

# Vladimir A Khomchenko

## List of Publications by Year in descending order

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97  
papers

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citations

186209

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docs citations

98  
times ranked

2740  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural and magnetic phase transitions in Ca-substituted bismuth ferromanganites. Journal of Alloys and Compounds, 2022, 901, 163682.	2.8	3
2	Structural, morphological and excellent gas sensing properties of $\text{La}_{1-2x}\text{Ba}_x\text{Bi}_x\text{FeO}_3$ (0.00 $\leq$ x $\leq$ 0.20) nanoparticles. Journal of Alloys and Compounds, 2021, 883, 160856.	2.8	11
3	Magnetic properties of $\text{BiFeO}_3$ $\leftrightarrow$ $\text{BaTiO}_3$ ceramics in the morphotropic phase boundary: A role of crystal structure and structural parameters. Journal of Magnetism and Magnetic Materials, 2021, 539, 168409.	1.0	5
4	Crystal and Magnetic Structure Transitions in $\text{BiMnO}_3$ - $\delta$ Ceramics Driven by Cation Vacancies and Temperature. Materials, 2021, 14, 5805.	1.3	4
5	Large magnetization jumps in Ca-doped bismuth ferromanganite. Physica B: Condensed Matter, 2021, 625, 413509.	1.3	0
6	An advanced approach to control the electro-optical properties of LT-GaAs-based terahertz photoconductive antenna. Materials Research Bulletin, 2020, 122, 110688.	2.7	6
7	Investigation of Local Conduction Mechanisms in Ca and Ti-Doped $\text{BiFeO}_3$ Using Scanning Probe Microscopy Approach. Nanomaterials, 2020, 10, 940.	1.9	0
8	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.	2.7	8
9	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.	1.9	5
10	Effect of Mn substitution on the crystal and magnetic structure of $\text{Bi}_{1-x}\text{Ca}_x\text{FeO}_3$ multiferroics. Materials Letters, 2020, 266, 127470.	1.3	4
11	Room temperature magnetoelectric coupling in a molecular ferroelectric ytterbium(III) complex. Science, 2020, 367, 671-676.	6.0	114
12	Peculiarities of the Crystal Structure Evolution of $\text{BiFeO}_3$ $\leftrightarrow$ $\text{BaTiO}_3$ Ceramics across Structural Phase Transitions. Nanomaterials, 2020, 10, 801.	1.9	62
13	Increased Low-Temperature Magnetization and Spin-Reorientational Transition in the Polar Phase of (Ca, Mn)-Doped Bismuth Ferrites. Physica Status Solidi (B): Basic Research, 2020, 257, 2000121.	0.7	1
14	Structure and piezoelectric properties of Sm-doped $\text{BiFeO}_3$ ceramics near the morphotropic phase boundary. Materials Research Bulletin, 2019, 112, 420-425.	2.7	22
15	Effect of combined Ca/Ti and Ca/Nb substitution on the crystal and magnetic structure of $\text{BiFeO}_3$ . Journal of Magnetism and Magnetic Materials, 2019, 491, 165561.	1.0	5
16	Temperature-driven structural transformations in Ca/Ti- and Ba/Ti-doped $\text{BiFeO}_3$ . Materials Letters, 2019, 254, 305-308.	1.3	3
17	The Structural Origin of Composition-Driven Magnetic Transformation in $\text{BiFeO}_3$ -Based Multiferroics. Proceedings (mdpi), 2019, 26, .	0.2	0
18	Nanoengineered nickel/reduced graphene oxide composites: Control of interfacial nanostructure for tunable electrophysical properties. Applied Surface Science, 2019, 498, 143781.	3.1	3

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19	Origins of the Appearance of Ferromagnetic State and Colossal Magnetoresistance in Cobaltites. <i>Physics of Metals and Metallography</i> , 2019, 120, 325-332.	0.3	2
20	Evolution of crystal structure of Ba and Ti co-doped BiFeO <sub>3</sub> ceramics at the morphotropic phase boundary. <i>Journal of Alloys and Compounds</i> , 2019, 803, 1136-1140.	2.8	12
21	A-site ordered state in manganites with perovskite-like structure based on optimally doped compounds Ln <sub>0.70</sub> Ba <sub>0.30</sub> MnO <sub>3</sub> (Ln=APr, Nd). <i>Journal of Rare Earths</i> , 2019, 37, 1242-1249.	2.5	15
22	The structural origin of composition-driven magnetic transformation in BiFeO <sub>3</sub> -based multiferroics: a neutron diffraction study. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6085-6090.	2.7	16
23	Strong impact of LiNbO <sub>3</sub> fillers on local electromechanical and electrochemical properties of P(VDF-TrFe) polymer disclosed via scanning probe microscopy. <i>Applied Surface Science</i> , 2019, 470, 1093-1100.	3.1	7
24	A correlation between crystal structure and magnetic properties in co-doped BiFeO <sub>3</sub> ceramics. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 126, 164-169.	1.9	27
25	Spin state crossover and colossal magnetoresistance in barium-doped cobaltites. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 129, 86-91.	1.9	2
26	Weak ferromagnetic state in the polar phase of Bi <sup>x</sup> Ca <sub>1-x</sub> Fe <sup>x</sup> /2Nb <sub>x</sub> /2O <sub>3</sub> multiferroics. <i>Materials Letters</i> , 2019, 235, 46-48.	1.3	5
27	Self-assembled diphenylalanine peptide microtubes covered by reduced graphene oxide/spiky nickel nanocomposite: An integrated nanobiomaterial for multifunctional applications. <i>Materials and Design</i> , 2018, 142, 149-157.	3.3	11
28	Polar-antipolar transition and weak ferromagnetism in Mn-doped Bi <sub>0.86</sub> La <sub>0.14</sub> FeO <sub>3</sub> . <i>Journal Physics D: Applied Physics</i> , 2018, 51, 165001.	1.3	13
29	A novel approach to study the conductivity behavior of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> using scanning probe microscopy technique. <i>MRS Communications</i> , 2018, 8, 932-937.	0.8	7
30	Development of a biocompatible magnetic nanofluid by incorporating SPIONs in Amazonian oils. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 172, 135-146.	2.0	18
31	Intermediate structural state in Bi <sup>x</sup> Pr <sub>x</sub> FeO <sub>3</sub> ceramics at the rhombohedral-orthorhombic phase boundary. <i>Journal of Materials Science</i> , 2017, 52, 9355-9362.	1.7	18
32	Magnetostructural correlations in BiFeO <sub>3</sub> -based multiferroics. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3623-3629.	2.7	33
33	Composition-driven magnetic and structural phase transitions in Bi <sup>x</sup> Pr <sub>x</sub> Fe <sup>x</sup> Mn <sub>x</sub> O <sub>3</sub> multiferroics. <i>Journal of Applied Physics</i> , 2017, 122, 124103.	1.1	13
34	Enhancement of local piezoelectric properties of a perforated ferroelectric thin film visualized via piezoresponse force microscopy. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 425303.	1.3	3
35	Investigation of micro- and nanoscale barrier layer capacitance mechanisms of conductivity in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> via scanning probe microscopy technique. <i>RSC Advances</i> , 2017, 7, 40695-40704.	1.7	28
36	Ti doping-induced magnetic and morphological transformations in Sr- and Ca-substituted BiFeO <sub>3</sub> . <i>Journal of Physics Condensed Matter</i> , 2016, 28, 166004.	0.7	13

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37	Composition- and magnetic field-driven antiferromagnetic-weak ferromagnetic transition in $\text{Bi}_{1-x}\text{Ca}_x\text{Fe}_{1-x}\text{Ti}_x\text{O}_3$ multiferroics. <i>Materials Letters</i> , 2016, 183, 69-72.	1.3	2
38	Effect of Nb doping on the morphology and multiferroic behavior of $\text{Bi}_{0.9}\text{La}_{0.1}\text{FeO}_3$ ceramics. <i>Materials Letters</i> , 2016, 169, 180-184.	1.3	10
39	Structural defects as a factor controlling the magnetic properties of pure and Ti-doped $\text{Bi}_{1-x}\text{Ca}_x\text{FeO}_{3-x/2}$ multiferroics. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 436002.	0.7	10
40	Mn substitution-induced revival of the ferroelectric antiferromagnetic phase in $\text{Bi}_{1-x}\text{Ca}_x\text{FeO}_{3-x/2}$ multiferroics. <i>Journal of Materials Science</i> , 2015, 50, 1740-1745.	1.7	14
41	Antiferromagnetic-weak ferromagnetic transition in lightly doped $\text{BiFeO}_3$ : role of structural defects. <i>Journal of Materials Science</i> , 2015, 50, 7192-7196.	1.7	7
42	Ti doping-driven magnetic and morphological changes in multiferroic ceramics of $\text{Bi}_{0.9}\text{La}_{0.1}\text{FeO}_3$ . <i>Journal Physics D: Applied Physics</i> , 2015, 48, 345001.	1.3	11
43	Spontaneous magnetization in the polar phase of $\text{Bi}_{1-x}\text{Ca}_x\text{FeO}_{3-x/2}$ perovskites: The role of anion vacancies. <i>Journal of Applied Physics</i> , 2014, 116, 214105.	1.1	17
44	Weak ferromagnetism and nanodimensional ferroelectric domain structure stabilized in the polar phase of $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ multiferroics via Ti doping. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	21
45	Structural and magnetic phase transitions in $\text{Bi}_{1-x}\text{Nd}_x\text{Fe}_{1-x}\text{Mn}_x\text{O}_3$ multiferroics. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	20
46	Weak ferromagnetic polar phase in the $\text{BiFe}_{1-x}\text{Ti}_x\text{O}_3$ multiferroics. <i>Journal of Materials Science</i> , 2013, 48, 3852-3856.	1.7	14
47	Composition- and temperature-driven structural transitions in $\text{Bi}_{1-x}\text{Ca}_x\text{FeO}_{3-x/2}$ multiferroics: a neutron diffraction study. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 135902.	0.7	32
48	Mn substitution-modified polar phase in the $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ multiferroics. <i>Journal of Applied Physics</i> , 2013, 113, 214112.	1.1	24
49	Structural transitions and unusual magnetic behavior in Mn-doped $\text{Bi}_{1-x}\text{La}_x\text{FeO}_3$ perovskites. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	28
50	Mn doping-induced structural and magnetic transformations in the antiferroelectric phase of the $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ perovskites. <i>Journal of Applied Physics</i> , 2012, 112, 064105.	1.1	15
51	Mn substitution-driven structural and magnetic phase evolution in $\text{Bi}_{1-x}\text{Sm}_x\text{FeO}_3$ multiferroics. <i>Journal of Applied Physics</i> , 2012, 111, 014110.	1.1	28
52	Effect of Mn substitution on crystal structure and magnetic properties of $\text{Bi}_{1-x}\text{Pr}_x\text{FeO}_3$ multiferroics. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 045302.	1.3	31
53	Structural and magnetic phase transitions in $\text{Bi}_{1-x}\text{Pr}_x\text{FeO}_3$ perovskites. <i>Journal of Materials Science</i> , 2012, 47, 1578-1581.	1.7	58
54	Isenthalpic structural transitions, magnetization and large piezoelectric response in $\text{Bi}_{1-x}\text{Pr}_x\text{FeO}_3$ perovskites. <i>Journal of Applied Physics</i> , 2012, 112, 064105.	1.1	15

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55	Order-disorder phenomena from X-ray diffraction in FeCo alloys annealed and ground at high energy. Powder Diffraction, 2011, 26, 267-272.	0.4	7
56	Structural stability and magnetic properties of $\text{Bi}_{1-x}\text{La}(\text{Pr})_x\text{FeO}_3$ solid solutions. Solid State Communications, 2011, 151, 1686-1689.	0.9	33
57	Structural phase evolution in $\text{Bi}_{7/8}\text{Ln}_{1/8}\text{FeO}_3$ (Ln=La, Dy) series. Materials Letters, 2011, 65, 1970-1972.	1.3	29
58	Paramagnetic-ferromagnetic and insulator-metal phase transitions in $\text{La}_{0.88}\text{Mn}_{0.95}$ . Bulletin of the Russian Academy of Sciences: Physics, 2011, 75, 198-201.	0.1	1
59	Comparison of disorder induced by annealing and quench and by ball-milling in $\text{B}_2\text{FeCo}$ . Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3087-3090.	0.8	3
60	Structural, ferroelectric and magnetic properties of $\text{Bi}_{0.85}\text{Sm}_{0.15}\text{FeO}_3$ perovskite. Crystal Research and Technology, 2011, 46, 238-242.	0.6	43
61	Conductivity investigations of Aurivillius-type $\text{Bi}_{2.5}\text{Gd}_{1.5}\text{Ti}_3\text{O}_{12}$ ceramics. Solid State Ionics, 2011, 188, 50-52.	1.3	9
62	Substitution-driven structural and magnetic phase transitions in $\text{Bi}_{0.86}(\text{La}, \text{Sm})_{0.14}\text{FeO}_3$ system. Journal Physics D: Applied Physics, 2011, 44, 185406.	1.3	31
63	Intermediate structural phases in rare-earth substituted $\text{BiFeO}_3$ . Materials Research Bulletin, 2010, 45, 416-419.	2.7	32
64	Effect of Gd substitution on ferroelectric and magnetic properties of $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ . Materials Letters, 2010, 64, 1066-1068.	1.3	25
65	Effect of Sm substitution on ferroelectric and magnetic properties of $\text{BiFeO}_3$ . Scripta Materialia, 2010, 62, 238-241.	2.6	95
66	Rhombohedral-to-orthorhombic transition and multiferroic properties of Dy-substituted $\text{BiFeO}_3$ . Journal of Applied Physics, 2010, 108, .	1.1	86
67	Strong magnetoelastic coupling in orthorhombic $\text{Eu}_{1-x}\text{Bi}_x\text{FeO}_3$ . Physical Review B, 2010, 82, .	1.1	18
68	Doping strategies for increased performance in $\text{BiFeO}_3$ . Journal of Magnetism and Magnetic Materials, 2009, 321, 1692-1698.	1.0	161
69	Effect of Gd substitution on the crystal structure and multiferroic properties of $\text{BiFeO}_3$ . Acta Materialia, 2009, 57, 5137-5145.	3.8	144
70	Crystal structure and magnetic properties of $\text{Bi}_{0.8}(\text{Gd}_{1-x}\text{Ba}_x)_{0.2}\text{FeO}_3$ ( $x=0, 0.5, 1$ ) multiferroics. Journal Physics D: Applied Physics, 2009, 42, 045418.	1.3	40
71	Negative magnetization in $\text{La}_{0.75}\text{Nd}_{0.25}\text{CrO}_3$ perovskite. Journal of Materials Science, 2008, 43, 5662-5665.	1.7	65
72	Influence of oxygen content on the magnetic properties of B-site deficient lanthanum manganites. Materials Chemistry and Physics, 2008, 111, 154-157.	2.0	4

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73	Weak ferromagnetism in diamagnetically-doped $\text{Bi}_{1-x}\text{A}_x\text{FeO}_3$ (A=Ca, Sr, Pb, Ba) multiferroics. <i>Materials Letters</i> , 2008, 62, 1927-1929.	1.3	80
74	Effect of diamagnetic Ca, Sr, Pb, and Ba substitution on the crystal structure and multiferroic properties of the $\text{BiFeO}_3$ perovskite. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	316
75	Crystal structure and multiferroic properties of Gd-substituted $\text{BiFeO}_3$ . <i>Applied Physics Letters</i> , 2008, 93, .	1.5	172
76	Coexistence of spontaneous ferroelectricity and weak ferromagnetism in $\text{Bi}_{0.8}\text{Pb}_{0.2}\text{FeO}_{2.9}$ perovskite. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 155207.	0.7	18
77	Intrinsic nature of the magnetization enhancement in heterovalently doped $\text{Bi}_{1-x}\text{A}_x\text{FeO}_3$ ( $\text{A} = \text{Ca, Sr, Pb, Ba}$ ) multiferroics. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 102003.	1.3	88
78	Effect of Diamagnetic $\text{A}^{2+}$ Substitution on the Magnetic and Ferroelectric Properties of the $\text{Bi}_{1-x}\text{A}_x\text{FeO}_3$ Multiferroics. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1034, 182.	0.1	0
79	Synthesis and multiferroic properties of $\text{Bi}_{0.8}\text{A}_{0.2}\text{FeO}_3$ (A=Ca,Sr,Pb) ceramics. <i>Applied Physics Letters</i> , 2007, 90, 242901.	1.5	167
80	Microstructure evolution and magnetoresistance of the A-site ordered Ba-doped manganites. <i>Semiconductors</i> , 2007, 41, 507-511.	0.2	44
81	Magnetic properties of Nd-deficient manganites $\text{Nd}_{0.9-x}\text{Ca}_x\text{MnO}_3$ . <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 303, 111-118.	1.0	17
82	Crystalline and magnetic structures of $\text{La}_{1-x}\text{Bi}_x\text{MnO}_3$ manganites. <i>Journal of Experimental and Theoretical Physics</i> , 2006, 103, 54-59.	0.2	20
83	Crystal structure and magnetic properties of Ba-ordered manganites $\text{Ln}_{0.70}\text{Ba}_{0.30}\text{MnO}_3$ ( $\text{Ln} = \text{Pr, Nd}$ ). <i>Journal of Experimental and Theoretical Physics</i> , 2006, 103, 398-410.	0.2	84
84	Metamagnetic behaviour in $\text{TbCo}_{0.5}\text{Mn}_{0.5}\text{O}_3$ perovskite. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 9541-9548.	0.7	21
85	Magnetic phase transitions in the lightly doped $\text{Nd}_{1-x}\text{Ca}_x\text{MnO}_3$ manganites. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 288, 224-235.	1.0	18
86	Inhomogeneous magnetic state in manganites – experimental aspects. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 290-291, 878-882.	1.0	0
87	Antiferromagnet-ferromagnet phase transition in lightly doped manganites. <i>Low Temperature Physics</i> , 2005, 31, 819-824.	0.2	2
88	Antiferromagnet-ferromagnet and structural phase transitions in $\text{La}_{0.88}\text{MnO}_x$ manganites. <i>Physical Review B</i> , 2004, 69, .	1.1	35
89	Mössbauer study of the Fe-doped $\text{La}_{0.9}\text{MnO}_x$ manganites. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 4335-4346.	0.7	27
90	Influence of oxygen vacancies on the magnetic and electrical properties of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_{3-x/2}$ manganites. <i>European Physical Journal B</i> , 2004, 42, 51-61.	0.6	101

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91	Orbital Correlations and Magnetic Phase Transitions in Lightly Doped $\text{La}_{0.88}\text{MnO}_x$ and $\text{LaMn}_{0.94}\text{O}_y$ Manganites. Acta Physica Polonica A, 2004, 105, 27-44.	0.2	1
92	Structural and magnetic phase transformations in $\text{La}_{0.88}\text{MnO}_3 \hat{\sim} x$ crystals. Crystallography Reports, 2003, 48, 390-395.	0.1	1
93	The influence of oxygen vacancies on the magnetic state of $\text{La}_{0.50}\text{D}_{0.50}\text{MnO}_3 \hat{\sim} \text{f}^3$ (D=Ca, Sr) manganites. Journal of Experimental and Theoretical Physics, 2003, 96, 1055-1064.	0.2	13
94	Magnetic phase transitions in $\text{Nd}_{1-x}\text{Ca}_x\text{MnO}_3$ manganites. Journal of Experimental and Theoretical Physics, 2003, 97, 1231-1239.	0.2	10
95	Spin-reorientational transitions in low-doped $\text{Nd}_{1-x}\text{Ca}_x\text{MnO}_3$ manganites: the evidence of an inhomogeneous magnetic state. Journal of Physics Condensed Matter, 2003, 15, 8865-8880.	0.7	37
96	Magnetic phase diagram of the $\text{La}_{0.88}\text{MnO}_x$ (2.82 $\hat{\sim}$ 2.96) system. Journal of Physics Condensed Matter, 2003, 15, 6005-6015.	0.7	9
97	Correlation between Ionic Radius of Substituting Element and Magnetic Properties of $\text{Bi}_{1-x}\text{A}_x\text{FeO}_{3-x/2}$ (A= Ca, Sr, Pb, Ba) Multiferroics. Solid State Phenomena, 0, 152-153, 131-134.	0.3	1