Chris Leighton

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 6.16

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#	Paper	IF	Citations
188	Artificial Repin iceRin a geometrically frustrated lattice of nanoscale ferromagnetic islands. <i>Nature</i> , 2006 , 439, 303-6	50.4	600
187	Interface-Induced Phenomena in Magnetism. Reviews of Modern Physics, 2017, 89,	40.5	475
186	Glassy ferromagnetism and magnetic phase separation in La1\(\mathbb{\textit{B}}\)SrxCoO3. <i>Physical Review B</i> , 2003 , 67,	3.3	456
185	Asymmetric magnetization reversal in exchange-biased hysteresis loops. <i>Physical Review Letters</i> , 2000 , 84, 3986-9	7.4	296
184	Coercivity enhancement in exchange biased systems driven by interfacial magnetic frustration. <i>Physical Review Letters</i> , 2000 , 84, 3466-9	7.4	239
183	Correlation between antiferromagnetic interface coupling and positive exchange bias. <i>Physical Review B</i> , 2000 , 61, 1315-1317	3.3	216
182	Electronic transport in doped SrTiO3: Conduction mechanisms and potential applications. <i>Physical Review B</i> , 2010 , 81,	3.3	177
181	Crystallites of magnetic charges in artificial spin ice. <i>Nature</i> , 2013 , 500, 553-7	50.4	166
180	Magnetocaloric effect and refrigerant capacity in charge-ordered manganites. <i>Journal of Applied Physics</i> , 2009 , 106, 023909	2.5	165
179	Sphericity and symmetry breaking in the formation of Frank-Kasper phases from one component materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17723-31	11.5	161
178	Intergranular giant magnetoresistance in a spontaneously phase separated perovskite oxide. <i>Physical Review Letters</i> , 2005 , 94, 037201	7.4	145
177	Direct measurement of the low-temperature spin-state transition in LaCoO3. <i>Physical Review Letters</i> , 2007 , 99, 047203	7.4	142
176	Electrolyte-based ionic control of functional oxides. <i>Nature Materials</i> , 2019 , 18, 13-18	27	142
175	Magnetic phase separation in La1-xSrxCoO3 by 59Co nuclear magnetic resonance. <i>Physical Review Letters</i> , 2003 , 91, 127202	7.4	140
174	Hopping transport and the Hall effect near the insulator-metal transition in electrochemically gated poly(3-hexylthiophene) transistors. <i>Nature Communications</i> , 2012 , 3, 1210	17.4	130
173	Reliability of normal-state currentwoltage characteristics as an indicator of tunnel-junction barrier quality. <i>Applied Physics Letters</i> , 2000 , 77, 1870	3.4	126
172	Two-stage magnetization reversal in exchange biased bilayers. <i>Physical Review Letters</i> , 2001 , 86, 4394-	7 7.4	115

171	Magnetic superlattices and multilayers. Journal of Magnetism and Magnetic Materials, 1999, 200, 571-58	32 .8	114
170	Alkali-metal-enhanced grain growth in Cu2ZnSnS4 thin films. <i>Energy and Environmental Science</i> , 2014 , 7, 1931-1938	35.4	111
169	Polylactide-poly(dimethylsiloxane)-polylactide triblock copolymers as multifunctional materials for nanolithographic applications. <i>ACS Nano</i> , 2010 , 4, 725-32	16.7	108
168	Lattice mismatch accommodation via oxygen vacancy ordering in epitaxial La0.5Sr0.5CoO3-Ithin films. <i>APL Materials</i> , 2013 , 1, 012105	5.7	104
167	Tuning exchange bias. Applied Physics Letters, 1999, 75, 2304-2306	3.4	104
166	Fabrication and thermal stability of arrays of Fe nanodots. <i>Applied Physics Letters</i> , 2002 , 81, 4434-4436	3.4	103
165	Single-crystalline silver films for plasmonics. <i>Advanced Materials</i> , 2012 , 24, 3988-92	24	100
164	Thickness-dependent coercive mechanisms in exchange-biased bilayers. <i>Physical Review B</i> , 2002 , 65,	3.3	100
163	Persistent optically induced magnetism in oxygen-deficient strontium titanate. <i>Nature Materials</i> , 2014 , 13, 481-7	27	92
162	Non-Griffiths-like clustered phase above the Curie temperature of the doped perovskite cobaltite La1\subseteq SrxCoO3. <i>Physical Review B</i> , 2007 , 76,	3.3	89
161	Emergent reduced dimensionality by vertex frustration in artificial spin ice. <i>Nature Physics</i> , 2016 , 12, 162-165	16.2	88
160	Persistent and transient photoconductivity in oxygen-deficient La2/3Sr1/3MnO3lthin films. <i>Physical Review B</i> , 2001 , 63,	3.3	84
159	Effect of anisotropy on the critical antiferromagnet thickness in exchange-biased bilayers. <i>Physical Review B</i> , 2002 , 66,	3.3	84
158	Atomic-resolution imaging of spin-state superlattices in nanopockets within cobaltite thin films. <i>Nano Letters</i> , 2011 , 11, 973-6	11.5	82
157	Competing interfacial exchange and Zeeman energies in exchange biased bilayers. <i>Physical Review B</i> , 1999 , 60, 12837-12840	3.3	82
156	Magnetic small-angle neutron scattering. <i>Reviews of Modern Physics</i> , 2019 , 91,	40.5	80
155	Large area nanolithographic templates by selective etching of chemically stained block copolymer thin films. <i>Journal of Materials Chemistry</i> , 2004 , 14, 2729		80
154	Perpendicular Domain Orientation in Thin Films of Polystyrene B olylactide Diblock Copolymers. <i>Macromolecules</i> , 2005 , 38, 10101-10108	5.5	73

153	Thermally excited spin-disorder contribution to the resistivity of LaCoO3. <i>Physical Review B</i> , 2002 , 65,	3.3	73
152	Structure and transport in high pressure oxygen sputter-deposited BaSnO3[IAPL Materials, 2015, 3, 062509	5.7	72
151	Anomalous magnetotransport properties of epitaxial full Heusler alloys. <i>Applied Physics Letters</i> , 2002 , 80, 4798-4800	3.4	72
150	Magnetic and electronic properties of La1\(\mathbb{R}\)SrxCoO3 single crystals across the percolation metal-insulator transition. <i>Physical Review B</i> , 2006 , 74,	3.3	70
149	Co1-xFexS2: a tunable source of highly spin-polarized electrons. <i>Physical Review Letters</i> , 2005 , 94, 0566	50 2 .4	68
148	Antiferromagnetic spin flop and exchange bias. <i>Physical Review B</i> , 2000 , 61, R6455-R6458	3.3	66
147	Electrostatic versus Electrochemical Doping and Control of Ferromagnetism in Ion-Gel-Gated Ultrathin La0.5Sr0.5CoO3-🛘 <i>ACS Nano</i> , 2016 , 10, 7799-810	16.7	66
146	Relation between exchange anisotropy and magnetization reversal asymmetry in Fe/MnF2 bilayers. <i>Physical Review B</i> , 2002 , 65,	3.3	65
145	Epitaxial La0.5Sr0.5CoO3 thin films: Structure, magnetism, and transport. <i>Journal of Applied Physics</i> , 2008 , 104, 023901	2.5	63
144	Small-angle neutron scattering study of magnetic ordering and inhomogeneity across the martensitic phase transformation in Ni50\(\text{Ni50} Ni	3.3	61
143	Optimization of long-range order in solvent vapor annealed poly(styrene)-block-poly(lactide) thin films for nanolithography. <i>ACS Applied Materials & Description of Lactide</i> (1978) 13770-81	9.5	59
142	Coercivity enhancement above the NBl temperature of an antiferromagnet/ferromagnet bilayer. Journal of Applied Physics, 2002, 92, 1483-1488	2.5	57
141	Composite block polymer-microfabricated silicon nanoporous membrane. <i>ACS Applied Materials & Material</i>	9.5	55
140	Magnetic phase behavior of the ferrimagnetic doped cobaltite Nd1\(\mathbb{B}\)SrxCoO3. <i>Physical Review B</i> , 2004 , 70,	3.3	55
139	Magnetization reversal and nanoscopic magnetic-phase separation in La1⊠SrxCoO3. <i>Physical Review B</i> , 2005 , 72,	3.3	55
138	Chemically driven nanoscopic magnetic phase separation at the SrTiO(3) (001)/La(1-x) Sr(x) CoO(3) interface. <i>Advanced Materials</i> , 2011 , 23, 2711-5	24	53
137	Criteria for ferromagneticIhsulatorEerromagnetic tunneling. <i>Journal of Magnetism and Magnetic Materials</i> , 2002 , 240, 86-91	2.8	53
136	Crossover from nanoscopic intergranular hopping to conventional charge transport in pyrite thin films. <i>ACS Nano</i> , 2013 , 7, 2781-9	16.7	52

135	Spin dynamics in La1⊠SrxCoO3. <i>Physical Review B</i> , 2004 , 69,	3.3	52
134	Pinholes may mimic tunneling. <i>Journal of Applied Physics</i> , 2001 , 89, 2786-2790	2.5	52
133	Mobility-electron density relation probed via controlled oxygen vacancy doping in epitaxial BaSnO3. <i>APL Materials</i> , 2017 , 5, 056102	5.7	47
132	Spin-dependent band structure effects and measurement of the spin polarization in the candidate half-metal CoS2. <i>Physical Review B</i> , 2004 , 69,	3.3	47
131	Using magnetoresistance to probe reversal asymmetry in exchange biased bilayers. <i>Journal of Applied Physics</i> , 2000 , 88, 344-347	2.5	47
130	Heat capacity study of magnetoelectronic phase separation in La1\(\mathbb{R}\)SrxCoO3 single crystals. <i>Physical Review B</i> , 2009 , 80,	3.3	45
129	Evolution of the ferromagnetic and nonferromagnetic phases with temperature in phase-separated La1\(\text{\text{B}}\) SrxCoO3 by high-field La139 NMR. <i>Physical Review B</i> , 2004 , 70,	3.3	45
128	Self-Regulation of Cu/Sn Ratio in the Synthesis of Cu2ZnSnS4Films. <i>Chemistry of Materials</i> , 2015 , 27, 2507-2514	9.6	42
127	Doping fluctuation-driven magneto-electronic phase separation in La 1lk Sr x CoO 3 single crystals. <i>Europhysics Letters</i> , 2009 , 87, 27006	1.6	41
126	Cobalt spin states and hyperfine interactions in LaCoO3 investigated by LDA+U calculations. <i>Physical Review B</i> , 2010 , 82,	3.3	40
125	Dielectric response to the low-temperature magnetic defect structure and spin state transition in polycrystalline LaCoO3. <i>Physical Review B</i> , 2009 , 79,	3.3	40
124	Glassy transport phenomena in a phase-separated perovskite cobaltite. <i>Physical Review B</i> , 2006 , 73,	3.3	40
123	Kondo physics in non-local metallic spin transport devices. <i>Nature Communications</i> , 2014 , 5, 3927	17.4	39
122	Coupled structural/magnetocrystalline anisotropy transitions in the doped perovskite cobaltite Pr1\(\text{\text{B}}\) SrxCoO3. <i>Physical Review B</i> , 2009 , 79,	3.3	38
121	Low temperature Schottky anomalies in the specific heat of LaCoO3: Defect-stabilized finite spin states. <i>Applied Physics Letters</i> , 2009 , 94, 102514	3.4	37
120	Identification and separation of two distinct contributions to the training effect in polycrystalline CoffeMn bilayers. <i>Physical Review B</i> , 2008 , 77,	3.3	37
119	Ion-gel-gating-induced oxygen vacancy formation in epitaxial La0.5Sr0.5CoO3Ifilms from in operando x-ray and neutron scattering. <i>Physical Review Materials</i> , 2017 , 1,	3.2	37
118	Magnetotransport properties of epitaxial MgO(001)/FeRh films across the antiferromagnet to ferromagnet transition. <i>Journal of Applied Physics</i> , 2011 , 109, 083913	2.5	36

117	Composition controlled spin polarization in Co1NFexS2: Electronic, magnetic, and thermodynamic properties. <i>Physical Review B</i> , 2006 , 73,	3.3	36
116	Origin of complex exchange anisotropy in Fe/MnF2 bilayers. <i>Physical Review B</i> , 2003 , 68,	3.3	36
115	High conductance 2D transport around the Hall mobility peak in electrolyte-gated rubrene crystals. <i>Physical Review Letters</i> , 2014 , 113, 246602	7.4	35
114	2D Insulator Metal Transition in Aerosol-Jet-Printed Electrolyte-Gated Indium Oxide Thin Film Transistors. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600369	6.4	34
113	Phase Stability and Stoichiometry in Thin Film Iron Pyrite: Impact on Electronic Transport Properties. <i>ACS Applied Materials & Acs Applied & Ac</i>	9.5	34
112	Isotype Heterojunction Solar Cells Using n-Type Sb2Se3 Thin Films. <i>Chemistry of Materials</i> , 2020 , 32, 20	621). Ø63	8034
111	Non-lift-off block copolymer lithography of 25 nm magnetic nanodot arrays. <i>ACS Applied Materials & Materials amp; Interfaces</i> , 2011 , 3, 3472-81	9.5	34
110	Observation of magnetic excitons in LaCoO 3. Europhysics Letters, 2005, 70, 677-683	1.6	34
109	Magneto-optical study of magnetization reversal asymmetry in exchange bias. <i>Applied Physics Letters</i> , 2006 , 89, 202512	3.4	33
108	Gate-Tuned Insulator-Metal Transition in Electrolyte-Gated Transistors Based on Tellurene. <i>Nano Letters</i> , 2019 , 19, 4738-4744	11.5	31
107	Magnetocaloric effect and critical behavior in Pr0.5Sr0.5MnO3: an analysis of the validity of the Maxwell relation and the nature of the phase transitions. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 286001	1.8	31
106	Sulfur stoichiometry effects in highly spin polarized CoS2 single crystals. <i>Applied Physics Letters</i> , 2006 , 88, 232509	3.4	31
105	The Nano-Jackhammer effect in probing near-surface mechanical properties. <i>International Journal of Plasticity</i> , 2009 , 25, 2045-2058	7.6	30
104	Composition controlled spin polarization in Co(1-x)Fe(x)S(2) alloys. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 315219	1.8	30
103	Metallic conductivity near the metal-insulator transition in Cd1⊠MnxTe. <i>Physical Review B</i> , 1998 , 58, 9773-9782	3.3	30
102	Growth temperature controlled magnetism in molecular beam epitaxially grown Ni2MnAl Heusler alloy. <i>Journal of Crystal Growth</i> , 2003 , 254, 384-389	1.6	29
101	Thermodynamics of energy conversion via first order phase transformation in low hysteresis magnetic materials. <i>Energy and Environmental Science</i> , 2013 , 6, 1315	35.4	28
100	Transverse susceptibility as a probe of the magnetocrystalline anisotropy-driven phase transition in Pr0.5Sr0.5CoO3. <i>Physical Review B</i> , 2011 , 83,	3.3	28

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99	Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers. <i>Physical Review B</i> , 2001 , 64,	3.3	28	
98	Efficient spin transport through native oxides of nickel and permalloy with platinum and gold overlayers. <i>Physical Review B</i> , 2016 , 93,	3.3	26	
97	Multiple antiferromagnet/ferromagnet interfaces as a probe of grain-size-dependent exchange bias in polycrystalline Co/Fe50Mn50. <i>Journal of Magnetism and Magnetic Materials</i> , 2007 , 309, 54-63	2.8	25	
96	Understanding magnetotransport signatures in networks of connected permalloy nanowires. <i>Physical Review B</i> , 2017 , 95,	3.3	24	
95	Effects of interface states on the transport properties of all-oxide La0.8Sr0.2CoO3BrTi0.99Nb0.01O3 p-n heterojunctions. <i>Applied Physics Letters</i> , 2008 , 92, 082106	3.4	23	
94	Spontaneous formation of an exchange-spring composite via magnetic phase separation in Pr1\(\text{LaxCoO3}. \text{ Physical Review B, 2010, 82,}	3.3	22	
93	Electronic structure of Co1⊠ Fex S2. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 2117-2121	1.3	20	
92	Effect of sputtering pressure-induced roughness on the microstructure and the perpendicular giant magnetoresistance of Fe/Cr superlattices. <i>Physical Review B</i> , 2000 , 62, 15079-15083	3.3	20	
91	Transport Evidence for Sulfur Vacancies as the Origin of Unintentional n-Type Doping in Pyrite FeS. <i>ACS Applied Materials & Acs Applied Materials & Description</i> 11, 15552-15563	9.5	19	
90	Potential resolution to the doping puzzle in iron pyrite: Carrier type determination by Hall effect and thermopower. <i>Physical Review Materials</i> , 2017 , 1,	3.2	19	
89	Local matrix-cluster interactions in a phase separated perovskite. <i>Physical Review B</i> , 2006 , 74,	3.3	18	
88	Interfacially dominated giant magnetoresistance in Fe/Cr superlattices. <i>Physical Review B</i> , 2001 , 65,	3.3	18	
87	Surface conduction in n-type pyrite FeS2 single crystals. <i>Physical Review Materials</i> , 2017 , 1,	3.2	18	
86	Electrical transport, magnetic, and thermodynamic properties of La-, Pr-, and Nd-doped BaSnO3II single crystals. <i>Physical Review Materials</i> , 2018 , 2,	3.2	18	
85	Voltage-induced ferromagnetism in a diamagnet. Science Advances, 2020, 6, eabb7721	14.3	18	
84	Coercivity enhancement driven by interfacial magnetic phase separation in SrTiO3(001)/Nd0.5Sr0.5CoO3. <i>Physical Review B</i> , 2011 , 84,	3.3	17	
83	Perpendicular magnetic anisotropy via strain-engineered oxygen vacancy ordering in epitaxial La1\(\text{La1}\(\text{SrxCoO3}\(\text{D}Physical Review Materials, \text{ 2018}, 2,	3.2	17	
82	Observation and modelling of ferromagnetic contact-induced spin relaxation in Hanle spin precession measurements. <i>Physical Review B</i> , 2016 , 94,	3.3	17	

81	Glass-Like Through-Plane Thermal Conductivity Induced by Oxygen Vacancies in Nanoscale Epitaxial La0.5Sr0.5CoO3[[Advanced Functional Materials, 2017, 27, 1704233]	15.6	16
80	Universal superconducting precursor in three classes of unconventional superconductors. <i>Nature Communications</i> , 2019 , 10, 2729	17.4	16
79	Enhanced spin pumping near a magnetic ordering transition. <i>Physical Review B</i> , 2017 , 96,	3.3	16
78	RbFe2+Fe3+F6: Synthesis, structure, and characterization of a new charge-ordered magnetically frustrated pyrochlore-related mixed-metal fluoride. <i>Chemical Science</i> , 2012 , 3, 741-751	9.4	16
77	Spontaneous alignment of self-assembled ABC triblock terpolymers for large-area nanolithography. <i>Applied Physics Letters</i> , 2008 , 93, 133112	3.4	16
76	Spin polarons in La1⊠SrxCoO3 single crystals. <i>Physical Review B</i> , 2008 , 78,	3.3	16
75	Plastic response of the native oxide on Cr and Al thin films from in situ conductive nanoindentation. <i>Journal of Materials Research</i> , 2012 , 27, 685-693	2.5	15
74	Sulfur Vacancy Clustering and Its Impact on Electronic Properties in Pyrite FeS2. <i>Chemistry of Materials</i> , 2020 , 32, 4820-4831	9.6	14
73	Low-temperature interactions of magnetic excitons in LaCoO3. <i>Physical Review B</i> , 2009 , 79,	3.3	14
72	Disorder and double-exchange spin dynamics in La0.7Sr0.3MnO3 and La0.7Sr0.3CoO3 from NMR hyperfine couplings. <i>Physical Review B</i> , 2007 , 75,	3.3	14
71	Giant electrostatic modification of magnetism via electrolyte-gate-induced cluster percolation in La1\(\text{La1}\text{\text{B}}\)SrxCoO3\(\text{D}\)Physical Review Materials, 2018 , 2,	3.2	14
70	Wide-voltage-window reversible control of electronic transport in electrolyte-gated epitaxial BaSnO3. <i>Physical Review Materials</i> , 2019 , 3,	3.2	14
69	Interdiffusion-controlled Kondo suppression of injection efficiency in metallic nonlocal spin valves. <i>Physical Review B</i> , 2016 , 93,	3.3	12
68	Structural, transport, and magnetic properties of narrow bandwidth Nd1\(\mathbb{R}\)CaxCoO3\(\mathbb{L}\)and comparisons to Pr1\(\mathbb{R}\)CaxCoO3\(\mathbb{D}\)Physical Review B, 2013 , 88,	3.3	12
67	Defects, stoichiometry, and electronic transport in SrTiO3-lepilayers: A high pressure oxygen sputter deposition study. <i>Journal of Applied Physics</i> , 2016 , 120, 055704	2.5	12
66	Understanding thermal annealing of artificial spin ice. APL Materials, 2019, 7, 111112	5.7	12
65	Magnetically nanostructured state in a Ni-Mn-Sn shape-memory alloy. <i>Physical Review B</i> , 2015 , 91,	3.3	11
64	Magnetically inhomogeneous ground state below the first-order valence transition in (Pr1JYy)0.7Ca0.3CoO3[] <i>Physical Review B</i> , 2014 , 89,	3.3	11

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63	Simultaneous First-Order Valence and Oxygen Vacancy Order/Disorder Transitions in (Pr0.85Y0.15)0.7Ca0.3CoO3-Ivia Analytical Transmission Electron Microscopy. <i>ACS Nano</i> , 2016 , 10, 938-	4 7 6.7	10	
62	Transport signatures of percolation and electronic phase homogeneity in La1⊠SrxCoO3 single crystals. <i>Applied Physics Letters</i> , 2009 , 95, 222511	3.4	10	
61	Time domain dynamics of the asymmetric magnetization reversal in exchange biased bilayers. <i>Physical Review B</i> , 2005 , 71,	3.3	10	
60	Phase separation and superparamagnetism in the martensitic phase of Ni50\(\mathbb{\text{N}}\)CoxMn40Sn10. Physical Review B, 2016 , 93,	3.3	9	
59	A Unified View of the Substitution-Dependent Antiferrodistortive Phase Transition in SrTiO3. <i>Chemistry of Materials</i> , 2016 , 28, 7973-7981	9.6	9	
58	Microstructure characterization of BaSnO thin films on LaAlO and PrScO substrates from transmission electron microscopy. <i>Scientific Reports</i> , 2018 , 8, 10245	4.9	9	
57	Neutron-scattering-based evidence for interacting magnetic excitons in LaCoO3. <i>Physical Review B</i> , 2015 , 92,	3.3	9	
56	Strongly inhomogeneous conduction in cobaltite films: Non-Gaussian resistance noise. <i>Physical Review B</i> , 2008 , 78,	3.3	9	
55	Low-temperature specific heat of doped SrTiO3: Doping dependence of the effective mass and Kadowaki-Woods scaling violation. <i>Physical Review Materials</i> , 2019 , 3,	3.2	9	
54	Nanoscale magnetic phase competition throughout the Ni50\(\mathbb{N}\)CoxMn40Sn10 phase diagram: Insights from small-angle neutron scattering. <i>Physical Review Materials</i> , 2019 , 3,	3.2	9	
53	Comparison between micromagnetic simulation and experiment for the CoEFe50Mn50 exchange-biased system. <i>Journal of Applied Physics</i> , 2007 , 102, 073901	2.5	8	
52	Deposition of epitaxial #e2O3 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	
51	Violation of the Wiedemann-Franz law through reduction of thermal conductivity in gold thin films. <i>Physical Review Materials</i> , 2020 , 4,	3.2	8	
50	Scattering mechanisms and mobility enhancement in epitaxial BaSnO3 thin films probed via electrolyte gating. <i>APL Materials</i> , 2020 , 8, 071113	5.7	8	
49	First-principles study of crystal and electronic structure of rare-earth cobaltites. <i>Journal of Applied Physics</i> , 2016 , 119, 244310	2.5	8	
48	Electronic structure of BaSnO3 investigated by high-energy-resolution electron energy-loss spectroscopy and ab initio calculations. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 031503	2.9	7	
47	Ferrimagnetism in PrCoO3 epitaxial films. <i>Physical Review B</i> , 2013 , 87,	3.3	7	
46	Upper bound for the magnetic proximity effect extracted from Brillouin light scattering. <i>Physical Review B</i> , 2002 , 65,	3.3	7	

45	Theory of Kondo suppression of spin polarization in nonlocal spin valves. <i>Physical Review B</i> , 2017 , 95,	3.3	6
44	Room temperature spin Kondo effect and intermixing in Co/Cu non-local spin valves. <i>Applied Physics Letters</i> , 2017 , 110, 222407	3.4	6
43	Synthesis and characterization of highly spin-polarized single-phase Co1\(\mathbb{U}\)FexS2 films. <i>Journal of Applied Physics</i> , 2009 , 105, 093912	2.5	6
42	The minority spin surface bands of CoS(2)(001). <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 295501	1.8	6
41	Giant anisotropic magnetoresistance in oxygen-vacancy-ordered epitaxial La0.5Sr0.5CoO3Ifilms. <i>Physical Review Materials</i> , 2020 , 4,	3.2	6
40	Enhanced superconductivity and ferroelectric quantum criticality in plastically deformed strontium titanate. <i>Nature Materials</i> , 2021 ,	27	6
39	Observation of an Internal pl Junction in Pyrite FeS2 Single Crystals: Potential Origin of the Low Open Circuit Voltage in Pyrite Solar Cells 2020 , 2, 861-868		5
38	Substrate and temperature dependence of the formation of the Earth abundant solar absorber Cu2ZnSnS4 by ex situ sulfidation of cosputtered Cu-Zn-Sn films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 061203	2.9	5
37	Growth temperature control of the epitaxy, magnetism, and transport in SrTiO3(001)/La0.5Sr0.5CoO3 thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 051511	2.9	5
36	Applications of aberration corrected scanning transmission electron microscopy and electron energy loss spectroscopy to thin oxide films and interfaces. <i>International Journal of Materials Research</i> , 2010 , 101, 21-26	0.5	5
35	Thermodynamics and Energy Conversion in Heusler Alloys. <i>Springer Series in Materials Science</i> , 2016 , 269-291	0.9	5
34	Changes in physical properties of 4C pyrrhotite (Fe7S8) across the 32 K Besnus transition. <i>American Mineralogist</i> , 2018 , 103, 1674-1689	2.9	5
33	Nature of the ferromagnetic-antiferromagnetic transition in Y1\(\mathbb{L}\)axTiO3. <i>Physical Review B</i> , 2021 , 104,	3.3	5
32	Soft x-ray absorption spectroscopy and magnetic circular dichroism as operando probes of complex oxide electrolyte gate transistors. <i>Applied Physics Letters</i> , 2020 , 116, 201905	3.4	4
31	Thermal Conductivity: Glass-Like Through-Plane Thermal Conductivity Induced by Oxygen Vacancies in Nanoscale Epitaxial La0.5Sr0.5CoO3[[Adv. Funct. Mater. 47/2017]. <i>Advanced Functional Materials</i> , 2017 , 27, 1770284	15.6	4
30	Direct real space observation of magneto-electronic inhomogeneity in ultra-thin film La0.5Sr0.5CoO3Ibn SrTiO3(001). <i>Applied Physics Letters</i> , 2014 , 105, 112909	3.4	4
29	Colossal magnetotransport phenomena due to phase competition in Pr1Id(CaySr1IJ)xMnO3 single crystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 288, 146-154	2.8	4
28	Strain-induced majority carrier inversion in ferromagnetic epitaxial LaCoO3lthin films. <i>Physical Review Materials</i> , 2020 , 4,	3.2	4

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27	Doping- and Strain-Dependent Electrolyte-Gate-Induced Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. <i>ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. <i>ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. <i>ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. ACS Applied Materials & District Amplitudes and Perovskite to Brownmillerite Transformation in Epitaxial LaSrCoO Films. <i>ACS Applied Materials & District Amplitudes and Perovskite State Sta</i></i></i></i>	197 ⁵	4	
26	Field-Induced Magnetic Monopole Plasma in Artificial Spin Ice. <i>Physical Review X</i> , 2021 , 11,	9.1	3	
25	Structure-property relationships and mobility optimization in sputtered La-doped BaSnO3 films: Toward 100cm2Vflsfl mobility. <i>Physical Review Materials</i> , 2021 , 5,	3.2	3	
24	What controls electrostatic vs electrochemical response in electrolyte-gated materials? A perspective on critical materials factors. <i>APL Materials</i> , 2022 , 10, 040901	5.7	3	
23	Percolation via Combined Electrostatic and Chemical Doping in Complex Oxide Films. <i>Physical Review Letters</i> , 2017 , 118, 106801	7.4	2	
22	Anomalous Cooling-Rate-Dependent Charge Transport in Electrolyte-Gated Rubrene Crystals. Journal of Physical Chemistry Letters, 2018 , 9, 4828-4833	6.4	2	
21	Spin-dependent intergranular transport in highly spin-polarized Co1⊠FexS2 thin films. <i>Applied Physics Letters</i> , 2009 , 95, 182510	3.4	2	
20	A high temperature probe operating in the variable temperature insert of a commercial superconducting magnet system. <i>Review of Scientific Instruments</i> , 2002 , 73, 2364-2368	1.7	2	
19	Magnetic impurities as the origin of the variability in spin relaxation rates in Cu-based spin transport devices. <i>Physical Review Materials</i> , 2019 , 3,	3.2	2	
18	String Phase in an Artificial Spin Ice. <i>Nature Communications</i> , 2021 , 12, 6514	17.4	2	
17	Magnetic Phase Competition in Off-Stoichiometric Martensitic Heusler Alloys: The Ni(_{50-x})Co(_{x})Mn(_{25+y})Sn(_{25-y}) System. <i>Springer Series in Materials Science</i> , 2016 , 193-216	0.9	2	
16	Quantitative Understanding of Superparamagnetic Blocking in Thoroughly Characterized Ni Nanoparticle Assemblies. <i>Chemistry of Materials</i> , 2020 , 32, 6494-6506	9.6	2	
15	Atomic-resolution study of oxygen vacancy ordering in Lao.5Sro.5CoO3-s thin films on SrTiO3 during in situ cooling experiments <i>Microscopy and Microanalysis</i> , 2018 , 24, 84-85	0.5	2	
14	Entropy-driven order in an array of nanomagnets. <i>Nature Physics</i> ,	16.2	2	
13	Sulfurization studies of the potential thin film solar absorber Cu2ZnSnS4 2010 ,		1	
12	Conduction via surface states in antiferromagnetic Mott-insulating NiS2 single crystals. <i>Physical Review Materials</i> , 2021 , 5,	3.2	1	
11	Experimental Realization of the 1D Random Field Ising Model. <i>Physical Review Letters</i> , 2021 , 127, 20720	3 7.4	1	
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9	Magnetic-field-induced changes in superparamagnetic cluster dynamics in the martensitic phase of Ni43Co7Mn40Sn10. <i>Applied Physics Letters</i> , 2016 , 108, 252403	3.4	1
8	Atomic-scale characterization of the oxygen vacancy ordering in La 0.5 Sr 0.5 CoO 3 thin film grown on SrTiO 3 using in-situ cooling experiments. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1626-1627	0.5	1
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