

Lane W Martin

List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/8085711/publications.pdf](https://exaly.com/author-pdf/8085711/publications.pdf)

Version: 2024-02-01

275
papers

22,674
citations

15497

65
h-index

9570

144
g-index

289
all docs

289
docs citations

289
times ranked

20525
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-temperature grapho-epitaxial La-substituted BiFeO ₃ on metallic perovskite. Nature Communications, 2024, 15, .	13.2	5
2	Lifting the fog in ferroelectric thin-film synthesis. Nature Materials, 2024, 23, 9-10.	26.6	2
3	Switching the spin cycloid in BiFeO ₃ with an electric field. Nature Communications, 2024, 15, .	13.2	4
4	Manipulating chiral spin transport with ferroelectric polarization. Nature Materials, 2024, 23, 898-904.	26.6	0
5	Effect of fabrication processes on BaTiO ₃ capacitor properties. APL Materials, 2024, 12, .	4.8	0
6	Spin disorder control of topological spin texture. Nature Communications, 2024, 15, .	13.2	1
7	Clamping enables enhanced electromechanical responses in antiferroelectric thin films. Nature Materials, 2024, 23, 944-950.	26.6	1
8	Heterogeneous field response of hierarchical polar laminates in relaxor ferroelectrics. Science, 2024, 384, 1447-1452.	20.9	0
9	Non-volatile magnon transport in a single domain multiferroic. Nature Communications, 2024, 15, .	13.2	0
10	(Invited) Functional Complex Oxides for Next-Generation Logic, Memory, Sensing, and Beyond. ECS Meeting Abstracts, 2024, MA2024-01, 1575-1575.	0.0	0
11	Non-equilibrium pathways to emergent polar supertextures. Nature Materials, 2024, 23, 1394-1401.	26.6	0
12	Non-volatile electric-field control of inversion symmetry. Nature Materials, 2023, 22, 207-215.	26.6	19
13	Emergent chirality in a polar meron to skyrmion phase transition. Nature Communications, 2023, 14, .	13.2	27
14	Topological phases in polar oxide nanostructures. Reviews of Modern Physics, 2023, 95, .	46.3	29
15	Multiscale electric-field imaging of polarization vortex structures in PbTiO ₃ /SrTiO ₃ superlattices. APL Materials, 2023, 11, .	4.8	1
16	Exchange-Interaction-Like Behavior in Ferroelectric Bilayers. Advanced Materials, 2023, 35, .	24.3	3
17	3D Printing and processing of miniaturized transducers with near-pristine piezoelectric ceramics for localized cavitation. Nature Communications, 2023, 14, .	13.2	17
18	Tunable Artificial Relaxor Behavior in BaTiO_3 $\text{m} < \text{BaZrO}_3$ Physical Review Letters, 2023, 130, .	8.0	0

#	ARTICLE	IF	CITATIONS
19	Direct Measurement of Inverse Piezoelectric Effects in Thin Films Using Laser Doppler Vibrometry. <i>Physical Review Applied</i> , 2023, 20, .	3.8	3
20	Engineering Relaxor Behavior in $(\text{BaTiO}_3)_x(\text{SrTiO}_3)_{1-x}$ Superlattices. <i>Advanced Materials</i> , 2023, 35, .	24.3	3
21	Strain effects on stability of topological ferroelectric polar configurations in $(\text{PbTiO}_3)_x(\text{SrTiO}_3)_{1-x}$ superlattices. <i>Applied Physics Letters</i> , 2023, 123, .	3.2	2
22	Roadmap on ferroelectric hafnia- and zirconia-based materials and devices. <i>APL Materials</i> , 2023, 11, .	4.8	33
23	A Predictive Theory for Domain Walls in Oxide Ferroelectrics Based on Interatomic Interactions and its Implications for Collective Material Properties. <i>Advanced Materials</i> , 2022, 34, e2106021.	24.3	10
24	Exploring the $\text{Pb}_{1-x}\text{Sr}_x\text{HfO}_3$ System and Potential for High Capacitive Energy Storage Density and Efficiency. <i>Advanced Materials</i> , 2022, 34, e2105967.	24.3	38
25	Electric field control of chirality. <i>Science Advances</i> , 2022, 8, eabj8030.	10.9	41
26	Tunable Nanoscale Evolution and Topological Phase Transitions of a Polar Vortex Supercrystal. <i>Advanced Materials</i> , 2022, 34, e2106401.	24.3	14
27	Observation of solid-state bidirectional thermal conductivity switching in antiferroelectric lead zirconate (PbZrO_3). <i>Nature Communications</i> , 2022, 13, 1573.	13.2	32
28	The role of lattice dynamics in ferroelectric switching. <i>Nature Communications</i> , 2022, 13, 1110.	13.2	31
29	Field-induced heterophase state in PbZrO_3 thin films. <i>Physical Review B</i> , 2022, 105, .	3.3	5
30	Effect of substrate clamping on evolution of properties in homovalent and heterovalent relaxor thin films. <i>Physical Review B</i> , 2022, 105, .	3.3	5
31	Thin-Film Ferroelectrics. <i>Advanced Materials</i> , 2022, 34, e2108841.	24.3	45
32	Chiral structures of electric polarization vectors quantified by X-ray resonant scattering. <i>Nature Communications</i> , 2022, 13, 1769.	13.2	8
33	Tunable Microwave Conductance of Nanodomains in Ferroelectric $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Thin Film. <i>Advanced Electronic Materials</i> , 2022, 8, .	5.4	6
34	Enabling ultra-low-voltage switching in BaTiO_3 . <i>Nature Materials</i> , 2022, 21, 779-785.	26.6	41
35	Freestanding complex-oxide membranes. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 383001.	1.9	18
36	Strain-Driven Mixed-Phase Domain Architectures and Topological Transitions in $\text{Pb}_{1-x}\text{Sr}_x\text{TiO}_3$ Thin Films. <i>Advanced Materials</i> , 2022, 34, .	24.3	7

#	ARTICLE	IF	CITATIONS
37	Coupled polarization and nanodomain evolution underpins large electromechanical responses in relaxors. <i>Nature Physics</i> , 2022, 18, 1502-1509.	11.8	13
38	Structural Chirality of Polar Skyrmions Probed by Resonant Elastic X-Ray Scattering. <i>Physical Review Letters</i> , 2022, 129, .	8.0	5
39	Local negative permittivity and topological phase transition in polar skyrmions. <i>Nature Materials</i> , 2021, 20, 194-201.	26.6	106
40	Recent Progress on Topological Structures in Ferroic Thin Films and Heterostructures. <i>Advanced Materials</i> , 2021, 33, e2000857.	24.3	93
41	Pyroelectric thin films—Past, present, and future. <i>APL Materials</i> , 2021, 9, .	4.8	22
42	Growth mode and strain effect on relaxor ferroelectric domains in epitaxial $0.67\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – $0.33\text{PbTiO}_3/\text{SrRuO}_3$ heterostructures. <i>RSC Advances</i> , 2021, 11, 1222-1232.	3.7	7
43	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
44	Local Probe Comparison of Ferroelectric Switching Event Statistics in the Creep and Depinning Regimes in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.32PbTiO_3 Thin-Film Heterostructures. <i>Advanced Functional Materials</i> , 2021, 31, 2105068.	8.0	15
45	Whirls and swirls of polarization. <i>Science</i> , 2021, 371, 992-993.	20.9	3
46	Correlating Surface Crystal Orientation and Gas Kinetics in Perovskite Oxide Electrodes. <i>Advanced Materials</i> , 2021, 33, e2100977.	24.3	20
47	Vortex Domain Walls in Ferroelectrics. <i>Nano Letters</i> , 2021, 21, 3533-3539.	9.5	38
48	Subterahertz collective dynamics of polar vortices. <i>Nature</i> , 2021, 592, 376-380.	36.2	77
49	Electric field control of magnetism: multiferroics and magnetoelectrics. <i>Rivista Del Nuovo Cimento</i> , 2021, 44, 251-289.	5.6	17
50	Low-Voltage Magnetoelectric Coupling in $\text{Fe}_{0.5}\text{Rh}_{0.5}/0.68\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.32PbTiO_3 Thin-Film Heterostructures. <i>Advanced Functional Materials</i> , 2021, 31, 2105068.	5.6	17
51	Emergent chirality in a polar meron to skyrmion transition revealed by 4D-STEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 348-350.	0.4	8
52	Frequency-dependent suppression of field-induced polarization rotation in relaxor ferroelectric thin films. <i>Matter</i> , 2021, 4, 2367-2377.	10.2	7
53	Probing Metastable Domain Dynamics via Automated Experimentation in Piezoresponse Force Microscopy. <i>ACS Nano</i> , 2021, 15, 15096-15103.	15.3	6
54	Strain-Induced Orbital Contributions to Oxygen Electrocatalysis in Transition-Metal Perovskites. <i>Advanced Energy Materials</i> , 2021, 11, 2102175.	22.2	10

#	ARTICLE	IF	CITATIONS
55	Atomic scale crystal field mapping of polar vortices in oxide superlattices. Nature Communications, 2021, 12, 6273.	13.2	19
56	Designing Optimal Perovskite Structure for High Ionic Conduction. Advanced Materials, 2020, 32, e1905178.	24.3	34
57	Light-Induced Currents at Domain Walls in Multiferroic BiFeO ₃ . Nano Letters, 2020, 20, 145-151.	9.5	38
58	Non-linearity in engineered lead magnesium niobate (PbMg _{1/3} Nb _{2/3} O ₃) thin films. Journal of Applied Physics, 2020, 128, 194102.	2.3	3
59	Full Control of Polarization in Ferroelectric Thin Films Using Growth Temperature to Modulate Defects. Advanced Electronic Materials, 2020, 6, 2000852.	5.4	14
60	Searching for New Ferroelectric Materials Using High-Throughput Databases: An Experimental Perspective on BiAlO ₃ and BiInO ₃ . Chemistry of Materials, 2020, 32, 7274-7283.	7.1	20
61	Couplings of Polarization with Interfacial Deep Trap and Schottky Interface Controlled Ferroelectric Memristive Switching. Advanced Functional Materials, 2020, 30, 2000664.	16.5	59
62	Toward Intrinsic Ferroelectric Switching in Multiferroic BiFeO_3 . Physical Review Letters, 2020, 125, 067601.	8.0	43
63	Beyond Substrates: Strain Engineering of Ferroelectric Membranes. Advanced Materials, 2020, 32, e2003780.	24.3	72
64	Beyond Expectation: Advanced Materials Design, Synthesis, and Processing to Enable Novel Ferroelectric Properties and Applications. MRS Advances, 2020, 5, 3453-3472.	1.0	1
65	Piezoresponse amplitude and phase quantified for electromechanical characterization. Journal of Applied Physics, 2020, 128, .	2.3	35
66	Ultralow Voltage Manipulation of Ferromagnetism. Advanced Materials, 2020, 32, e2001943.	24.3	48
67	Manipulating magnetoelectric energy landscape in multiferroics. Nature Communications, 2020, 11, 2836.	13.2	50
68	Integration of amorphous ferromagnetic oxides with multiferroic materials for room temperature magnetoelectric spintronics. Scientific Reports, 2020, 10, 3583.	3.4	18
69	Finite-size effects in lead scandium tantalate relaxor thin films. Physical Review B, 2020, 101, .	3.3	11
70	Phonon-induced near-field resonances in multiferroic BiFeO ₃ thin films at infrared and THz wavelengths. Applied Physics Letters, 2020, 116, .	3.2	25
71	Large Polarization and Susceptibilities in Artificial Morphotropic Phase Boundary PbZr _{1-x} Ti _x O ₃ Superlattices. Advanced Electronic Materials, 2020, 6, 1901395.	5.4	18
72	Defect-Enhanced Polarization Switching in the Improper Ferroelectric LuFeO ₃ . Advanced Materials, 2020, 32, e2000508.	24.3	25

#	ARTICLE	IF	CITATIONS
73	Giant Superelastic Piezoelectricity in Flexible Ferroelectric BaTiO ₃ Membranes. ACS Nano, 2020, 14, 5053-5060.	15.3	45
74	To switch or not to switch – a machine learning approach for ferroelectricity. Nanoscale Advances, 2020, 2, 2063-2072.	4.6	13
75	A new era in ferroelectrics. APL Materials, 2020, 8, .	4.8	42
76	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	2.9	249
77	<i>In situ</i> Electric Field Manipulation of Ferroelectric Vortices. Microscopy and Microanalysis, 2019, 25, 1844-1845.	0.4	3
78	Emergence of the Vortex State in Confined Ferroelectric Heterostructures. Advanced Materials, 2019, 31, e1901014.	24.3	39
79	Revealing ferroelectric switching character using deep recurrent neural networks. Nature Communications, 2019, 10, 4809.	13.2	38
80	Versatile and Highly Efficient Controls of Reversible Topotactic Metal–Insulator Transitions through Proton Intercalation. Advanced Functional Materials, 2019, 29, 1907072.	16.5	28
81	Mechanical-force-induced non-local collective ferroelastic switching in epitaxial lead-titanate thin films. Nature Communications, 2019, 10, 3951.	13.2	50
82	Quantifying Intrinsic, Extrinsic, Dielectric, and Secondary Pyroelectric Responses in PbZr _{1-x} Ti _x O ₃ Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 35146-35154.	8.3	18
83	Platinum nanoparticle induced nanoionic effects on electrical conduction in strontium cerate and zirconate. Journal of Solid State Electrochemistry, 2019, 23, 953-963.	2.6	7
84	New approach to waste-heat energy harvesting: pyroelectric energy conversion. NPG Asia Materials, 2019, 11, .	8.3	82
85	Observation of room-temperature polar skyrmions. Nature, 2019, 568, 368-372.	36.2	466
86	Kinetic control of tunable multi-state switching in ferroelectric thin films. Nature Communications, 2019, 10, 1282.	13.2	52
87	Optical creation of a supercrystal with three-dimensional nanoscale periodicity. Nature Materials, 2019, 18, 377-383.	26.6	115
88	Epitaxial Strain Control of Relaxor Ferroelectric Phase Evolution. Advanced Materials, 2019, 31, e1901060.	24.3	32
89	Enhanced spontaneous polarization in double perovskite Bi ₂ FeCrO ₆ films. Journal of the American Ceramic Society, 2019, 102, 5234-5242.	3.8	21
90	Ferroelectric properties of ion-irradiated bismuth ferrite layers grown via molecular-beam epitaxy. APL Materials, 2019, 7, .	4.8	10

#	ARTICLE	IF	CITATIONS
91	Defect-Induced (Dis)Order in Relaxor Ferroelectric Thin Films. Physical Review Letters, 2019, 123, 207602.	8.0	25
92	Enhanced pyroelectric properties of Bi ^{1-x} La ^x FeO ₃ thin films. APL Materials, 2019, 7, .	4.8	11
93	Electronic Structure and Band Alignment of LaMnO ₃ /SrTiO ₃ Polar/Nonpolar Heterojunctions. Advanced Materials Interfaces, 2019, 6, 1801428.	4.1	23
94	Relaxor Behavior in Ordered Lead Magnesium Niobate (PbMg _{1/3} Nb _{2/3} O ₃) Thin Films. Advanced Functional Materials, 2019, 29, 1804258.	16.5	17
95	Understanding the Role of Ferroelastic Domains on the Pyroelectric and Electrocaloric Effects in Ferroelectric Thin Films. Advanced Materials, 2019, 31, e1803312.	24.3	37
96	Pyroelectric energy conversion with large energy and power density in relaxor ferroelectric thin films. Nature Materials, 2018, 17, 432-438.	26.6	221
97	Strain-Driven Nanoscale Phase Competition near the Antipolar–Nonpolar Phase Boundary in Bi _{0.7} La _{0.3} FeO ₃ Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 14914-14921.	8.3	11
98	Reducing Coercive-Field Scaling in Ferroelectric Thin Films <i>via</i> Orientation Control. ACS Nano, 2018, 12, 4736-4743.	15.3	53
99	Subtractive fabrication of ferroelectric thin films with precisely controlled thickness. Nanotechnology, 2018, 29, 155302.	2.7	7
100	Chemical Phenomena of Atomic Force Microscopy Scanning. Analytical Chemistry, 2018, 90, 3475-3481.	6.8	21
101	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
102	Electronic Transport and Ferroelectric Switching in Ion-Bombarded, Defect-Engineered BiFeO ₃ Thin Films. Advanced Materials Interfaces, 2018, 5, 1700991.	4.1	32
103	Experimental Demonstration of Ferroelectric Spiking Neurons for Unsupervised Clustering. , 2018, , .		61
104	Complex strain evolution of polar and magnetic order in multiferroic BiFeO ₃ thin films. Nature Communications, 2018, 9, 3764.	13.2	44
105	Ultrafast collective oxygen-vacancy flow in Ca-doped BiFeO ₃ . NPG Asia Materials, 2018, 10, 943-955.	8.3	22
106	Perspective: Emergent topologies in oxide superlattices. APL Materials, 2018, 6, .	4.8	29
107	Nanoscale Electrochemical Phenomena of Polarization Switching in Ferroelectrics. ACS Applied Materials & Interfaces, 2018, 10, 38217-38222.	8.3	18
108	Phase Coexistence of Ferroelectric Vortices and Classical a ₁ /a ₂ Domains in PbTiO ₃ /SrTiO ₃ Superlattices.. Microscopy and Microanalysis, 2018, 24, 1638-1639.	0.4	2

#	ARTICLE	IF	CITATIONS
109	Nonstoichiometry, structure, and properties of Ba _x Ti _y thin films. Journal of Materials Chemistry C, 2018, 6, 10751-10759.	5.6	18
110	Ambipolar ferromagnetism by electrostatic doping of a manganite. Nature Communications, 2018, 9, 1897.	13.2	52
111	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. Physical Review Letters, 2018, 120, 227601.	8.0	358
112	Machine Detection of Enhanced Electromechanical Energy Conversion in PbZr _{0.2} Ti _{0.8} O ₃ Thin Films. Advanced Materials, 2018, 30, e1800701.	24.3	24
113	A Perovskite Light-Emitting Device Driven by Low-Frequency Alternating Current Voltage. Advanced Optical Materials, 2018, 6, 1800206.	7.9	31
114	Resonant domain-wall-enhanced tunable microwave ferroelectrics. Nature, 2018, 560, 622-627.	36.2	93
115	Electronic and Polar Properties of Vanadate Compounds Stabilized by Epitaxial Strain. Chemistry of Materials, 2018, 30, 5870-5877.	7.1	10
116	Reply to "Comment on "Ultrafast terahertz-field-driven ionic response in ferroelectric BaTiO ₃ " Physical Review B, 2018, 97, .		
117	Local control of defects and switching properties in ferroelectric thin films. Physical Review Materials, 2018, 2, .	2.5	37
118	Pyroelectric and electrocaloric effects in ferroelectric silicon-doped hafnium oxide thin films. Physical Review Materials, 2018, 2, .	2.5	27
119	Stability of Polar Vortex Lattice in Ferroelectric Superlattices. Nano Letters, 2017, 17, 2246-2252.	9.5	147
120	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. Journal of the American Ceramic Society, 2017, 100, 1777-1803.	3.8	23
121	Large polarization gradients and temperature-stable responses in compositionally-graded ferroelectrics. Nature Communications, 2017, 8, 14961.	13.2	64
122	Slow Conductance Relaxation in Graphene-Ferroelectric Field-Effect Transistors. Journal of Physical Chemistry C, 2017, 121, 7542-7548.	3.3	15
123	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. Physical Review Applied, 2017, 7, .	3.8	57
124	Pressurizing Field-Effect Transistors of Few-Layer MoS ₂ in a Diamond Anvil Cell. Nano Letters, 2017, 17, 194-199.	9.5	34
125	Epitaxy on polycrystalline substrates. Science, 2017, 358, 587-588.	20.9	10
126	Electron Accumulation and Emergent Magnetism in LaMnO ₃ Heterostructures. Physical Review Letters, 2017, 119, 156801.	8.0	70

#	ARTICLE	IF	CITATIONS
127	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
128	Ferroelectricity in Pb _{1+δ} ZrO ₃ Thin Films. <i>Chemistry of Materials</i> , 2017, 29, 6544-6551.	7.1	34
129	Three- ϵ -State Ferroelastic Switching and Large Electromechanical Responses in PbTiO ₃ Thin Films. <i>Advanced Materials</i> , 2017, 29, 1702069.	24.3	77
130	Phase coexistence and electric-field control of toroidal order in oxide superlattices. <i>Nature Materials</i> , 2017, 16, 1003-1009.	26.6	167
131	Quantification of flexoelectricity in PbTiO ₃ /SrTiO ₃ superlattice polar vortices using machine learning and phase-field modeling. <i>Nature Communications</i> , 2017, 8, 1468.	13.2	95
132	Thin-film ferroelectric materials and their applications. <i>Nature Reviews Materials</i> , 2017, 2, .	40.2	669
133	Quantitative Mapping of Strain, Polarization, and Octahedral Distortion at unit cell resolution by Scanning Electron Diffraction. <i>Microscopy and Microanalysis</i> , 2017, 23, 434-435.	0.4	0
134	Differential voltage amplification from ferroelectric negative capacitance. <i>Applied Physics Letters</i> , 2017, 111, .	3.2	37
135	Structural imaging of nanoscale phonon transport in ferroelectrics excited by metamaterial-enhanced terahertz fields. <i>Physical Review Materials</i> , 2017, 1, .	2.5	5
136	Mapping growth windows in quaternary perovskite oxide systems by hybrid molecular beam epitaxy. <i>Applied Physics Letters</i> , 2016, 109, .	3.2	24
137	Single gate p-n junctions in graphene-ferroelectric devices. <i>Applied Physics Letters</i> , 2016, 108, .	3.2	26
138	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
139	Microwave a.c. conductivity of domain walls in ferroelectric thin films. <i>Nature Communications</i> , 2016, 7, 11630.	13.2	85
140	Interfacial Octahedral Rotation Mismatch Control of the Symmetry and Properties of SrRuO ₃ . <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14871-14878.	8.3	62
141	New modalities of strain-control of ferroelectric thin films. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 263001.	1.9	94
142	Nanodomain Engineering in Ferroelectric Capacitors with Graphene Electrodes. <i>Nano Letters</i> , 2016, 16, 6460-6466.	9.5	42
143	Enhanced Electrical Resistivity and Properties via Ion Bombardment of Ferroelectric Thin Films. <i>Advanced Materials</i> , 2016, 28, 10750-10756.	24.3	53
144	Nonstoichiometry, Structure, and Properties of BiFeO ₃ Films. <i>Chemistry of Materials</i> , 2016, 28, 5952-5961.	7.1	57

#	ARTICLE	IF	CITATIONS
145	Frontiers in strain-engineered multifunctional ferroic materials. MRS Communications, 2016, 6, 151-166.	1.8	17
146	Ultrafast terahertz-field-driven ionic response in ferroelectric BaTiO_3 . Physical Review B, 2016, 94, .	3.3	81
147	Self-Assembled, Nanostructured, Tunable Metamaterials <i>via</i> Spinodal Decomposition. ACS Nano, 2016, 10, 10237-10244.	15.3	48
148	Strain-induced growth instability and nanoscale surface patterning in perovskite thin films. Scientific Reports, 2016, 6, 26075.	3.4	26
149	Observation of polar vortices in oxide superlattices. Nature, 2016, 530, 198-201.	36.2	731
150	Surface Chemically Switchable Ultraviolet Luminescence from Interfacial Two-Dimensional Electron Gas. Nano Letters, 2016, 16, 681-687.	9.5	11
151	Highly mobile ferroelastic domain walls in compositionally graded ferroelectric thin films. Nature Materials, 2016, 15, 549-556.	26.6	101
152	Asymmetric Response of Ferroelastic Domain-Wall Motion under Applied Bias. ACS Applied Materials & Interfaces, 2016, 8, 2935-2941.	8.3	11
153	X-ray diffraction and spectroscopy of photoinduced ferroic superstructures (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5		
154	Structural phase diagram and pyroelectric properties of free-standing ferroelectric/non-ferroelectric multilayer heterostructures. Journal of Applied Physics, 2015, 118, .	2.3	4
155	Toward Deterministic Switching in Ferroelectric Systems: Insight Gained from In Situ TEM. Microscopy and Microanalysis, 2015, 21, 1347-1348.	0.4	0
156	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
157	Epitaxial growth of highly-crystalline spinel ferrite thin films on perovskite substrates for all-oxide devices. Scientific Reports, 2015, 5, 10363.	3.4	31
158	Visible light carrier generation in co-doped epitaxial titanate films. Applied Physics Letters, 2015, 106, 092901.	3.2	12
159	Structurally disordered phase in epitaxial iron-deficient F_3O_4 thin films. Physical Review B, 2015, 91, .	3.3	15
160	Ferroelectrically driven spatial carrier density modulation in graphene. Nature Communications, 2015, 6, 6136.	13.2	150
161	Complex Evolution of Built-in Potential in Compositionally-Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. ACS Nano, 2015, 9, 7332-7342.	15.3	41
162	Towards reversible control of domain wall conduction in $\text{Pb}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3$ thin films. Applied Physics Letters, 2015, 106, .	3.2	33

#	ARTICLE	IF	CITATIONS
163	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	13.2	74
164	Thermal conductance of strongly bonded metal-oxide interfaces. Physical Review B, 2015, 91, . Orientation-dependent structural phase diagrams and dielectric properties of $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ polydomain. Physical Review B, 2015, 91	3.3	70
165	Self-regulated growth of LaVO_3 thin films by hybrid molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.2	42
166	180Å° Ferroelectric Stripe Nanodomains in BiFeO_3 Thin Films. Nano Letters, 2015, 15, 6506-6513.	9.5	60
167	A Novel, Layered Phase in Ti-Rich SrTiO_3 Epitaxial Thin Films. Advanced Materials, 2015, 27, 861-868.	24.3	9
168	Ferroelectric polarization reversal via successive ferroelastic transitions. Nature Materials, 2015, 14, 79-86.	26.6	222
169	Emerging Multiferroic Memories. , 2014, , 103-166.		10
170	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
171	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 3. $\text{GdScO}_3(110)$. Surface Science Spectra, 2014, 21, 149-156.	1.3	4
172	An Introduction to Single Crystal Perovskites and Single Crystal Rare-Earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2014, 21, 84-86.	1.3	3
173	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 4. $(\text{LaAlO}_3)_{0.3}(\text{Sr}_2\text{TaAlO}_6)_{0.7}(001)$. Surface Science Spectra, 2014, 21, 112-121.	1.3	1
174	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 2. $\text{YAlO}_3(110)$. Surface Science Spectra, 2014, 21, 95-102.	1.3	2
175	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 1. $\text{SrTiO}_3(001)$. Surface Science Spectra, 2014, 21, 87-94.	1.3	11
176	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 3. $\text{LaAlO}_3(001)$. Surface Science Spectra, 2014, 21, 103-111.	1.3	2
177	High-frequency thermal-electrical cycles for pyroelectric energy conversion. Journal of Applied Physics, 2014, 116, .	2.3	37
178	Secondary effects in wide frequency range measurements of the pyroelectric coefficient of $\text{Ba}_{0.6}\text{Pb}_{0.2}\text{Zr}_{0.2}\text{O}_3$. Physical Review B, 2014, 90, .	3.3	20
179	Enhanced electrocaloric and pyroelectric response from ferroelectric multilayers. Applied Physics Letters, 2014, 105, .	3.2	40

#	ARTICLE	IF	CITATIONS
181	Effect of "symmetry mismatch" on the domain structure of rhombohedral BiFeO ₃ thin films. Applied Physics Letters, 2014, 104, .	3.2	66
182	Tunability of conduction at the LaAlO ₃ /SrTiO ₃ heterointerface: Thickness and compositional studies. Applied Physics Letters, 2014, 105, 121610.	3.2	13
183	Tuning Susceptibility via Misfit Strain in Relaxed Morphotropic Phase Boundary PbZr _{1-x} Ti _x O ₃ Epitaxial Thin Films. Advanced Materials Interfaces, 2014, 1, 1400098.	4.1	17
184	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 5. NdGaO ₃ (110). Surface Science Spectra, 2014, 21, 122-130.	1.3	2
185	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 2. NdScO ₃ (110). Surface Science Spectra, 2014, 21, 140-148.	1.3	3
186	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 4. TbScO ₃ (110). Surface Science Spectra, 2014, 21, 157-164.	1.3	3
187	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 5. DyScO ₃ (110). Surface Science Spectra, 2014, 21, 165-172.	1.3	3
188	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 1. PrScO ₃ (110). Surface Science Spectra, 2014, 21, 131-139.	1.3	2
189	Magnon spectra and strong spin-lattice coupling in magnetically frustrated $Mn_2B_2O_7$. Physical Review B, 2014, 89, . Inelastic light scattering studies. Physical Review B, 2014, 89, .	13.2	81
190	Enhanced Thermoelectric Power Factor of Na _x CoO ₂ Thin Films by Structural Engineering. Advanced Energy Materials, 2014, 4, 1301927.	22.2	29
191	Stationary domain wall contribution to enhanced ferroelectric susceptibility. Nature Communications, 2014, 5, 3120.	13.2	87
192	Understanding the Competition between Epitaxial Strain and Thermodynamics in TiO ₂ : Structural, Morphological, and Property Evolution. Crystal Growth and Design, 2014, 14, 1981-1988.	3.2	13
193	Conformable amplified lead zirconate titanate sensors with enhanced piezoelectric response for cutaneous pressure monitoring. Nature Communications, 2014, 5, 4496.	13.2	790
194	Reduction of the electrocaloric entropy change of ferroelectric $PbZr_{1-x}O_3$ epitaxial layers due to an elastocaloric effect. Physical Review B, 2014, 90, .	3.3	31
195	Understanding order in compositionally graded ferroelectrics: Flexoelectricity, gradient, and depolarization field effects. Physical Review B, 2014, 89, .	3.3	23
196	X-ray diffraction studies of stripelike ferroelectric domains in thin films of $BiFeO_3$. Physical Review B, 2014, 89, .	3.3	18
197	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	15.3	61
198	Enhancement of Ferroelectric Curie Temperature in BaTiO ₃ Films via Strain-Induced Defect Dipole Alignment. Advanced Materials, 2014, 26, 6341-6347.	24.3	144

#	ARTICLE	IF	CITATIONS
199	Real-Time Observation of Local Strain Effects on Nonvolatile Ferroelectric Memory Storage Mechanisms. <i>Nano Letters</i> , 2014, 14, 3617-3622.	9.5	15
200	Low voltage field emission from $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ -coated silicon nanotips. , 2013, , .		0
201	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
202	Strain evolution in non-stoichiometric heteroepitaxial thin-film perovskites. <i>Journal of Materials Chemistry C</i> , 2013, 1, 8052.	5.6	33
203	Unexpected Crystal and Domain Structures and Properties in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. <i>Advanced Materials</i> , 2013, 25, 1761-1767.	24.3	74
204	Tunable Carrier Type and Density in Graphene/ $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Hybrid Structures through Ferroelectric Switching. <i>Nano Letters</i> , 2013, 13, 1693-1698.	9.5	105
205	Large built-in electric fields due to flexoelectricity in compositionally graded ferroelectric thin films. <i>Physical Review B</i> , 2013, 87, .	3.3	55
206	Pyroelectric electron emission from nanometer-thick films of $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$. <i>Applied Physics Letters</i> , 2013, 102, .	3.2	11
207	Strong Visible-Light Absorption and Hot-Carrier Injection in $\text{TiO}_2/\text{SrRuO}_3$ Heterostructures. <i>Advanced Energy Materials</i> , 2013, 3, 1084-1090.	22.2	36
208	Improved Pyroelectric Figures of Merit in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 13235-13241.	8.3	77
209	Field emission from nanometer-scale tips of crystalline $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013, 31, .	1.3	12
210	Effect of Growth Induced (Non)Stoichiometry on Interfacial Conductance in LaAlO_3 . <i>Physical Review Letters</i> , 2013, 110, 196804.	8.0	137
211	Pyroelectric electron emission from a thin film of $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ on a nanofabricated cathode. , 2013, , .		1
212	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, .	3.2	20
213	Ultrathin Limit of Exchange Bias Coupling at Oxide Multiferroic/Ferromagnetic Interfaces. <i>Advanced Materials</i> , 2013, 25, 4739-4745.	24.3	61
214	Note: Electrical and thermal characterization of a ferroelectric thin film with an electro-thermal nanoprobe. <i>Review of Scientific Instruments</i> , 2012, 83, 076105.	1.4	0
215	Stabilization of mixed-phase structures in highly strained BiFeO_3 thin films via chemical-alloying. <i>Applied Physics Letters</i> , 2012, 100, .	3.2	16
216	Thermoreflectance of metal transducers for optical pump-probe studies of thermal properties. <i>Optics Express</i> , 2012, 20, 28829.	3.4	115

#	ARTICLE	IF	CITATIONS
217	Effect of 90Å Domain Walls and Thermal Expansion Mismatch on the Pyroelectric Properties of Epitaxial $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Thin Films. Physical Review Letters, 2012, 108, 167601.	7.6	216
218	Effect of 90Å Domain Walls on the Low-Field Permittivity of $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Thin Films. Physical Review Letters, 2012, 108, 167601.	7.6	216
219	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
220	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
221	Pyroelectric current measurements on $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ epitaxial layers. Journal of Applied Physics, 2012, 112, .	2.3	33
222	Temperature and thickness evolution and epitaxial breakdown in highly strained BiFeO_3 thin films. Physical Review B, 2012, 85, .	3.3	65
223	X-ray linear dichroism dependence on ferroelectric polarization. Journal of Physics Condensed Matter, 2012, 24, 245902.	1.9	14
224	Accessing intermediate ferroelectric switching regimes with time-resolved transmission electron microscopy. Journal of Applied Physics, 2012, 112, .	2.3	21
225	Direct observation of ferroelectric domain switching in varying electric field regimes using in situ TEM. Micron, 2012, 43, 1121-1126.	2.3	40
226	Magnetotransport at Domain Walls in BiFeO_3 . Physical Review Letters, 2012, 108, 067203.	8.0	135
227	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
228	Epitaxial Ferroelectric Heterostructures Fabricated by Selective Area Epitaxy of SrRuO_3 Using an MgO Mask. Advanced Materials, 2012, 24, 1610-1615.	24.3	66
229	Nanosession: Ferroelectric Interfaces. , 2012, , 399-408.		0
230	Near-field examination of perovskite-based superlenses and superlens-enhanced probe-object coupling. Nature Communications, 2011, 2, 249.	13.2	99
231	Atomic and electronic structures of the SrVO_3 - LaAlO_3 interface. Journal of Applied Physics, 2011, 110, 046104.	2.3	15
232	Thermal conductivity as a metric for the crystalline quality of SrTiO_3 epitaxial layers. Applied Physics Letters, 2011, 98, .	3.2	59
233	Synthesis, Control, and Characterization of Surface Properties of Cu_2O Nanostructures. ACS Nano, 2011, 5, 3736-3743.	15.3	66
234	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

#	ARTICLE	IF	CITATIONS
235	Large field-induced strains in a lead-free piezoelectric material. Nature Nanotechnology, 2011, 6, 98-102.	30.5	296
236	Nanoscale Structure and Mechanism for Enhanced Electromechanical Response of Highly Strained BiFeO ₃ Thin Films. Advanced Materials, 2011, 23, 3170-3175.	24.3	139

237

#	ARTICLE	IF	CITATIONS
253	Electric modulation of conduction in multiferroic Ca-doped BiFeO ₃ films. Nature Materials, 2009, 8, 485-493.	26.6	485
254	Nanoscale Control of Domain Architectures in BiFeO ₃ Thin Films. Nano Letters, 2009, 9, 1726-1730.	9.5	214
255	Photovoltaic effects in BiFeO ₃ . Applied Physics Letters, 2009, 95, .	3.2	467
256	Electric-field control of local ferromagnetism using a magnetoelectric multiferroic. Nature Materials, 2008, 7, 478-482.	26.6	1,237
257	Linear and nonlinear optical properties of BiFeO ₃ . Applied Physics Letters, 2008, 92, .	3.2	217
258	Nanoscale Control of Exchange Bias with BiFeO ₃ Thin Films. Nano Letters, 2008, 8, 2050-2055.	9.5	276
259	Critical thickness and orbital ordering in ultrathin $\text{La}_{0.7}\text{Bi}_{0.3}\text{FeO}_3$. Physical Review B, 2008, 78, .	3.3	379
260	Photoconductivity in BiFeO ₃ thin films. Applied Physics Letters, 2008, 92, .	3.2	450
261	Multiferroics and magnetoelectrics: thin films and nanostructures. Journal of Physics Condensed Matter, 2008, 20, 434220.	1.9	304
262	Linear and nonlinear optical properties of multifunctional PbVO ₃ thin films. Applied Physics Letters, 2008, 92, .	3.2	24
263	Low voltage performance of epitaxial BiFeO ₃ films on Si substrates through lanthanum substitution. Applied Physics Letters, 2008, 92, .	3.2	104
264	Adsorption-controlled molecular-beam epitaxial growth of BiFeO ₃ . Applied Physics Letters, 2007, 91, .	3.2	92
265	Growth and structure of PbVO ₃ thin films. Applied Physics Letters, 2007, 90, 062903.	3.2	48
266	Polar and magnetic properties of PbVO ₃ thin films. Physical Review B, 2007, 75, .	3.3	36
267	Controlling magnetism with multiferroics. Materials Today, 2007, 10, 16-23.	18.1	253
268	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
269	Ferroelectric size effects in multiferroic BiFeO ₃ thin films. Applied Physics Letters, 2007, 90, 252906.	3.2	182
270	Leakage mechanisms in BiFeO ₃ thin films. Applied Physics Letters, 2007, 90, 072902.	3.2	509

#	ARTICLE	IF	CITATIONS
271	Epitaxial Multiferroic BiFeO ₃ Thin Films: Progress and Future Directions. <i>Ferroelectrics</i> , 2007, 354, 167-177.	0.6	46
272	Magnetolectric complex-oxide heterostructures. <i>Philosophical Magazine Letters</i> , 2007, 87, 155-164.	1.2	11
273	BGH v. 20.1.2005 â€“ III ZR 278/04, Gerichtliche ZustÃ¤ndigkeit fÃ¼r Rechtsstreit um Kostenrechnung eines Notars (PreuÃŸ). <i>Juristische Rundschau</i> , 2005, 2005, .	0.0	0
274	An entropy tactic. <i>Nature Energy</i> , 0, , .	29.7	1
275	Unveiling the Nanoscale Dielectric Gap and Its Influence on Ferroelectric Polarization Switching in Scanning Probe Microscopy. <i>Advanced Functional Materials</i> , 0, , .	16.5	0