E.P., Ryzhkov V.I., Yurkov D.I. "ANGULAR CORRELATION OF GAMMA-RAYS IN HE INELASTIC SCATTERING OF 14.1 MEV NEUTRONS ON CARBON". **23rd International Seminar on Interaction of Neutrons with Nuclei (ISINN-23)**, May 25-29, 2015, Dubna, Russia.
 156. Kulin G.V., Frank A.I., Goryunov S.V., Geltenbort P., Jentschel M., Bushuev V.A., Lauss B., Schmidt-Wellenburg Ph., Panzarella A. and Fuchs Y. "Spectroscopy of ultracold neutrons diffraction by a moving grating". **Physical Review A**, 2016, vol. 93, p. 033606.
 157. Kulin G.V., Frank A.I., Goryunov S.V., Geltenbort P., Jentschel M., Bushuev V.A., Lauss B., Schmidt-Wellenburg Ph., Panzarella A., Fuchs Y. "Time-of-flight Fourier Spectrometry with UCN". **Journal of Physics: Conference Series**, 2016, vol. 746, p. 012021
 158. Kulin G.V., Frank A.I., Goryunov S.V., Kustov D.V., Geltenbort P., Jentschel M., Lauss B., Schmidt-Wellenburg Ph. "Time-of-flight Fourier UCN spectrometer". **Nuclear Instruments and Methods in Physics Research Section A**, 2016, vol. 819, p.67-72.
 159. Lychagin E.V., Mutyukhlyayev V.F., Muzichka A.Yu., Nekhaev G.V., Nesvizhevsky V.V., Onegin V.S., Sharapov E.I., Strelkov A.V. "UCN sources at external beams of thermal neutrons. An example of PIK reactor". **Nuclear Instruments and Methods in Physics Research Section A**, 2016, vol. 823, p. 47-55.
 160. Lychagin E.V., Mityukhlyayev V.A., Muzychka A.Yu., Nekhaev G.V., Nesvizhevsky V.V., Onegin M.S., Sharapov E.I. and Strelkov A.V. "UCN sources at external beams of thermal neutrons. Estimation of the source intensity at PIK reactor". **Neutron Spectroscopy, Nuclear Structure, Related Topics; ISINN-23** May 25-29, 2015, Dubna, **JINR Report E3-2016-12**, p.15-31.
 161. Mitsyna L.V., Popov A.B. "Remarks on the modern status of the neutron charge radius problem". In: **ISINN-23**, May 25-29, 2015, Dubna, **JINR Report E3-2016-12**, p.151-158.
 162. Morris C.L., Adamek E.R., Broussard L.J. et al. (30 authors, including Sharapov E.I.). "A new method for measuring the neutron life time using in situ neutron detector". **Report LA-UR-16-27352 (2016)**, Los Alamos National Laboratory, Los Alamos, arXiv:1610.04560.
 163. Odsuren M., Kato K., Khuukhenkhoo G., Gledenov Yu.M., Sansarbayer E. "Resonance States of the Alpha-Alpha System". In: **Proc. of the 23 International Seminar on Interaction of Neutron with Nuclei (ISINN-23)**, 2016, E3-2016-12, p. 202-207, Dubna.
 164. Oprea C., Oprea A. "Neutron Induced Capture and Fission Processes on 238U nucleus". **European Physical Journal Web of Conferences: EDP Science**, 2016, vol. 111, p. 11002.
 165. Paradelo C., Calviani M., Tarrío D. et al., "High-accuracy determination of the 238U/235U fission cross section ratio up to ≈ 1 GeV at n_TOF at CERN", **Phys. Rev. C** 91, 024602
 166. Pokotilovski Yu.N. "Effect of oxide films and structural inhomogeneities on transmission of ultracold neutrons through foils." **The European Physical Journal Applied Physics**, 2016, vol. 73 (2), p. 20302.
 167. Sukhovoij A.M., Mitsyna L.V. and Jovancevich N. "Overall Picture of the Cascade Gamma Decay of Neutron Resonances within a Modified Practical Model". **Physics of Atomic Nuclei**, 2016, vol. 79, p. 313-235. (Суховой А.М., Мицына Л.В., Иованчевич Н. "Картина процесса каскадного гамма-распада нейтронного резонанса в современной практической модели", **Ядерная Физика**, 2016, вып. 79б стр. 207-219).
 168. Vu D.C., Sukhovoij A.M., Mitsyna L.V., Zeinalov Sh.S., Jovancevic N., Knezevic D., Krmar M., Dragic A. "Representation of the Radiative Strength Functions in the Practical Model of Cascade Gamma Decay". **Preprint of JINR**, 2016, E3-2016-43, Dubna, submitted to "Physics of Atomic Nuclei".

3. PUBLICATIONS

169. Wei W., Broussard L.J., Morris C.L. et al. (32 authors, including Sharapov E.I.). "Position-sensitive detector of ultracold neutrons with imaging camera and its implications to spectroscopy". **Nuclear Instruments and Methods in Physics Research A**, 2016, vol. 830, p. 36-45.
170. Zakharov M.A., Kulin G.V., Frank A.I., Goryunov S.V., Kustov D.V. "A new approach to the experiment intended to test the weak equivalence principle for the neutron". **Journal of Physics: Conference Series**, 2016, vol. 746, p. 012050.
171. Бушуев В.А., Франк А.И. "Влияние пространственной когерентности нейтронного пучка на дифракцию на движущейся фазовой решетке". **Труды XX Международного симпозиума «Нанофизика и нанозлектроника»**, 2016, том 1, с. 356-358.
172. Бушуев В.А., Франк А.И., Кулин Г.В. "Динамическая дифракция нейтронов на движущейся решетке". **ЖЭТФ**, 2016, том 149, стр. 41-52. (Bushuev V.A., Frank A.I. and Kulin G.V. "Dynamic theory of neutron diffraction from a moving grating". **JETP**, 2016, vol. 122, p. 32-42).
173. Гундорин Н.А., Зейналов Ш.С., Копач Ю.Н., Попов А.Б., Фурман В.И. "Исследования характеристик и корреляционных эффектов в делении". **Физика элементарных частиц и атомного ядра**, 2016, том 47, вып. 4, 1248-1287.
174. Кожевников С.В., Игнатович В.К., Петренко А.В., Раду Ф. "Нейтронные резонансы в плоских волноводах". **ЖЭТФ**, 2016, том 150, № 6, стр. 1094-1101.
175. Лычагин Е.В., Козленко Д.П., Седышев П.В., Швецов В.Н. "Нейтронная физика в ОИЯИ — 60 лет Лаборатории нейтронной физики им. И.М. Франка", **УФН**, 2016, вып. 186:3, стр. 265–274.
176. Франк А.И., Бушуев В.А., Кулин В.Г. "Нестационарное преобразование энергии нейтронов при дифракции на движущейся решетке". **Труды XX Международного симпозиума «Нанофизика и нанозлектроника»**, 2016, том 1, стр.419-420.
177. Франк А.И. "Ультрахолодные нейтроны и взаимодействие волн с движущимся веществом". **ЭЧАЯ**, 2016, том 47, вып. 4, стр.1192-1227. (Frank A.I. "Ultracold Neutrons and the Interaction of Waves with Moving Matter". **Physics of Particles and Nuclei**, 2016, vol. 47, № 4, p. 647–666).
178. Ignatovich V.K. "Single Measurement Bell's Inequality with Detection Efficiencies". **Physics Journal, Изд: American Institute of Science**, 2016, vol. 2, № 1, p. 1-5.
179. Ignatovich V.K. "Singular Bound States and Cold Nuclear Fusion". **Physics Journal, Изд: American Institute of Science**, 2016, vol. 2, № 1, pp. 6-10.
180. Ignatovich V.K., Utsuro M. "Change of neutron energy at reflection from and transmission through a matter layer". **SCIREA Journal of Physics, Изд: Science Research Association a global academic organization**, 2016, vol.1, № 1, pp. 41-51.
181. Ignatovich V. "Proposal of an Experiment to Investigate Properties of the Neutron Wave-Packet". **SCIREA Journal of Physics, Изд: Science Research Association a global academic organization**, 2016, vol.1, № 1, p. 11-22.
182. Никитенко Ю.В., Игнатович В.К., Кожевников С.В., Петренко А.В. "Двухзеркальный нейтронный спин-интерферометр". **Поверхность. Рентгеновские, синхротронные и нейтронные исследования**, 2016, № 10, стр. 5-13. (Nikitenko Yu.V., Ignatovich V.K., Kozhevnikov S.V. and Petrenko A.V. "Two-Mirror Spin-Wave Neutron Interferometer". **Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques**, 2016, vol.10, №5, p. 992-1000).
183. Balalykin N.I., Huran J., Nozdryn M.A., Feshchenko A.A., Kobzev A.P., Arbet J. "Transmission photocathodes based on stainless steel mesh and quartz glass coated with N-doped ALC thin films prepared by reactive magnetron sputtering". **Journal of Physics: Conference Series**, 2016, vol. 700, p. 012050.
184. Huran J., Hrubcin L., Bohacek P., Borzakov S.B., Skuratov V.A., Kobzev A.P., Kleinova A., Sasinkova V. "The effect of Xe ion and neutron irradiation on the properties of SiC and SiC(N) films prepared by PECVD technology". **Radiation @ Application**, April 2016, vol.1, issue 1, p. 14-19.
185. Kulik M., Kolodynska D., Kobzev A.P., Komarov F.F., Hubicki Z., Pyszniak K. "Chemical composition of native oxides on noble gases implanted GaAs". **Thin Solid Films**, 2016, vol. 616, p. 55-61.
186. Allajbeu S., Qarri F., Marku E., Bektashi L., Ibro V., Frontasyeva M.V., Stafilov T., Lazo P.V.. "Contamination scale on atmospheric deposition for assessing air quality in Albania evaluated from most toxic heavy metal and moss biomonitring". **Air Quality, Atmosphere & Health**. DOI:10.1007/s11869-016-0453-9.
187. Allajbeu Sh., Yushin N.S., Qarri F., Dului O.G., Lazo P., Frontasyeva M. V.. "Atmospheric depositions of rare earth elements in Albania studied by the moss biomonitring technique, neutron activation analysis and GIS technology". **Environmental Science and Pollution Research**. No. 23, 2016, p. 14087-14101. DOI 10.1007/s11356-016-6509-4.
188. Aleksiyenak Y.V., Leonchik S.V., Ignatenko O.V., Komar V.A., Konovalova A.V., Frontasyeva M. V. "Neutron activation analysis and electron microscopy in the investigation of crystallization processes and characteristics of diamonds in the C-Mn-Ni-Fe systems". **Journal of Radioanalytical and Nuclear Chemistry**, July 2016, Vol. 309, No. 1, pp. 267-271.
189. Badawy W., Chepurchenko O.Ye., Samman H. El, Frontasyeva M.V.. "Assessment of industrial contamination of agricultural soil adjacent to Sadat city, Egypt". **Ecological Chemistry and Engineering**, S, Vol. 23, No. 2, 2016, p. 297-310. DOI: 10.1515/eces-2016-0021.

190. Culicov O.A., Dului O.G., Zinicovscaia I.. "Study of elemental grouping in moss-bags as a function of height and location of the exposure site", **Romanian Reports in Physics**, Vol. 68, 2016, p. 736–745.
191. Culicov O.A., Zinicovscaia I., Dului O.G. "Active Sphagnum girgensohnii Russow Moss Biomonitoring of an Industrial Site in Romania: Temporal Variation in the Elemental Content". **Bulletin of Environmental Contamination and Toxicology**, Vol. 96, 2016, p. 650-656.
192. Ene A., Frontasyeva M. V., Cantaragiu A., Pintilie V., Pascu E., Soimu D., Chiriac E., Coguteac V., Buliga A., Tobol M., "Nuclear and X-ray methods used in environmental and material science", **Annals of the University Dunarea de Jos of Galati, Fascicle II - Mathematics, Physics, Theoretical Mechanics**, Year VIII (XXXIX), No.1, 2016, p.86-91.
193. Fiałkiewicz-Kozieł B., Smieja-Król B., Frontasyeva M., Stowiński M., Marcisz K., Lapshina E., Gilbert D., Buttler A., Jassev V. E. J., Kaliszán K., Laggoun-Déferge F., Kołaczek P., Lamentowicz M.. "Anthropogenic- and natural sources of dust in peatland during the Anthropocene". **NATURE Scientific Reports** Nr 6, Article number: 38731 (2016);doi:10.1038/srep38731
194. Gorbunov A.V., Ermolaev B.V., Lyapunov S.M., Okina O.I., Pavlov S.S., Frontasyeva M.V.. "Estimation of mercury intake from consumption of fish and seafood in Russia". **Food and Nutrition Sciences**, No. 7, 2016, p. 516-523.
195. Gorelova S.V., Frontasyeva M.V., Volkova E.V., Vergel K.N., Babicheva D.E.. "Trace element accumulating ability of different moss species used to study atmospheric deposition of heavy metals in Central Russia: Tula Region case study". **International Journal of Biology and Biomedical Engineering**, Vol. 10, 2016, p. 273-285. ISSN: 1998-4510.
196. Gorelova S.V., Babicheva D. E., Frontasyeva M. V., Vergel K. N., Volkova E. V.. "Atmospheric Deposition of Trace Elements in Central Russia: Tula Region Case Study. Comparison of Different Moss Species for Biomonitoring". **Environmental Science**, 1, 220-229. ID: 73703-145
197. Goryainova Z., Vuković G., Aničić Urošević M., Vergel K., Ostrovnyaya T., Frontasyeva M., Zechmeister H.. "Assessment of vertical element distribution in street canyons using the moss Sphagnum girgensohnii: A case study in Belgrade and Moscow cities". **Atmospheric Pollution Research**, Volume 7, Issue 4, July 2016, Pages 690–697
198. Keränen A., Leiviskä T., Zinicovscaia I., Frontasyeva M.V., Hormi O., Tanskanen J.. "Quaternized pine sawdust in the treatment of mining wastewater". **Environmental Technology**. 2016; 37(11):1390-7. doi: 10.1080/09593330.2015.1116611.
199. Xuesong Li, Frontasyeva M.V., Hristozova G., Nekhoroshkov P. S., Zinicovscaia I., Yushin N., Vasilev A., Chepurchenko O.. "Neutron activation analysis of elemental content of edible and medicinal plant iron stick yam". **Proc. of the 23 International Seminar on Interaction of Neutron with Nuclei (ISINN-23)**, May 25-29, 2015, Dubna, Russia, 411-419.
200. Ososkov G., Frontasyeva M., Uzhinskiy A., Kutovskiy N., Rumyantsev B., Nechaevsky A., Trofimov V., Vergel K.. "Data Management of the Environmental Monitoring Network: UNECE ICP Vegetation Case". **Proceedings of XVIII International Conference «Data Analytics and Management in Data Intensive Domains» DAMDID/RCDL'2016** (October 11-14, Ershovo, Moscow, Russia). ISBN 978-5-94588-206-5, Moscow: FRC IM RAS Publ., 2016. pp. 309-314.
201. Pavlov S.S., Dmitriev A.Yu., Frontasyeva M.V.. "Automation system for neutron activation analysis at the reactor IBR-2, Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia". **Journal of Radioanalytical and Nuclear Chemistry**, May 2016, Vol. 309, No. 1, pp. 27-38. <http://link.springer.com/article/10.1007/s10967-016-4864-8>
202. Rumyantsev I.V., Dunaev A.M., Ostrovnyaya T.M., Frontasyeva M.V., Grinevich V.I.. "Evaluation of soil quality soil in the Ivanovo region". **Ecology of Urban Areas**. No. 2, 2016, p. 5-13. (In Russian). И.В. Румянцев, А.М. Дунаев, Т.М. Островная, М.В. Фронтасьева, В.И. Гриневич. Оценка качества почвенного покрова на территории Ивановской области. Проблемы региональной экологии. № 2, 2016, с. 5-13.
203. Schröder W., Nickel S., Schönrock S., et al. "Spatially valid data of atmospheric deposition of heavy metals and nitrogen derived by moss surveys for pollution risk assessments of ecosystems". **Environmental Science and Pollution Research**, 23 (11), 10457–10476 (2016); ISSN 0944-1344, DOI 10.1007/s11356-016-6577-5, 2016.
204. Zinicovscaia I., Hramco C., Dului O.G., Vergel K.N., Culicov O.A., Frontasyeva M.V., Duca G.. "Air pollution study in the Republic of Moldova using moss biomonitoring technique. **Bulletin of Environmental Contamination and Toxicology**. DOI: 10.1007/s00128-016-1989-y.
205. Zinicovscaia I., Safonov A., Ttregubova V., Ilin V., Cepoi L., Chiriac T., Rudi L., Frontasyeva M.V. . "Uptake of metals from single and multi-component systems by arthrospira (Spirulina) platensis biomass". **Ecological Chemistry and Engineering**. S, 2016, v.23, p. 401-412.
206. Zinicovscaia I., Cepoi L., Chiriac T., Rudi L., Culicov O.A., Frontasyeva M.V., Pavlov S.S., Kirkesali E.I., Gundorina S.F., Mitina T., Akshintsev A., Rodlovskaya E.. "Spirulina platensis as biosorbent of chromium and nickel from wastewaters". **Desalination and Water Treatment**, 2016, v.57, p.11103-11110. <http://DOI:10.1080/19443994.2015.1042061>
207. Zinicovscaia I., Chiriac T., Cepoi L., Rudi L., Culicov O., Frontasyeva M., Rudic V.. "Selenium intake and assessment of the biochemical changes in arthrospira (Spirulina) platensis biomass during the synthesis of selenium nanoparticles". **Canadian Journal of Microbiology**. 2016, doi: 10.1139/cjm-2016-0339

3. PUBLICATIONS

Books, Chapters in Books

208. Frontasyeva M. V., Steinnes E. and H. Harmens. Monitoring long-term and large-scale deposition of air pollutants based on moss analysis. Chapter in a book "Biomonitoring of Air Pollution Using Mosses and Lichens: Passive and Active Approach – State of the Art and Perspectives", Edts. M. Aničić Urošević, G. Vuković, M. Tomašević, Nova Science Publishers, New-York, USA, 2016.
209. Lazo P.V., Allajbeu S., Qarri F., Marku E., Bekteshi L., Ibro V., Frontasyeva M.V., Stafilov T.. Trace metals distribution on atmospheric deposition in Albania evaluated by moss biomonitoring, ICP/AES and ENAA analysis. Chapter of the Book: The Mediterranean Region, ISBN 978-953-51-5503-4, Editor Borna Fuerst-Bjeliš, University of Zagreb, Croatia. Submitted in 2016.
210. Mankovská B., Izakovičová Z., Oszlányi J., Frontasyeva M.V.. Temporal and spatial trends (1990-2010) of heavy metal accumulation in mosses in Slovakia. Chapter in a book "Biological Diversity and Conservation". Edt. Prof. Dr. Ersin YÜCEL ISSN 1308-5301 Print; ISSN 1308-8084 Online, Turkey, 2016, pp. 5.
211. Harmens H., Mills G., Hayes F., Sharps K., Frontasyeva M., et al., AIR POLLUTION AND VEGETATION - ICP VEGETATION, ANNUAL REPORT 2015/2016, H. Harmens, G. Mills, F. Hayes, K. Sharps, M. Frontasyeva, (Eds.), ICP Vegetation Programme Coordination Centre, Centre for Ecology and Hydrology, Environment Centre Wales, Bangor, Gwynedd, UK, Moss Survey Coordination Centre, Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Moscow Region, Russian Federation, September 2016; ISBN: 978-1-906698-58-4..