

Lane W Martin

List of Publications by Year in descending order

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275
papers

22,674
citations

15497

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9570

144
g-index

289
all docs

289
docs citations

289
times ranked

20525
citing authors

#	ARTICLE	IF	CITATIONS
1	Above-bandgap voltages from ferroelectric photovoltaic devices. Nature Nanotechnology, 2010, 5, 143-147.	30.5	1,541
2	Electric-field control of local ferromagnetism using a magnetoelectric multiferroic. Nature Materials, 2008, 7, 478-482.	26.6	1,237
3	Conduction at domain walls in oxide multiferroics. Nature Materials, 2009, 8, 229-234.	26.6	1,236
4	Conformable amplified lead zirconate titanate sensors with enhanced piezoelectric response for cutaneous pressure monitoring. Nature Communications, 2014, 5, 4496.	13.2	790
5	Observation of polar vortices in oxide superlattices. Nature, 2016, 530, 198-201.	36.2	731
6	Thin-film ferroelectric materials and their applications. Nature Reviews Materials, 2017, 2, .	40.2	669
7	Leakage mechanisms in BiFeO ₃ thin films. Applied Physics Letters, 2007, 90, 072902.	3.2	509
8	Electric modulation of conduction in multiferroic Ca-doped BiFeO ₃ films. Nature Materials, 2009, 8, 485-493.	26.6	485
9	Photovoltaic effects in BiFeO ₃ . Applied Physics Letters, 2009, 95, .	3.2	467
10	Observation of room-temperature polar skyrmions. Nature, 2019, 568, 368-372.	36.2	466
11	Photoconductivity in BiFeO ₃ thin films. Applied Physics Letters, 2008, 92, .	3.2	450
12	Critical thickness and orbital ordering in ultrathin LaBiFeO_3 . Physical Review B, 2008, 78, .	3.3	379
13	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. Physical Review Letters, 2018, 120, 227601.	8.0	358
14	Interface Ferromagnetism and Orbital Reconstruction in $\text{BiFeO}_3/\text{LaBiFeO}_3$. Physical Review Letters, 2010, 105, 027201.	8.0	342
15	Multiferroics and magnetoelectrics: thin films and nanostructures. Journal of Physics Condensed Matter, 2008, 20, 434220.	1.9	304
16	Large field-induced strains in a lead-free piezoelectric material. Nature Nanotechnology, 2011, 6, 98-102.	30.5	296
17	Nanoscale Control of Exchange Bias with BiFeO_3 Thin Films. Nano Letters, 2008, 8, 2050-2055.	9.5	276
18	Controlling magnetism with multiferroics. Materials Today, 2007, 10, 16-23.	18.1	253

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19	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	2.9	249
20	Ferroelectric polarization reversal via successive ferroelastic transitions. Nature Materials, 2015, 14, 79-86.	26.6	222
21	Pyroelectric energy conversion with large energy and power density in relaxor ferroelectric thin films. Nature Materials, 2018, 17, 432-438.	26.6	221
22	Linear and nonlinear optical properties of BiFeO ₃ . Applied Physics Letters, 2008, 92, .	3.2	217
23	Interface control of bulk ferroelectric polarization. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9710-9715.	7.6	216
24	Nanoscale Control of Domain Architectures in BiFeO ₃ Thin Films. Nano Letters, 2009, 9, 1726-1730.	9.5	214
25	Ferroelectric size effects in multiferroic BiFeO ₃ thin films. Applied Physics Letters, 2007, 90, 252906.	3.2	182
26	Phase coexistence and electric-field control of toroidal order in oxide superlattices. Nature Materials, 2017, 16, 1003-1009.	26.6	167
27	Ferroelectrically driven spatial carrier density modulation in graphene. Nature Communications, 2015, 6, 6136.	13.2	150
28	Optical properties and magnetochromism in multiferroic BiFeO_3 . Physical Review B, 2009, 79, .	3.3	149
29	Stability of Polar Vortex Lattice in Ferroelectric Superlattices. Nano Letters, 2017, 17, 2246-2252.	9.5	147
30	Enhancement of Ferroelectric Curie Temperature in BaTiO ₃ Films via Strain-Induced Defect Dipole Alignment. Advanced Materials, 2014, 26, 6341-6347.	24.3	144
31	Nanoscale Structure and Mechanism for Enhanced Electromechanical Response of Highly Strained BiFeO ₃ Thin Films. Advanced Materials, 2011, 23, 3170-3175.	24.3	139
32	Effect of Growth Induced (Non)Stoichiometry on Interfacial Conductance in $\text{LaAlO}_3/\text{SrTiO}_3$. Physical Review Letters, 2013, 110, 196804.	8.0	137
33	Magnetotransport at Domain Walls in BiFeO_3 . Physical Review Letters, 2012, 108, 067203.	8.0	135
34	Emergent chirality in the electric polarization texture of titanate superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 915-920.	7.6	132
35	Thermoreflectance of metal transducers for optical pump-probe studies of thermal properties. Optics Express, 2012, 20, 28829.	3.4	115
36	Optical creation of a supercrystal with three-dimensional nanoscale periodicity. Nature Materials, 2019, 18, 377-383.	26.6	115

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37	Effect of Growth Induced (Non)Stoichiometry on the Structure, Dielectric Response, and Thermal Conductivity of SrTiO ₃ Thin Films. Chemistry of Materials, 2012, 24, 331-337.	7.1	111
38	Local negative permittivity and topological phase transition in polar skyrmions. Nature Materials, 2021, 20, 194-201.	26.6	106
39	Room temperature exchange bias and spin valves based on BiFeO ₃ /SrRuO ₃ /SrTiO ₃ /Si (001) heterostructures. Applied Physics Letters, 2007, 91, .	3.2	105
40	Tunable Carrier Type and Density in Graphene/PbZr _{0.2} Ti _{0.8} O ₃ Hybrid Structures through Ferroelectric Switching. Nano Letters, 2013, 13, 1693-1698.	9.5	105
41	Low voltage performance of epitaxial BiFeO ₃ films on Si substrates through lanthanum substitution. Applied Physics Letters, 2008, 92, .	3.2	104
42	Highly mobile ferroelastic domain walls in compositionally graded ferroelectric thin films. Nature Materials, 2016, 15, 549-556.	26.6	101
43	Near-field examination of perovskite-based superlenses and superlens-enhanced probe-object coupling. Nature Communications, 2011, 2, 249.	13.2	99
44	Advanced synthesis techniques and routes to new single-phase multiferroics. Current Opinion in Solid State and Materials Science, 2012, 16, 199-215.	11.8	96
45	Quantification of flexoelectricity in PbTiO ₃ /SrTiO ₃ superlattice polar vortices using machine learning and phase-field modeling. Nature Communications, 2017, 8, 1468.	13.2	95
46	New modalities of strain-control of ferroelectric thin films. Journal of Physics Condensed Matter, 2016, 28, 263001.	1.9	94
47	Resonant domain-wall-enhanced tunable microwave ferroelectrics. Nature, 2018, 560, 622-627.	36.2	93
48	Recent Progress on Topological Structures in Ferroic Thin Films and Heterostructures. Advanced Materials, 2021, 33, e2000857.	24.3	93
49	Adsorption-controlled molecular-beam epitaxial growth of BiFeO ₃ . Applied Physics Letters, 2007, 91, .	3.2	92
50	Stationary domain wall contribution to enhanced ferroelectric susceptibility. Nature Communications, 2014, 5, 3120.	13.2	87
51	Microwave a.c. conductivity of domain walls in ferroelectric thin films. Nature Communications, 2016, 7, 11630.	13.2	85
52	Magnon sidebands and spin-charge coupling in bismuth ferrite probed by nonlinear optical spectroscopy. Physical Review B, 2009, 79, .	3.3	83
53	Direct Observation of Capacitor Switching Using Planar Electrodes. Advanced Functional Materials, 2010, 20, 3466-3475.	16.5	82
54	New approach to waste-heat energy harvesting: pyroelectric energy conversion. NPG Asia Materials, 2019, 11, .	8.3	82

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55	Ultrafast terahertz-field-driven ionic response in ferroelectric BaTiO_3 . Physical Review B, 2016, 94, .	3.3	81
56	Improved Pyroelectric Figures of Merit in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. ACS Applied Materials & Interfaces, 2013, 5, 13235-13241.	8.3	77
57	Three-State Ferroelastic Switching and Large Electromechanical Responses in PbTiO_3 Thin Films. Advanced Materials, 2017, 29, 1702069.	24.3	77
58	Subterahertz collective dynamics of polar vortices. Nature, 2021, 592, 376-380.	36.2	77
59	Unexpected Crystal and Domain Structures and Properties in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. Advanced Materials, 2013, 25, 1761-1767.	24.3	74
60	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	13.2	74
61	Beyond Substrates: Strain Engineering of Ferroelectric Membranes. Advanced Materials, 2020, 32, e2003780.	24.3	72
62	Probing the evolution of antiferromagnetism in multiferroics. Physical Review B, 2010, 81, .	3.3	70
63	Effect of domain walls on the electrocaloric properties of $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$ thin films. Applied Physics Letters, 2011, 99, .	3.2	70
64	Thermal conductance of strongly bonded metal-oxide interfaces. Physical Review B, 2015, 91, .	3.3	70
65	Electron Accumulation and Emergent Magnetism in LaMnO_3 Heterostructures. Physical Review Letters, 2017, 119, 156801.	8.0	70
66	Synthesis, Control, and Characterization of Surface Properties of Cu_2O Nanostructures. ACS Nano, 2011, 5, 3736-3743.	15.3	66
67	Epitaxial Ferroelectric Heterostructures Fabricated by Selective Area Epitaxy of SrRuO_3 Using an MgO Mask. Advanced Materials, 2012, 24, 1610-1615.	24.3	66
68	Effect of C_2v symmetry mismatch on the domain structure of rhombohedral BiFeO_3 thin films. Applied Physics Letters, 2014, 104, .	3.2	66
69	Temperature and thickness evolution and epitaxial breakdown in highly strained BiFeO_3 thin films. Physical Review B, 2012, 85, .	3.3	65
70	Large polarization gradients and temperature-stable responses in compositionally-graded ferroelectrics. Nature Communications, 2017, 8, 14961.	13.2	64
71	Orientation-dependent potential barriers in case of epitaxial $\text{Pt}/\text{BiFeO}_3/\text{SrRuO}_3$ capacitors. Applied Physics Letters, 2009, 94, .	3.2	63
72	Engineering functionality in the multiferroic BiFeO_3 controlling chemistry to enable advanced applications. Dalton Transactions, 2010, 39, 10813.	3.4	62

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73	Interfacial Octahedral Rotation Mismatch Control of the Symmetry and Properties of SrRuO ₃ . ACS Applied Materials & Interfaces, 2016, 8, 14871-14878.	8.3	62
74	Ultrathin Limit of Exchange Bias Coupling at Oxide Multiferroic/Ferromagnetic Interfaces. Advanced Materials, 2013, 25, 4739-4745.	24.3	61
75	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	15.3	61
76	Experimental Demonstration of Ferroelectric Spiking Neurons for Unsupervised Clustering. , 2018, , .		61
77	180° Ferroelectric Stripe Nanodomains in BiFeO ₃ Thin Films. Nano Letters, 2015, 15, 6506-6513.	9.5	60
78	Thermal conductivity as a metric for the crystalline quality of SrTiO ₃ epitaxial layers. Applied Physics Letters, 2011, 98, .	3.2	59
79	Couplings of Polarization with Interfacial Deep Trap and Schottky Interface Controlled Ferroelectric Memristive Switching. Advanced Functional Materials, 2020, 30, 2000664.	16.5	59
80	Pyroelectric properties of polydomain epitaxial Pb _{0.98} Ti _{0.02} O ₃ thin films. Applied Physics Letters, 2012, 100, 167601.	3.3	58
81	Nonstoichiometry, Structure, and Properties of BiFeO ₃ Films. Chemistry of Materials, 2016, 28, 5952-5961.	7.1	57
82	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. Physical Review Applied, 2017, 7, .	3.8	57
83	Effect of 90° Domain Walls on the Low-Field Permittivity of Pb _{0.98} Ti _{0.02} O ₃ Thin Films. Physical Review Letters, 2012, 108, 167601.	3.3	57
84	Large built-in electric fields due to flexoelectricity in compositionally graded ferroelectric thin films. Physical Review B, 2013, 87, .	3.3	55
85	Effect of 90° Domain Walls and Thermal Expansion Mismatch on the Pyroelectric Properties of Epitaxial Pb _{0.98} Ti _{0.02} O ₃ Thin Films. Physical Review Letters, 2012, 108, 167601.	3.3	55
86	The dependence of oxygen vacancy distributions in BiFeO ₃ films on oxygen pressure and substrate. Applied Physics Letters, 2009, 95, .	3.2	53
87	Enhanced Electrical Resistivity and Properties via Ion Bombardment of Ferroelectric Thin Films. Advanced Materials, 2016, 28, 10750-10756.	24.3	53
88	Reducing Coercive-Field Scaling in Ferroelectric Thin Films via Orientation Control. ACS Nano, 2018, 12, 4736-4743.	15.3	53
89	Ambipolar ferromagnetism by electrostatic doping of a manganite. Nature Communications, 2018, 9, 1897.	13.2	52
90	Kinetic control of tunable multi-state switching in ferroelectric thin films. Nature Communications, 2019, 10, 1282.	13.2	52

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91	Effects of Nonequilibrium Growth, Nonstoichiometry, and Film Orientation on the Metal-to-Insulator Transition in NdNiO ₃ Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 22436-22444.	8.3	50
92	Mechanical-force-induced non-local collective ferroelastic switching in epitaxial lead-titanate thin films. Nature Communications, 2019, 10, 3951.	13.2	50
93	Manipulating magnetoelectric energy landscape in multiferroics. Nature Communications, 2020, 11, 2836.	13.2	50
94	Growth and structure of PbVO ₃ thin films. Applied Physics Letters, 2007, 90, 062903.	3.2	48
95	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in BiFeO ₃ Thin Films. Advanced Materials, 2015, 27, 6371-6375.	24.3	48
96	Self-Assembled, Nanostructured, Tunable Metamaterials <i>via</i> Spinodal Decomposition. ACS Nano, 2016, 10, 10237-10244.	15.3	48
97	Ultralow Voltage Manipulation of Ferromagnetism. Advanced Materials, 2020, 32, e2001943.	24.3	48
98	Epitaxial Multiferroic BiFeO ₃ Thin Films: Progress and Future Directions. Ferroelectrics, 2007, 354, 167-177.	0.6	46
99	Spin-charge-lattice coupling through resonant multimagnon excitations in multiferroic BiFeO ₃ . Applied Physics Letters, 2009, 94, 161905.	3.2	45
100	Giant Superelastic Piezoelectricity in Flexible Ferroelectric BaTiO ₃ Membranes. ACS Nano, 2020, 14, 5053-5060.	15.3	45
101	Thin-Film Ferroelectrics. Advanced Materials, 2022, 34, e2108841.	24.3	45
102	Complex strain evolution of polar and magnetic order in multiferroic BiFeO ₃ thin films. Nature Communications, 2018, 9, 3764.	13.2	44
103	Toward Intrinsic Ferroelectric Switching in Multiferroic BiFeO_3 Physical Review Letters, 2020, 125, 067601.	8.0	43
104	Self-regulated growth of LaVO ₃ thin films by hybrid molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.2	42
105	Nanodomain Engineering in Ferroelectric Capacitors with Graphene Electrodes. Nano Letters, 2016, 16, 6460-6466.	9.5	42
106	A new era in ferroelectrics. APL Materials, 2020, 8, .	4.8	42
107	Switching kinetics in epitaxial BiFeO ₃ thin films. Journal of Applied Physics, 2010, 107, .	2.3	41
108	Complex Evolution of Built-in Potential in Compositionally-Graded PbZr _{1-x} Ti _x O ₃ Thin Films. ACS Nano, 2015, 9, 7332-7342.	15.3	41

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109	Electric field control of chirality. <i>Science Advances</i> , 2022, 8, eabj8030.	10.9	41
110	Enabling ultra-low-voltage switching in BaTiO ₃ . <i>Nature Materials</i> , 2022, 21, 779-785.	26.6	41
111	Direct observation of ferroelectric domain switching in varying electric field regimes using in situ TEM. <i>Micron</i> , 2012, 43, 1121-1126.	2.3	40
112	Enhanced electrocaloric and pyroelectric response from ferroelectric multilayers. <i>Applied Physics Letters</i> , 2014, 105, .	3.2	40
113	Emergence of the Vortex State in Confined Ferroelectric Heterostructures. <i>Advanced Materials</i> , 2019, 31, e1901014.	24.3	39
114	Revealing ferroelectric switching character using deep recurrent neural networks. <i>Nature Communications</i> , 2019, 10, 4809.	13.2	38
115	Light-Induced Currents at Domain Walls in Multiferroic BiFeO ₃ . <i>Nano Letters</i> , 2020, 20, 145-151.	9.5	38
116	Vortex Domain Walls in Ferroelectrics. <i>Nano Letters</i> , 2021, 21, 3533-3539.	9.5	38
117	Exploring the Pb _{1-x} Sr _x HfO ₃ System and Potential for High Capacitive Energy Storage Density and Efficiency. <i>Advanced Materials</i> , 2022, 34, e2105967.	24.3	38
118	High-frequency thermal-electrical cycles for pyroelectric energy conversion. <i>Journal of Applied Physics</i> , 2014, 116, .	2.3	37
119	Orientation-dependent structural phase diagrams and dielectric properties of $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ polydomain. <i>Physical Review B</i> , 2015, 91, .	3.3	37
120	Differential voltage amplification from ferroelectric negative capacitance. <i>Applied Physics Letters</i> , 2017, 111, .	3.2	37
121	Understanding the Role of Ferroelastic Domains on the Pyroelectric and Electrocaloric Effects in Ferroelectric Thin Films. <i>Advanced Materials</i> , 2019, 31, e1803312.	24.3	37
122	Local control of defects and switching properties in ferroelectric thin films. <i>Physical Review Materials</i> , 2018, 2, .	2.5	37
123	Polar and magnetic properties of PbVO ₃ thin films. <i>Physical Review B</i> , 2007, 75, .	3.3	36
124	Strong Visible-Light Absorption and Hot-Carrier Injection in TiO ₂ /SrRuO ₃ Heterostructures. <i>Advanced Energy Materials</i> , 2013, 3, 1084-1090.	22.2	36
125	Piezoresponse amplitude and phase quantified for electromechanical characterization. <i>Journal of Applied Physics</i> , 2020, 128, .	2.3	35
126	Pressurizing Field-Effect Transistors of Few-Layer MoS ₂ in a Diamond Anvil Cell. <i>Nano Letters</i> , 2017, 17, 194-199.	9.5	34

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127	Ferroelectricity in $\text{Pb}^{1+}\text{ZrO}_3$ Thin Films. <i>Chemistry of Materials</i> , 2017, 29, 6544-6551.	7.1	34
128	Designing Optimal Perovskite Structure for High Ionic Conduction. <i>Advanced Materials</i> , 2020, 32, e1905178.	24.3	34
129	Pyroelectric current measurements on $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ epitaxial layers. <i>Journal of Applied Physics</i> , 2012, 112, .	2.3	33
130	Strain evolution in non-stoichiometric heteroepitaxial thin-film perovskites. <i>Journal of Materials Chemistry C</i> , 2013, 1, 8052.	5.6	33
131	Towards reversible control of domain wall conduction in $\text{Pb}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3$ thin films. <i>Applied Physics Letters</i> , 2015, 106, .	3.2	33
132	Roadmap on ferroelectric hafnia- and zirconia-based materials and devices. <i>APL Materials</i> , 2023, 11, .	4.8	33
133	Electronic Transport and Ferroelectric Switching in Ion-Bombarded, Defect-Engineered BiFeO_3 Thin Films. <i>Advanced Materials Interfaces</i> , 2018, 5, 1700991.	4.1	32
134	Epitaxial Strain Control of Relaxor Ferroelectric Phase Evolution. <i>Advanced Materials</i> , 2019, 31, e1901060.	24.3	32
135	Observation of solid-state bidirectional thermal conductivity switching in antiferroelectric lead zirconate (PbZrO_3). <i>Nature Communications</i> , 2022, 13, 1573.	13.2	32
136	Reduction of the electrocaloric entropy change of ferroelectric $\text{PbZr}_{1-x}\text{O}_3$ epitaxial layers due to an elastocaloric effect. <i>Physical Review B</i> , 2014, 90, .	3.3	31
137	Epitaxial growth of highly-crystalline spinel ferrite thin films on perovskite substrates for all-oxide devices. <i>Scientific Reports</i> , 2015, 5, 10363.	3.4	31
138	A Perovskite Light-Emitting Device Driven by Low-Frequency Alternating Current Voltage. <i>Advanced Optical Materials</i> , 2018, 6, 1800206.	7.9	31
139	Epitaxial Ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ with Metallic Pyrochlore Oxide Electrodes. <i>Advanced Materials</i> , 2021, 33, e2006089.	24.3	31
140	The role of lattice dynamics in ferroelectric switching. <i>Nature Communications</i> , 2022, 13, 1110.	13.2	31
141	Enhanced Thermoelectric Power Factor of Na_3CoO_2 Thin Films by Structural Engineering. <i>Advanced Energy Materials</i> , 2014, 4, 1301927.	22.2	29
142	Perspective: Emergent topologies in oxide superlattices. <i>APL Materials</i> , 2018, 6, .	4.8	29
143	Topological phases in polar oxide nanostructures. <i>Reviews of Modern Physics</i> , 2023, 95, .	46.3	29
144	Versatile and Highly Efficient Controls of Reversible Topotactic Metal-Insulator Transitions through Proton Intercalation. <i>Advanced Functional Materials</i> , 2019, 29, 1907072.	16.5	28

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145	Pyroelectric and electrocaloric effects in ferroelectric silicon-doped hafnium oxide thin films. <i>Physical Review Materials</i> , 2018, 2, .	2.5	27
146	Emergent chirality in a polar meron to skyrmion phase transition. <i>Nature Communications</i> , 2023, 14, .	13.2	27
147	Single gate p-n junctions in graphene-ferroelectric devices. <i>Applied Physics Letters</i> , 2016, 108, .	3.2	26
148	Strain-induced growth instability and nanoscale surface patterning in perovskite thin films. <i>Scientific Reports</i> , 2016, 6, 26075.	3.4	26
149	Orientation-dependent properties of epitaxially strained perovskite oxide thin films: Insights from first-principles calculations. <i>Physical Review B</i> , 2017, 95, .	3.3	25
150	Defect-Induced (Dis)Order in Relaxor Ferroelectric Thin Films. <i>Physical Review Letters</i> , 2019, 123, 207602.	8.0	25
151	Phonon-induced near-field resonances in multiferroic BiFeO ₃ thin films at infrared and THz wavelengths. <i>Applied Physics Letters</i> , 2020, 116, .	3.2	25
152	Defect-Enhanced Polarization Switching in the Improper Ferroelectric LuFeO ₃ . <i>Advanced Materials</i> , 2020, 32, e2000508.	24.3	25
153	Linear and nonlinear optical properties of multifunctional PbVO ₃ thin films. <i>Applied Physics Letters</i> , 2008, 92, .	3.2	24
154	Mapping growth windows in quaternary perovskite oxide systems by hybrid molecular beam epitaxy. <i>Applied Physics Letters</i> , 2016, 109, .	3.2	24
155	Machine Detection of Enhanced Electromechanical Energy Conversion in PbZr _{0.2} Ti _{0.8} O ₃ Thin Films. <i>Advanced Materials</i> , 2018, 30, e1800701.	24.3	24
156	Understanding order in compositionally graded ferroelectrics: Flexoelectricity, gradient, and depolarization field effects. <i>Physical Review B</i> , 2014, 89, .	3.3	23
157	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1777-1803.	3.8	23
158	Electronic Structure and Band Alignment of LaMnO ₃ /SrTiO ₃ Polar/Nonpolar Heterojunctions. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801428.	4.1	23
159	Enhanced Photoelectrochemical Activity in All-Oxide Heterojunction Devices Based on Correlated δ -Metallic Oxides. <i>Advanced Materials</i> , 2013, 25, 6201-6206.	24.3	22
160	Ultrafast collective oxygen-vacancy flow in Ca-doped BiFeO ₃ . <i>NPG Asia Materials</i> , 2018, 10, 943-955.	8.3	22
161	Pyroelectric thin films—Past, present, and future. <i>APL Materials</i> , 2021, 9, .	4.8	22
162	Accessing intermediate ferroelectric switching regimes with time-resolved transmission electron microscopy. <i>Journal of Applied Physics</i> , 2012, 112, .	2.3	21

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163	Magnon spectra and strong spin-lattice coupling in magnetically frustrated Mn_2O_7 . <i>Physical Review B</i> , 2014, 89, 080401. DOI / Open Access	10.7	21
164	High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO_3 Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2016, 20, 137-146.	2.6	21
165	Chemical Phenomena of Atomic Force Microscopy Scanning. <i>Analytical Chemistry</i> , 2018, 90, 3475-3481.	6.8	21
166	Enhanced spontaneous polarization in double perovskite $\text{Bi}_2\text{FeCrO}_6$ films. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5234-5242.	3.8	21
167	Effect of growth induced (non)stoichiometry on the thermal conductivity, permittivity, and dielectric loss of LaAlO_3 films. <i>Applied Physics Letters</i> , 2013, 103, 122101.	3.2	20
168	Secondary effects in wide frequency range measurements of the pyroelectric coefficient of $\text{Ba}_0.6\text{Pb}_{0.2}\text{Zr}_{0.2}\text{TiO}_3$. <i>Physical Review B</i> , 2014, 90, 080401.	3.9	20
169	Searching for New Ferroelectric Materials Using High-Throughput Databases: An Experimental Perspective on BiAlO_3 and BiInO_3 . <i>Chemistry of Materials</i> , 2020, 32, 7274-7283.	7.1	20
170	Correlating Surface Crystal Orientation and Gas Kinetics in Perovskite Oxide Electrodes. <i>Advanced Materials</i> , 2021, 33, e2100977.	24.3	20
171	Atomic scale crystal field mapping of polar vortices in oxide superlattices. <i>Nature Communications</i> , 2021, 12, 6273.	13.2	19
172	Non-volatile electric-field control of inversion symmetry. <i>Nature Materials</i> , 2023, 22, 207-215.	26.6	19
173	Nanoscale Electrochemical Phenomena of Polarization Switching in Ferroelectrics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38217-38222.	8.3	18
174	Nonstoichiometry, structure, and properties of $\text{Ba}_{1-x}\text{Ti}_x\text{O}_3$ thin films. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10751-10759.	5.6	18
175	Quantifying Intrinsic, Extrinsic, Dielectric, and Secondary Pyroelectric Responses in $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35146-35154.	8.3	18
176	Integration of amorphous ferromagnetic oxides with multiferroic materials for room temperature magnetoelectric spintronics. <i>Scientific Reports</i> , 2020, 10, 3583.	3.4	18
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