

Nicola A Spaldin

List of Publications by Year in descending order

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239
papers

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4641

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docs citations

250
times ranked

23545
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial BiFeO ₃ Multiferroic Thin Film Heterostructures. <i>Science</i> , 2003, 299, 1719-1722.	6.0	5,548
2	Multiferroics: progress and prospects in thin films. <i>Nature Materials</i> , 2007, 6, 21-29.	13.3	3,543
3	Why Are There so Few Magnetic Ferroelectrics?. <i>Journal of Physical Chemistry B</i> , 2000, 104, 6694-6709.	1.2	3,289
4	MATERIALS SCIENCE: The Renaissance of Magnetoelectric Multiferroics. <i>Science</i> , 2005, 309, 391-392.	6.0	2,543
5	Weak ferromagnetism and magnetoelectric coupling in bismuth ferrite. <i>Physical Review B</i> , 2005, 71, .	1.1	1,235
6	First-principles study of spontaneous polarization in multiferroic BiFeO ₃ . <i>Physical Review B</i> , 2005, 71, .	1.1	1,225
7	Conduction at domain walls in oxide multiferroics. <i>Nature Materials</i> , 2009, 8, 229-234.	13.3	1,212
8	Electrical control of antiferromagnetic domains in multiferroic BiFeO ₃ films at room temperature. <i>Nature Materials</i> , 2006, 5, 823-829.	13.3	1,160
9	Advances in magnetoelectric multiferroics. <i>Nature Materials</i> , 2019, 18, 203-212.	13.3	1,084
10	The origin of ferroelectricity in magnetoelectric YMnO ₃ . <i>Nature Materials</i> , 2004, 3, 164-170.	13.3	1,081
11	A Strain-Driven Morphotropic Phase Boundary in BiFeO ₃ . <i>Science</i> , 2009, 326, 977-980.	6.0	1,065
12	Multiferroics: Past, present, and future. <i>Physics Today</i> , 2010, 63, 38-43.	0.3	826
13	Visualizing the Role of Bi 6s Lone Pairs in the Off-Center Distortion in Ferromagnetic BiMnO ₃ . <i>Chemistry of Materials</i> , 2001, 13, 2892-2899.	3.2	734
14	Effect of Epitaxial Strain on the Spontaneous Polarization of Thin Film Ferroelectrics. <i>Physical Review Letters</i> , 2005, 95, 257601.	2.9	512
15	Transition metal-doped TiO ₂ and ZnO—present status of the field. <i>Journal of Physics Condensed Matter</i> , 2005, 17, R657-R689.	0.7	492
16	Origin of the dielectric dead layer in nanoscale capacitors. <i>Nature</i> , 2006, 443, 679-682.	13.7	475
17	Anisotropic conductance at improper ferroelectric domain walls. <i>Nature Materials</i> , 2012, 11, 284-288.	13.3	409
18	Nonlinear lattice dynamics as a basis for enhanced superconductivity in YBa ₂ Cu ₃ O _{6.5} . <i>Nature</i> , 2014, 516, 71-73.	13.7	391

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19	Enhancement of ferroelectricity at metal-oxide interfaces. <i>Nature Materials</i> , 2009, 8, 392-397.	13.3	383
20	The toroidal moment in condensed-matter physics and its relation to the magnetoelectric effect. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 434203.	0.7	357
21	Influence of strain and oxygen vacancies on the magnetoelectric properties of multiferroic bismuth ferrite. <i>Physical Review B</i> , 2005, 71, .	1.1	339
22	Structure and Properties of Functional Oxide Thin Films: Insights From Electronic Structure Calculations. <i>Advanced Materials</i> , 2011, 23, 3363-3381.	11.1	339
23	A beginner's guide to the modern theory of polarization. <i>Journal of Solid State Chemistry</i> , 2012, 195, 2-10.	1.4	337
24	Theoretical Prediction of New High-Performance Lead-Free Piezoelectrics. <i>Chemistry of Materials</i> , 2005, 17, 1376-1380.	3.2	333
25	First-principles investigation of ferromagnetism and ferroelectricity in bismuth manganite. <i>Physical Review B</i> , 1999, 59, 8759-8769.	1.1	324
26	Strain-controlled oxygen vacancy formation and ordering in CaMnO_3 . <i>Physical Review B</i> , 2013, 88, .	1.1	315
27	Entropically Stabilized Local Dipole Formation in Lead Chalcogenides. <i>Science</i> , 2010, 330, 1660-1663.	6.0	308
28	Carrier-mediated magnetoelectricity in complex oxide heterostructures. <i>Nature Nanotechnology</i> , 2008, 3, 46-50.	15.6	306
29	Magnetism in polycrystalline cobalt-substituted zinc oxide. <i>Physical Review B</i> , 2003, 68, .	1.1	304
30	First-principles indicators of metallicity and cation off-centricity in the IV-VI rocksalt chalcogenides of divalent Ge, Sn, and Pb. <i>Physical Review B</i> , 2003, 67, .	1.1	299
31	Search for ferromagnetism in transition-metal-doped piezoelectric ZnO. <i>Physical Review B</i> , 2004, 69, .	1.1	297
32	Quantifying octahedral rotations in strained perovskite oxide films. <i>Physical Review B</i> , 2010, 82, .	1.1	293
33	Magnetic interactions in transition-metal-doped ZnO: An ab initio study. <i>Physical Review B</i> , 2006, 74, .	1.1	291
34	First principles study of the multiferroics BiFeO_3 , $\text{Bi}_2\text{FeCrO}_6$, and BiCrO_3 : Structure, polarization, and magnetic ordering temperature. <i>Physical Review B</i> , 2005, 72, .	1.1	289
35	First-principles study of the origin and nature of ferromagnetism in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$. <i>Physical Review B</i> , 2001, 63, .	1.1	288
36	The 2016 oxide electronic materials and oxide interfaces roadmap. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 433001.	1.3	266

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37	Strain-induced isosymmetric phase transition in BiFeO_3 . Physical Review B, 2010, 81, .	1.1	243
38	Self-interaction-corrected pseudopotential scheme for magnetic and strongly-correlated systems. Physical Review B, 2003, 67, .	1.1	242
39	Lattice Relaxation in Oxide Heterostructures: $\text{LaTiO}_3/\text{SrTiO}_3$ Superlattices. Physical Review Letters, 2006, 97, 056802.	2.9	237
40	First-principles study of ferroelectric domain walls in multiferroic bismuth ferrite. Physical Review B, 2009, 80, .	1.1	236
41	Stress-induced changes in BiFeO_3 . Physical Review B, 2011, 83, .	1.1	231
42	Why are there any magnetic ferroelectrics?. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 976-979.	1.0	228
43	Ground state of half-metallic zinc-blende MnAs . Physical Review B, 2000, 62, 15553-15560.	1.1	227
44	Functional Ion Defects in Transition Metal Oxides. Science, 2013, 341, 858-859.	6.0	227
45	Size Dependence of Excitons in Silicon Nanocrystals. Physical Review Letters, 1995, 75, 1130-1133.	2.9	214
46	Ab initio prediction of a multiferroic with large polarization and magnetization. Applied Physics Letters, 2005, 86, 012505.	1.5	207
47	Self-consistent treatment of spin-orbit coupling in solids using relativistic fully separableab initio pseudopotentials. Physical Review B, 2001, 64, .	1.1	183
48	Coexistence of magnetism and ferroelectricity in perovskites. Physical Review B, 2002, 65, .	1.1	173
49	Towards a microscopic theory of toroidal moments in bulk periodic crystals. Physical Review B, 2007, 76, .	1.1	173
50	Density Functional Studies of Multiferroic Magnetoelectrics. Annual Review of Materials Research, 2002, 32, 1-37.	4.3	170
51	Landau theory of topological defects in multiferroic hexagonal manganites. Nature Materials, 2014, 13, 42-49.	13.3	168
52	Non-ferroelectricity in antiferromagnetic BaMnO_3 . Physical Review B, 2009, 79, .	1.1	162
53	Structural and Optoelectronic Characterization of RF Sputtered ZnSnN_2 . Advanced Materials, 2013, 25, 2562-2566.	11.1	161
54	A new route to magnetic ferroelectrics. Nature Materials, 2004, 3, 849-851.	13.3	158

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55	Large resistivity modulation in mixed-phase metallic systems. Nature Communications, 2015, 6, 5959.	5.8	154
56	Strain-induced coupling of electrical polarization and structural defects in SrMnO ₃ films. Nature Nanotechnology, 2015, 10, 661-665.	15.6	153
57	Mn ³⁺ in Trigonal Bipyramidal Coordination: A New Blue Chromophore. Journal of the American Chemical Society, 2009, 131, 17084-17086.	6.6	151
58	Quantum Critical Origin of the Superconducting Dome in SrTiO_3 . Physical Review Letters, 2015, 115, 247002.	2.9	148
59	Electronic properties of bulk and thin film SrRuO_3 . Search for the metal-insulator transition. Physical Review B. 2008, 78, .	1.1	143
60	Electric displacement as the fundamental variable in electronic-structure calculations. Nature Physics, 2009, 5, 304-308.	6.5	143
61	MATERIALS SCIENCE: Fundamental Size Limits in Ferroelectricity. Science, 2004, 304, 1606-1607.	6.0	137
62	Polarization, piezoelectric constants, and elastic constants of ZnO, MgO, and CdO. Journal of Electronic Materials, 2006, 35, 538-542.	1.0	136
63	Functional electronic inversion layers at ferroelectric domain walls. Nature Materials, 2017, 16, 622-627.	13.3	127
64	Multiferroics: Past, present, and future. MRS Bulletin, 2017, 42, 385-390.	1.7	125
65	Scaling Behavior and Beyond Equilibrium in the Hexagonal Manganites. Physical Review X, 2012, 2, .	2.8	119
66	Anti-Polarity in Ideal BiMnO ₃ . Journal of the American Chemical Society, 2007, 129, 9854-9855.	6.6	115
67	Magnetic Stress as a Driving Force of Structural Distortions: The Case of CrN. Physical Review Letters, 2000, 85, 5166-5169.	2.9	114
68	Strain-Induced Ferroelectricity in Simple Rocksalt Binary Oxides. Physical Review Letters, 2010, 104, 037601.	2.9	114
69	Band alignment at metal/ferroelectric interfaces: Insights and artifacts from first principles. Physical Review B, 2011, 83, .	1.1	114
70	A theoretical study of the influence of the surface on the electronic structure of CdSe nanoclusters. Journal of Chemical Physics, 1994, 100, 2831-2837.	1.2	113
71	Understanding ferromagnetism in Co-doped TiO ₂ anatase from first principles. Physical Review B, 2006, 73, .	1.1	113
72	Dynamical multiferroicity. Physical Review Materials, 2017, 1, .	0.9	110

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73	Recent progress in first-principles studies of magnetoelectric multiferroics. <i>Current Opinion in Solid State and Materials Science</i> , 2005, 9, 128-139.	5.6	107
74	Structural domain walls in polar hexagonal manganites. <i>Nature Communications</i> , 2013, 4, 1540.	5.8	103
75	Influence of Quantum Confinement on the Electronic and Magnetic Properties of (Ga,Mn)As Diluted Magnetic Semiconductor. <i>Nano Letters</i> , 2002, 2, 605-608.	4.5	101
76	Origin of ferroelectricity in the multiferroic barium fluorides BaMF ₄ : A first principles study. <i>Physical Review B</i> , 2006, 74, .	1.1	98
77	First Principles Search for Multiferroism in BiCrO ₃ . <i>Journal of Physical Chemistry B</i> , 2002, 106, 3383-3388.	1.2	95
78	Substrate coherency driven octahedral rotations in perovskite oxide films. <i>Physical Review B</i> , 2010, 82, .	1.1	95
79	Monopole-based formalism for the diagonal magnetoelectric response. <i>Physical Review B</i> , 2013, 88, .	1.1	93
80	Competition and cooperation between antiferrodistortive and ferroelectric instabilities in the model perovskite SrTiO ₃ . <i>Journal of Physics Condensed Matter</i> , 2014, 26, 122203.	0.7	92
81	First-principles study of strain-electronic interplay in ZnO: Stress and temperature dependence of the piezoelectric constants. <i>Physical Review B</i> , 2000, 62, 8802-8810.	1.1	89
82	Structural effects on the spin-state transition in epitaxially strained LaCoO ₃ . <i>Physical Review B</i> , 2009, 79, .	1.1	89
83	A multiferroic material to search for the permanent electric dipole moment of the electron. <i>Nature Materials</i> , 2010, 9, 649-654.	13.3	88
84	Noncollinear magnetism and single-ion anisotropy in multiferroic perovskites. <i>Physical Review B</i> , 2012, 86, .	1.1	88
85	Density-functional study of charge doping in WO ₃ . <i>Physical Review B</i> , 2004, 70, .	1.1	84
86	Strain-Engineered Oxygen Vacancies in CaMnO ₃ Thin Films. <i>Nano Letters</i> , 2017, 17, 794-799.	4.5	83
87	Density Functional Calculations for III-V Diluted Ferromagnetic Semiconductors: A Review. <i>Journal of Superconductivity and Novel Magnetism</i> , 2002, 15, 85-104.	0.5	82
88	Temperature-Dependent Magnetoelectric Effect from First Principles. <i>Physical Review Letters</i> , 2010, 105, 087202.	2.9	82
89	Strong coupling of Jahn-Teller distortion to oxygen-octahedron rotation and functional properties in epitaxially strained orthorhombic LaMnO ₃ . <i>Physical Review B</i> , 2013, 88, .	1.1	82
90	Orbital magnetic moments of phonons. <i>Physical Review Materials</i> , 2019, 3, .	0.9	80

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91	Ultrafast Structure Switching through Nonlinear Phononics. Physical Review Letters, 2017, 118, 054101.	2.9	76
92	Atomic responses to general dark matter-electron interactions. Physical Review Research, 2020, 2, .	1.3	73
93	Influence of the local As antisite distribution on ferromagnetism in (Ga, δ Mn)As. Applied Physics Letters, 2001, 78, 3493-3495.	1.5	69
94	Multiferroics beyond electric-field control of magnetism. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190542.	1.0	69
95	A theoretical study of light emission from nanoscale silicon. Journal of Electronic Materials, 1996, 25, 269-285.	1.0	68
96	Computational design of multifunctional materials. Journal of Solid State Chemistry, 2003, 176, 615-632.	1.4	66
97	Structural phases of strained $\text{LaAlO}_3/\text{SrTiO}_3$ by octahedral tilt instabilities. Physical Review B, 2010, 82, .	1.6	65
98	LiMSO ₄ F (M = Fe, Co and Ni): promising new positive electrode materials through the DFT microscope. Physical Chemistry Chemical Physics, 2010, 12, 15512.	1.3	65
99	Coupling and competition between ferroelectricity, magnetism, strain, and oxygen vacancies in AMnO ₃ perovskites. MRS Communications, 2016, 6, 182-191.	0.8	62
100	Current trends of the magnetoelectric effect. European Physical Journal B, 2009, 71, 293-297.	0.6	61
101	Geometric ferroelectricity in fluoroperovskites. Physical Review B, 2014, 89, .	1.1	61
102	Mott transition of MnO under pressure: A comparison of correlated band theories. Physical Review B, 2006, 74, .	1.1	60
103	First-principles modeling of ferroelectric capacitors via constrained displacement field calculations. Physical Review B, 2009, 80, .	1.1	60
104	Induced Magnetoelectric Response in Pnma Perovskites. Physical Review Letters, 2011, 107, 197603.	1.2	58
105	Electronic structure of semiconductor nanoclusters: A time dependent theoretical approach. Journal of Chemical Physics, 1993, 99, 3707-3715.	1.2	58
106	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. Progress in Solid State Chemistry, 2008, 36, 1-133.	3.9	58
107	J dependence in the $\text{LSDA}+U$ of noncollinear magnets. Physical Review B, 2010, 82, .	1.1	57
108	Observation of persistent centrosymmetry in the hexagonal manganite family. Physical Review B, 2012, 85, .	1.1	57

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109	First principles study of structural, electronic and magnetic interplay in ferroelectromagnetic yttrium manganite. Journal of Magnetism and Magnetic Materials, 2001, 236, 176-189.	1.0	56
110	Strong-correlation effects in Born effective charges. Physical Review B, 2003, 68, .	1.1	56
111	Electric-field-switchable magnets: The case of BaNiF ₄ . Physical Review B, 2006, 74, .	1.1	56
112	Unexpectedly Large Electronic Contribution to Linear Magnetoelectricity. Physical Review Letters, 2011, 106, 107202.	2.9	56
113	Superexchange-Driven Magnetoelectricity in Magnetic Vortices. Physical Review Letters, 2009, 102, 157203.	2.9	55
114	First-principles prediction of oxygen octahedral rotations in perovskite-structure EuTiO ₃ . Physical Review B, 2012, 85, .	1.1	55
115	Biquadratic and ring exchange interactions in orthorhombic perovskite manganites. Physical Review B, 2015, 91, .	1.1	55
116	Magnetophononics: Ultrafast spin control through the lattice. Physical Review Materials, 2018, 2, .	0.9	53
117	Linear Magnetoelectric Effect by Orbital Magnetism. Physical Review Letters, 2012, 109, 197203.	2.9	52
118	Accurate polarization within a unified Wannier function formalism. Physical Review B, 2006, 73, .	1.1	51
119	Ab initio theory of metal-insulator interfaces in a finite electric field. Physical Review B, 2007, 75, .	1.1	51
120	Multiferroic quantum criticality. Nature Materials, 2019, 18, 223-228.	13.3	49
121	Strain-induced magnetic anisotropy in epitaxial thin films of the spinel CoCr ₂ S ₄ . Physical Review B, 2015, 92, .		
122	Phono-magnetic analogs to opto-magnetic effects. Physical Review Research, 2020, 2, .	1.3	46
123	High-temperature multiferroicity and strong magnetocrystalline anisotropy in double perovskites. Physical Review B, 2011, 83, .	1.1	45
124	Ab Initio Transport Theory for Digital Ferromagnetic Heterostructures. Physical Review Letters, 2001, 87, 267202.	2.9	44
125	Electric-Field Control of Magnetism in Complex Oxide Thin Films. MRS Bulletin, 2008, 33, 1047-1050.	1.7	44
126	Origin of ferroelectric polarization in tetragonal tungsten-bronze-type oxides. Physical Review B, 2016, 93, .	1.1	44

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127	The ultrathin limit of improper ferroelectricity. Nature Communications, 2019, 10, 5591.	5.8	44
128	Correlated local dipoles in PbTe. Physical Review Materials, 2018, 2, .	0.9	43
129	Ferrodistorive Instability at the (001) Surface of Half-Metallic Manganites. Physical Review Letters, 2007, 99, 226101.	2.9	40
130	Analogies and Differences between Ferroelectrics and Ferromagnets. , 2007, , 175-218.		40
131	Duality of Topological Defects in Hexagonal Manganites. Physical Review Letters, 2014, 113, 267602.	2.9	40
132	Strain-induced structural instability in FeRh. Physical Review B, 2016, 94, .	1.1	40
133	Global Formation of Topological Defects in the Multiferroic Hexagonal Manganites. Physical Review X, 2017, 7, .	2.8	40
134	Incommensurate magnetic structure, Fe/Cu chemical disorder, and magnetic interactions in the high-temperature multiferroic YBaCuFeO_{5-x} . Physical Review B, 2015, 91, .	1.1	39
135	Quasistatic magnetoelectric multipoles as order parameter for pseudogap phase in cuprate superconductors. Physical Review B, 2016, 93, .	1.1	39
136	Self-interaction effects in (Ga,Mn)As and (Ga,Mn)N. Chemical Physics, 2005, 309, 59-65.	0.9	38
137	Quantification of octahedral rotations in strained LaAlO_3 films via synchrotron x-ray diffraction. Physical Review B, 2013, 88, .	1.1	38
138	Theoretical study of Schottky-barrier formation at epitaxial rare-earth-metal/semiconductor interfaces. Physical Review B, 2010, 81, .	1.1	37
139	Multiferroics: progress and prospects in thin films. , 2009, , 20-28.		36
140	Self-interaction correction with Wannier functions. Physical Review B, 2008, 77, .	1.1	33
141	Magnetoelectric multipoles in metals. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170450.	1.6	33
142	Depolarizing-Field Effects in Epitaxial Capacitor Heterostructures. Physical Review Letters, 2019, 123, 147601.	2.9	33
143	Longitudinal and transverse electron paramagnetic resonance in a scanning tunneling microscope. Science Advances, 2020, 6, .	4.7	33
144	Unconventional Spin Relaxation Involving Localized Vibrational Modes in Ho Single-Atom Magnets. Physical Review Letters, 2020, 124, 077204.	2.9	33

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145	Interface and surface stabilization of the polarization in ferroelectric thin films. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28589-28595.	3.3	32
146	Effects of intense optical phonon pumping on the structure and electronic properties of yttrium barium copper oxide. Physical Review B, 2016, 94, .	1.1	31
147	Defect Chemistry as a Crystal Structure Design Parameter: Intrinsic Point Defects and Ga Substitution in InMnO ₃ . Chemistry of Materials, 2017, 29, 2425-2434.	3.2	31
148	Strain and ferroelectric soft-mode induced superconductivity in strontium titanate. Physical Review B, 2018, 97, .	1.1	31
149	Trilayer superlattices: A route to magnetoelectric multiferroics?. Applied Physics Letters, 2007, 90, 242916.	1.5	30
150	Novel Nanorod Precipitate Formation in Neodymium and Titanium Codoped Bismuth Ferrite. Advanced Functional Materials, 2013, 23, 683-689.	7.8	29
151	First-principles calculation and experimental investigation of lattice dynamics in the rare-earth pyrochlores $O_{R_2}O_7$		

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163	Emphanitic anharmonicity in PbSe at high temperature and anomalous electronic properties in the PbQ(Q=S,Se,Te) system. Physical Review B, 2018, 98, .	1.1	23
164	Electron-lattice instabilities suppress cuprate-like electronic structures in SrFeO_{3-x} . Physical Review B, 2010, 81, .	1.1	22
165	Oxygen vacancies in the bulk and at neutral domain walls in hexagonal YMnO_3 . Physical Review B, 2018, 98, . Electric and magnetic polarizabilities of hexagonal YMnO_3 . Physical Review B, 2018, 98, .	1.1	22
166			

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181	On the happiness of ferroelectric surfaces and its role in water dissociation: The example of bismuth ferrite. Journal of Chemical Physics, 2021, 154, 024702.	1.2	17
182	Translation domains in multiferroics. Phase Transitions, 2013, 86, 33-52.	0.6	16
183	Magnetic field generated by a charge in a uniaxial magnetoelectric material. Physical Review B, 2014, 89, .	1.1	16
184	Interplay between ferroelectricity and metallicity in BaTiO ₃ . Journal of Materials Chemistry C, 2021, 9, 8640-8649.	2.7	16
185	Relationship between crystal structure and multiferroic orders in orthorhombic perovskite manganites. Physical Review Materials, 2018, 2, .	0.9	16
186	Density-functional investigation of the grain boundary in Co-doped anatase. Physical Review B, 2007, 76, .	1.1	15
187	Unusual dielectric response in B-site size-disordered hexagonal transition metal oxides. Applied Physics Letters, 2010, 96, .	1.5	15
188	Search for the Magnetic Monopole at a Magnetoelectric Surface. Physical Review X, 2019, 9, .	2.8	15
189	Chemical control of polar behavior in bicomponent short-period superlattices. Physical Review B, 2010, 81, .	1.1	14
190	Fermi surface evolution of Na-doped PbTe studied through density functional theory calculations and Shubnikov-de Haas measurements. Physical Review B, 2016, 94, .	1.1	14
191	The valence band electronic structure of rhombohedral-like and tetragonal-like BiFeO ₃ thin films from hard X-ray photoelectron spectroscopy and first-principles theory. Journal of Electron Spectroscopy and Related Phenomena, 2016, 208, 63-66.	0.8	14
192	Layer and spontaneous polarizations in perovskite oxides and their interplay in multiferroic bismuth ferrite. Journal of Chemical Physics, 2021, 154, 154702.	1.2	14
193	Ultrafast transient increase of oxygen octahedral rotations in a perovskite. Physical Review Research, 2019, 1, .	1.3	14
194	Manifestation of structural Higgs and Goldstone modes in the hexagonal manganites. Physical Review B, 2020, 102, .	1.1	13
195	Strong correlation and ferromagnetism in (Ga,Mn)As and (Ga,Mn)N. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1391-1394.	1.0	12
196	Multiferroic Magnetic Spirals Induced by Random Magnetic Exchanges. Physical Review X, 2018, 8, .	2.8	12
197	Evidence of Incoherent Carriers Associated with Resonant Impurity Levels and Their Influence on Superconductivity in the Anomalous Superconductor Pb _{1-x} Bi _x S ₂ . Physical Review X, 2018, 8, .	2.9	12
198	Observation of a Charge-Neutral Muon-Polaron Complex in Antiferromagnetic CrO ₃ . Physical Review X, 2020, 10, .	2.8	12

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199	Magnetolectric Classification of Skyrmions. Physical Review Letters, 2022, 128, .	2.9	12
200	Multiferroic materials tower up. Physics World, 2004, 17, 20-21.	0.0	11
201	Theoretical study of the structural and electronic properties of strained ErAs. Physical Review B, 2008, 77, .	1.1	11
202	Sounding out optical phonons. Science, 2017, 357, 873-874.	6.0	11
203	Origin and evolution of ferroelectricity in the layered rare-earth-titanate, $R_2\text{Ti}_2\text{O}_7$ and $R_2\text{Zr}_2\text{O}_7$ Carpy-Galy phases. Polyhedron, 2019, 171, 181-192.	1.0	11
204	First principles study of intrinsic defects in (Ga,Mn)As. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 441-446.	1.0	10
205	Emergent room temperature polar phase in CaTiO ₃ nanoparticles and single crystals. APL Materials, 2019, 7, .	2.2	10
206	Local Electronic Structure and Dynamics of Muon-Polaron Complexes in FeO . Physical Review Letters, 2021, 126, 037202.	2.9	10
207	Prediction of low-energy phases of BiFeO ₃ with large unit cells and complex tilts beyond Glazer notation. Physical Review Materials, 2021, 5, .	0.9	10
208	Ferroelectric, quantum paraelectric, or paraelectric? Calculating the evolution from BaTiO_3 to SrTiO_3 . Physical Review Letters, 2021, 126, 037202.	1.3	10
209	Theoretical analysis of the geometries of the luminescent regions in porous silicon. Applied Physics Letters, 1995, 67, 1125-1127.	1.5	9
210	Separating different contributions to the crystal-field parameters using Wannier functions. Journal of Physics Condensed Matter, 2015, 27, 175503.	0.7	9
211	<i>Ab initio</i> study of the ferroelectric strain dependence and BaMgF_4 walls in the barium metal fluorides. Physical Review B, 2016, 93, .	1.1	9
212	On the relationship between topological and geometric defects. Journal of Physics Condensed Matter, 2017, 29, 343001.	0.7	9
213	Comparison of coherent phonon generation by electronic and ionic Raman scattering in LaAlO_3 . Physical Review Research, 2021, 3, .	1.3	9
214	Analogy between the Magnetic Dipole Moment at the Surface of a Magnetolectric and the Electric Charge at the Surface of a Ferroelectric. Journal of Experimental and Theoretical Physics, 2021, 132, 493-505.	0.2	8
215	Oxygen vacancies in strontium titanate: A DFT study. Physical Review Research, 2021, 3, .	1.1	8
216	Revealing hidden magnetolectric multipoles using Compton scattering. Physical Review Research, 2021, 3, .	1.3	7

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