Vladimir A Khomchenko

List of Publications by Year
in descending order

97	3,084	186265 28	168389 53
papers	citations	h-index	g-index

98	98	98	2740
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of diamagnetic Ca, Sr, Pb, and Ba substitution on the crystal structure and multiferroic properties of the BiFeO3 perovskite. Journal of Applied Physics, 2008, 103, .	2.5	316
2	Crystal structure and multiferroic properties of Gd-substituted BiFeO3. Applied Physics Letters, 2008, 93, .	3.3	172
3	Synthesis and multiferroic properties of Bi0.8A0.2FeO3 (A=Ca,Sr,Pb) ceramics. Applied Physics Letters, 2007, 90, 242901.	3.3	167
4	Doping strategies for increased performance in BiFeO3. Journal of Magnetism and Magnetic Materials, 2009, 321, 1692-1698.	2.3	161
5	Effect of Gd substitution on the crystal structure and multiferroic properties of BiFeO3. Acta Materialia, 2009, 57, 5137-5145.	7.9	144
6	Isothermal structural transitions, magnetization and large piezoelectric response in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mrow xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow	3.2	135
7	Room temperature magnetoelectric coupling in a molecular ferroelectric ytterbium(III) complex. Science, 2020, 367, 671-676.	12.6	114
8	Influence of oxygen vacancies on the magnetic and electrical properties of La $mathsf{_{1-x}}$ Sr $mathsf{_{x}}$ MnO $mathsf{_{3-x/2}}$ manganites. European Physical Journal B, 2004, 42, 51-61.	1.5	101
9	Effect of Sm substitution on ferroelectric and magnetic properties of BiFeO3. Scripta Materialia, 2010, 62, 238-241.	5.2	95
10	Intrinsic nature of the magnetization enhancement in heterovalently doped Bi_{1â^’x}A_xFeO₃(A= Ca, Sr, Pb, Ba) multiferroics. Journal Physics D: Applied Physics, 2008, 41, 102003.	2.8	88
11	Rhombohedral-to-orthorhombic transition and multiferroic properties of Dy-substituted BiFeO3. Journal of Applied Physics, 2010, 108, .	2.5	86
12	Crystal structure and magnetic properties of Ba-ordered manganites Ln0.70Ba0.30MnO3â^’Î´ (Ln = Pr, Nd). Journal of Experimental and Theoretical Physics, 2006, 103, 398-410.	0.9	84
13	Weak ferromagnetism in diamagnetically-doped Bi1â^’xAxFeO3 (A=Ca, Sr, Pb, Ba) multiferroics. Materials Letters, 2008, 62, 1927-1929.	2.6	80
14	Negative magnetization in La0.75Nd0.25CrO3 perovskite. Journal of Materials Science, 2008, 43, 5662-5665.	3.7	65
15	Peculiarities of the Crystal Structure Evolution of BiFeO3â€“BaTiO3 Ceramics across Structural Phase Transitions. Nanomaterials, 2020, 10, 801.	4.1	62
16	Structural and magnetic phase transitions in Bi1â^’x Pr x FeO3 perovskites. Journal of Materials Science, 2012, 47, 1578-1581.	3.7	58
17	Microstructure evolution and magnetoresistance of the A-site ordered Ba-doped manganites. Semiconductors, 2007, 41, 507-511.	0.5	44
18	Structural, ferroelectric and magnetic properties of Bi_{0.85}Sm_{0.15}FeO₃ perovskite. Crystal Research and Technology, 2011, 46, 238-242.	1.3	43

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19	Crystal structure and magnetic properties of Bi0.8(Gd1â^'xBax)0.2FeO3(x= 0, 0.5, 1) multiferroics. Journal Physics D: Applied Physics, 2009, 42, 045418.	2.8	40
20	Spin-reorientational transitions in low-doped Nd1ÂxCaxMnO3manganites: the evidence of an inhomogeneous magnetic state. Journal of Physics Condensed Matter, 2003, 15, 8865-8880.	1.8	37
21	Antiferromagnet-ferromagnet and structural phase transitions inLa0.88MnOxmanganites. Physical Review B, 2004, 69, .	3.2	35
22	Structural stability and magnetic properties of Bi1â^'xLa(Pr)xFeO3 solid solutions. Solid State Communications, 2011, 151, 1686-1689.	1.9	33
23	Magnetostructural correlations in BiFeO₃-based multiferroics. Journal of Materials Chemistry C, 2017, 5, 3623-3629.	5.5	33
24	Intermediate structural phases in rare-earth substituted BiFeO3. Materials Research Bulletin, 2010, 45, 416-419.	5.2	32
25	Composition- and temperature-driven structural transitions in Bi_{1â^'x}Ca_xFeO₃multiferroics: a neutron diffraction study. Journal of Physics Condensed Matter, 2013, 25, 135902.	1.8	32
26	Substitution-driven structural and magnetic phase transitions in Bi0.86(La, Sm)0.14FeO3system. Journal Physics D: Applied Physics, 2011, 44, 185406.	2.8	31
27	Effect of Mn substitution on crystal structure and magnetic properties of Bi_{1â^'x}Pr_xFeO₃ multiferroics. Journal Physics D: Applied Physics, 2012, 45, 045302.	2.8	31
28	Structural phase evolution in Bi7/8Ln1/8FeO3 (Ln=Laâ€“Dy) series. Materials Letters, 2011, 65, 1970-1972.	2.6	29
29	Structural transitions and unusual magnetic behavior in Mn-doped Bi1â^'xLaxFeO3 perovskites. Journal of Applied Physics, 2012, 112, .	2.5	28
30	Mn substitution-driven structural and magnetic phase evolution in Bi1â^'xSmxFeO3 multiferroics. Journal of Applied Physics, 2012, 111, 014110.	2.5	28
31	Investigation of micro- and nanoscale barrier layer capacitance mechanisms of conductivity in CaCu₃Ti₄O₁₂via scanning probe microscopy technique. RSC Advances, 2017, 7, 40695-40704.	3.6	28
32	MÃ¶ssbauer study of the Fe-doped La0.9MnOxmanganites. Journal of Physics Condensed Matter, 2004, 16, 4335-4346.	1.8	27
33	A correlation between crystal structure and magnetic properties in co-doped BiFeO3 ceramics. Journal of Physics and Chemistry of Solids, 2019, 126, 164-169.	4.0	27
34	Effect of Gd substitution on ferroelectric and magnetic properties of Bi4Ti3O12. Materials Letters, 2010, 64, 1066-1068.	2.6	25
35	Mn substitution-modified polar phase in the Bi1â^'xNdxFeO3 multiferroics. Journal of Applied Physics, 2013, 113, 214112.	2.5	24
36	Structure and piezoelectric properties of Sm-doped BiFeO3 ceramics near the morphotropic phase boundary. Materials Research Bulletin, 2019, 112, 420-425.	5.2	22

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37	Metamagnetic behaviour in TbCo0.5Mn0.5O3.06perovskite. Journal of Physics Condensed Matter, 2006, 18, 9541-9548.	1.8	21
38	Weak ferromagnetism and nanodimensional ferroelectric domain structure stabilized in the polar phase of Bi1â^'xNdxFeO3 multiferroics via Ti doping. Journal of Applied Physics, 2014, 115, .	2.5	21
39	Crystalline and magnetic structures of La1â^'x BixMnO3+Î´ manganites. Journal of Experimental and Theoretical Physics, 2006, 103, 54-59.	0.9	20
40	Structural and magnetic phase transitions in Bi1â^'xNdxFe1â^'xMnxO3 multiferroics. Journal of Applied Physics, 2014, 115, .	2.5	20
41	Magnetic phase transitions in the lightly doped Nd1â^'xCaxMnO3â^'Î´ manganites. Journal of Magnetism and Magnetic Materials, 2005, 288, 224-235.	2.3	18
42	Coexistence of spontaneous ferroelectricity and weak ferromagnetism in Bi_{0.8}Pb_{0.2}FeO_{2.9}perovskite. Journal of Physics Condensed Matter, 2008, 20, 155207.	1.8	18
43	Strong magnetoelastic coupling in orthorhombic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Eu</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:mn> Physical Review B, 2010, 82, .	3.2	18
44	Development of a biocompatible magnetic nanofluid by incorporating SPIONs in Amazonian oils. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 172, 135-146.	3.9	18
45	Intermediate structural state in Bi1â^'x Pr x FeO3 ceramics at the rhombohedralâ€“orthorhombic phase boundary. Journal of Materials Science, 2017, 52, 9355-9362.	3.7	18
46	Magnetic properties of Nd-deficient manganites Nd0.9â^'Ca MnO. Journal of Magnetism and Magnetic Materials, 2006, 303, 111-118.	2.3	17
47	Spontaneous magnetization in the polar phase of Bi1â^'xCaxFeO3â^'2/x perovskites: The role of anion vacancies. Journal of Applied Physics, 2014, 116, 214105.	2.5	17
48	The structural origin of composition-driven magnetic transformation in BiFeO₃-based multiferroics: a neutron diffraction study. Journal of Materials Chemistry C, 2019, 7, 6085-6090.	5.5	16
49	Mn doping-induced structural and magnetic transformations in the antiferroelectric phase of the Bi1â^'xNdxFeO3 perovskites. Journal of Applied Physics, 2012, 112, 064105.	2.5	15
50	A-site ordered state in manganites with perovskite-like structureÂbased on optimally doped compounds Ln0.70Ba0.30MnO3 (LnÂ=ÂPr, Nd). Journal of Rare Earths, 2019, 37, 1242-1249.	4.8	15
51	Weak ferromagnetic polar phase in the BiFe1â^'xTixO3 multiferroics. Journal of Materials Science, 2013, 48, 3852-3856.	3.7	14
52	Mn substitution-induced revival of the ferroelectric antiferromagnetic phase in Bi1â^'x Ca x FeO3â^'x/2 multiferroics. Journal of Materials Science, 2015, 50, 1740-1745.	3.7	14
53	The influence of oxygen vacancies on the magnetic state of La0.50D0.50MnO3â^'Î³ (D=Da, Sr) manganites. Journal of Experimental and Theoretical Physics, 2003, 96, 1055-1064.	0.9	13
54	Ti doping-induced magnetic and morphological transformations in Sr- and Ca-substituted BiFeO₃. Journal of Physics Condensed Matter, 2016, 28, 166004.	1.8	13

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55	Composition-driven magnetic and structural phase transitions in Bi1â^'xPrxFe1â^'xMnxO3 multiferroics. Journal of Applied Physics, 2017, 122, 124103.	2.5	13
56	Polar-antipolar transition and weak ferromagnetism in Mn-doped Bi_{0.86}La_{0.14}FeO₃. Journal Physics D: Applied Physics, 2018, 51, 165001.	2.8	13
57	Evolution of crystal structure of Ba and Ti co-doped BiFeO3 ceramics at the morphotropic phase boundary. Journal of Alloys and Compounds, 2019, 803, 1136-1140.	5.5	12
58	Ti doping-driven magnetic and morphological changes in multiferroic ceramics of Bi_{0.9}La_{0.1}FeO₃. Journal Physics D: Applied Physics, 2015, 48, 345001.	2.8	11
59	Self-assembled diphenylalanine peptide microtubes covered by reduced graphene oxide/spiky nickel nanocomposite: An integrated nanobiomaterial for multifunctional applications. Materials and Design, 2018, 142, 149-157.	7.0	11
60	Structural, morphological and excellent gas sensing properties of La1â€"2xBaxBixFeO3 (0.00Ââ‰ÂxÂâ‰Â0.20) nanoparticles. Journal of Alloys and Compounds, 2021, 883, 160856.	5.5	11
61	Magnetic phase transitions in Nd1â^'x CaxMnO3 manganites. Journal of Experimental and Theoretical Physics, 2003, 97, 1231-1239.	0.9	10
62	Structural defects as a factor controlling the magnetic properties of pure and Ti-doped Bi_{1â^'x}Ca_xFeO_{3â^'x/2}multiferroics. Journal of Physics Condensed Matter, 2015, 27, 436002.	1.8	10
63	Effect of Nb doping on the morphology and multiferroic behavior of Bi0.9La0.1FeO3 ceramics. Materials Letters, 2016, 169, 180-184.	2.6	10
64	Magnetic phase diagram of the La0.88MnOx(2.82 ÂxÂ 2.96) system. Journal of Physics Condensed Matter, 2003, 15, 6005-6015.	1.8	9
65	Conductivity investigations of Aurivillius-type Bi2.5Gd1.5Ti3O12 ceramics. Solid State Ionics, 2011, 188, 50-52.	2.7	9
66	Impact of the pulling rate on the redox state and magnetic domains of Fe-Si-O glass ceramic processed by LFZ method. Materials Research Bulletin, 2020, 131, 110972.	5.2	8
67	Order-disorder phenomena from X-ray diffraction in FeCo alloys annealed and ground at high energy. Powder Diffraction, 2011, 26, 267-272.	0.2	7
68	Antiferromagneticâ€"weak ferromagnetic transition in lightly doped BiFeO3: role of structural defects. Journal of Materials Science, 2015, 50, 7192-7196.	3.7	7
69	A novel approach to study the conductivity behavior of CaCu3Ti4O12 using scanning probe microscopy technique. MRS Communications, 2018, 8, 932-937.	1.8	7
70	Strong impact of LiNbO3 fillers on local electromechanical and electrochemical properties of P(VDF-TrFe) polymer disclosed via scanning probe microscopy. Applied Surface Science, 2019, 470, 1093-1100.	6.1	7
71	An advanced approach to control the electro-optical properties of LT-GaAs-based terahertz photoconductive antenna. Materials Research Bulletin, 2020, 122, 110688.	5.2	6
72	Effect of combined Ca/Ti and Ca/Nb substitution on the crystal and magnetic structure of BiFeO3. Journal of Magnetism and Magnetic Materials, 2019, 491, 165561.	2.3	5

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73	Weak ferromagnetic state in the polar phase of Bi1â^'xCaxFe1â^'x/2Nbx/2O3 multiferroics. Materials Letters, 2019, 235, 46-48.	2.6	5
74	Magnetic structure and properties of Ca, Mn-doped bismuth ferrites near the polar/nonpolar phase boundary. Journal of Physics and Chemistry of Solids, 2020, 146, 109612.	4.0	5
75	Magnetic properties of BiFeO3 â€“ BaTiO3 ceramics in the morphotropic phase boundary: A role of crystal structure and structural parameters. Journal of Magnetism and Magnetic Materials, 2021, 539, 168409.	2.3	5
76	Influence of oxygen content on the magnetic properties of B-site deficient lanthanum manganites. Materials Chemistry and Physics, 2008, 111, 154-157.	4.0	4
77	Effect of Mn substitution on the crystal and magnetic structure of Bi1â^'xCaxFeO3â^'x/2 multiferroics. Materials Letters, 2020, 266, 127470.	2.6	4
78	Crystal and Magnetic Structure Transitions in BiMnO3+Î´ Ceramics Driven by Cation Vacancies and Temperature. Materials, 2021, 14, 5805.	2.9	4
79	Comparison of disorder induced by annealing and quench and by ballâ€milling in B2 FeCo. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3087-3090.	0.8	3
80	Enhancement of local piezoelectric properties of a perforated ferroelectric thin film visualized via piezoresponse force microscopy. Journal Physics D: Applied Physics, 2017, 50, 425303.	2.8	3
81	Temperature-driven structural transformations in Ca/Ti- and Ba/Ti-doped BiFeO3. Materials Letters, 2019, 254, 305-308.	2.6	3
82	Nanoengineered nickel/reduced graphene oxide composites: Control of interfacial nanostructure for tunable electrophysical properties. Applied Surface Science, 2019, 498, 143781.	6.1	3
83	Structural and magnetic phase transitions in Ca-substituted bismuth ferromanganites. Journal of Alloys and Compounds, 2022, 901, 163682.	5.5	3
84	Antiferromagnet-ferromagnet phase transition in lightly doped manganites. Low Temperature Physics, 2005, 31, 819-824.	0.6	2
85	Composition- and magnetic field-driven antiferromagnetic-weak ferromagnetic transition in Bi1â^'xCaxFe1â^'xTixO3 multiferroics. Materials Letters, 2016, 183, 69-72.	2.6	2
86	Origins of the Appearance of Ferromagnetic State and Colossal Magnetoresistance in Cobaltites. Physics of Metals and Metallography, 2019, 120, 325-332.	1.0	2
87	Spin state crossover and colossal magnetoresistance in barium-doped cobaltites. Journal of Physics and Chemistry of Solids, 2019, 129, 86-91.	4.0	2
88	Structural and magnetic phase transformations in La0.88MnO3 â^' x crystals. Crystallography Reports, 2003, 48, 390-395.	0.6	1
89	Correlation between Ionic Radius of Substituting Element and Magnetic Properties of Bi_{1-x}A_xFeO_{3-x/2} (A= Ca, Sr, Pb, Ba) Multiferroics. Solid State Phenomena, 0, 152-153, 131-134.	0.3	1
90	Paramagnetic-ferromagnetic and insulator-metal phase transitions in La0.88MnO2.95. Bulletin of the Russian Academy of Sciences: Physics, 2011, 75, 198-201.	0.6	1

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91	Increased Lowâ€Temperature Magnetization and Spinâ€Reorientational Transition in the Polar Phase of (Ca, Mn)â€Doped Bismuth Ferrites. Physica Status Solidi (B): Basic Research, 2020, 257, 2000121.	1.5	1
92	Orbital Correlations and Magnetic Phase Transitions in Lightly Doped La_{0.88}MnO_xand LaMn_{0.94}O_yManganites. Acta Physica Polonica A, 2004, 105, 27-44.	0.5	1
93	Inhomogeneous magnetic state in manganitesâ€"experimental aspects. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 878-882.	2.3	0
94	Effect of Diamagnetic A2+ Substitution on the Magnetic and Ferroelectric Properties of the Bi1â^'xAxFeO3 Multiferroics. Materials Research Society Symposia Proceedings, 2007, 1034, 182.	0.1	0
95	The Structural Origin of Composition-Driven Magnetic Transformation in BiFeO3-Based Multiferroics. Proceedings (mdpi), 2019, 26, .	0.2	0
96	Investigation of Local Conduction Mechanisms in Ca and Ti-Doped BiFeO3 Using Scanning Probe Microscopy Approach. Nanomaterials, 2020, 10, 940.	4.1	0
97	Large magnetization jumps in Ca-doped bismuth ferromanganite. Physica B: Condensed Matter, 2021, 625, 413509.	2.7	0