

Lane Martin

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8085711/lane-martin-publications-by-year.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

244
papers

17,831
citations

61
h-index

130
g-index

262
ext. papers

20,337
ext. citations

11.2
avg, IF

6.59
L-index

#	Paper	IF	Citations
244	Electric field control of chirality.. <i>Science Advances</i> , 2022 , 8, eabj8030	14.3	6
243	Observation of solid-state bidirectional thermal conductivity switching in antiferroelectric lead zirconate (PbZrO) ₃ .. <i>Nature Communications</i> , 2022 , 13, 1573	17.4	2
242	The role of lattice dynamics in ferroelectric switching.. <i>Nature Communications</i> , 2022 , 13, 1110	17.4	6
241	Thin-film Ferroelectrics.. <i>Advanced Materials</i> , 2022 , e2108841	24	3
240	Chiral structures of electric polarization vectors quantified by X-ray resonant scattering.. <i>Nature Communications</i> , 2022 , 13, 1769	17.4	0
239	Tunable Microwave Conductance of Nanodomains in Ferroelectric PbZr 0.2 Ti 0.8 O 3 Thin Film. <i>Advanced Electronic Materials</i> , 2022 , 8, 2100952	6.4	0
238	Tunable Nanoscale Evolution and Topological Phase Transitions of a Polar Vortex Supercrystal.. <i>Advanced Materials</i> , 2021 , e2106401	24	1
237	A Predictive Theory for Domain Walls in Oxide Ferroelectrics Based on Interatomic Interactions and its Implications for Collective Material Properties. <i>Advanced Materials</i> , 2021 , e2106021	24	1
236	Exploring the Pb Sr HfO System and Potential for High Capacitive Energy Storage Density and Efficiency. <i>Advanced Materials</i> , 2021 , e2105967	24	7
235	Strain-Induced Orbital Contributions to Oxygen Electrocatalysis in Transition-Metal Perovskites. <i>Advanced Energy Materials</i> , 2021 , 11, 2102175	21.8	3
234	Atomic scale crystal field mapping of polar vortices in oxide superlattices. <i>Nature Communications</i> , 2021 , 12, 6273	17.4	0
233	Local Probe Comparison of Ferroelectric Switching Event Statistics in the Creep and Depinning Regimes in Pb(Zr _{0.2} Ti _{0.8})O ₃ Thin Films. <i>Physical Review Letters</i> , 2021 , 126, 117601	7.4	6
232	Whirls and swirls of polarization. <i>Science</i> , 2021 , 371, 992-993	33.3	0
231	Correlating Surface Crystal Orientation and Gas Kinetics in Perovskite Oxide Electrodes. <i>Advanced Materials</i> , 2021 , 33, e2100977	24	5
230	Vortex Domain Walls in Ferroelectrics. <i>Nano Letters</i> , 2021 , 21, 3533-3539	11.5	9
229	Subterahertz collective dynamics of polar vortices. <i>Nature</i> , 2021 , 592, 376-380	50.4	15
228	Electric field control of magnetism: multiferroics and magnetoelectrics. <i>Rivista Del Nuovo Cimento</i> , 2021 , 44, 251-289	3.5	4

227	Low-Voltage Magnetoelectric Coupling in Fe _{0.5} Rh _{0.5} /0.68PbMg _{1/3} Nb _{2/3} O ₃ -0.32PbTiO ₃ Thin-Film Heterostructures. <i>Advanced Functional Materials</i> , 2021 , 31, 2105068	15.6	2
226	Emergent chirality in a polar meron to skyrmion transition revealed by 4D-STEM. <i>Microscopy and Microanalysis</i> , 2021 , 27, 348-350	0.5	2
225	Local negative permittivity and topological phase transition in polar skyrmions. <i>Nature Materials</i> , 2021 , 20, 194-201	27	33
224	Recent Progress on Topological Structures in Ferroic Thin Films and Heterostructures. <i>Advanced Materials</i> , 2021 , 33, e2000857	24	34
223	Pyroelectric thin films Past, present, and future. <i>APL Materials</i> , 2021 , 9, 010702	5.7	7
222	Growth mode and strain effect on relaxor ferroelectric domains in epitaxial 0.67Pb(MgNb)O-0.33PbTiO/SrRuO heterostructures.. <i>RSC Advances</i> , 2021 , 11, 1222-1232	3.7	2
221	Epitaxial Ferroelectric Hf Zr O with Metallic Pyrochlore Oxide Electrodes. <i>Advanced Materials</i> , 2021 , 33, e2006089	24	12
220	Frequency-dependent suppression of field-induced polarization rotation in relaxor ferroelectric thin films. <i>Matter</i> , 2021 , 4, 2367-2377	12.7	3
219	Probing Metastable Domain Dynamics Automated Experimentation in Piezoresponse Force Microscopy. <i>ACS Nano</i> , 2021 , 15, 15096-15103	16.7	2
218	Piezoresponse amplitude and phase quantified for electromechanical characterization. <i>Journal of Applied Physics</i> , 2020 , 128, 171105	2.5	10
217	Ultralow Voltage Manipulation of Ferromagnetism. <i>Advanced Materials</i> , 2020 , 32, e2001943	24	21
216	Manipulating magnetoelectric energy landscape in multiferroics. <i>Nature Communications</i> , 2020 , 11, 28361-7.4	17.4	18
215	Integration of amorphous ferromagnetic oxides with multiferroic materials for room temperature magnetoelectric spintronics. <i>Scientific Reports</i> , 2020 , 10, 3583	4.9	10
214	Finite-size effects in lead scandium tantalate relaxor thin films. <i>Physical Review B</i> , 2020 , 101,	3.3	5
213	Ultrahigh capacitive energy density in ion-bombarded relaxor ferroelectric films. <i>Science</i> , 2020 , 369, 81-84.	84.3	82
212	Phonon-induced near-field resonances in multiferroic BiFeO ₃ thin films at infrared and THz wavelengths. <i>Applied Physics Letters</i> , 2020 , 116, 071103	3.4	11
211	Large Polarization and Susceptibilities in Artificial Morphotropic Phase Boundary PbZr _{1-x} Ti _x O ₃ Superlattices. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901395	6.4	8
210	Defect-Enhanced Polarization Switching in the Improper Ferroelectric LuFeO. <i>Advanced Materials</i> , 2020 , 32, e2000508	24	16

209	Giant Superelastic Piezoelectricity in Flexible Ferroelectric BaTiO Membranes. <i>ACS Nano</i> , 2020 , 14, 5053-5060	16	16
208	A new era in ferroelectrics. <i>APL Materials</i> , 2020 , 8, 120902	5.7	12
207	Designing Optimal Perovskite Structure for High Ionic Conduction. <i>Advanced Materials</i> , 2020 , 32, e1905178	17	17
206	Light-Induced Currents at Domain Walls in Multiferroic BiFeO. <i>Nano Letters</i> , 2020 , 20, 145-151	11.5	20
205	Non-linearity in engineered lead magnesium niobate (PbMg _{1/3} Nb _{2/3} O ₃) thin films. <i>Journal of Applied Physics</i> , 2020 , 128, 194102	2.5	0
204	Full Control of Polarization in Ferroelectric Thin Films Using Growth Temperature to Modulate Defects. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000852	6.4	8
203	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	9.6	7
202	Couplings of Polarization with Interfacial Deep Trap and Schottky Interface Controlled Ferroelectric Memristive Switching. <i>Advanced Functional Materials</i> , 2020 , 30, 2000664	15.6	18
201	Toward Intrinsic Ferroelectric Switching in Multiferroic BiFeO ₃ . <i>Physical Review Letters</i> , 2020 , 125, 067601	7.4	18
200	Beyond Substrates: Strain Engineering of Ferroelectric Membranes. <i>Advanced Materials</i> , 2020 , 32, e2003780	17	17
199	Beyond Expectation: Advanced Materials Design, Synthesis, and Processing to Enable Novel Ferroelectric Properties and Applications. <i>MRS Advances</i> , 2020 , 5, 3453-3472	0.7	0
198	To switch or not to switch: a machine learning approach for ferroelectricity. <i>Nanoscale Advances</i> , 2020 , 2, 2063-2072	5.1	6
197	Versatile and Highly Efficient Controls of Reversible Topotactic Metal-Insulator Transitions through Proton Intercalation. <i>Advanced Functional Materials</i> , 2019 , 29, 1907072	15.6	17
196	Mechanical-force-induced non-local collective ferroelastic switching in epitaxial lead-titanate thin films. <i>Nature Communications</i> , 2019 , 10, 3951	17.4	25
195	Quantifying Intrinsic, Extrinsic, Dielectric, and Secondary Pyroelectric Responses in PbZrTiO Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35146-35154	9.5	9
194	Platinum nanoparticle induced nanoionic effects on electrical conduction in strontium cerate and zirconate. <i>Journal of Solid State Electrochemistry</i> , 2019 , 23, 953-963	2.6	2
193	New approach to waste-heat energy harvesting: pyroelectric energy conversion. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	38
192	Observation of room-temperature polar skyrmions. <i>Nature</i> , 2019 , 568, 368-372	50.4	221

191	Kinetic control of tunable multi-state switching in ferroelectric thin films. <i>Nature Communications</i> , 2019 , 10, 1282	17.4	28
190	Optical creation of a supercrystal with three-dimensional nanoscale periodicity. <i>Nature Materials</i> , 2019 , 18, 377-383	27	61
189	Epitaxial Strain Control of Relaxor Ferroelectric Phase Evolution. <i>Advanced Materials</i> , 2019 , 31, e1901060	24	20
188	Predicting synthesizability. <i>Journal Physics D: Applied Physics</i> , 2019 , 52,	3	161
187	In situ Electric Field Manipulation of Ferroelectric Vortices. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1844-1845	18.45	1
186	Emergence of the Vortex State in Confined Ferroelectric Heterostructures. <i>Advanced Materials</i> , 2019 , 31, e1901014	24	17
185	Revealing ferroelectric switching character using deep recurrent neural networks. <i>Nature Communications</i> , 2019 , 10, 4809	17.4	21
184	Enhanced spontaneous polarization in double perovskite Bi ₂ FeCrO ₆ films. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 5234-5242	3.8	10
183	Ferroelectric properties of ion-irradiated bismuth ferrite layers grown via molecular-beam epitaxy. <i>APL Materials</i> , 2019 , 7, 111101	5.7	5
182	Defect-Induced (Dis)Order in Relaxor Ferroelectric Thin Films. <i>Physical Review Letters</i> , 2019 , 123, 207602	7.4	10
181	Enhanced pyroelectric properties of Bi _{1-x} LaxFeO ₃ thin films. <i>APL Materials</i> , 2019 , 7, 111111	5.7	9
180	Electronic Structure and Band Alignment of LaMnO ₃ /SrTiO ₃ Polar/Nonpolar Heterojunctions. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801428	4.6	11
179	Relaxor Behavior in Ordered Lead Magnesium Niobate (PbMg _{1/3} Nb _{2/3} O ₃) Thin Films. <i>Advanced Functional Materials</i> , 2019 , 29, 1804258	15.6	9
178	Understanding the Role of Ferroelastic Domains on the Pyroelectric and Electrocaloric Effects in Ferroelectric Thin Films. <i>Advanced Materials</i> , 2019 , 31, e1803312	24	22
177	Pyroelectric energy conversion with large energy and power density in relaxor ferroelectric thin films. <i>Nature Materials</i> , 2018 , 17, 432-438	27	132
176	Strain-Driven Nanoscale Phase Competition near the Antipolar-Nonpolar Phase Boundary in BiLaFeO Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 14914-14921	9.5	2
175	Reducing Coercive-Field Scaling in Ferroelectric Thin Films via Orientation Control. <i>ACS Nano</i> , 2018 , 12, 4736-4743	16.7	24
174	Subtractive fabrication of ferroelectric thin films with precisely controlled thickness. <i>Nanotechnology</i> , 2018 , 29, 155302	3.4	6

173	Chemical Phenomena of Atomic Force Microscopy Scanning. <i>Analytical Chemistry</i> , 2018 , 90, 3475-3481	7.8	16
172	Emergent chirality in the electric polarization texture of titanate superlattices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 915-920	11.5	73
171	Resonant domain-wall-enhanced tunable microwave ferroelectrics. <i>Nature</i> , 2018 , 560, 622-627	50.4	48
170	Electronic and Polar Properties of Vanadate Compounds Stabilized by Epitaxial Strain. <i>Chemistry of Materials</i> , 2018 , 30, 5870-5877	9.6	4
169	Local control of defects and switching properties in ferroelectric thin films. <i>Physical Review Materials</i> , 2018 , 2,	3.2	21
168	Pyroelectric and electrocaloric effects in ferroelectric silicon-doped hafnium oxide thin films. <i>Physical Review Materials</i> , 2018 , 2,	3.2	22
167	Electronic Transport and Ferroelectric Switching in Ion-Bombarded, Defect-Engineered BiFeO ₃ Thin Films. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1700991	4.6	22
166	Experimental Demonstration of Ferroelectric Spiking Neurons for Unsupervised Clustering 2018 ,		28
165	Complex strain evolution of polar and magnetic order in multiferroic BiFeO thin films. <i>Nature Communications</i> , 2018 , 9, 3764	17.4	30
164	Ultrafast collective oxygen-vacancy flow in Ca-doped BiFeO ₃ . <i>NPG Asia Materials</i> , 2018 , 10, 943-955	10.3	9
163	Perspective: Emergent topologies in oxide superlattices. <i>APL Materials</i> , 2018 , 6, 100901	5.7	21
162	Nanoscale Electrochemical Phenomena of Polarization Switching in Ferroelectrics. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38217-38222	9.5	12
161	Phase Coexistence of Ferroelectric Vortices and Classical a1/a2 Domains in PbTiO ₃ /SrTiO ₃ Superlattices.. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1638-1639	0.5	1
160	Nonstoichiometry, structure, and properties of Ba _{1-x} TiO _y thin films. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 10751-10759	7.1	7
159	Ambipolar ferromagnetism by electrostatic doping of a manganite. <i>Nature Communications</i> , 2018 , 9, 1897	17.4	30
158	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. <i>Physical Review Letters</i> , 2018 , 120, 227601	7.4	170
157	Machine Detection of Enhanced Electromechanical Energy Conversion in PbZr Ti O Thin Films. <i>Advanced Materials</i> , 2018 , 30, e1800701	24	14
156	Stability of Polar Vortex Lattice in Ferroelectric Superlattices. <i>Nano Letters</i> , 2017 , 17, 2246-2252	11.5	85

155	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	17
154	Large polarization gradients and temperature-stable responses in compositionally-graded ferroelectrics. <i>Nature Communications</i> , 2017 , 8, 14961	17.4	43
153	Slow Conductance Relaxation in GrapheneFerroelectric Field-Effect Transistors. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 7542-7548	3.8	13
152	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. <i>Physical Review Applied</i> , 2017 , 7,	4.3	44
151	Pressurizing Field-Effect Transistors of Few-Layer MoS in a Diamond Anvil Cell. <i>Nano Letters</i> , 2017 , 17, 194-199	11.5	25
150	Epitaxy on polycrystalline substrates. <i>Science</i> , 2017 , 358, 587-588	33.3	8
149	Electron Accumulation and Emergent Magnetism in LaMnO ₃ /SrTiO ₃ Heterostructures. <i>Physical Review Letters</i> , 2017 , 119, 156801	7.4	44
148	Orientation-dependent properties of epitaxially strained perovskite oxide thin films: Insights from first-principles calculations. <i>Physical Review B</i> , 2017 , 95,	3.3	16
147	Ferroelectricity in Pb1+ZrO3 Thin Films. <i>Chemistry of Materials</i> , 2017 , 29, 6544-6551	9.6	19
146	Three-State Ferroelastic Switching and Large Electromechanical Responses in PbTiO Thin Films. <i>Advanced Materials</i> , 2017 , 29, 1702069	24	53
145	Phase coexistence and electric-field control of toroidal order in oxide superlattices. <i>Nature Materials</i> , 2017 , 16, 1003-1009	27	108
144	Quantification of flexoelectricity in PbTiO/SrTiO superlattice polar vortices using machine learning and phase-field modeling. <i>Nature Communications</i> , 2017 , 8, 1468	17.4	60
143	Thin-film ferroelectric materials and their applications. <i>Nature Reviews Materials</i> , 2017 , 2,	73.3	350
142	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	0.5	
141	Differential voltage amplification from ferroelectric negative capacitance. <i>Applied Physics Letters</i> , 2017 , 111, 253501	3.4	27
140	Structural imaging of nanoscale phonon transport in ferroelectrics excited by metamaterial-enhanced terahertz fields. <i>Physical Review Materials</i> , 2017 , 1,	3.2	3
139	Frontiers in strain-engineered multifunctional ferroic materials. <i>MRS Communications</i> , 2016 , 6, 151-166	2.7	15
138	Ultrafast terahertz-field-driven ionic response in ferroelectric BaTiO3. <i>Physical Review B</i> , 2016 , 94,	3.3	54

137	Self-Assembled, Nanostructured, Tunable Metamaterials via Spinodal Decomposition. <i>ACS Nano</i> , 2016 , 10, 10237-10244	16.7	37
136	Strain-induced growth instability and nanoscale surface patterning in perovskite thin films. <i>Scientific Reports</i> , 2016 , 6, 26075	4.9	20
135	Observation of polar vortices in oxide superlattices. <i>Nature</i> , 2016 , 530, 198-201	50.4	488
134	Surface Chemically Switchable Ultraviolet Luminescence from Interfacial Two-Dimensional Electron Gas. <i>Nano Letters</i> , 2016 , 16, 681-7	11.5	9
133	Highly mobile ferroelastic domain walls in compositionally graded ferroelectric thin films. <i>Nature Materials</i> , 2016 , 15, 549-56	27	85
132	Asymmetric Response of Ferroelastic Domain-Wall Motion under Applied Bias. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2935-41	9.5	8
131	Mapping growth windows in quaternary perovskite oxide systems by hybrid molecular beam epitaxy. <i>Applied Physics Letters</i> , 2016 , 109, 101903	3.4	18
130	Single gate p-n junctions in graphene-ferroelectric devices. <i>Applied Physics Letters</i> , 2016 , 108, 203109	3.4	23
129	High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO ₃ Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2016 , 20, 137-146	3.7	12
128	Microwave a.c. conductivity of domain walls in ferroelectric thin films. <i>Nature Communications</i> , 2016 , 7, 11630	17.4	63
127	Interfacial Octahedral Rotation Mismatch Control of the Symmetry and Properties of SrRuO ₃ . <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 14871-8	9.5	39
126	New modalities of strain-control of ferroelectric thin films. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 263001	1.8	61
125	Nanodomain Engineering in Ferroelectric Capacitors with Graphene Electrodes. <i>Nano Letters</i> , 2016 , 16, 6460-6466	11.5	30
124	Enhanced Electrical Resistivity and Properties via Ion Bombardment of Ferroelectric Thin Films. <i>Advanced Materials</i> , 2016 , 28, 10750-10756	24	36
123	Nonstoichiometry, Structure, and Properties of BiFeO ₃ Films. <i>Chemistry of Materials</i> , 2016 , 28, 5952-5964	9.6	42
122	Ferroelectrically driven spatial carrier density modulation in graphene. <i>Nature Communications</i> , 2015 , 6, 6136	17.4	107
121	Complex Evolution of Built-in Potential in Compositionally-Graded PbZr(1-x)Ti(x)O ₃ Thin Films. <i>ACS Nano</i> , 2015 , 9, 7332-42	16.7	33
120	Towards reversible control of domain wall conduction in Pb(Zr _{0.2} Ti _{0.8})O ₃ thin films. <i>Applied Physics Letters</i> , 2015 , 106, 162902	3.4	23

119	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. <i>Nature Communications</i> , 2015 , 6, 6735	17.4	64
118	Thermal conductance of strongly bonded metal-oxide interfaces. <i>Physical Review B</i> , 2015 , 91,	3.3	44
117	Orientation-dependent structural phase diagrams and dielectric properties of PbZr _{1-x} Ti _x O ₃ polydomain thin films. <i>Physical Review B</i> , 2015 , 91,	3.3	27
116	Self-regulated growth of LaVO ₃ thin films by hybrid molecular beam epitaxy. <i>Applied Physics Letters</i> , 2015 , 106, 233102	3.4	34
115	180° Ferroelectric Stripe Nanodomains in BiFeO ₃ Thin Films. <i>Nano Letters</i> , 2015 , 15, 6506-13	11.5	49
114	A novel, layered phase in Ti-rich SrTiO ₃ epitaxial thin films. <i>Advanced Materials</i> , 2015 , 27, 861-8	24	6
113	Ferroelectric polarization reversal via successive ferroelastic transitions. <i>Nature Materials</i> , 2015 , 14, 79-86	17.5	175
112	Structural phase diagram and pyroelectric properties of free-standing ferroelectric/non-ferroelectric multilayer heterostructures. <i>Journal of Applied Physics</i> , 2015 , 118, 244102-5	2.5	3
111	Toward Deterministic Switching in Ferroelectric Systems: Insight Gained from In Situ TEM. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1347-1348	0.5	
110	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in BiFeO ₃ Thin Films. <i>Advanced Materials</i> , 2015 , 27, 6371-5	24	34
109	Epitaxial growth of highly-crystalline spinel ferrite thin films on perovskite substrates for all-oxide devices. <i>Scientific Reports</i> , 2015 , 5, 10363	4.9	19
108	Visible light carrier generation in co-doped epitaxial titanate films. <i>Applied Physics Letters</i> , 2015 , 106, 092901	3.4	10
107	Magnetically disordered phase in epitaxial iron-deficient Fe ₃ O ₄ thin films. <i>Physical Review B</i> , 2015 , 91,	3.3	11
106	Magnon spectra and strong spin-lattice coupling in magnetically frustrated MnB ₂ O ₄ (B=Mn,V): Inelastic light-scattering studies. <i>Physical Review B</i> , 2014 , 89,	3.3	19
105	Enhanced Thermoelectric Power Factor of Na _x CoO ₂ Thin Films by Structural Engineering. <i>Advanced Energy Materials</i> , 2014 , 4, 1301927	21.8	25
104	Stationary domain wall contribution to enhanced ferroelectric susceptibility. <i>Nature Communications</i> , 2014 , 5, 3120	17.4	70
103	Understanding the Competition between Epitaxial Strain and Thermodynamics in TiO ₂ : Structural, Morphological, and Property Evolution. <i>Crystal Growth and Design</i> , 2014 , 14, 1981-1988	3.5	10
102	Conformable amplified lead zirconate titanate sensors with enhanced piezoelectric response for cutaneous pressure monitoring. <i>Nature Communications</i> , 2014 , 5, 4496	17.4	571

101	Reduction of the electrocaloric entropy change of ferroelectric $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ epitaxial layers due to an elastocaloric effect. <i>Physical Review B</i> , 2014 , 90,	3-3	26
100	Understanding order in compositionally graded ferroelectrics: Flexoelectricity, gradient, and depolarization field effects. <i>Physical Review B</i> , 2014 , 89,	3-3	18
99	X-ray diffraction studies of stripelike ferroelectric domains in thin films of BiFeO_3 . <i>Physical Review B</i> , 2014 , 89,	3-3	3
98	Thickness-dependent crossover from charge- to strain-mediated magnetoelectric coupling in ferromagnetic/piezoelectric oxide heterostructures. <i>ACS Nano</i> , 2014 , 8, 894-903	16.7	54
97	Enhancement of ferroelectric Curie temperature in BaTiO_3 films via strain-induced defect dipole alignment. <i>Advanced Materials</i> , 2014 , 26, 6341-7	24	101
96	Real-time observation of local strain effects on nonvolatile ferroelectric memory storage mechanisms. <i>Nano Letters</i> , 2014 , 14, 3617-22	11.5	14
95	Emerging Multiferroic Memories 2014 , 103-166		2
94	Effects of nonequilibrium growth, nonstoichiometry, and film orientation on the metal-to-insulator transition in NdNiO_3 thin films. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 22436-44	9.5	37
93	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 3. $\text{GdScO}_3(110)$. <i>Surface Science Spectra</i> , 2014 , 21, 149-156	1.2	2
92	An Introduction to Single Crystal Perovskites and Single Crystal Rare-Earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy. <i>Surface Science Spectra</i> , 2014 , 21, 84-86	1.2	2
91	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 4. $(\text{LaAlO}_3)_{0.3}(\text{Sr}_2\text{TaAlO}_6)_{0.7}(001)$. <i>Surface Science Spectra</i> , 2014 , 21, 112-121	1.2	0
90	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 2. $\text{YAlO}_3(110)$. <i>Surface Science Spectra</i> , 2014 , 21, 95-102	1.2	1
89	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 1. $\text{SrTiO}_3(001)$. <i>Surface Science Spectra</i> , 2014 , 21, 87-94	1.2	7
88	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 3. $\text{LaAlO}_3(001)$. <i>Surface Science Spectra</i> , 2014 , 21, 103-111	1.2	1
87	High-frequency thermal-electrical cycles for pyroelectric energy conversion. <i>Journal of Applied Physics</i> , 2014 , 116, 194509	2.5	30
86	Secondary effects in wide frequency range measurements of the pyroelectric coefficient of $\text{Ba}_{0.6}\text{Sr}_{0.4}\text{TiO}_3$ and $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ epitaxial layers. <i>Physical Review B</i> , 2014 , 90,	3-3	18
85	Enhanced electrocaloric and pyroelectric response from ferroelectric multilayers. <i>Applied Physics Letters</i> , 2014 , 105, 052901	3-4	33
84	Effect of Symmetry mismatch on the domain structure of rhombohedral BiFeO_3 thin films. <i>Applied Physics Letters</i> , 2014 , 104, 182908	3-4	53

83	Tunability of conduction at the LaAlO ₃ /SrTiO ₃ heterointerface: Thickness and compositional studies. <i>Applied Physics Letters</i> , 2014 , 105, 121610	3.4	11
82	Tuning Susceptibility via Misfit Strain in Relaxed Morphotropic Phase Boundary PbZr _{1-x} Ti _x O ₃ Epitaxial Thin Films. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400098	4.6	11
81	Single Crystal Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 5. NdGaO ₃ (110). <i>Surface Science Spectra</i> , 2014 , 21, 122-130	1.2	0
80	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 2. NdScO ₃ (110). <i>Surface Science Spectra</i> , 2014 , 21, 140-148	1.2	2
79	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 4. TbScO ₃ (110). <i>Surface Science Spectra</i> , 2014 , 21, 157-164	1.2	2
78	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 5. DyScO ₃ (110). <i>Surface Science Spectra</i> , 2014 , 21, 165-172	1.2	2
77	Single Crystal Rare-earth Scandate Perovskites Analyzed Using X-ray Photoelectron Spectroscopy: 1. PrScO ₃ (110). <i>Surface Science Spectra</i> , 2014 , 21, 131-139	1.2	1
76	Enhanced photoelectrochemical activity in all-oxide heterojunction devices based on correlated "metallic" oxides. <i>Advanced Materials</i> , 2013 , 25, 6201-6	24	19
75	Strain evolution in non-stoichiometric heteroepitaxial thin-film perovskites. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 8052	7.1	28
74	Unexpected crystal and domain structures and properties in compositionally graded PbZr _(1-x) Ti _(x) O ₃ thin films. <i>Advanced Materials</i> , 2013 , 25, 1761-7	24	63
73	Tunable carrier type and density in graphene/PbZr _{0.2} Ti _{0.8} O ₃ hybrid structures through ferroelectric switching. <i>Nano Letters</i> , 2013 , 13, 1693-8	11.5	88
72	Large built-in electric fields due to flexoelectricity in compositionally graded ferroelectric thin films. <i>Physical Review B</i> , 2013 , 87,	3.3	42
71	Pyroelectric electron emission from nanometer-thick films of PbZr _x Ti _{1-x} O ₃ . <i>Applied Physics Letters</i> , 2013 , 102, 192908	3.4	8
70	Nanosession: Ferroelectric Interfaces 2013 , 399-408		
69	Strong Visible-Light Absorption and Hot-Carrier Injection in TiO ₂ /SrRuO ₃ Heterostructures. <i>Advanced Energy Materials</i> , 2013 , 3, 1084-1090	21.8	29
68	Improved pyroelectric figures of merit in compositionally graded PbZr _{1-x} Ti _x O ₃ thin films. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 13235-41	9.5	61
67	Field emission from nanometer-scale tips of crystalline PbZr _x Ti _{1-x} O ₃ . <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013 , 31, 021805	1.3	9
66	Effect of growth induced (non)stoichiometry on interfacial conductance in LaAlO ₃ /SrTiO ₃ . <i>Physical Review Letters</i> , 2013 , 110, 196804	7.4	124

65	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, 082901	3.4	16
64	Ultrathin limit of exchange bias coupling at oxide multiferroic/ferromagnetic interfaces. <i>Advanced Materials</i> , 2013 , 25, 4739-45	24	51
63	Epitaxial ferroelectric heterostructures fabricated by selective area epitaxy of SrRuO ₃ using an MgO mask. <i>Advanced Materials</i> , 2012 , 24, 1610-5	24	58
62	Advanced synthesis techniques and routes to new single-phase multiferroics. <i>Current Opinion in Solid State and Materials Science</i> , 2012 , 16, 199-215	12	84
61	Pyroelectric current measurements on PbZr _{0.2} Ti _{0.8} O ₃ epitaxial layers. <i>Journal of Applied Physics</i> , 2012 , 112, 104106	2.5	29
60	Temperature and thickness evolution and epitaxial breakdown in highly strained BiFeO ₃ thin films. <i>Physical Review B</i> , 2012 , 85,	3.3	61
59	X-ray linear dichroism dependence on ferroelectric polarization. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 245902	1.8	12
58	Accessing intermediate ferroelectric switching regimes with time-resolved transmission electron microscopy. <i>Journal of Applied Physics</i> , 2012 , 112, 052013	2.5	21
57	Direct observation of ferroelectric domain switching in varying electric field regimes using in situ TEM. <i>Micron</i> , 2012 , 43, 1121-6	2.3	35
56	Magnetotransport at domain walls in BiFeO ₃ . <i>Physical Review Letters</i> , 2012 , 108, 067203	7.4	120
55	Effect of Growth Induced (Non)Stoichiometry on the Structure, Dielectric Response, and Thermal Conductivity of SrTiO ₃ Thin Films. <i>Chemistry of Materials</i> , 2012 , 24, 331-337	9.6	95
54	Multiferroic and magnetoelectric heterostructures. <i>Acta Materialia</i> , 2012 , 60, 2449-2470	8.4	158
53	Note: electrical and thermal characterization of a ferroelectric thin film with an electro-thermal nanoprobe. <i>Review of Scientific Instruments</i> , 2012 , 83, 076105	1.7	
52	Stabilization of mixed-phase structures in highly strained BiFeO ₃ thin films via chemical-alloying. <i>Applied Physics Letters</i> , 2012 , 100, 082904	3.4	15
51	Thermoreflectance of metal transducers for optical pump-probe studies of thermal properties. <i>Optics Express</i> , 2012 , 20, 28829-38	3.3	81
50	Effect of 90° domain walls and thermal expansion mismatch on the pyroelectric properties of epitaxial PbZr _{0.2} Ti _{0.8} O ₃ thin films. <i>Physical Review Letters</i> , 2012 , 109, 257602	7.4	48
49	Effect of 90° domain walls on the low-field permittivity of PbZr _(0.2) Ti _(0.8) O ₃ thin films. <i>Physical Review Letters</i> , 2012 , 108, 167601	7.4	48
48	Interface control of bulk ferroelectric polarization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 9710-5	11.5	187

47	Near-field examination of perovskite-based superlenses and superlens-enhanced probe-object coupling. <i>Nature Communications</i> , 2011 , 2, 249	17.4	74
46	Atomic and electronic structures of the SrVO ₃ -LaAlO ₃ interface. <i>Journal of Applied Physics</i> , 2011 , 110, 046104	2.5	14
45	Thermal conductivity as a metric for the crystalline quality of SrTiO ₃ epitaxial layers. <i>Applied Physics Letters</i> , 2011 , 98, 221904	3.4	55
44	Synthesis, control, and characterization of surface properties of CuO nanostructures. <i>ACS Nano</i> , 2011 , 5, 3736-43	16.7	55
43	Effect of domain walls on the electrocaloric properties of Pb(Zr _{1-x} Ti _x)O ₃ thin films. <i>Applied Physics Letters</i> , 2011 , 99, 032904	3.4	62
42	Large field-induced strains in a lead-free piezoelectric material. <i>Nature Nanotechnology</i> , 2011 , 6, 98-102	28.7	271
41	Nanoscale structure and mechanism for enhanced electromechanical response of highly Strained BiFeO ₃ thin films. <i>Advanced Materials</i> , 2011 , 23, 3170-5	24	130
40	Exciting new insight into the prototype complex oxide heterointerface: LaAlO ₃ / SrTiO ₃ (A Perspective on: L. Qiao, T. C. Droubay, T. C. Kaspar, P. V. Sushko, S. A. Chambers, Surf. Sci. (2011) 1381. <i>Surface Science</i> , 2011 , 605, 1388-1389	1.8	
39	High-temperature piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2011 , 99, 173103	3.4	11
38	Pyroelectric properties of polydomain epitaxial Pb(Zr _{1-x} Ti _x)O ₃ thin films. <i>Physical Review B</i> , 2011 , 84,	3.3	51
37	Above-bandgap voltages from ferroelectric photovoltaic devices. <i>Nature Nanotechnology</i> , 2010 , 5, 143-7	28.7	1212
36	Switching kinetics in epitaxial BiFeO ₃ thin films. <i>Journal of Applied Physics</i> , 2010 , 107, 084111	2.5	35
35	Probing the evolution of antiferromagnetism in multiferroics. <i>Physical Review B</i> , 2010 , 81,	3.3	68
34	Interface ferromagnetism and orbital reconstruction in BiFeO ₃ -La(0.7)Sr(0.3)MnO ₃ heterostructures. <i>Physical Review Letters</i> , 2010 , 105, 027201	7.4	311
33	Engineering functionality in the multiferroic BiFeO ₃ --controlling chemistry to enable advanced applications. <i>Dalton Transactions</i> , 2010 , 39, 10813-26	4.3	53
32	Direct Observation of Capacitor Switching Using Planar Electrodes. <i>Advanced Functional Materials</i> , 2010 , 20, 3466-3475	15.6	76
31	Advances in the growth and characterization of magnetic, ferroelectric, and multiferroic oxide thin films. <i>Materials Science and Engineering Reports</i> , 2010 , 68, 89-133	30.9	501
30	Magnon sidebands and spin-charge coupling in bismuth ferrite probed by nonlinear optical spectroscopy. <i>Physical Review B</i> , 2009 , 79,	3.3	69

29	Optical properties and magnetochromism in multiferroic BiFeO ₃ . <i>Physical Review B</i> , 2009 , 79,	3-3	130
28	Spin-charge-lattice coupling through resonant multimagnon excitations in multiferroic BiFeO ₃ . <i>Applied Physics Letters</i> , 2009 , 94, 161905	3-4	41
27	The dependence of oxygen vacancy distributions in BiFeO ₃ films on oxygen pressure and substrate. <i>Applied Physics Letters</i> , 2009 , 95, 012904	3-4	48
26	Surface, bulk, and interface electronic states of epitaxial BiFeO ₃ films. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 2012		16
25	Orientation-dependent potential barriers in case of epitaxial PtBiFeO ₃ /RuO ₃ capacitors. <i>Applied Physics Letters</i> , 2009 , 94, 232902	3-4	56
24	Conduction at domain walls in oxide multiferroics. <i>Nature Materials</i> , 2009 , 8, 229-34	27	1048
23	Electric modulation of conduction in multiferroic Ca-doped BiFeO ₃ films. <i>Nature Materials</i> , 2009 , 8, 485-93		426
22	Nanoscale control of domain architectures in BiFeO ₃ thin films. <i>Nano Letters</i> , 2009 , 9, 1726-30	11.5	188
21	Photovoltaic effects in BiFeO ₃ . <i>Applied Physics Letters</i> , 2009 , 95, 062909	3-4	429
20	A strain-driven morphotropic phase boundary in BiFeO ₃ . <i>Science</i> , 2009 , 326, 977-80	33-3	956
19	Electric-field control of local ferromagnetism using a magnetoelectric multiferroic. <i>Nature Materials</i> , 2008 , 7, 478-82	27	1099
18	Linear and nonlinear optical properties of BiFeO ₃ . <i>Applied Physics Letters</i> , 2008 , 92, 121915	3-4	183
17	Nanoscale control of exchange bias with BiFeO ₃ thin films. <i>Nano Letters</i> , 2008 , 8, 2050-5	11.5	254
16	Critical thickness and orbital ordering in ultrathin La _{0.7} Sr _{0.3} MnO ₃ films. <i>Physical Review B</i> , 2008 , 78,	3-3	329
15	Photoconductivity in BiFeO ₃ thin films. <i>Applied Physics Letters</i> , 2008 , 92, 091905	3-4	389
14	Multiferroics and magnetoelectrics: thin films and nanostructures. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 434220	1.8	246
13	Linear and nonlinear optical properties of multifunctional PbVO ₃ thin films. <i>Applied Physics Letters</i> , 2008 , 92, 231915	3-4	23
12	Low voltage performance of epitaxial BiFeO ₃ films on Si substrates through lanthanum substitution. <i>Applied Physics Letters</i> , 2008 , 92, 102909	3-4	89

11	Ferroelectric size effects in multiferroic BiFeO ₃ thin films. <i>Applied Physics Letters</i> , 2007 , 90, 252906	3-4	167
10	Leakage mechanisms in BiFeO ₃ thin films. <i>Applied Physics Letters</i> , 2007 , 90, 072902	3-4	444
9	Epitaxial Multiferroic BiFeO ₃ Thin Films: Progress and Future Directions. <i>Ferroelectrics</i> , 2007 , 354, 167-176	41	
8	Magnetoelectric complex-oxide heterostructures. <i>Philosophical Magazine Letters</i> , 2007 , 87, 155-164	1	9
7	Domain Control in Multiferroic BiFeO ₃ through Substrate Vicinality. <i>Advanced Materials</i> , 2007 , 19, 2662-2666	216	
6	Adsorption-controlled molecular-beam epitaxial growth of BiFeO ₃ . <i>Applied Physics Letters</i> , 2007 , 91, 071922	3-4	80
5	Growth and structure of PbVO ₃ thin films. <i>Applied Physics Letters</i> , 2007 , 90, 062903	3-4	45
4	Polar and magnetic properties of PbVO ₃ thin films. <i>Physical Review B</i> , 2007 , 75,	3-3	36
3	Controlling magnetism with multiferroics. <i>Materials Today</i> , 2007 , 10, 16-23	21.8	214
2	Room temperature exchange bias and spin valves based on BiFeO ₃ /RuO ₃ /TiO ₃ /Bi (001) heterostructures. <i>Applied Physics Letters</i> , 2007 , 91, 172513	3-4	98
1	Nanoscale Domain Control in Multiferroic BiFeO ₃ Thin Films. <i>Advanced Materials</i> , 2006 , 18, 2307-2311	24	244