Ivan K Schuller

List of Publications by Year
in descending order

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232 papers	15,824 citations	34016 52 h-index	17055 122 g-index
233 all docs	233 docs citations	233 times ranked	11439 citing authors

#	Article	IF	Citations
1	Exchange bias. Journal of Magnetism and Magnetic Materials, 1999, 192, 203-232.	1.0	4,314
2	Ordered magnetic nanostructures: fabrication and properties. Journal of Magnetism and Magnetic Materials, 2003, 256, 449-501.	1.0	856
3	Interface-induced phenomena in magnetism. Reviews of Modern Physics, 2017, 89, .	16.4	672
4	Structural refinement of superlattices from x-ray diffraction. Physical Review B, 1992, 45, 9292-9310.	1.1	644
5	New Class of Layered Materials. Physical Review Letters, 1980, 44, 1597-1600.	2.9	531
6	Positive Exchange Bias in FeF2-Fe Bilayers. Physical Review Letters, 1996, 76, 4624-4627.	2.9	499
7	Flux Pinning in a Superconductor by an Array of Submicrometer Magnetic Dots. Physical Review Letters, 1997, 79, 1929-1932.	2.9	477
8	Surface, interface, and thin-film magnetism. Journal of Materials Research, 1990, 5, 1299-1340.	1.2	455
9	Role of Thermal Heating on the Voltage Induced Insulator-Metal Transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>VO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2013, 110, 056601.	2.9	238
10	Artificially Induced Reconfiguration of the Vortex Lattice by Arrays of Magnetic Dots. Physical Review Letters, 1999, 83, 1022-1025.	2.9	196
11	Nanotextured phase coexistence in the correlated insulator V2O3. Nature Physics, 2017, 13, 80-86.	6.5	172
12	Challenges in materials and devices for resistive-switching-based neuromorphic computing. Journal of Applied Physics, 2018, 124, .	1.1	155
13	Perpendicular coupling at Feâ€“FeF2 interfaces. Applied Physics Letters, 1998, 72, 617-619.	1.5	154
14	Role of interfacial structure on exchange-biasedFeF2â^'Fe. Physical Review B, 1999, 59, 6984-6993.	1.1	149
15	Dimensional crossover in superlattice superconductors. Physical Review B, 1984, 29, 4915-4920.	1.1	147
16	Large exchange bias and its connection to interface structure in FeF2â€“Fe bilayers. Applied Physics Letters, 1996, 68, 3186-3188.	1.5	139
17	Subthreshold firing in Mott nanodevices. Nature, 2019, 569, 388-392.	13.7	139
18	Photoinduced enhancement of superconductivity. Applied Physics Letters, 1992, 60, 2159-2161.	1.5	133

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19	Tailoring exchange bias with magnetic nanostructures. Physical Review B, 2001, 63, .	1.1	133
20	Magnetic fingerprints of sub-100nmFe dots. Physical Review B, 2007, 75, .	1.1	125
21	Magnetic superlattices and multilayers. Journal of Magnetism and Magnetic Materials, 1999, 200, 571-582.	1.0	124
22	Two-Stage Magnetization Reversal in Exchange Biased Bilayers. Physical Review Letters, 2001, 86, 4394-4397.	2.9	124
23	Multiple Avalanches across the Metal-Insulator Transition of Vanadium Oxide Nanoscaled Junctions. Physical Review Letters, 2008, 101, 026404.	2.9	120
24	Tuning exchange bias. Applied Physics Letters, 1999, 75, 2304-2306.	1.5	111
25	Fabrication and thermal stability of arrays of Fe nanodots. Applied Physics Letters, 2002, 81, 4434-4436.	1.5	109
26	Thickness-dependent coercive mechanisms in exchange-biased bilayers. Physical Review B, 2002, 65, .	1.1	108
27	Pinned magnetization in the antiferromagnet and ferromagnet of an exchange bias system. Physical Review B, 2007, 75, .	1.1	99
28	Ultrathin organic transistors for chemical sensing. Applied Physics Letters, 2007, 90, 263506.	1.5	94
29	Effect of anisotropy on the critical antiferromagnet thickness in exchange-biased bilayers. Physical Review B, 2002, 66, .	1.1	90
30	First-order reversal curve measurements of the metal-insulator transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>VO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Signatures of persistent metallic domains. Physical Review B, 2009, 79, .	1.1	89
31	Increased exchange anisotropy due to disorder at permalloy/CoO interfaces. Journal of Applied Physics, 1995, 78, 1887-1891.	1.1	87
32	Persistent and transient photoconductivity in oxygen-deficientLa2/3Sr1/3MnO3â^Î´thin films. Physical Review B, 2001, 63, .	1.1	86
33	Switchable Plasmonicâ€“Dielectric Resonators with Metalâ€“Insulator Transitions. ACS Photonics, 2018, 5, 371-377.	3.2	78
34	Non-thermal resistive switching in Mott insulator nanowires. Nature Communications, 2020, 11, 2985.	5.8	77
35	Fabrication of submicrometric magnetic structures by electron-beam lithography. Journal of Applied Physics, 1998, 84, 411-415.	1.1	73
36	Exchange-Bias Phenomenon: The Role of the Ferromagnetic Spin Structure. Physical Review Letters, 2015, 114, 097202.	2.9	73

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37	Energy-efficient Mott activation neuron for full-hardware implementation of neural networks. Nature Nanotechnology, 2021, 16, 680-687.	15.6	73
38	Overcoming thermal fluctuations. Nature Materials, 2003, 2, 437-438.	13.3	72
39	Relation between exchange anisotropy and magnetization reversal asymmetry inFe/MnF2bilayers. Physical Review B, 2002, 65, .	1.1	70
40	Antiferromagnetic spin flop and exchange bias. Physical Review B, 2000, 61, R6455-R6458.	1.1	69
41	Vortex state and effect of anisotropy in sub-100-nm magnetic nanodots. Journal of Applied Physics, 2006, 100, 104319.	1.1	69
42	Temperature induced single domainâ€“vortex state transition in sub-100nm Fe nanodots. Applied Physics Letters, 2007, 91, .	1.5	67
43	HighTcthin films with roughness smaller than one unit cell. Applied Physics Letters, 1992, 60, 120-122.	1.5	64
44	Coercivity enhancement above the NÃ©el temperature of an antiferromagnet/ferromagnet bilayer. Journal of Applied Physics, 2002, 92, 1483-1488.	1.1	62
45	Influence of in-plane crystalline quality of an antiferromagnet on perpendicular exchange coupling and exchange bias. Physical Review B, 2002, 65, .	1.1	61
46	Quantitative structural analysis of organic thin films: An x-ray diffraction study. Physical Review B, 2005, 72, .	1.1	61
47	Directional vortex motion guided by artificially induced mesoscopic potentials. Physical Review B, 2003, 68, .	1.1	58
48	Tunneling criteria for magnetic-insulator-magnetic structures. Applied Physics Letters, 2001, 79, 3104-3106.	1.5	56
49	Pinholes may mimic tunneling. Journal of Applied Physics, 2001, 89, 2786-2790.	1.1	54
50	Spin-dependent Seebeck effect in non-local spin valve devices. Applied Physics Letters, 2012, 100, .	1.5	54
51	Broadband Electrically Tunable Dielectric Resonators Using Metalâ€“Insulator Transitions. ACS Photonics, 2018, 5, 4056-4060.	3.2	54
52	Robust Coupling between Structural and Electronic Transitions in a Mott Material. Physical Review Letters, 2019, 122, 057601.	2.9	54
53	Effect of disorder on the metal-insulator transition of vanadium oxides: Local versus global effects. Physical Review B, 2015, 91, .	1.1	53
54	Using magnetoresistance to probe reversal asymmetry in exchange biased bilayers. Journal of Applied Physics, 2000, 88, 344-347.	1.1	52

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55	Bidomain state in exchange biased FeF2âˆ•Ni. Applied Physics Letters, 2005, 87, 222509.	1.5	52
56	A caloritronics-based Mott neuristor. Scientific Reports, 2020, 10, 4292.	1.6	52
57	Spatiotemporal characterization of the field-induced insulator-to-metal transition. Science, 2021, 373, 907-911.	6.0	52
58	Surface enhanced spin-flip scattering in lateral spin valves. Applied Physics Letters, 2010, 96, .	1.5	49
59	Angular dependence of vortex-annihilation fields in asymmetric cobalt dots. Physical Review B, 2009, 80, .	1.1	45
60	Coercivity enhancement in V2O3/Ni bilayers driven by nanoscale phase coexistence. Applied Physics Letters, 2014, 104, .	1.5	45
61	Control of magnetism across metal to insulator transitions. Applied Physics Letters, 2013, 102, .	1.5	44
62	Electrically Induced Multiple Metal-Insulator Transitions in Oxide Nanodevices. Physical Review Applied, 2017, 8, .	1.5	44
63	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.	1.1	42
64	Direct observation of cooperative effects in capillary condensation: The hysteretic origin. Applied Physics Letters, 2007, 91, .	1.5	42
65	Electrical breakdown in a V ₂ O ₃ device at the insulator-to-metal transition. Europhysics Letters, 2013, 101, 57003.	0.7	42
66	Dynamic conductivity scaling in photoexcited<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>thin films. Physical Review B, 2015, 92, .	1.1	42
67	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.	3.3	41
68	Nonequilibrium Phase Precursors during a Photoexcited Insulator-to-Metal Transition in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2018, 120, 207601.	2.9	39
69	Changes in ferromagnetic spin structure induced by exchange bias in Fe/MnF2films. Physical Review B, 2004, 70, .	1.1	38
70	Impact of interfacial roughness on tunneling conductance and extracted barrier parameters. Applied Physics Letters, 2007, 90, 043513.	1.5	38
71	Enhancement of perpendicular and parallel giant magnetoresistance with the number of bilayers in Fe/Cr superlattices. Physical Review B, 2000, 62, 3361-3367.	1.1	37
72	Bistability in a Superconducting Al Thin Film Induced by Arrays of Fe-Nanodot Magnetic Vortices. Physical Review Letters, 2007, 99, 227001.	2.9	37

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73	Origin of complex exchange anisotropy inFe/MnF2bilayers. Physical Review B, 2003, 68, .	1.1	36
74	Development of vortex state in circular magnetic nanodots: Theory and experiment. Physical Review B, 2010, 81, .	1.1	35
75	Highly effective superconducting vortex pinning in conformal crystals. Applied Physics Letters, 2013, 102, .	1.5	35
76	Substrate-controlled ferromagnetism in iron phthalocyanine films due to one-dimensional iron chains. Physical Review B, 2012, 86, .	1.1	34
77	Measurements of the ferromagnetic/antiferromagnetic interfacial exchange energy in CO/CoO and Fe/FeF2 layers (invited). Journal of Applied Physics, 1998, 83, 6893-6895.	1.1	33
78	Magnetization reversal of uncompensated Fe moments in exchange biased Niâ•FeF2 bilayers. Applied Physics Letters, 2006, 88, 072503.	1.5	33
79	Electronic structure differences between H2-, Fe-, Co-, and Cu-phthalocyanine highly oriented thin films observed using NEXAFS spectroscopy. Journal of Chemical Physics, 2013, 139, 034701.	1.2	33
80	Magnetization depth dependence in exchange biased thin films. Applied Physics Letters, 2006, 89, 072504.	1.5	32
81	Ultrafast electron-lattice coupling dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>VO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review B, 2017, 96, .	1.1	32
82	Large magnetoresistance with low saturation fields in magnetic/magnetic superlattices. Applied Physics Letters, 1994, 64, 2590-2592.	1.5	31
83	Coupling of magnetism and structural phase transitions by interfacial strain. Journal of Materials Research, 2014, 29, 2353-2365.	1.2	31
84	Enhanced metalâ€“insulator transition in V2O3 by thermal quenching after growth. Journal of Materials Science, 2018, 53, 9131-9137.	1.7	31
85	Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers. Physical Review B, 2001, 64, .	1.1	30
86	Origin of the current-driven breakdown in vanadium oxides: Thermal versus electronic. Physical Review B, 2018, 98, .	1.1	30
87	Organismic materials for beyond von Neumann machines. Applied Physics Reviews, 2020, 7, .	5.5	30
88	Deviation from bulk in the pressure-temperature phase diagram of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review B, 2017, 95, .	1.1	28
89	Anomalous Spontaneous Reversal in Magnetic Heterostructures. Physical Review Letters, 2006, 96, 137201.	2.9	27
90	Nanoscale Imaging and Control of Volatile and Nonâ€Volatile Resistive Switching in VO₂. Small, 2020, 16, e2005439.	5.2	27

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91	Loop bifurcation and magnetization rotation in exchange-biasedNiâ•FeF2. Physical Review B, 2005, 72, .	1.1	26
92	Ambient induced degradation and chemically activated recovery in copper phthalocyanine thin film transistors. Journal of Applied Physics, 2009, 106, .	1.1	26
93	Exchange bias induced by the Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>Verwey transition. Physical Review B, 2012, 85, .	1.1	26
94	Superconductivity found in meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7645-7649.	3.3	26
95	Vortex-lattice dynamics with channeled pinning potential landscapes. Physical Review B, 2005, 72, .	1.1	25
96	Three-dimensional spin structure in exchange-biased antiferromagnetic/ferromagnetic thin films. Applied Physics Letters, 2009, 95, .	1.5	25
97	Asymmetric magnetic dots: A way to control magnetic properties. Journal of Applied Physics, 2011, 109, .	1.1	25
98	Ultra-thin filaments revealed by the dielectric response across the metal-insulator transition in VO2. Applied Physics Letters, 2013, 102, .	1.5	25
99	Irreversibility of magnetization rotation in exchange biased Fe/epitaxial-FeF2 thin films. Applied Physics Letters, 2007, 90, 032510.	1.5	24
100	Bilayer processing for an enhanced organic-electrode contact in ultrathin bottom contact organic transistors. Applied Physics Letters, 2008, 92, 193311.	1.5	24
101	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, .	1.1	24
102	Controlling Metalâ€“Insulator Transitions in Vanadium Oxide Thin Films by Modifying Oxygen Stoichiometry. ACS Applied Materials & Interfaces, 2021, 13, 887-896.	4.0	24
103	Elastic constants of metalâ€insulator superlattices. Applied Physics Letters, 1989, 54, 1409-1411.	1.5	23
104	Synthesis and properties ofaâ€axis andbâ€axis oriented GdBa2Cu3O7âˆ’Îhightcthin films. Applied Physics Letters, 1992, 61, 2598-2600.	1.5	23
105	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.	1.1	23
106	Antiferromagnetic domain size and exchange bias. Physical Review B, 2008, 77, .	1.1	23
107	Enhanced superconducting vortex pinning with disordered nanomagnetic arrays. Physical Review B, 2010, 82, .	1.1	23
108	Exchange bias: The antiferromagnetic bulk matters. Applied Physics Letters, 2014, 105, .	1.5	23

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109	Magnetism of Metal Phthalocyanines. Nanoscience and Technology, 2014, , 221-245.	1.5	23
110	Phase diagram and oxygen stoichiometry of Yâ€Baâ€Cuâ€O thin films. Applied Physics Letters, 1988, 53, 808-810.	1.5	22
111	Interfacially dominated giant magnetoresistance in Fe/Cr superlattices. Physical Review B, 2001, 65, .	1.1	22
112	Vortex ratchet reversal: Role of interstitial vortices. Physical Review B, 2011, 83, .	1.1	22
113	Strain yourself. Nature, 1998, 394, 419-421.	13.7	21
114	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.	1.5	21
115	Magnetoresistance of mechanically stable Co nanoconstrictions. Physical Review B, 2004, 70, .	1.1	21
116	Structural changes induced by hydrogen absorption in palladium and palladiumâ€“ruthenium alloys. Applied Physics Letters, 1995, 66, 1216-1218.	1.5	20
117	Antiferromagnetic/ferromagnetic nanostructures for multidigit storage units. Applied Physics Letters, 2014, 104, 032401.	1.5	20
118	Magnetic field frustration of the metal-insulator transition in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 101, .	1.1	20
119	Angular dependence of exchange anisotropy on the cooling field in ferromagnet/fluoride thin films. Physical Review B, 2006, 73, .	1.1	19
120	Changes in crystallographic orientation of thin foils of palladium and palladium alloys after the absorption of hydrogen. Catalysis Letters, 1995, 30, 11-23.	1.4	18
121	Structural Manipulation of Phase Transitions by Selfâ€Induced Strain in Geometrically Confined Thin Films. Advanced Functional Materials, 2020, 30, 2005939.	7.8	17
122	Epitaxial film growth and metastable phases of single crystal Dy by molecular beam epitaxy. Journal of Applied Physics, 1988, 63, 4066-4068.	1.1	16
123	Magnetic profile as a function of structural disorder in Fe/Cr superlattices. Journal of Applied Physics, 1994, 75, 6178-6180.	1.1	16
124	Relaxation times in exchange-biased nanostructures. Applied Physics Letters, 2003, 83, 332-334.	1.5	16
125	X-ray-induced persistent photoconductivity in vanadium dioxide. Physical Review B, 2014, 90, .	1.1	16
126	Rocking ratchet induced by pure magnetic potentials with broken reflection symmetry. Physical Review B, 2009, 80, .	1.1	15

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127	Control of magnetic properties in metallo-organic thin films. Journal of Materials Science, 2010, 45, 5032-5035.	1.7	15
128	Deconvoluting reversal modes in exchange-biased nanodots. Physical Review B, 2012, 86, .	1.1	15
129	Dipole-induced exchange bias. Nanoscale, 2017, 9, 17074-17079.	2.8	15
130	Operando characterization of conductive filaments during resistive switching in Mott VO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
131	Inherent stochasticity during insulatorâ€“metal transition in VO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
132	Magnetic field modulated microwave spectroscopy across phase transitions and the search for new superconductors. Reports on Progress in Physics, 2014, 77, 093902.	8.1	14
133	Growth-Induced In-Plane Uniaxial Anisotropy in V2O3/Ni Films. Scientific Reports, 2017, 7, 13471.	1.6	14
134	Intertwined magnetic, structural, and electronic transitions in V2O3. Physical Review B, 2019, 100, .	1.1	14
135	Detection of new superconductors using phaseâ€spread alloy films. Applied Physics Letters, 1995, 66, 3677-3679.	1.5	13
136	Thermally Reconfigurable Meta-Optics. IEEE Photonics Journal, 2019, 11, 1-16.	1.0	13
137	Switchable Optically Active Schottky Barrier in La_{0.7}Sr_{0.3}MnO₃/BaTiO₃/ITO Ferroelectric Tunnel Junction. Advanced Electronic Materials, 2021, 7, 2100069.	2.6	13
138	Direct Observation of the Electrically Triggered Insulator-Metal Transition in V3O5 Far below the Transition Temperature. Physical Review X, 2022, 12, .	2.8	13
139	Relevance of length scales in exchange biased submicron dots. Applied Physics Letters, 2009, 94, 142503.	1.5	12
140	Microscopy image segmentation tool: Robust image data analysis. Review of Scientific Instruments, 2014, 85, 033701.	0.6	12
141	Transverse barrier formation by electrical triggering of a metal-to-insulator transition. Nature Communications, 2021, 12, 5499.	5.8	12
142	Quantitative x-ray photoelectron spectroscopy study of Al/AlO[sub x] bilayers. Journal of Applied Physics, 2002, 91, 10163.	1.1	11
143	Exponential behavior of the Ohmic transport in organic films. Physical Review B, 2011, 83, .	1.1	11
144	Superconducting Vortex Pinning with Magnetic Dots: Does Size and Magnetic Configuration Matter?. Journal of Superconductivity and Novel Magnetism, 2012, 25, 2187-2191.	0.8	11

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145	Generation of Tunable Stochastic Sequences Using the Insulatorâ€“Metal Transition. Nano Letters, 2022, 22, 1251-1256.	4.5	11
146	Exponential Escape Rate of Filamentary Incubation in Mott Spiking Neurons. Physical Review Applied, 2022, 17, .	1.5	11
147	Time domain dynamics of the asymmetric magnetization reversal in exchange biased bilayers. Physical Review B, 2005, 71, .	1.1	10
148	Temperature and angular dependences of dynamic spin-polarized resonant tunneling in CoFeBâ•MgOâ•NiFe junctions. Journal of Applied Physics, 2008, 103, 07A904.	1.1	10
149	Spin valve effect across the metal-insulator transition in V2O3. Journal of Applied Physics, 2013, 114, .	1.1	10
150	Manipulation of competing ferromagnetic and antiferromagnetic domains in exchange-biased nanostructures. Physical Review B, 2015, 92, .	1.1	10
151	Resistive asymmetry due to spatial confinement in first-order phase transitions. Physical Review B, 2018, 98, .	1.1	10
152	New buffer layer for highâ€temperature superconducting ceramics on sapphire: LaBa2Cu3Oy/Ag bilayers. Applied Physics Letters, 1991, 59, 1245-1247.	1.5	9
153	Scaling of critical currents in highâ€temperature superconducting superlattices and thin films. Applied Physics Letters, 1992, 61, 3181-3183.	1.5	9
154	Phenomenological Explanation of Elastic Anomalies in Superlattices. Materials Research Society Symposia Proceedings, 1993, 308, 685.	0.1	9
155	Mechanisms of periodic pinning in superconducting thin films. European Physical Journal B, 2004, 40, 459-462.	0.6	9
156	The role of micro-shorts and electrode-film interface in the electrical transport of ultra-thin metallophthalocyanine capacitive devices. Applied Physics Letters, 2012, 101, .	1.5	9
157	Ferromagnetism in partially oxidized CuCl. Journal of Magnetism and Magnetic Materials, 2013, 346, 161-165.	1.0	9
158	Quadrupolar XMCD at the Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math>-edge in Fe phthalocyanine film on Au: Insight into the magnetic ground state. Physical Review B, 2015, 91, .	1.1	9
159	Ultradense Arrays of Sub-100 nm Co/CoO Nanodisks for Spintronics Applications. ACS Applied Nano Materials, 2020, 3, 4037-4044.	2.4	9
160	Imaging of Electrothermal Filament Formation in a Mott Insulator. Physical Review Applied, 2021, 16, .	1.5	9
161	Neuromorphic computing: Challenges from quantum materials to emergent connectivity. Applied Physics Letters, 2022, 120, .	1.5	9
162	Photoinduced enhancement of the Josephson effect in YBaCuO grain boundary junctions. Journal of Low Temperature Physics, 1997, 106, 255-264.	0.6	8

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163	Surface Roughness of Metallic Films Probed by Resistivity Measurements. Langmuir, 1998, 14, 3249-3254.	1.6	8
164	Deposition of epitaxial Î±-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.	0.6	8
165	Avalanches in vanadium sesquioxide nanodevices. Physical Review B, 2015, 92, .	1.1	8
166	Criticality in the Brain: Evidence and Implications for Neuromorphic Computing. ACS Chemical Neuroscience, 2018, 9, 1254-1258.	1.7	8
167	A hybrid optoelectronic Mott insulator. Applied Physics Letters, 2021, 118, .	1.5	8
168	Wireless Forceâ€Inducing Neuronal Stimulation Mediated by High Magnetic Moment Microdiscs. Advanced Healthcare Materials, 2022, 11, e2101826.	3.9	8
169	Upper bound for the magnetic proximity effect extracted from Brillouin light scattering. Physical Review B, 2002, 65, .	1.1	7
170	Kinetics of subsurface hydrogen adsorbed on niobium: Thermal desorption studies. Journal of Materials Research, 2002, 17, 2698-2704.	1.2	7
171	Anomalous, hysteretic, transverse magnetoresistance in superconducting thin films with magnetic vortex arrays. Applied Physics Letters, 2009, 94, 252507.	1.5	7
172	Mesoscopic magnetism and superconductivity. MRS Bulletin, 2015, 40, 925-932.	1.7	7
173	Search for Superconductivity in Micrometeorites. Scientific Reports, 2015, 4, 7333.	1.6	7
174	Irreversible metal-insulator transition in thin film VO2 induced by soft X-ray irradiation. Applied Physics Letters, 2017, 111, .	1.5	7
175	Preface to Special Topic: New Physics and Materials for Neuromorphic Computation. Journal of Applied Physics, 2018, 124, .	1.1	7
176	Hydrostatic pressure mapping of barium titanate phase transitions with quenched FeRh. Scientific Reports, 2020, 10, 6312.	1.6	7
177	Cation and anion topotactic transformations in cobaltite thin films leading to Ruddlesden-Popper phases. Physical Review Materials, 2021, 5, .	0.9	7
178	Photovoltaic sensing of a memristor based in LSMO/BTO/ITO ferroionic tunnel junctions. Applied Physics Letters, 2022, 120, .	1.5	7
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