Ivan K Schuller

List of Publications by Citations

219 papers	13,584 citations	48 h-index	114 g-index
233 ext. papers	14,761 ext. citations	5.2 avg, IF	6.38 L-index

#	Paper	IF	Citations
219	Exchange bias. *Journal of Magnetism and Magnetic Materials*, **1999**, 192, 203-232	2.8	3904
218	Ordered magnetic nanostructures: fabrication and properties. *Journal of Magnetism and Magnetic Materials*, **2003**, 256, 449-501	2.8	801
217	Structural refinement of superlattices from x-ray diffraction. *Physical Review B*, **1992**, 45, 9292-9310	3.3	616
216	New Class of Layered Materials. *Physical Review Letters*, **1980**, 44, 1597-1600	7.4	509
215	Interface-Induced Phenomena in Magnetism. *Reviews of Modern Physics*, **2017**, 89,	40.5	475
214	Positive exchange bias in FeF2-Fe bilayers. *Physical Review Letters*, **1996**, 76, 4624-4627	7.4	448
213	Flux Pinning in a Superconductor by an Array of Submicrometer Magnetic Dots. *Physical Review Letters*, **1997**, 79, 1929-1932	7.4	447
212	Surface, interface, and thin-film magnetism. *Journal of Materials Research*, **1990**, 5, 1299-1340	2.5	431
211	Artificially Induced Reconfiguration of the Vortex Lattice by Arrays of Magnetic Dots. *Physical Review Letters*, **1999**, 83, 1022-1025	7.4	188
210	Role of thermal heating on the voltage induced insulator-metal transition in VO2. *Physical Review Letters*, **2013**, 110, 056601	7.4	178
209	Perpendicular coupling at Fe□eF2 interfaces. *Applied Physics Letters*, **1998**, 72, 617-619	3.4	142
208	Dimensional crossover in superlattice superconductors. *Physical Review B*, **1984**, 29, 4915-4920	3.3	138
207	Role of interfacial structure on exchange-biased FeF2□e. *Physical Review B*, **1999**, 59, 6984-6993	3.3	137
206	Large exchange bias and its connection to interface structure in FeF2□e bilayers. *Applied Physics Letters*, **1996**, 68, 3186-3188	3.4	133
205	Tailoring exchange bias with magnetic nanostructures. *Physical Review B*, **2001**, 63,	3.3	127
204	Nanotextured phase coexistence in the correlated insulator V2O3. *Nature Physics*, **2017**, 13, 80-86	16.2	123
203	Photoinduced enhancement of superconductivity. *Applied Physics Letters*, **1992**, 60, 2159-2161	3.4	119

202	Two-stage magnetization reversal in exchange biased bilayers. *Physical Review Letters*, **2001**, 86, 4394-7	7.4	115
201	Magnetic superlattices and multilayers. *Journal of Magnetism and Magnetic Materials*, **1999**, 200, 571-582	2.8	114
200	Magnetic fingerprints of sub-100nm Fe dots. *Physical Review B*, **2007**, 75,	3.3	112
199	Multiple avalanches across the metal-insulator transition of vanadium oxide nanoscaled junctions. *Physical Review Letters*, **2008**, 101, 026404	7.4	105
198	Tuning exchange bias. *Applied Physics Letters*, **1999**, 75, 2304-2306	3.4	104
197	Fabrication and thermal stability of arrays of Fe nanodots. *Applied Physics Letters*, **2002**, 81, 4434-4436	3.4	103
196	Thickness-dependent coercive mechanisms in exchange-biased bilayers. *Physical Review B*, **2002**, 65,	3.3	100
195	Pinned magnetization in the antiferromagnet and ferromagnet of an exchange bias system. *Physical Review B*, **2007**, 75,	3.3	96
194	Challenges in materials and devices for resistive-switching-based neuromorphic computing. *Journal of Applied Physics*, **2018**, 124, 211101	2.5	92
193	Ultrathin organic transistors for chemical sensing. *Applied Physics Letters*, **2007**, 90, 263506	3.4	89
192	Persistent and transient photoconductivity in oxygen-deficient La2/3Sr1/3MnO3 thin films. *Physical Review B*, **2001**, 63,	3.3	84
191	Effect of anisotropy on the critical antiferromagnet thickness in exchange-biased bilayers. *Physical Review B*, **2002**, 66,	3.3	84
190	Increased exchange anisotropy due to disorder at permalloy/CoO interfaces. *Journal of Applied Physics*, **1995**, 78, 1887-1891	2.5	83
189	Subthreshold firing in Mott nanodevices. *Nature*, **2019**, 569, 388-392	50.4	75
188	First-order reversal curve measurements of the metal-insulator transition in VO2: Signatures of persistent metallic domains. *Physical Review B*, **2009**, 79,	3.3	69
187	Fabrication of submicrometric magnetic structures by electron-beam lithography. *Journal of Applied Physics*, **1998**, 84, 411-415	2.5	67
186	Antiferromagnetic spin flop and exchange bias. *Physical Review B*, **2000**, 61, R6455-R6458	3.3	66
185	Relation between exchange anisotropy and magnetization reversal asymmetry in Fe/MnF2 bilayers. *Physical Review B*, **2002**, 65,	3.3	65

184	High Tc thin films with roughness smaller than one unit cell. *Applied Physics Letters*, **1992**, 60, 120-122	3.4	63
183	Vortex state and effect of anisotropy in sub-100-nm magnetic nanodots. *Journal of Applied Physics*, **2006**, 100, 104319	2.5	59
182	Temperature induced single domain□vortex state transition in sub-100nm Fe nanodots. *Applied Physics Letters*, **2007**, 91, 202501	3.4	59
181	Influence of in-plane crystalline quality of an antiferromagnet on perpendicular exchange coupling and exchange bias. *Physical Review B*, **2002**, 65,	3.3	57
180	Coercivity enhancement above the Nél temperature of an antiferromagnet/ferromagnet bilayer. *Journal of Applied Physics*, **2002**, 92, 1483-1488	2.5	57
179	Exchange-bias phenomenon: the role of the ferromagnetic spin structure. *Physical Review Letters*, **2015**, 114, 097202	7.4	54
178	Quantitative structural analysis of organic thin films: An x-ray diffraction study. *Physical Review B*, **2005**, 72,	3.3	53
177	Tunneling criteria for magnetic-insulator-magnetic structures. *Applied Physics Letters*, **2001**, 79, 3104-3106	3.4	53
176	Directional vortex motion guided by artificially induced mesoscopic potentials. *Physical Review B*, **2003**, 68,	3.3	52
175	Pinholes may mimic tunneling. *Journal of Applied Physics*, **2001**, 89, 2786-2790	2.5	52
174	Bidomain state in exchange biased FeF2□Ni. *Applied Physics Letters*, **2005**, 87, 222509	3.4	51
173	Switchable Plasmonic□Dielectric Resonators with Metal□Insulator Transitions. *ACS Photonics*, **2018**, 5, 371-377	6.3	50
172	Spin-dependent Seebeck effect in non-local spin valve devices. *Applied Physics Letters*, **2012**, 100, 212401	3.4	47
171	Surface enhanced spin-flip scattering in lateral spin valves. *Applied Physics Letters*, **2010**, 96, 022513	3.4	47
170	Using magnetoresistance to probe reversal asymmetry in exchange biased bilayers. *Journal of Applied Physics*, **2000**, 88, 344-347	2.5	47
169	Effect of disorder on the metal-insulator transition of vanadium oxides: Local versus global effects. *Physical Review B*, **2015**, 91,	3.3	44
168	Angular dependence of vortex-annihilation fields in asymmetric cobalt dots. *Physical Review B*, **2009**, 80,	3.3	39
167	Fabrication and structural characterization of highly ordered sub-100-nm planar magnetic nanodot arrays over 1cm2 coverage area. *Journal of Applied Physics*, **2006**, 100, 074318	2.5	39

166	Direct observation of cooperative effects in capillary condensation: The hysteretic origin. *Applied Physics Letters*, **2007**, 91, 243103	3.4	38
165	Bistability in a superconducting Al thin film induced by arrays of Fe-nanodot magnetic vortices. *Physical Review Letters*, **2007**, 99, 227001	7.4	37
164	Impact of interfacial roughness on tunneling conductance and extracted barrier parameters. *Applied Physics Letters*, **2007**, 90, 043513	3.4	37
163	Changes in ferromagnetic spin structure induced by exchange bias in Fe/MnF2 films. *Physical Review B*, **2004**, 70,	3.3	36
162	Origin of complex exchange anisotropy in Fe/MnF2 bilayers. *Physical Review B*, **2003**, 68,	3.3	36
161	Highly effective superconducting vortex pinning in conformal crystals. *Applied Physics Letters*, **2013**, 102, 252602	3.4	34
160	Development of vortex state in circular magnetic nanodots: Theory and experiment. *Physical Review B*, **2010**, 81,	3.3	34
159	Enhancement of perpendicular and parallel giant magnetoresistance with the number of bilayers in Fe/Cr superlattices. *Physical Review B*, **2000**, 62, 3361-3367	3.3	34
158	Coercivity enhancement in V2O3/Ni bilayers driven by nanoscale phase coexistence. *Applied Physics Letters*, **2014**, 104, 062410	3.4	33
157	Broadband Electrically Tunable Dielectric Resonators Using Metal–Insulator Transitions. *ACS Photonics*, **2018**, 5, 4056-4060	6.3	33
156	Electrically Induced Multiple Metal-Insulator Transitions in Oxide Nanodevices. *Physical Review Applied*, **2017**, 8,	4.3	32
155	Control of magnetism across metal to insulator transitions. *Applied Physics Letters*, **2013**, 102, 122404	3.4	32
154	Dynamic conductivity scaling in photoexcited V2O3 thin films. *Physical Review B*, **2015**, 92,	3.3	31
153	Magnetization reversal of uncompensated Fe moments in exchange biased Ni–FeF2 bilayers. *Applied Physics Letters*, **2006**, 88, 072503	3.4	31
152	Magnetization depth dependence in exchange biased thin films. *Applied Physics Letters*, **2006**, 89, 072504	3.4	31
151	Measurements of the ferromagnetic/antiferromagnetic interfacial exchange energy in CO/CoO and Fe/FeF2 layers (invited). *Journal of Applied Physics*, **1998**, 83, 6893-6895	2.5	31
150	Non-thermal resistive switching in Mott insulator nanowires. *Nature Communications*, **2020**, 11, 2985	17.4	30
149	Electrical breakdown in a V 2 O 3 device at the insulator-to-metal transition. *Europhysics Letters*, **2013**, 101, 57003	1.6	30

148	Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers. *Physical Review B*, **2001**, 64,	3.3	28
147	Robust Coupling between Structural and Electronic Transitions in a Mott Material. *Physical Review Letters*, **2019**, 122, 057601	7.4	27
146	Anomalous spontaneous reversal in magnetic heterostructures. *Physical Review Letters*, **2006**, 96, 137204	7.4	27
145	Substrate-controlled ferromagnetism in iron phthalocyanine films due to one-dimensional iron chains. *Physical Review B*, **2012**, 86,	3.3	26
144	Large magnetoresistance with low saturation fields in magnetic/magnetic superlattices. *Applied Physics Letters*, **1994**, 64, 2590-2592	3.4	26
143	Nonequilibrium Phase Precursors during a Photoexcited Insulator-to-Metal Transition in V_{2}O_{3}. *Physical Review Letters*, **2018**, 120, 207601	7.4	26
142	Loop bifurcation and magnetization rotation in exchange-biased NiFeF2. *Physical Review B*, **2005**, 72,	3.3	24
141	Coupling of magnetism and structural phase transitions by interfacial strain. *Journal of Materials Research*, **2014**, 29, 2353-2365	2.5	23
140	Ambient induced degradation and chemically activated recovery in copper phthalocyanine thin film transistors. *Journal of Applied Physics*, **2009**, 106, 034505	2.5	23
139	Bilayer processing for an enhanced organic-electrode contact in ultrathin bottom contact organic transistors. *Applied Physics Letters*, **2008**, 92, 193311	3.4	23
138	Vortex-lattice dynamics with channeled pinning potential landscapes. *Physical Review B*, **2005**, 72,	3.3	23
137	Exchange bias induced by the Fe3O4 Verwey transition. *Physical Review B*, **2012**, 85,	3.3	22
136	Three-dimensional spin structure in exchange-biased antiferromagnetic/ferromagnetic thin films. *Applied Physics Letters*, **2009**, 95, 092503	3.4	22
135	Switchable collective pinning of flux quanta using magnetic vortex arrays: Experiments on square arrays of Co dots on thin superconducting films. *Physical Review B*, **2008**, 77,	3.3	22
134	Elastic constants of metal-insulator superlattices. *Applied Physics Letters*, **1989**, 54, 1409-1411	3.4	22
133	Energy-efficient Mott activation neuron for full-hardware implementation of neural networks. *Nature Nanotechnology*, **2021**, 16, 680-687	28.7	22
132	Giant nonvolatile resistive switching in a Mott oxide and ferroelectric hybrid. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 8798-8802	11.5	21
131	Enhanced metal–insulator transition in V2O3 by thermal quenching after growth. *Journal of Materials Science*, **2018**, 53, 9131-9137	4.3	21

130	Electronic structure differences between H(2)-, Fe-, Co-, and Cu-phthalocyanine highly oriented thin films observed using NEXAFS spectroscopy. *Journal of Chemical Physics*, **2013**, 139, 034701	3.9	21
129	Ultrafast electron-lattice coupling dynamics in VO2 and V2O3 thin films. *Physical Review B*, **2017**, 96,	3.3	21
128	Deviation from bulk in the pressure-temperature phase diagram of V2O3 thin films. *Physical Review B*, **2017**, 95,	3.3	21
127	Asymmetric magnetic dots: A way to control magnetic properties. *Journal of Applied Physics*, **2011**, 109, 073907	2.5	21
126	Enhanced superconducting vortex pinning with disordered nanomagnetic arrays. *Physical Review B*, **2010**, 82,	3.3	21
125	Antiferromagnetic domain size and exchange bias. *Physical Review B*, **2008**, 77,	3.3	21
124	Synthesis and properties of a-axis and b-axis oriented GdBa2Cu3O7□high Tc thin films. *Applied Physics Letters*, **1992**, 61, 2598-2600	3.4	21
123	Phase diagram and oxygen stoichiometry of Y-Ba-Cu-O thin films. *Applied Physics Letters*, **1988**, 53, 808-810	3.4	21
122	A caloritronics-based Mott neuristor. *Scientific Reports*, **2020**, 10, 4292	4.9	20
121	Antiferromagnetic/ferromagnetic nanostructures for multidigit storage units. *Applied Physics Letters*, **2014**, 104, 032401	3.4	20
120	Effect of sputtering pressure-induced roughness on the microstructure and the perpendicular giant magnetoresistance of Fe/Cr superlattices. *Physical Review B*, **2000**, 62, 15079-15083	3.3	20
119	Irreversibility of magnetization rotation in exchange biased Fe/epitaxial-FeF2 thin films. *Applied Physics Letters*, **2007**, 90, 032510	3.4	19
118	Magnetic domain and domain-wall imaging of submicron Co dots by probing the magnetostrictive response using atomic force microscopy. *Applied Physics Letters*, **2000**, 76, 2931-2933	3.4	19
117	Superconductivity found in meteorites. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7645-7649	11.5	18
116	Ultra-thin filaments revealed by the dielectric response across the metal-insulator transition in VO2. *Applied Physics Letters*, **2013**, 102, 063110	3.4	18
115	Angular dependence of exchange anisotropy on the cooling field in ferromagnet/fluoride thin films. *Physical Review B*, **2006**, 73,	3.3	18
114	Magnetoresistance of mechanically stable Co nanoconstrictions. *Physical Review B*, **2004**, 70,	3.3	18
113	Interfacially dominated giant magnetoresistance in Fe/Cr superlattices. *Physical Review B*, **2001**, 65,	3.3	18

112	Structural changes induced by hydrogen absorption in palladium and palladium–ruthenium alloys. *Applied Physics Letters*, **1995**, 66, 1216-1218	3.4	18
111	Magnetism of Metal Phthalocyanines. *Nanoscience and Technology*, **2014**, 221-245	0.6	18
110	Exchange bias: The antiferromagnetic bulk matters. *Applied Physics Letters*, **2014**, 105, 072403	3.4	17
109	Vortex ratchet reversal: Role of interstitial vortices. *Physical Review B*, **2011**, 83,	3.3	17
108	Origin of the current-driven breakdown in vanadium oxides: Thermal versus electronic. *Physical Review B*, **2018**, 98,	3.3	17
107	Relaxation times in exchange-biased nanostructures. *Applied Physics Letters*, **2003**, 83, 332-334	3.4	16
106	Changes in crystallographic orientation of thin foils of palladium and palladium alloys after the absorption of hydrogen. *Catalysis Letters*, **1995**, 30, 11-23	2.8	15
105	Epitaxial film growth and metastable phases of single crystal Dy by molecular beam epitaxy. *Journal of Applied Physics*, **1988**, 63, 4066-4068	2.5	15
104	Rocking ratchet induced by pure magnetic potentials with broken reflection symmetry. *Physical Review B*, **2009**, 80,	3.3	14
103	Control of magnetic properties in metallo-organic thin films. *Journal of Materials Science*, **2010**, 45, 5032-5035	4.5	14
102	Magnetic profile as a function of structural disorder in Fe/Cr superlattices. *Journal of Applied Physics*, **1994**, 75, 6178-6180	2.5	14
101	Spatiotemporal characterization of the field-induced insulator-to-metal transition. *Science*, **2021**, 373, 907-911	33.3	14
100	X-ray-induced persistent photoconductivity in vanadium dioxide. *Physical Review B*, **2014**, 90,	3.3	13
99	Deconvoluting reversal modes in exchange-biased nanodots. *Physical Review B*, **2012**, 86,	3.3	13
98	Organismic materials for beyond von Neumann machines. *Applied Physics Reviews*, **2020**, 7, 011309	17.3	12
97	Relevance of length scales in exchange biased submicron dots. *Applied Physics Letters*, **2009**, 94, 142503	3.4	12
96	Detection of new superconductors using phase-spread alloy films. *Applied Physics Letters*, **1995**, 66, 3677-3679	3.4	12
95	Magnetic field modulated microwave spectroscopy across phase transitions and the search for new superconductors. *Reports on Progress in Physics*, **2014**, 77, 093902	14.4	11

94	Exponential behavior of the Ohmic transport in organic films. *Physical Review B*, **2011**, 83,	3.3	10
93	Temperature and angular dependences of dynamic spin-polarized resonant tunneling in CoFeB□MgO□NiFe junctions. *Journal of Applied Physics*, **2008**, 103, 07A904	2.5	10
92	Time domain dynamics of the asymmetric magnetization reversal in exchange biased bilayers. *Physical Review B*, **2005**, 71,	3.3	10
91	Microscopy image segmentation tool: robust image data analysis. *Review of Scientific Instruments*, **2014**, 85, 033701	1.7	9
90	Quantitative x-ray photoelectron spectroscopy study of Al/AlOx bilayers. *Journal of Applied Physics*, **2002**, 91, 10163	2.5	9
89	New buffer layer for high-temperature superconducting ceramics on sapphire: LaBa2Cu3Oy/Ag bilayers. *Applied Physics Letters*, **1991**, 59, 1245-1247	3.4	9
88	Scaling of critical currents in high-temperature superconducting superlattices and thin films. *Applied Physics Letters*, **1992**, 61, 3181-3183	3.4	9
87	Growth-Induced In-Plane Uniaxial Anisotropy in VO/Ni Films. *Scientific Reports*, **2017**, 7, 13471	4.9	8
86	Thermally Reconfigurable Meta-Optics. *IEEE Photonics Journal*, **2019**, 11, 1-16	1.8	8
85	Manipulation of competing ferromagnetic and antiferromagnetic domains in exchange-biased nanostructures. *Physical Review B*, **2015**, 92,	3.3	8
84	Superconducting Vortex Pinning with Magnetic Dots: Does Size and Magnetic Configuration Matter?. *Journal of Superconductivity and Novel Magnetism*, **2012**, 25, 2187-2191	1.5	8
83	The role of micro-shorts and electrode-film interface in the electrical transport of ultra-thin metallophthalocyanine capacitive devices. *Applied Physics Letters*, **2012**, 101, 133304	3.4	8
82	Mechanisms of periodic pinning in superconducting thin films. *European Physical Journal B*, **2004**, 40, 459-462	1.2	8
81	Deposition of epitaxial □Fe2O3 layers for exchange bias studies by reactive dc magnetron sputtering. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **2001**, 81, 1927-1934		8
80	Phenomenological Explanation of Elastic Anomalies in Superlattices. *Materials Research Society Symposia Proceedings*, **1993**, 308, 685		8
79	Nanoscale Imaging and Control of Volatile and Non-Volatile Resistive Switching in VO. *Small*, **2020**, 16, e2005439	11	8
78	Dipole-induced exchange bias. *Nanoscale*, **2017**, 9, 17074-17079	7.7	7
77	Quadrupolar XMCD at the Fe K-edge in Fe phthalocyanine film on Au: Insight into the magnetic ground state. *Physical Review B*, **2015**, 91,	3.3	7

76	Avalanches in vanadium sesquioxide nanodevices. *Physical Review B*, **2015**, 92,	3.3	7
75	Upper bound for the magnetic proximity effect extracted from Brillouin light scattering. *Physical Review B*, **2002**, 65,	3.3	7
74	Kinetics of subsurface hydrogen adsorbed on niobium: Thermal desorption studies. *Journal of Materials Research*, **2002**, 17, 2698-2704	2.5	7
73	Controlling Metal-Insulator Transitions in Vanadium Oxide Thin Films by Modifying Oxygen Stoichiometry. *ACS Applied Materials & Interfaces*, **2021**, 13, 887-896	9.5	7
72	Preface to Special Topic: New Physics and Materials for Neuromorphic Computation. *Journal of Applied Physics*, **2018**, 124, 151801	2.5	7
71	Mesoscopic magnetism and superconductivity. *MRS Bulletin*, **2015**, 40, 925-932	3.2	6
70	Ferromagnetism in partially oxidized CuCl. *Journal of Magnetism and Magnetic Materials*, **2013**, 346, 161-165	1.8	6
69	Anomalous, hysteretic, transverse magnetoresistance in superconducting thin films with magnetic vortex arrays. *Applied Physics Letters*, **2009**, 94, 252507	3.4	6
68	Methodology and search for superconductivity in the La□Si□ system. *Superconductor Science and Technology*, **2011**, 24, 075017	3.1	6
67	Time-Dependent Ginzburg□andau: From Single Particle to Collective Behavior. *Journal of Superconductivity and Novel Magnetism*, **2007**, 19, 401-407	1.5	6
66	Surface Roughness of Metallic Films Probed by Resistivity Measurements□*Langmuir*, **1998**, 14, 3249-3254	4	6
65	Quantitative X-Ray Structure Determination of Superlattices and Interfaces. *Materials Research Society Symposia Proceedings*, **1991**, 229, 41		6
64	Structural Manipulation of Phase Transitions by Self-Induced Strain in Geometrically Confined Thin Films. *Advanced Functional Materials*, **2020**, 30, 2005939	15.6	6
63	Detection of in-depth helical spin structures by planar Hall effect. *Applied Physics Letters*, **2015**, 106, 252404	3.4	5
62	Magnetic field frustration of the metal-insulator transition in V2O3. *Physical Review B*, **2020**, 101,	3.3	5
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60	Resolving transitions in the mesoscale domain configuration in VO2 using laser speckle pattern analysis. *Scientific Reports*, **2014**, 4, 6259	4.9	5
59	Search for new superconductors in the Y-Ni-B-C system. *Journal of Applied Physics*, **1997**, 81, 2291-2295	2.5	5

58	Coercivity of a percolative magnetic system. *Physical Review B*, **2000**, 63,	3.3	5
57	Elastic Properties of a Polyimide Film Determined by Brillouin Scattering and Mechanical Techniques. *Materials Research Society Symposia Proceedings*, **1993**, 308, 503		5
56	Effect of Structure on the Anomalous Mechanical Properties of Metallic Superlattices. *Materials Research Society Symposia Proceedings*, **1991**, 239, 499		5
55	Structural and Electronic Properties of Pb/Cu Multilayers. *Materials Research Society Symposia Proceedings*, **1989**, 160, 599		5
54	Search for New Superconductors: an Electro-Magnetic Phase Transition in an Iron Meteorite Inclusion at 117 K. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 297-304	1.5	4
53	Hydrostatic pressure mapping of barium titanate phase transitions with quenched FeRh. *Scientific Reports*, **2020**, 10, 6312	4.9	4
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51	Resistive asymmetry due to spatial confinement in first-order phase transitions. *Physical Review B*, **2018**, 98,	3.3	4
50	Spin valve effect across the metal-insulator transition in V2O3. *Journal of Applied Physics*, **2013**, 114, 143901	2.5	4
49	Enhancements of pinning by superconducting nanoarrays. *Physical Review B*, **2015**, 92,	3.3	4
48	Magnetic pinning of flux lattice in superconducting-nanomagnet hybrids. *Applied Physics Letters*, **2011**, 99, 182509	3.4	4
47	Photoinduced enhancement of the Josephson effect in YBaCuO grain boundary junctions. *Journal of Low Temperature Physics*, **1997**, 106, 255-264	1.3	4
46	Effect of Photodoping on the Fiske Resonances of YBa2Cu3O x Grain Boundary Josephson Junctions. *Journal of Superconductivity and Novel Magnetism*, **1998**, 11, 225-230		4
45	New high-temperature superconducting phase spread alloy thin films. *Applied Physics Letters*, **1993**, 63, 1276-1278	3.4	4
44	Magnetic Superlattices. *Materials Research Society Symposia Proceedings*, **1987**, 103, 335		4
43	Intertwined magnetic, structural, and electronic transitions in V2O3. *Physical Review B*, **2019**, 100,	3.3	4
42	Ultradense Arrays of Sub-100 nm Co/CoO Nanodisks for Spintronics Applications. *ACS Applied Nano Materials*, **2020**, 3, 4037-4044	5.6	4
41	characterization of conductive filaments during resistive switching in Mott VO. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4

40	Study of Co-phthalocyanine films by surface plasmon resonance spectroscopy. *Journal of Applied Physics*, **2014**, 115, 103106	2.5	3
39	Shearing transition in a superconducting vortex lattice subject to periodic pinning. *Physical Review B*, **2013**, 88,	3.3	3
38	Interaction-induced anisotropy in the onion-to-vortex transition in dense ferromagnetic nano-ring arrays. *Journal of Applied Physics*, **2012**, 112, 103903	2.5	3
37	Switchable Optically Active Schottky Barrier in La0.7Sr0.3MnO3/BaTiO3/ITO Ferroelectric Tunnel Junction. *Advanced Electronic Materials*, **2021**, 7, 2100069	6.4	3
36	Chiral symmetry and scale invariance breaking in spin chains. *AIP Advances*, **2020**, 10, 025215	1.5	3
35	Inherent stochasticity during insulator-metal transition in VO. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
34	Temperature trends and correlation between SQUID superparamagnetic relaxometry and dc-magnetization on model iron-oxide nanoparticles. *Journal of Applied Physics*, **2020**, 127, 044304	2.5	2
33	Collective mode splitting in hybrid heterostructures. *Physical Review B*, **2016**, 93,	3.3	2
32	Irreversible metal-insulator transition in thin film VO2 induced by soft X-ray irradiation. *Applied Physics Letters*, **2017**, 111, 241605	3.4	2
31	Detailed structural analysis of epitaxial MBE-grown Fe/Cr superlattices by x-ray diffraction and transmission-electron spectroscopy. *Physical Review B*, **2005**, 71,	3.3	2
30	CONNECTION BETWEEN GIANT MAGNETORESISTANCE AND ROUGHNESS IN SPUTTERED Fe/Cr SUPERLATTICES. *International Journal of Modern Physics B*, **1993**, 07, 419-424	1.1	2
29	Emerging Magnetic Interactions in van der Waals Heterostructures. *Nano Letters*, **2020**, 20, 7852-7859	11.5	2
28	Quantum Sensing of Insulator-to-Metal Transitions in a Mott Insulator. *Advanced Quantum Technologies*, **2021**, 4, 2000142	4.3	2
27	Transverse barrier formation by electrical triggering of a metal-to-insulator transition. *Nature Communications*, **2021**, 12, 5499	17.4	2
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23	Uncompensated moments in antiferromagnets: Origin, properties and role in exchange bias **2010**,		1

22	Combined neutron and synchrotron studies of magnetic films **2006**, 67, 47-55		1
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