Ivan A Bobrikov

List of Publications by Year
in descending order

136	2,307	236925 25	276875 41
papers	citations	h-index	g-index

136	136	136	1992
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Crystal structure and magnetic properties of the BaFe12â^'Al O19 (x=0.1â€“1.2) solid solutions. Journal of Magnetism and Magnetic Materials, 2015, 393, 253-259.	2.3	287
2	Structural phase transition in CuFe2O4 spinel. Crystallography Reports, 2013, 58, 710-717.	0.6	90
3	Investigation of the crystal and magnetic structures of BaFe12 - x Al x O19 solid solutions (x = 0.1â€'1.2). Crystallography Reports, 2015, 60, 629-635.	0.6	89
4	Study of the crystalline and magnetic structures of BaFe11.4Al0.6O19 in a wide temperature range. Journal of Surface Investigation, 2015, 9, 17-23.	0.5	86
5	Phase transitions as a tool for tailoring magnetostriction in intrinsic Fe-Ga composites. Acta Materialia, 2017, 130, 229-239.	7.9	71
6	High moisture resistance of an efficient Mn4+-activated red phosphor Cs2NbOF5:Mn4+ for WLEDs. Chemical Engineering Journal, 2021, 405, 126678.	12.7	61
7	In situ neutron diffraction study of bulk phase transitions in Fe-27Ga alloys. Materials and Design, 2016, 98, 113-119.	7.0	55
8	Structural evolution in LiFePO4-based battery materials: In-situ and ex-situ time-of-flight neutron diffraction study. Journal of Power Sources, 2014, 258, 356-364.	7.8	52
9	Study of structural and electrochemical characteristics of LiNi 0.33 Mn 0.33 Co 0.33 O 2 electrode at lithium content variation. Journal of Electroanalytical Chemistry, 2018, 821, 140-151.	3.8	47
10	Correlation Fourier diffractometry: 20 Years of experience at the IBR-2 reactor. Physics of Particles and Nuclei, 2015, 46, 249-276.	0.7	42
11	Li(Ni,Co,Al)O₂ Cathode Delithiation: A Combination of Topological Analysis, Density Functional Theory, Neutron Diffraction, and Machine Learning Techniques. Journal of Physical Chemistry C, 2017, 121, 28293-28305.	3.1	41
12	Biochemical changes in cyanobacteria during the synthesis of silver nanoparticles. Canadian Journal of Microbiology, 2015, 61, 13-21.	1.7	40
13	Correlation of chemical coordination and magnetic ordering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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19	Comparative study of structural phase transitions in bulk and powdered Feâ€“27Ga alloy by real-time neutron thermodiffractometry. Journal of Applied Crystallography, 2017, 50, 198-210.	4.5	30
20	Crystal structure, phase transition, and magnetic ordering in perovskitelike<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Pb</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review B, 2008, 78, .	3.2	29
21	Enhancing lithium-ion conductivity in NASICON glass-ceramics by adding yttria. CrystEngComm, 2018, 20, 1375-1382.	2.6	29
22	Phase transition induced anelasticity in Feâ€“Ga alloys with 25 and 27%Ga. Journal of Alloys and Compounds, 2016, 675, 393-398.	5.5	27
23	Neutron diffractometer for real-time studies of transient processes at the IBR-2 pulsed reactor. Journal of Surface Investigation, 2016, 10, 467-479.	0.5	27
24	Antiphase domains or dispersed clusters? Neutron diffraction study of coherent atomic ordering in Fe3Al-type alloys. Acta Materialia, 2018, 153, 45-52.	7.9	26
25	Neutron scattering for analysis of processes in lithium-ion batteries. Russian Chemical Reviews, 2014, 83, 1120-1134.	6.5	25
26	Tb-dependent phase transitions in Fe-Ga functional alloys. Intermetallics, 2018, 93, 55-62.	3.9	25
27	Structure induced anelasticity in Fe3Me (MeÂ=ÂAl, Ga, Ge) alloys. Journal of Alloys and Compounds, 2016, 688, 310-319.	5.5	24
28	Features of crystal and magnetic structures of solid solutions BaFe12-xDxO19 (D=Al3+, In3+; x=0.1) in a wide temperature range. European Physical Journal Plus, 2016, 131, 1.	2.6	24
29	Time-Temperature-Transformation from metastable to equilibrium structure in Fe-Ga. Materials Letters, 2020, 263, 127257.	2.6	22
30	Bottle-necked ionic transport in Li 2 ZrO 3 : high temperature neutron diffraction and impedance spectroscopy. Electrochimica Acta, 2016, 209, 574-581.	5.2	21
31	A novel Mn⁴⁺-activated fluoride red phosphor Cs₃₀(Nb₂O₂F₉)₉(OH)₃Â·H₂O:Mn<sup>4+ with good waterproof stability for WLEDs. Journal of Materials Chemistry C, 2022, 10, 7049-7057.	5.5	21
32	Disordering effects in the atomic structure of fine-crystalline HTSC YBa2Cu3O y. Journal of Experimental and Theoretical Physics, 2012, 114, 1001-1011.	0.9	20
33	High-resolution neutron Fourier diffractometer at the IBR-2 pulsed reactor: A new concept. Nuclear Instruments & Methods in Physics Research B, 2018, 436, 263-271.	1.4	20
34	High-resolution neutron diffraction study of microstructural changes in nanocrystalline ball-milled niobium carbide NbC0.93. Materials Characterization, 2015, 109, 173-180.	4.4	19
35	Phase transitions in Fe-27Ga alloys: Guidance to develop functionality. Intermetallics, 2018, 100, 20-26.	3.9	19
36	In situ studies of atomic ordering in Fe-19Ga type alloys. Intermetallics, 2019, 105, 6-12.	3.9	19

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37	High damping in Fe-Ga-La alloys: Phenomenological model for magneto-mechanical hysteresis damping and experiment. Journal of Materials Science and Technology, 2021, 72, 69-80.	10.7	19
38	Neutron diffraction study of nanocrystalline NbC0.93 powders and the anisotropy of deformation distortions. JETP Letters, 2015, 100, 629-634.	1.4	18
39	Magnetostructural phase transitions in NiO and MnO: Neutron diffraction data. JETP Letters, 2016, 104, 88-93.	1.4	18
40	Anelasticity of iron-aluminide Fe3Al type single and polycrystals. Journal of Alloys and Compounds, 2018, 746, 660-669.	5.5	17
41	From metastable to stable structure: the way to construct functionality in Fe-27Ga alloy. Journal of Alloys and Compounds, 2018, 751, 364-369.	5.5	17
42	Comparative study of structure and phase transitions in Fe-(25â€“27)%Ga alloys. Journal of Alloys and Compounds, 2019, 811, 152030.	5.5	17
43	Volume effect upon martensitic transformation in Ti29.7Ni50.3Hf20 high temperature shape memory alloy. Scripta Materialia, 2020, 178, 67-70.	5.2	17
44	Concentration-dependent structural transition in the La0.70Sr0.30MnO3â^Î´ system. JETP Letters, 2006, 84, 254-257.	1.4	16
45	The first- and second-order isothermal phase transitions in Fe₃Ga-type compounds. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 1024-1033.	1.1	16
46	Stabilization of bcc-born phases in Fe-27Ga by adding Tb: Comparative in situ neutron diffraction study. Materials Letters, 2016, 181, 67-70.	2.6	15
47	Mechanical spectroscopy as an in situ tool to study first and second order transitions in metastable Fe-Ga alloys. Journal of Alloys and Compounds, 2019, 790, 1149-1156.	5.5	15
48	First- and second-order phase transitions in Fe-(17-19)at.%Ga alloys. Materials Letters, 2020, 279, 128508.	2.6	15
49	V8C7â€“Î´ superstructure in nonstoichiometric vanadium carbide powders. JETP Letters, 2015, 102, 154-160.	1.4	14
50	The role of glass crystallization processes in preparation of high Li-conductive NASICON-type ceramics. CrystEngComm, 2019, 21, 3106-3115.	2.6	14
51	Hydrogen diffusivity in the Sr-doped LaScO3 proton-conducting oxides. International Journal of Hydrogen Energy, 2020, 45, 23455-23468.	7.1	14
52	Thermal expansion of martensite in Ti29.7Ni50.3Hf20 shape memory alloy. Intermetallics, 2020, 125, 106889.	3.9	14
53	Unraveling the Synergistic Effect of Mg and Ti Codoping to Realize an Ordered Structure and Excellent Performance for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 7869-7877.	8.0	14
54	Low-temperature structural anomalies in Pr0.5Sr0.5CoO3. JETP Letters, 2011, 93, 263-268.	1.4	13

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55	Approaching better cycleability of LiCoPO4 by vanadium modification. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 213, 105-113.	3.5	13
56	Abnormal phase-separated state of Li Ni0.8Co0.15Al0.05O2 in the first charge: Effect of electrode compaction. Electrochimica Acta, 2018, 265, 726-735.	5.2	13
57	Nanocrystalline ordered vanadium carbide: Superlattice and nanostructure. Superlattices and Microstructures, 2016, 90, 148-164.	3.1	12
58	The effect of oxygen isotope substitution on the phase diagram of nearly half-doped R1â^'xSrxMnO3manganites (R = Sm, NdTb, NdEu). Journal of Physics Condensed Matter, 2005, 17, 1975-1984.	1.8	11
59	Synthesis, structure and magnetic ordering of the mullite-type Bi₂Fe_{4â^'x}Cr_xO₉solid solutions with a frustrated pentagonal Cairo lattice. Dalton Transactions, 2016, 45, 1192-1200.	3.3	11
60	Structure of the Fe-Mn-Si alloys submitted to Î³â€¯â†”â€¯Îµ thermocycling. Materials Characterization, 2018, 141, 223-228.	4.4	11
61	Neutron diffraction and MÃ¶ssbauer spectroscopy studies for Ce doped CoFe2O4 nanoparticles. Journal of Magnetism and Magnetic Materials, 2020, 503, 166624.	2.3	11
62	Effect of thermal cycling on microstructure and damping capacity of Feâ€“26Mnâ€“4Si alloy. Materials Characterization, 2020, 159, 110001.	4.4	10
63	High-Temperature Behavior, Oxygen Transport Properties, and Electrochemical Performance of Cu-Substituted Nd1.6Ca0.4NiO4+Î´ Electrode Materials. Applied Sciences (Switzerland), 2022, 12, 3747.	2.5	10
64	Structural investigation of anion-deficient manganites La0.7Sr0.3MnO3 â^' Î´. Crystallography Reports, 2007, 52, 805-810.	0.6	9
65	Neutron scattering study of structural and magnetic size effects in NiO. IOP Conference Series: Materials Science and Engineering, 2013, 49, 012021.	0.6	9
66	Coherent cluster atomic ordering in the Fe-27Al intermetallic compound. JETP Letters, 2016, 104, 539-545.	1.4	9
67	Structural investigation of chemically synthesized ferrite magnetic nanomaterials. Journal of Molecular Structure, 2018, 1160, 447-454.	3.6	9
68	Anelasticity of Phase Transitions and Magnetostriction in Fe-(27-28%)Ga Alloys. Materials Research, 2018, 21, .	1.3	9
69	Anomalous Behavior of an Î± â†' Î³ Phase Transition in Iron: Results of In Situ Neutron Diffraction Experiment. JETP Letters, 2018, 107, 558-563.	1.4	9
70	Effects of Ordering in Fe-xAl Alloys. JETP Letters, 2019, 110, 585-591.	1.4	9
71	Correlation between synthesis and physical properties of magnesium ferrite. Journal of Sol-Gel Science and Technology, 2020, 95, 223-229.	2.4	9
72	Temperature evolution of Feâ€“27Ga structure: comparison of in situ X-ray and neutron diffraction studies. Journal of Applied Crystallography, 2020, 53, 1343-1352.	4.5	9

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73	Crystal Structure and Electrochemistry of Na2-XLixFePO4F (0<=x<=1) New Cathode Materials for Na- and Li-Ion Batteries. ECS Transactions, 2014, 62, 67-78.	0.5	8
74	Neutron diffraction study of microstructural and magnetic effects in fine particle NiO powders. Physica Status Solidi (B): Basic Research, 2016, 253, 1529-1536.	1.5	8
75	Tuning the high-temperature properties of Pr₂NiO_{4+Î´}by simultaneous Pr- and Ni-cation replacement. RSC Advances, 2016, 6, 33951-33958.	3.6	8
76	Peculiarities of structure, morphology, and electrochemistry of the doped 5-V spinel cathode materials LiNi0.5-x Mn1.5-y M x+y O4 (Mâ€‰=â€‰Co, Cr, Ti; x+yâ€‰=â€‰0.05) prepared by mechanochemical way. Journal of Solid State Electrochemistry, 2016, 20, 235-246.	2.5	8
77	The role of structural features in heterogeneous catalytic oxidation of H2 on TiO2:MoO3 nanocomposites. Journal of Solid State Chemistry, 2019, 275, 181-186.	2.9	8
78	Crystal structure and phase composition evolution during heat treatment of Fe-45Ga alloy. Intermetallics, 2021, 131, 107110.	3.9	8
79	Crystal structure phase separation in anion-deficient La0.70Sr0.30MnO3 â^’ Î´ manganite system. Journal of Surface Investigation, 2007, 1, 705-710.	0.5	7
80	Effect of isotopic composition and microstructure on the crystalline and magnetic phase states in R0.5Sr0.5MnO3. Journal of Experimental and Theoretical Physics, 2008, 106, 528-541.	0.9	7
81	Cation distribution in Cu(Cr2â€“x Al x)O4 and Cu(Fe2â€“x Al x)O4 according to neutron-diffraction studies and their catalytic properties in the water-gas shift reaction. Journal of Surface Investigation, 2016, 10, 1161-1168.	0.5	7
82	Neutron diffraction analysis of structural transformations in lithium-ion batteries. Russian Journal of Electrochemistry, 2017, 53, 178-186.	0.9	7
83	The crystal structure of compositionally homogeneous mixed ceria-zirconia oxides by high resolution X-ray and neutron diffraction methods. Open Chemistry, 2017, 15, 438-445.	1.9	7
84	Influence of spinodal decomposition on structure and thermoelastic martensitic transition in MnCuAlNi alloy. Materials Letters, 2020, 275, 128069.	2.6	7
85	Study of martensitic transformation in TiNiHfZr high temperature shape memory alloy using in situ neutron diffraction. Journal of Alloys and Compounds, 2022, 899, 163322.	5.5	7
86	Magnetostructural phase separation and giant isotope effect in R0.5Sr0.5MnO3. JETP Letters, 2005, 82, 594-598.	1.4	6
87	Refinement of atomic and magnetic structures using neutron diffraction for synthesized bulk and nano-nickel zinc gallate ferrite. Physica B: Condensed Matter, 2016, 481, 118-123.	2.7	6
88	Cation distribution in CuFe 2-x Cr x Đž 4 spinels studied by neutron diffraction and its effect on catalytic properties in water gas shift reaction. Materials Chemistry and Physics, 2018, 211, 278-282.	4.0	6
89	The influence of cation ordering and oxygen nonstoichiometry on magnetic properties of Sr2FeMoO6â€“ around Curie temperature. Journal of Magnetism and Magnetic Materials, 2020, 500, 166386.	2.3	6
90	Cluster-Like Structure of Fe-Based Alloys with Enhanced Magnetostriction. Journal of Surface Investigation, 2020, 14, S11-S14.	0.5	6

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91	Electronic Structures of the Vanadium-Intercalated and Substitutionally Doped Transition-Metal Dichalcogenides Ti_xV_ySe₂. Inorganic Chemistry, 2020, 59, 8543-8551.	4.0	6
92	Fe13Ga9 intermetallic in bcc-base Feâ€“Ga alloy. Intermetallics, 2021, 131, 107059.	3.9	6
93	Dispersed clusters in (Fe,Cr)3Al alloys: Neutron time-of-flight diffraction study. Physical Review Materials, 2019, 3, .	2.4	6
94	Mathematical Methods for the Analysis of Polycrystal Phase Evolutions. EPJ Web of Conferences, 2016, 108, 02049.	0.3	5
95	Evolution of microstructure of niobium carbide NbC_{0.77} powders. Crystal Research and Technology, 2017, 52, 1700061.	1.3	5
96	Time-of-flight neutron diffraction of nanocrystalline powders of nonstoichiometric niobium carbide NbC0.77. Physics of the Solid State, 2017, 59, 607-612.	0.6	5
97	Microinhomogeneity of the Structure of Nanocrystalline Niobium and Vanadium Carbides. JETP Letters, 2018, 108, 253-259.	1.4	5
98	Structural, infrared and magnetic properties of MgAl Fe2-O4 compounds: Effect of the preparation methods and Al substitution. Solid State Sciences, 2020, 109, 106400.	3.2	5
99	Spinodal decomposition influence of austenite on martensitic transition in a Mn-13 at.%Cu alloy. Journal of Alloys and Compounds, 2021, 853, 157061.	5.5	5
100	Interrelation among superstructural ordering, oxygen nonstoichiometry and lattice strain of double perovskite Sr2FeMoO6â˜Î´ materials. Journal of Materials Science, 2021, 56, 11698-11710.	3.7	5
101	Spinodal decomposition in ternary Mn-Cu-Cr alloy and its influence on martensitic transition temperatures. Journal of Alloys and Compounds, 2021, 884, 161082.	5.5	5
102	Synthesis and structure of CeNi3D x. Inorganic Materials, 2007, 43, 704-710.	0.8	4
103	Effect of high magnetic field on the phase transition in Fe-24%Ga and Fe-27%Ga during isothermal annealing. Journal of Magnetism and Magnetic Materials, 2020, 514, 167284.	2.3	4
104	In-grain phase separation and structural ordering in Feâ€“Ga alloys seen from reciprocal space. Intermetallics, 2021, 128, 107016.	3.9	4
105	Competition of ferromagnetism and antiferromagnetism in Mn-doped orthorhombic YCrO3. Journal of Magnetism and Magnetic Materials, 2021, 535, 168022.	2.3	4
106	Structure evolution of as-cast metastable Fe-38Ga alloy towards equilibrium. Journal of Alloys and Compounds, 2021, 889, 161782.	5.5	4
107	Preparation-dependent properties of Ca(Cu,Mn)7O12 CMR materials. Solid State Communications, 2006, 139, 380-385.	1.9	3
108	Structure of thermally desorbed CeNi3-based hydrides. Inorganic Materials, 2010, 46, 836-841.	0.8	3

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109	Visualization and analysis of large neutron diffraction data arrays measured in real time. Journal of Surface Investigation, 2017, 11, 169-178.	0.5	3
110	Delithiated states of layered cathode materials: doping and dispersion interaction effects on the structure. EPJ Web of Conferences, 2018, 177, 02001.	0.3	3
111	Coherent cluster ordering in Fe-xAl and Fe-xGa alloys. Journal of Alloys and Compounds, 2021, , 162540.	5.5	3
112	Kinetics of the isothermal A2 to sigma phase transformation in Fe-Cr alloy. Journal of Alloys and Compounds, 2022, 913, 165282.	5.5	3
113	Anomalies in the structure and properties of titanium diselenide intercalated by iron. Physics of the Solid State, 2008, 50, 314-317.	0.6	2
114	Hydriding of TiMo alloys at high hydrogen pressures. Inorganic Materials, 2016, 52, 1126-1131.	0.8	2
115	To a question of temperature driven gas swelling in helium doped ferritic alloys. Journal of Nuclear Materials, 2020, 533, 152089.	2.7	2
116	Wide-aperture back-scattering detector (BSD) for the High-Resolution Fourier Diffractometer (HRFD) at the IBR-2 reactor. Journal of Neutron Research, 2021, 23, 243-250.	1.1	2
117	Wide-Range Tuning of the Mo Oxidation State in La1-xSrxFe2/3Mo1/3O3 Perovskites. European Journal of Inorganic Chemistry, 2016, 2016, 2942-2951.	2.0	1
118	Investigation of a Spin Transition in a LaCoO3 Single Crystal by the Method of X-Ray Magnetic Circular Dichroism at the Cobalt K- and L2,3-Edges. Physics of the Solid State, 2018, 60, 288-291.	0.6	1
119	Influence of substitution of Fe by Co on structural and magneto-mechanical properties of Fe-27Ga alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 236-237, 76-83.	3.5	1
120	Neutron methods for tracking lithium in operating electrodes and interfaces. Physical Sciences Reviews, 2018, 3, .	0.8	1
121	Preparation of Submicron CaCu3Ti4O12 Dispersions and Filled Epoxy Compositions Based on Them. Inorganic Materials, 2019, 55, 856-863.	0.8	1
122	Crystal Structure Features of HTSC Cuprates and Relative AF Phases. AIP Conference Proceedings, 2006, , .	0.4	0
123	Structural origin of the giant oxygen isotope effect in Re0.5Sr0.5MnO3 perovskites. Physica B: Condensed Matter, 2006, 385-386, 94-96.	2.7	0
124	Unit-cell parameters of nanoparticles embedded in porous glasses: Neutron-diffraction studies. Journal of Surface Investigation, 2015, 9, 668-672.	0.5	0
125	Neutron diffraction analysis of the microstructure of dispersion-hardening steels. Physics of Metals and Metallography, 2016, 117, 1047-1053.	1.0	0
126	Microstructure of nanocrystalline powders of nonstoichiometric vanadium VC0.875 and niobium NbC0.93 carbides. Journal of Surface Investigation, 2016, 10, 1136-1142.	0.5	0

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127	On the structure of stable CeNi3 based hydrides. Journal of Surface Investigation, 2017, 11, 190-193.	0.5	0
128	Electrochemical cells for neutron diffraction study of Li/Na-ion electrode materials. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C131-C131.	0.1	0
129	5. Characterization methods. , 2018, , 261-408.		0
130	Interaction between Intermetallic Compounds RNi3 (R = Gd, Dy) and Hydrogen at Low Temperatures. Journal of Surface Investigation, 2018, 12, 674-677.	0.5	0
131	Boron interaction with D03 phase in Fe-(27â€“29)Ga alloys. Intermetallics, 2020, 126, 106938.	3.9	0
132	Structure of Polycrystalline CeNi3-Based Intermetallic Hydrides at 293 and 5 K. Crystallography Reports, 2020, 65, 43-47.	0.6	0
133	Phase Transformations of a CeCo3-Based Intermetallic Hydride at Temperatures from 200 to 950Â°C. Inorganic Materials, 2021, 57, 775-780.	0.8	0
134	Analysis of processes in Li-ion batteries by time-of-flight neutron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C359-C359.	0.1	0
135	Electrochemical Cells for Operando Time-of-Flight Neutron Diffraction Study of Li/Na-Ion Electrode Materials. ECS Meeting Abstracts, 2017, , .	0.0	0
136	Phase transformation during Sr2CrMoO6â€“Î´ synthesis. Izvestiya Vysshikh Uchebnykh Zavedenii Materialy Elektronnoi Tekhniki = Materials of Electronics Engineering, 2020, 22, 149-157.	0.2	0