

Vassil Skumryev

List of Publications by Year in descending order

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papers

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126708

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Infrared phonon spectroscopy on the Cairo pentagonal antiferromagnet Bi_2O_9 : A study through the pressure-induced structural transition. <i>Physical Review B</i> , 2021, 103, .	1.1	2
2	Raman spectroscopy of alpha-FeOOH (goethite) near antiferromagnetic to paramagnetic phase transition. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	15
3	Dimer Physics in the Frustrated Cairo Pentagonal Antiferromagnet Bi_2O_9 . <i>Physical Review Letters</i> , 2020, 124, 127202.	1.92	2
4	Proof of the elusive high-temperature incommensurate phase in CuO by spherical neutron polarimetry. <i>Science Advances</i> , 2020, 6, eaay7661.	4.7	6
5	Exchange bias and major coercivity enhancement in strongly-coupled CuO/Co films. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 449, 5-9.	1.0	4
6	Unveiling the Mechanisms Governing the Exchange Coupling and Coercivity Modifications in Annealed or Ion-Irradiated Mn_3Ir . <i>Physical Review Applied</i> , 2018, 10, .	1.5	3
7	Single-crystal neutron diffraction study of hexagonal multiferroic YbMnO_3 under a magnetic field. <i>Physical Review B</i> , 2018, 98, .	1.1	1
8	Magnetic field induced phase transitions and phase diagrams of multiferroic Mn_2O_7 with cycloidal spin structure. <i>Physical Review B</i> , 2017, 96, .	1.1	1
9	Ensemble averaged structure-function relationship for nanocrystals: effective superparamagnetic Fe clusters with catalytically active Pt skin. <i>Nanoscale</i> , 2017, 9, 15505-15514.	2.8	14
10	Magnetic field-temperature phase diagrams of multiferroic $\text{Ni}_2\text{V}_2\text{O}_8$. <i>Physical Review B</i> , 2016, 94, .	1.1	4
11	Monolithic integration of room-temperature multifunctional BaTiO ₃ -CoFe ₂ O ₄ epitaxial heterostructures on Si(001). <i>Scientific Reports</i> , 2016, 6, 31870.	1.6	19
12	Magnetoelectric effect and phase transitions in CuO in external magnetic fields. <i>Nature Communications</i> , 2016, 7, 10295.	5.8	47
13	Comparative study of the field-induced and spontaneous AF ² multiferroic phases in MnWO_4 and $\text{Mn}_{0.90}\text{Co}_{0.10}\text{WO}_4$ within the magnetic symmetry framework. <i>Journal of Applied Crystallography</i> , 2016, 49, 520-527.	1.9	0
14	Criteria for saturated magnetization loop. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 402, 76-82.	1.0	88
15	High Temperature Magnetic Stabilization of Cobalt Nanoparticles by an Antiferromagnetic Proximity Effect. <i>Physical Review Letters</i> , 2015, 115, 057201.	2.9	61
16	Polar domain walls trigger magnetoelectric coupling. <i>Scientific Reports</i> , 2015, 5, 13784.	1.6	27
17	Neutron diffraction study of the $(\text{BiFeO}_3)_{1-x}(\text{PbTiO}_3)_x$ solid solution: nanostructured multiferroic system. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 046004.	0.7	2
18	Comment on BiFeO_3 Superspin Glass Mediated Giant Spontaneous Exchange Bias in a Nanocomposite of BiFeO_3 and PbTiO_3 . <i>Physical Review Letters</i> , 2015, 114, 099703.	2.9	5

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19	Direct observation of noncollinear order of Co and Mn moments in multiferroic $MnWO_4$. Physical Review B, 2014, 90, .	1.1	8
20	Functional spinel oxide heterostructures on silicon. CrystEngComm, 2014, 16, 10741-10745.	1.3	12
21	Epitaxial ferromagnetic oxide thin films on silicon with atomically sharp interfaces. Applied Physics Letters, 2014, 105, .	1.5	5
22	X phase of $MnWO_4$. Physical Review B, 2014, 90, .	1.1	15
23	Phase coexistence and magnetically tuneable polarization in cycloidal multiferroics. Physical Review B, 2013, 88, .	1.1	9
24	Phase coexistence and magnetically tuneable polarization in cycloidal multiferroics. Physical Review B, 2013, 88, .	1.1	14
25	Incommensurate magnetic structures of multiferroic $MnWO_4$ studied within the superspace formalism. Physical Review B, 2013, 87, .	1.1	34
26	Synthesis, structure and in vitro cytotoxic studies of novel paramagnetic palladium(III) complexes with hematoporphyrin IX. Journal of Inorganic Biochemistry, 2013, 124, 54-62.	1.5	11
27	Conical antiferromagnetic order in the ferroelectric phase of $MnWO_4$. Physical Review B, 2013, 87, .	1.1	8
28	Magnetic behavior of La_2CoMnO_6 crystal doped with Pb and Pt. Materials Research Bulletin, 2012, 47, 4001-4005.	1.1	20
29	Neutron diffraction, magnetic, and magnetoelectric studies of phase transitions in multiferroic $MnCoWO_4$. Physical Review B, 2012, 85, 041102.	2.7	7
30	Domain matching epitaxy of ferrimagnetic $CoFe_2O_4$ thin films on $Sc_2O_3/Si(111)$. Applied Physics Letters, 2011, 99, .	1.1	20
31	Domain matching epitaxy of ferrimagnetic $CoFe_2O_4$ thin films on $Sc_2O_3/Si(111)$. Applied Physics Letters, 2011, 99, .	1.5	25
32	Ferroelectricity and strain effects in orthorhombic $YMnO_3$ thin films. Phase Transitions, 2011, 84, 555-568.	0.6	16
33	Calibration of ac and dc magnetometers with a Dy_2O_3 standard. Review of Scientific Instruments, 2011, 82, 045112.	0.6	21
34	$CoFe_2O_4$ /buffer layer ultrathin heterostructures on $Si(001)$. Journal of Applied Physics, 2011, 110, .	1.1	16
35	Flat epitaxial ferromagnetic $CoFe_2O_4$ films on buffered $Si(001)$. Thin Solid Films, 2011, 519, 5726-5729.	0.8	15
36	Magnetization Reversal by Electric-Field Decoupling of Magnetic and Ferroelectric Domain Walls in Multiferroic-Based Heterostructures. Physical Review Letters, 2011, 106, 057206.	2.9	121

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37	elastastic coupling in $\text{La}_{2-x}\text{Sr}_x\text{MnO}_3$ thin films. Physical Review B, 2010, 81, .	1.1	17
38	Growth and characterization of $\text{Pb}_{0.3}\text{Ni}_{1.5}\text{Mn}_{5.5}\text{O}_{15}$ single crystal. Journal of Physics Condensed Matter, 2011, 23, 156001.	0.7	3
39	Phonon and magnon scattering of antiferromagnetic BiMnO_3 . Physical Review B, 2010, 81, .	1.1	107
40	Emergence of ferromagnetism in antiferromagnetic TbMnO_3 by epitaxial strain. Applied Physics Letters, 2010, 96, .	1.5	53
41	Epitaxial stabilization of $\mu\text{-Fe}_2\text{O}_3$ (001) thin films on SrTiO_3 (111). Applied Physics Letters, 2010, 96, .	1.5	79
42	Strain-driven noncollinear magnetic ordering in orthorhombic epitaxial YMnO_3 thin films. Journal of Applied Physics, 2010, 108, .	1.1	25
43	Why the iron magnetization in $\text{Gd}_2\text{Fe}_{14}\text{B}$ and the spontaneous magnetization of $\text{Y}_2\text{Fe}_{14}\text{B}$ depend on temperature differently. Journal of Applied Physics, 2010, 107, .	1.1	19
44	Dipolar Driven Spontaneous Self Assembly of Superparamagnetic Co Nanoparticles into Micrometric Rice-Grain like Structures. Langmuir, 2010, 26, 109-116.	1.6	25
45	Calibration of low-temperature ac susceptometers with a copper cylinder standard. Review of Scientific Instruments, 2010, 81, 025104.	0.6	22
46	Strain tuned magnetoelectric coupling in orthorhombic YMnO_3 thin films. Applied Physics Letters, 2009, 95, .	1.5	26
47	Influence of substrate temperature in $\text{BiFeO}_3/\text{CoFe}_2\text{O}_4$ nanocomposites deposited on SrTiO_3 (001). Journal of Magnetism and Magnetic Materials, 2009, 321, 1790-1794.	1.0	14
48	Ferromagnetism in epitaxial orthorhombic YMnO_3 thin films. Journal of Magnetism and Magnetic Materials, 2009, 321, 1719-1722.	1.0	38
49	Anisotropic paramagnetic response of hexagonal MnO . Physical Review B, 2009, 79, .	1.1	22
50	Discrimination between coupling and anisotropy fields in exchange-biased bilayers. Journal of Applied Physics, 2009, 105, 053903.	1.1	12
51	Magnetic Frustration in an Iron-Based Cairo Pentagonal Lattice. Physical Review Letters, 2009, 103, 267204.	2.9	121
52	The magnetization of epitaxial nanometric CoFe_2O_4 (001) layers. Journal of Applied Physics, 2009, 106, .	1.1	72
53	Magnetic anisotropy of multiferroic HoMn_2O_5 single crystal. Solid State Communications, 2008, 147, 212-216.	0.9	7
54	Crystal texture selection in epitaxies of orthorhombic antiferromagnetic YMnO_3 films. Thin Solid Films, 2008, 516, 4899-4907.	0.8	31

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55	Synthesis, structure, and magnetic studies on self-assembled BiFeO ₃ /CoFe ₂ O ₄ nanocomposite thin films. Journal of Applied Physics, 2008, 103, 07E301.	1.1	41
56	Impact of magnetization easy-axis distributions on the ferromagnet-antiferromagnet exchange-coupling estimation. Physical Review B, 2008, 77, . Comment on "Effect of Exchange Bias Dependence on Interface Spin Alignment in a Ni/Fe System". Physical Review Letters, 2008, 100, 039701.	1.1	10
57	Physical Review Letters, 2008, 100, 039701.	1.1	16
58	Magnetic response of YbMnO ₃ single crystal. Journal of Applied Physics, 2008, 103, .	1.1	16
59	Dielectric anomaly and magnetic response of epitaxial orthorhombic YMnO ₃ thin films. Journal of Materials Research, 2007, 22, 2096-2101.	1.2	25
60	Electric field effects on magnetotransport properties of multiferroic Py/YMnO ₃ /Pt heterostructures. Philosophical Magazine Letters, 2007, 87, 183-191.	0.5	7
61	Synthesis, Structural Characterization, and Cytotoxic Activity of Novel Paramagnetic Platinum Hematoporphyrin IX Complexes: Potent Antitumor Agents. Metal-Based Drugs, 2007, 2007, 1-13.	3.8	11
62	Epitaxial growth of biferric YMnO ₃ (0001) on platinum electrodes. Journal of Crystal Growth, 2007, 299, 288-294.	0.7	16
63	Copper(II) complexes of the antihypertensive drug nadolol. Open Chemistry, 2007, 5, 118-131.	1.0	1
64	Sputtering growth and characterization of CoFe ₂ O ₄ /BaTiO ₃ nanostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 144, 127-131.	1.7	23
65	Shell-Driven Magnetic Stability in Core-Shell Nanoparticles. Physical Review Letters, 2006, 97, 157203.	2.9	195
66	Electric-Field Control of Exchange Bias in Multiferroic Epitaxial Heterostructures. Physical Review Letters, 2006, 97, 227201.	2.9	295
67	Iron filled single-wall carbon nanotubes – A novel ferromagnetic medium. Chemical Physics Letters, 2006, 421, 129-133.	1.2	130
68	High- and Low-Temperature Crystal and Magnetic Structures of $\mu\text{-Fe}_2\text{O}_3$ and Their Correlation to Its Magnetic Properties. Chemistry of Materials, 2006, 18, 3889-3897.	3.2	150
69	Direct Synthesis of Isolated L10 FePt Nanoparticles in a Robust TiO ₂ Matrix via a Combined Sol-Gel/Pyrolysis Route. Advanced Materials, 2006, 18, 466-470.	11.1	33
70	Exchange biasing and electric polarization with YMnO ₃ . Applied Physics Letters, 2006, 89, 032510.	1.5	37
71	Exchange bias in nanostructures. Physics Reports, 2005, 422, 65-117.	10.3	1,722
72	Copper(II) complexes with 4-amino- β -(t-butylaminomethyl)-3,5-dichlorobenzyl alcohol hydrochloride (Clenbuterol). Crystal structures of the binuclear and mononuclear Cu(II) complexes with Clenbuterol. Polyhedron, 2005, 24, 1983-1990.	1.0	6

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73	Exchange coupling mechanism for magnetization reversal and thermal stability of Co nanoparticles embedded in a CoO matrix. Journal of Magnetism and Magnetic Materials, 2005, 294, 111-116.	1.0	27
74	Effect of post deposition annealing on the hysteresis loops of sputtered NdFeB films. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E877-E879.	1.0	8
75	Thickness dependence of coercivity in FePt/C multilayers. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1625-1627.	1.0	6
76	Microstructural characterization of L10 FePt/MgO nanoparticles with perpendicular anisotropy. Applied Physics Letters, 2004, 85, 5343-5345.	1.5	23
77	Synthesis and Magnetic Properties of $(\text{Ln}, \text{Ln}^{\text{II}})_3(\text{Fe}, \text{Ti})_{29}$ (Ln: Pr, Nd and Ln^{II} : Sm, Er) Intermetallic Compounds.. ChemInform, 2003, 34, no.	0.1	0
78	Beating the superparamagnetic limit with exchange bias. Nature, 2003, 423, 850-853.	13.7	1,468
79	Magnetic properties of gadolinium and terbium nanoparticles produced via multilayer precursors. Physical Review B, 2003, 67, .	1.1	21
80	Synthesis and magnetic properties of $(\text{R}, \text{R}^{\text{II}})_3(\text{Fe}, \text{Ti})_{29}$ (R=Pr, Nd and R^{II} =Sm, Er) intermetallic compounds. Journal of Alloys and Compounds, 2003, 352, 73-78.	2.8	8
81	Fabrication of ordered FePt nanoparticles with a cluster gun. Journal of Applied Physics, 2003, 93, 7190-7192.	1.1	42
82	High anisotropy Sm^{II} -Co nanoparticles: Preparation by cluster gun technique and their magnetic properties. Journal of Applied Physics, 2003, 93, 7592-7594.	1.1	51
83	Thickness Effect on the Formation of FePt Nanoparticles in FePt/C Multilayers. Microscopy and Microanalysis, 2003, 9, 514-515.	0.2	0
84	Application of Energy-Filtered Imaging and HREM in the Study of Terbium Nanoparticles. Microscopy and Microanalysis, 2002, 8, 1360-1361.	0.2	1
85	Improving the energy product of hard magnetic materials. Physical Review B, 2002, 65, .	1.1	112
86	Magnetic, structural and microstructural properties of FePt/M (M=C,BN) granular films. IEEE Transactions on Magnetics, 2001, 37, 1292-1294.	1.2	111
87	High field magnetization study and analysis of magnetic interactions in $\text{Dy}_2\text{Fe}_{17-x}\text{Ga}_x$ ($x=5-8$) compounds. Journal of Magnetism and Magnetic Materials, 2001, 231, 157-161.	1.0	2
88	Paramagnetic behavior and correlation between high- and low-temperature structural and magnetic transitions in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ ($x=1/4, 1/8$) single-crystal perovskites. Physical Review B, 2001, 64, .	1.1	12
89	Alternating current susceptibility study of the low doped regime of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ perovskites. Journal of Applied Physics, 2001, 89, 6633-6635.	1.1	4
90	Alternating current susceptibility of a gadolinium crystal. Journal of Applied Physics, 2000, 87, 7028-7030.	1.1	14

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91	Anomalous anisotropic ac susceptibility response of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ ($x=1/8$) crystals: Relevance to phase separation. <i>Physical Review B</i> , 2000, 62, 3879-3882.	1.1	20
92	Crystal structure, electric and magnetic properties, and Raman spectroscopy of Gd_3RuO_7 . <i>Physical Review B</i> , 2000, 62, 12235-12240.	1.1	40
93	Anisotropy constants and crystal-field parameters of $\text{Sm}_2\text{Fe}_{17-x}\text{Ga}_x$. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 7339-7345.	0.7	1
94	Is gadolinium really ferromagnetic?. <i>Nature</i> , 1999, 401, 35-36.	13.7	64
95	AC susceptibility of a magnetite crystal. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 196-197, 515-517.	1.0	49
96	High magnetic field studies of 3d and 4f magnetism in $(\text{R}_{0.7}\text{A}_{0.3})\text{MnO}_3$: $\text{R}=\text{La}^{3+}, \text{Pr}^{3+}, \text{Nd}^{3+}$, $\text{A}=\text{Ca}^{2+}, \text{Sr}^{2+}, \text{Ba}^{2+}, \text{Pb}^{2+}$. <i>Journal of Applied Physics</i> , 1999, 85, 5384-5386.	1.1	34
97	Field-induced transition in the paramagnetic state of $(\text{Sm}_{0.65}\text{Sr}_{0.35})\text{MnO}_3$ associated with magnetic clusters. <i>Physical Review B</i> , 1999, 60, 12847-12851.	1.1	81
98	Weak ferromagnetism in. <i>European Physical Journal B</i> , 1999, 11, 401.	0.6	64
99	Influence of Ga on the Fe anisotropy in. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 4035-4044.	0.7	6
100	Alternating current susceptibility study of $\text{Dy}_2\text{Fe}_{17-x}\text{Ga}_x$ compounds. <i>Journal of Applied Physics</i> , 1998, 83, 7145-7147.	1.1	2
101	Magnetic moment and hyperfine field on Fe sites in RFe_6Sn_6 compounds. <i>Journal of Applied Physics</i> , 1998, 83, 6983-6985.	1.1	7
102	Domain-wall dynamics in aligned bound $\text{Sm}_2\text{Fe}_{17}$. <i>Physical Review B</i> , 1996, 53, 15014-15022.	1.1	35

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109	Correlation between the structure and the magnetic properties of Gd ₄ Me ₃ metallic glasses (Me = Al,) Tj ETQq1 1 0.784314 rgBT /Overld		
110	New high-T _c 2-2-3 type superconductor Y ₂ Ba _{1.5} Ca _{0.5} Cu ₃ O _{8+δ} . Solid State Communications, 1990, 73, 511-513.	0.9	3
111	The synthesis of superconducting bismuth compounds via oxalate coprecipitation. Physica C: Superconductivity and Its Applications, 1989, 157, 108-114.	0.6	37
112	Tl _{0.75} Pb _{0.20} Sb _{0.05} Ca ₂ Ba ₃ Cu ₄ O _y high T _c superconductor. Physica C: Superconductivity and Its Applications, 1989, 162-164, 995-996.	0.6	0
113	Magnetic properties of YBa _{1.5} Ca _{0.5} Cu ₃ O _{7+δ} superconductor. Solid State Communications, 1989, 72, 1203-1205.	0.9	0
114	Short-range order in RE ₄ Al ₃ metallic glasses (RE = Pr, Gd, Tb, Dy). Journal of Non-Crystalline Solids, 1989, 110, 184-189.	1.5	12
115	Radial distribution functions for RE ₄ Al ₃ metallic glasses (RE = Pr, Gd, Tb, Dy). Journal of Non-Crystalline Solids, 1989, 108, 75-79.	1.5	8
116	Magnetic properties of amorphous Gd ₄ Fe ₃ and Y ₄ Fe ₃ alloys. Materials Science and Engineering, 1988, 99, 113-117.	0.1	5
117	Physical properties of Bi ₁ Ca ₁ Sr ₁ Cu ₂ O _x superconductor obtained by rapid quenching from the melt. Physica C: Superconductivity and Its Applications, 1988, 152, 315-320.	0.6	26
118	Low-field ac susceptibility and microwave absorption in YBaCuO and BiCaSrCuO superconductors. Physica C: Superconductivity and Its Applications, 1988, 156, 73-78.	0.6	15
119	Magnetic Properties of Amorphous Gd ₄ Fe ₃ and Y ₄ Fe ₃ Alloys. , 1988, , 113-117.		0
120	AMORPHOUS Gd ₅₇ Al ₄₃ - A NEW "FERROGLASS" ALLOY. Journal De Physique Colloque, 1988, 49, C8-1363-C8-1364.	0.2	1
121	MAGNETIC PROPERTIES OF Y ₁ Ba ₂ Cu ₃ O _x SUPERCONDUCTOR OBTAINED BY RAPID QUENCHING FROM THE MELT. Journal De Physique Colloque, 1988, 49, C8-2183-C8-2184.	0.2	0
122	Structural investigations of rapidly quenched Gd ₄ Co ₃ and Gd ₄ Fe ₃ alloys. Journal of Non-Crystalline Solids, 1987, 94, 195-202.	1.5	3
123	Magnetic properties of As-spun MmxFe _{92-8x} ribbons. Journal of Magnetism and Magnetic Materials, 1987, 71, L7-L9.	1.0	7
124	Magnetic properties of bulk amorphous Ho ₄ Fe ₃ . IEEE Transactions on Magnetics, 1986, 22, 560-562.	1.2	6
125	Magnetic properties of bulk amorphous alloys Gd ₄ Co ₃ , Er ₄ Co ₃ , and Sm ₄ Co ₃ . Physica Status Solidi A, 1983, 75, 401-404.	1.7	19
126	Magnetic properties of bulk amorphous R ₅₇ T ₄₃ alloys (R = Dy, Er; T = Co, Fe). Journal of Magnetism and Magnetic Materials, 1983, 31-34, 1499-1500.	1.0	11

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127	Magnetic properties of bulk amorphous alloy Dy ₄ Co ₃ . Journal of Non-Crystalline Solids, 1983, 55, 159-164.	1.5	6
128	Effect of post deposition annealing on the hysteresis loops of sputtered NdFeB film. , 0, , .		0