

Brahim Dkhil

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7115158/publications.pdf>

Version: 2024-02-01

267
papers

14,353
citations

16451

64
h-index

25787

108
g-index

284
all docs

284
docs citations

284
times ranked

12663
citing authors

#	ARTICLE	IF	CITATIONS
1	Electric-field control of magnetic order above room temperature. <i>Nature Materials</i> , 2014, 13, 345-351.	27.5	451
2	Control of the shape and size of iron oxide (Fe_2O_3) nanoparticles synthesized through the chemical precipitation method. <i>Results in Physics</i> , 2017, 7, 3007-3015.	4.1	403
3	Evidence for Room-Temperature Multiferroicity in a Compound with a Giant Axial Ratio. <i>Physical Review Letters</i> , 2009, 102, 217603.	7.8	331
4	Photovoltaics with Ferroelectrics: Current Status and Beyond. <i>Advanced Materials</i> , 2016, 28, 5153-5168.	21.0	330
5	A rhombohedral ferroelectric phase in epitaxially strained $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ thin films. <i>Nature Materials</i> , 2018, 17, 1095-1100.	27.5	324
6	Crafting the magnonic and spintronic response of BiFeO_3 films by epitaxial strain. <i>Nature Materials</i> , 2013, 12, 641-646.	27.5	311
7	High Proton Conduction in a Chiral Ferromagnetic Metal-Organic Quartz-like Framework. <i>Journal of the American Chemical Society</i> , 2011, 133, 15328-15331.	13.7	302
8	Monoclinic structure of unpoled morphotropic high piezoelectric PMN-PT and PZN-PT compounds. <i>Physical Review B</i> , 2002, 65, .	3.2	280
9	Giant Negative Electrocaloric Effect in Antiferroelectric La -Doped $\text{Pb}(\text{ZrTi})\text{O}_3$ Thin Films Near Room Temperature. <i>Advanced Materials</i> , 2015, 27, 3165-3169.	21.0	241
10	Towards Oxide Electronics: a Roadmap. <i>Applied Surface Science</i> , 2019, 482, 1-93.	6.1	236
11	Finite-Temperature Properties of Multiferroic BiFeO_3 . <i>Physical Review Letters</i> , 2007, 99, 227602.	7.8	210
12	Direct and indirect measurements on electrocaloric effect: Recent developments and perspectives. <i>Applied Physics Reviews</i> , 2016, 3, 031102.	11.3	206
13	Phase Diagram of $\text{Pb}(\text{Zr,Ti})\text{O}_3$ Solid Solutions from First Principles. <i>Physical Review Letters</i> , 2006, 97, 157601.	7.8	189
14	Crystal structure and phase transitions of sodium potassium niobate perovskites. <i>Solid State Sciences</i> , 2009, 11, 320-324.	3.2	187
15	Local and long range polar order in the relaxor-ferroelectric compounds $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ and $\text{PbMg}_{0.3}\text{Nb}_{0.6}\text{Ti}_{0.1}\text{O}_3$. <i>Physical Review B</i> , 2001, 65, .	3.2	183
16	Electrostrain in excess of 1% in polycrystalline piezoelectrics. <i>Nature Materials</i> , 2018, 17, 427-431.	27.5	180
17	Order and disorder in the relaxor ferroelectric perovskite (PSN): comparison with simple perovskites and. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 7485-7500.	1.8	172
18	High-pressure x-ray scattering of oxides with a nanoscale local structure: Application to $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$. <i>Physical Review B</i> , 2003, 68, .	3.2	170

#	ARTICLE	IF	CITATIONS
19	Intermediate temperature scale T^{\wedge} —in lead-based relaxor systems. <i>Physical Review B</i> , 2009, 80, .	3.2	169
20	Ferroelectricity of Perovskites under Pressure. <i>Physical Review Letters</i> , 2005, 95, 196804.	7.8	168
21	Enhanced electrocaloric effect in lead-free $BaTi_{1-x}Sn_xO_3$ ceramics near room temperature. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	165
22	Dielectric Response: Answer to Many Questions in the Methylammonium Lead Halide Solar Cell Absorbers. <i>Advanced Energy Materials</i> , 2017, 7, 1700600.	19.5	163
23	Multiferroics by Rational Design: Implementing Ferroelectricity in Molecule-Based Magnets. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8356-8360.	13.8	157
24	Phase stability and structural temperature dependence in powdered multiferroic $BiFeO_3$. <i>Physical Review B</i> , 2008, 78, .	3.2	154
25	Structural investigation of $AgNbO_3$ phases using x-ray and neutron diffraction. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 2795-2810.	1.8	152
26	Effect of high pressure on multiferroic $BiFeO_3$. <i>Physical Review B</i> , 2009, 79, .	3.2	149
27	Bridging Multiferroic Phase Transitions by Epitaxial Strain in $BiFeO_3$. <i>Physical Review Letters</i> , 2010, 105, 057601.	7.8	147
28	Synthesis, photoluminescence and Magnetic properties of iron oxide (\pm - Fe_2O_3) nanoparticles through precipitation or hydrothermal methods. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2018, 101, 212-219.	2.7	136
29	Strong electrocaloric effect in lead-free $0.65Ba(Zr_{0.2}Ti_{0.8})O_3-0.35(Ba_{0.7}Ca_{0.3})TiO_3$ ceramics obtained by direct measurements. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	131
30	Giant ultrafast photo-induced shear strain in ferroelectric $BiFeO_3$. <i>Nature Communications</i> , 2014, 5, 4301.	12.8	129
31	A Robust Artificial Synapse Based on Organic Ferroelectric Polymer. <i>Advanced Electronic Materials</i> , 2019, 5, 1800600.	5.1	129
32	Size Effect on Optical and Photocatalytic Properties in $BiFeO_3$ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3595-3601.	3.1	119
33	Nonmagnetic Fe-site doping of $BiFeO_3$ multiferroic ceramics. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	117
34	Surface Domain Structures and Mesoscopic Phase Transition in Relaxor Ferroelectrics. <i>Advanced Functional Materials</i> , 2011, 21, 1977-1987.	14.9	113
35	Research progress on solutions to the sneak path issue in memristor crossbar arrays. <i>Nanoscale Advances</i> , 2020, 2, 1811-1827.	4.6	110
36	Large reversible caloric effect in $FeRh$ thin films via a dual-stimulus multicaloric cycle. <i>Nature Communications</i> , 2016, 7, 11614.	12.8	108

#	ARTICLE	IF	CITATIONS
37	Phase Transition at a Nanometer Scale Detected by Acoustic Emission within the Cubic Phase $\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ Relaxor Ferroelectrics. <i>Physical Review Letters</i> , 2007, 98, 265701.	7.8	105
38	High-pressure Raman investigation of the Pb-free relaxor $\text{BaTi}_{0.65}\text{Zr}_{0.35}\text{O}_3$. <i>Physical Review B</i> , 2004, 69, .	3.2	104
39	Tunnel electroresistance through organic ferroelectrics. <i>Nature Communications</i> , 2016, 7, 11502.	12.8	104
40	Structural evolution and polar order in $\text{Sr}_{1-x}\text{Ba}_x\text{TiO}_3$. <i>Physical Review B</i> , 2002, 65, .	3.2	102
41	High-Pressure Effect on PbTiO_3 : An Investigation by Raman and X-Ray Scattering up to 63 GPa. <i>Physical Review Letters</i> , 2008, 101, 237601.	7.8	95
42	Field-Induced Percolation of Polar Nanoregions in Relaxor Ferroelectrics. <i>Physical Review Letters</i> , 2013, 110, 207601.	7.8	95
43	Competing phases in BiFeO_3 films under compressive epitaxial strain. <i>Physical Review B</i> , 2010, 81, .	3.2	93
44	Multiple high-pressure phase transitions in BiFeO_3 films. <i>Physical Review B</i> , 2011, 84, .	3.2	93
45	Effect of high pressure on relaxor ferroelectrics. <i>Physical Review B</i> , 2002, 65, .	3.2	91
46	Multiferroic Phase Transition near Room Temperature in BiFeO_3 Films. <i>Physical Review Letters</i> , 2011, 107, 237601.	7.8	88
47	Acoustic emission study of phase transitions and polar nanoregions in relaxor-based systems: Application to the $\text{PbZn}_{1-x}\text{Nb}_x\text{O}_3$ family of single crystals. <i>Physical Review B</i> , 2006, 73, .	3.2	87
48	Huge electrocaloric effect in Langmuir-Blodgett ferroelectric polymer thin films. <i>New Journal of Physics</i> , 2010, 12, 023035.	2.9	87
49	Mesoscale Domains and Nature of the Relaxor State by Piezoresponse Force Microscopy. <i>Annual Review of Materials Research</i> , 2013, 43, 423-449.	9.3	87
50	Giant Room-Temperature Elastocaloric Effect in Ferroelectric Ultrathin Films. <i>Advanced Materials</i> , 2014, 26, 6132-6137.	21.0	86
51	Pressure-Induced Suppression of the Diffuse Scattering in the Model Relaxor Ferroelectric $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$. <i>Physical Review Letters</i> , 2003, 90, 257601.	7.8	82
52	Negative-pressure-induced enhancement in a freestanding ferroelectric. <i>Nature Materials</i> , 2015, 14, 985-990.	27.5	82
53	Postsynthetic Approach for the Rational Design of Chiral Ferroelectric Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2017, 139, 8098-8101.	13.7	81
54	Structural, optical and morphological characterization of Cu-doped Fe_2O_3 nanoparticles synthesized through co-precipitation technique. <i>Journal of Molecular Structure</i> , 2017, 1148, 276-281.	3.6	78

#	ARTICLE	IF	CITATIONS
55	A brief review on the model antiferroelectric PbZrO_3 perovskite-like material. Zeitschrift für Kristallographie, 2011, 226, 163-170.	1.1	77
56	Catalytic Activity of Carbon-Supported Pt Nanoelectrocatalysts. Why Reducing the Size of Pt Nanoparticles is Not Always Beneficial. Journal of Physical Chemistry C, 2011, 115, 5429-5434.	3.1	76
57	Strain and Magnetic Field Induced Spin-Structure Transitions in Multiferroic BiFeO_3 . Advanced Materials, 2017, 29, 1602327.	21.0	76
58	Electric-field-induced polarization in the ergodic and nonergodic states of $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ relaxor. Journal of Applied Physics, 2001, 90, 4676-4681.	2.5	75
59	Atomistic Screening Mechanism of Ferroelectric Surfaces: An In Situ Study of the Polar Phase in Ultrathin BaTiO_3 Films Exposed to H_2O . Nano Letters, 2009, 9, 3720-3725.	9.1	73
60	Inverse transition of labyrinthine domain patterns in ferroelectric thin films. Nature, 2020, 577, 47-51.	27.8	71
61	Surface phase transitions in BiFeO_3 below room temperature. Physical Review B, 2012, 85, .	3.2	70
62	Phenomenological theory of phase transitions in epitaxial $\text{Ba}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ films. Physical Review B, 2009, 79, .	3.2	69
63	Size-driven relaxation and polar states in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ -based system. Physical Review B, 2005, 72, .	3.2	67
64	Size effect in morphotropic phase boundary $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ - PbTiO_3 . Applied Physics Letters, 2007, 91, 3.3	3.3	66
65	Strain dependence of polarization and piezoelectric response in epitaxial BiFeO_3 thin films. Journal of Physics Condensed Matter, 2012, 24, 162202.	1.8	66
66	Optical Observation of Heterophase and Domain Structures in Relaxor Ferroelectrics $\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ /9% PbTiO_3 . Japanese Journal of Applied Physics, 1998, 37, 5246-5248.	1.5	64
67	Phenomenological theory of phase transitions in epitaxial BaTiO_3 thin films. Physical Review B, 2007, 75, .	3.2	64
68	Photoexcitation of gigahertz longitudinal and shear acoustic waves in BiFeO_3 multiferroic single crystal. Applied Physics Letters, 2012, 100, .	3.3	64
69	Electric and antiferromagnetic chiral textures at multiferroic domain walls. Nature Materials, 2020, 19, 386-390.	27.5	64
70	Synthesis, structural, morphological, optical and magnetic characterization of iron oxide (Fe_2O_3) nanoparticles by precipitation method: Effect of varying the nature of precursor. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 328-334.	2.7	63
71	Low-Symmetry Phases in Ferroelectric Nanowires. Nano Letters, 2010, 10, 1177-1183.	9.1	62
72	Quasivertical line in the phase diagram of single crystals of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$. Physical Review B, 2007, 76, .	1.2	60

#	ARTICLE	IF	CITATIONS
73	Giant electrocaloric effect in lead-free Ba _{0.94} Ca _{0.06} Ti _{1-x} Sn _x O ₃ ceramics with tunable Curie temperature. Applied Physics Letters, 2015, 107, .	3.3	60
74	Temperature-dependent Raman and x-ray studies of the spin-ice pyrochlore $Dy_2Sn_2O_7$ nonmagnetic pyrochlore. Physical Review B, 2008, 78, .	3.7	57
75	Some strategies for improving caloric responses with ferroelectrics. APL Materials, 2016, 4, 064109.	5.1	57
76	$BiFeO_3$ Films under Tensile Epitaxial Strain from First Principles. Physical Review Letters, 2011, 106, 237601.	7.8	56
77	Storing magnetic information in IrMn/MgO/Ta tunnel junctions via field-cooling. Applied Physics Letters, 2013, 102, .	3.3	56
78	Morphotropic phase boundary of heterovalent perovskite solid solutions: Experimental and theoretical investigation of $PbSc_{1-x}Nb_xTiO_3$. Physical Review B, 2005, 71, .	3.2	55
79	Spin-lattice coupling in multiferroic $Pb(Fe_{1/2}Nb_{1/2})O_3$ thin films. Applied Physics Letters, 2009, 94, .	3.3	54
80	Enhanced electrocaloric effect near polymorphic phase boundary in lead-free potassium sodium niobate ceramics. Applied Physics Letters, 2017, 110, .	3.3	53
81	Ferroelectric Synaptic Transistor Network for Associative Memory. Advanced Electronic Materials, 2021, 7, 2001276.	5.1	52
82	Photostriction in Ferroelectrics from Density Functional Theory. Physical Review Letters, 2016, 116, 247401.	7.8	51
83	New life of a forgotten method: Electrochemical route toward highly efficient Pt/C catalysts for low-temperature fuel cells. Applied Catalysis A: General, 2012, 431-432, 120-125.	4.3	49
84	The direct magnetoelectric effect in ferroelectric/ferromagnetic epitaxial heterostructures. Nanoscale, 2013, 5, 8037.	5.6	49
85	Finite-temperature properties of the relaxor $PbMg_{1-x}Pb_{1-x}O_3$ from atomistic simulations. Physical Review B, 2015, 91, .	3.2	49
86	X-ray study of the kinetics of field induced transition from the glass-like to the ferroelectric phase in lead magnoniobate. Solid State Communications, 1997, 103, 477-482.	1.9	48
87	Cationic-competition-induced monoclinic phase in high piezoelectric $(PbSc_{1/2}Nb_{1/2}O_3)_{1-x}(PbTiO_3)_x$ compounds. Physical Review B, 2003, 68, .	3.2	48
88	Synthesis, structural, optical and morphological characterization of hematite through the precipitation method: Effect of varying the nature of the base. Journal of Molecular Structure, 2017, 1141, 99-106.	3.6	48
89	Large magnetoelectric response and its origin in bulk Co-doped BiFeO ₃ synthesized by a stirred hydrothermal process. Acta Materialia, 2018, 145, 316-321.	7.9	48
90	Direct Epitaxial Growth of Polar $(1-x)HfO_2$ /(x)ZrO ₂ Ultrathin Films on Silicon. ACS Applied Electronic Materials, 2019, 1, 2585-2593.	4.3	48

#	ARTICLE	IF	CITATIONS
91	Strains in BaTiO ₃ thin film deposited onto Pt-coated Si substrate. Applied Physics Letters, 2007, 90, 022908.	3.3	47
92	Adsorption and dissociation of H_2O in-plane-polarized $BaTiO_3$ Physical Review B, 2009, 79, .	3.2	47
93	Phase transitions and ferroelectrics: revival and the future in the field. Phase Transitions, 2009, 82, 633-661.	1.3	47
94	Prediction of giant elastocaloric strength and stress-mediated electrocaloric effect in $BaTiO_3$ single crystals. Physical Review B, 2014, 90, .	3.2	47
95	Large electrocaloric strength and broad electrocaloric temperature span in lead-free $Ba_{0.85}Ca_{0.15}Ti_{1-x}Hf_xO_3$ ceramics. RSC Advances, 2017, 7, 5813-5820.	3.6	46
96	Epitaxial ferroelectric oxide thin films for optical applications. Applied Physics Reviews, 2018, 5, 041108.	11.3	46
97	Effect of high pressure on the $Pb(Mg_{1/3}Nb_{2/3})O_3 \sim PbTiO_3$ solid solution: A Raman scattering investigation. Physical Review B, 2004, 70, .	3.2	45
98	Effect of a built-in electric field in asymmetric ferroelectric tunnel junctions. Physical Review B, 2013, 88, .	3.2	45
99	Strain effects on multiferroic BiFeO ₃ films. Comptes Rendus Physique, 2015, 16, 193-203.	0.9	44
100	Local electrical control of magnetic order and orientation by ferroelastic domain arrangements just above room temperature. Scientific Reports, 2015, 5, 10026.	3.3	44
101	Optical and Structural Studies of Long-Range Order Development in Relaxor Ferroelectrics. Journal of the Physical Society of Japan, 2000, 69, 2331-2338.	1.6	43
102	Giant room-temperature barocaloric effect and pressure-mediated electrocaloric effect in BaTiO ₃ single crystal. Applied Physics Letters, 2014, 104, .	3.3	43
103	Crystal structure, leakage conduction mechanism evolution and enhanced multiferroic properties in Y-doped BiFeO ₃ ceramics. Ceramics International, 2016, 42, 13395-13403.	4.8	43
104	Direct measurement of electrocaloric effect in lead-free $Ba(Sn_xTi_{1-x})O_3$ ceramics. Applied Physics Letters, 2017, 111, .	3.3	43
105	Synthesis, structural, optical, morphological and magnetic characterization of copper substituted nickel ferrite ($Cu_xNi_{1-x}Fe_2O_4$) through co-precipitation method. Journal of Materials Science: Materials in Electronics, 2017, 28, 18480-18488.	2.2	42
106	Relativistic interaction Hamiltonian coupling the angular momentum of light and the electron spin. Physical Review B, 2015, 92, .	3.2	41
107	Ultrafast acousto-optic mode conversion in optically birefringent ferroelectrics. Nature Communications, 2016, 7, 12345.	12.8	41
108	Pinched hysteresis loop in defect-free ferroelectric materials. Physical Review B, 2016, 94, .	3.2	41

#	ARTICLE	IF	CITATIONS
109	Substituted effect of Al ³⁺ on structural, optical, magnetic and photocatalytic activity of Ni ferrites. Journal of Magnetism and Magnetic Materials, 2019, 476, 124-133.	2.3	41
110	Pressure instabilities up to 46 GPa in the relaxor ferroelectric $\text{PbZn}_{1-x}\text{Nb}_2\text{O}_3$. Physical Review B, 2006, 73, .	3.2	40
111	Effect of grain size on the transition between ferroelectric and relaxor states in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$		

#	ARTICLE	IF	CITATIONS
127	Influence of the substrate on the phase composition and electrical properties of 0.65PMN ϵ 0.35PT thick films. Journal of the European Ceramic Society, 2010, 30, 2081-2092. Evidence for a first-order transition from monoclinic ϵ to monoclinic ϵ	5.7	31
128	Phase transition from monoclinic ϵ to monoclinic ϵ phase in ferroelectric polymers for neuromorphic computing. Applied Physics Reviews, 2022, 9, .	3.2	31
129	Ferroelectric polymers for neuromorphic computing. Applied Physics Reviews, 2022, 9, .	11.3	31
130	SrTiO ₃ Displacive Transition Revisited via Coherent X-Ray Diffraction. Physical Review Letters, 2007, 98, 105501.	7.8	30
131	Strain sensitivity of polarization in perovskite ferroelectrics. Applied Physics Letters, 2008, 93, 122903.	3.3	30
132	Space-charge Effect on Electroresistance in Metal-Ferroelectric-Metal capacitors. Scientific Reports, 2016, 5, 18297.	3.3	30
133	Improved photocatalytic activities of Cu _x Co _{0.5-x} Ni _{0.5} Fe ₂ O ₄ nanoparticles through co-precipitation method in degrading methylene blue. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 101, 29-37.	2.7	30
134	XRD and electrochemical investigation of particle size effects in platinum-cobalt cathode electrocatalysts for oxygen reduction. Journal of Alloys and Compounds, 2010, 500, 241-246.	5.5	29
135	Phase transition, leakage conduction mechanism evolution and enhanced ferroelectric properties in multiferroic Mn-doped BiFeO ₃ thin films. Journal of Materials Science: Materials in Electronics, 2016, 27, 3095-3102.	2.2	29
136	Phenomenological description of phase transitions in thin BaTiO ₃ films. Physics of the Solid State, 2008, 50, 928-936.	0.6	28
137	Nonlinear Dielectric Properties of PMN Relaxor Crystals within Landau-Ginzburg-Devonshire Approximation. Ferroelectrics, 2008, 363, 141-149.	0.6	28
138	Temperature evolution of the structural properties of monodomain ferroelectric thin film. Applied Physics Letters, 2007, 90, 192910.	3.3	27
139	Effect of particle morphology on the photocatalytic activity of BiFeO ₃ microcrystallites. Journal of Materials Science: Materials in Electronics, 2012, 23, 1869-1874.	2.2	27
140	Spin and lattice excitations of a BiFeO ₃ film and ceramics. Physical Review B, 2015, 91, .	3.2	27
141	Ultrafast Neuromorphic Dynamics Using Hidden Phases in the Prototype of Relaxor Ferroelectrics. Physical Review Letters, 2021, 126, 027602.	7.8	27
142	Study of potassium-sodium-niobate alloys: A combined experimental and theoretical approach. European Physical Journal Special Topics, 2005, 128, 55-60.	0.2	26
143	Metal-insulator transition in thin films of R _x R _{1-x} NiO ₃ compounds: DC electrical conductivity and IR spectroscopy measurements. Journal of Physics Condensed Matter, 2005, 17, 1137-1150.	1.8	26
144	Stress and orientation in the relaxor/ferroelectric superlattices (PbMg _{1-x} Nb _{2x-3} O ₃)(1-x)(PbTiO ₃) _x . Physical Review B, 2005, 71, .	3.2	26

#	ARTICLE	IF	CITATIONS
145	Interfacial Strain Gradients Control Nanoscale Domain Morphology in Epitaxial BiFeO ₃ Multiferroic Films. <i>Advanced Functional Materials</i> , 2020, 30, 2000343.	14.9	26
146	Comparison of structural and electrical properties of PMN-PT films deposited on Si with different bottom electrodes. <i>Journal of Crystal Growth</i> , 2007, 305, 137-143.	1.5	25
147	Dielectric evidences of core-shell-like effects in nanosized relaxor PbMg _{1-x} Nb _{2-x} O ₃ . <i>Applied Physics Letters</i> , 2008, 92, .	3.3	24
148	Effect of Mn and Ba Codoping on a Magnetic Spin Cycloid of Multiferroic Bismuth Ferrite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22266-22277.	3.1	24
149	Rayleigh-like nonlinear dielectric response and its evolution during electrical fatigue in antiferroelectric (Pb,La)(Zr,Ti)O ₃ thin film. <i>Applied Physics Letters</i> , 2014, 104, 142904.	3.3	23
150	Effect of resistivity ratio on energy storage and dielectric relaxation properties of 0-3 dielectric composites. <i>Journal of Materials Science</i> , 2017, 52, 6074-6080.	3.7	23
151	Structural and optical investigation of (V, Al) doped and co-doped ZnO nanopowders: Tailored visible luminescence for white light emitting diodes. <i>Superlattices and Microstructures</i> , 2018, 122, 349-361.	3.1	23
152	Partial decoupling between strain and polarization in mono-oriented Pb(Zr _{0.2} Ti _{0.8})O ₃ thin film. <i>Applied Physics Letters</i> , 2007, 90, 212904.	3.3	21
153	Uniaxial-stress induced phase transitions in [001]C-poled 0.955Pb(Zn _{1-x} Nb _{2-x})O ₃ -0.045PbTiO ₃ . <i>Applied Physics Letters</i> , 2007, 90, 152907.	3.3	21
154	Magnetodielectric effect and phonon properties of compressively strained EuTiO ₃ thin films deposited on (001)(LaAlO ₃) _{Tj} ETQq0 0 0 rgBT /Overlock 10 Tf	3.2	21
155	Strain engineering of perovskite thin films using a single substrate. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 292201.	1.8	21
156	Nonlinear magnetoelectric effect in paraelectric state of Co ₄ Nb ₂ O ₉ single crystal. <i>Scientific Reports</i> , 2017, 7, 14079.	3.3	21
157	Structure of Nanodomains in Relaxors. <i>AIP Conference Proceedings</i> , 2003, , .	0.4	20
158	Giant magnetocapacitance of strained ferroelectric-ferromagnetic hybrids. <i>Physical Review B</i> , 2012, 85, .	3.2	20
159	Direct Evidence of Lithium Ion Migration in Resistive Switching of Lithium Cobalt Oxide Nanobatteries. <i>Small</i> , 2018, 14, e1801038.	10.0	20
160	Emerging spin-phonon coupling through cross-talk of two magnetic sublattices. <i>Nature Communications</i> , 2022, 13, 443.	12.8	20
161	Condensation of the atomic relaxation vibrations in lead-magnesium-niobate at T=T*. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	19
162	Single crystal growth of Mn ₄ Nb ₂ O ₉ and its structure-magnetic coupling. <i>RSC Advances</i> , 2017, 7, 13846-13850.	3.6	19

#	ARTICLE	IF	CITATIONS
163	A magnetic phase diagram for nanoscale epitaxial BiFeO ₃ films. Applied Physics Reviews, 2019, 6, .	11.3	19
164	Structural phase transitions in nanosized ferroelectric barium strontium titanate films. Physics of the Solid State, 2008, 50, 485-489.	0.6	18
165	Stability of glassy and ferroelectric states in the relaxors PbMg _{1-x} Nb _{2-x} O ₃ and PbMg _{1-x} Nb _{2-x} O ₃ ~12%PbTiO ₃ . Physical Review B, 2007, 75, .	3.2	17
166	Giant electrocaloric effect in asymmetric ferroelectric tunnel junctions at room temperature. Applied Physics Letters, 2014, 104, .	3.3	17
167	Influence of epitaxial strain on elastocaloric effect in ferroelectric thin films. Applied Physics Letters, 2015, 106, .	3.3	17
168	Surface Proximity Effect, Imprint Memory of Ferroelectric Twins, and Tweed in the Paraelectric Phase of BaTiO ₃ . Scientific Reports, 2018, 8, 13660.	3.3	17
169	Optical and structural properties of In-rich In _x Ga _{1-x} As epitaxial layers on (1 0 0) InP for SWIR detectors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2020, 262, 114769.	3.5	17
170	Effect of High Pressure on the Relaxor Ferroelectrics Na _{1/2} Bi _{1/2} TiO ₃ (NBT) and PbMg _{1/3} Nb _{2/3} O ₃ (PMN). Ferroelectrics, 2004, 302, 293-298.	0.6	16
171	Acoustic emission and nonergodic states of the electric-field-induced-phase transition of PbMg _{1-x} Nb _{2-x} O ₃ . Journal of Applied Physics, 2005, 98, 023520.	2.5	16
172	Mapping Disorder in Polycrystalline Relaxors: A Piezoresponse Force Microscopy Approach. Materials, 2010, 3, 4860-4870.	2.9	16
173	Vacancies and holes in bulk and at 180Å° domain walls in lead titanate. Journal of Physics Condensed Matter, 2017, 29, 485707.	1.8	16
174	Switchable two-dimensional electron gas based on ferroelectric Ca: $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{SrTi} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. Physical Review Materials, 2020, 4, .	2.4	15
175	Quantum-fluctuation-stabilized orthorhombic ferroelectric ground state in lead-free piezoelectric $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{Ba} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. Physical Review B, 2019, 80, .	3.4	14
176	Electrocalorics hit the top. Nature Materials, 2020, 19, 9-11.	27.5	14
177	Increase of magnetic and magnetoelectric properties in Co/Mn co-doped BiFeO ₃ multiferroic. Journal of Magnetism and Magnetic Materials, 2020, 498, 166137.	2.3	14
178	PbMg _{1-x} Nb _{2-x} O ₃ ~PbTiO ₃ superlattices: An x-ray diffraction and Raman spectroscopy temperature-dependent study. Physical Review B, 2007, 76, .	3.2	13
179	Effect of polarization fatigue on the Rayleigh coefficients of ferroelectric lead zirconate titanate thin films: Experimental evidence and implications. Applied Physics Letters, 2014, 105, .	3.3	13
180	Heat flow in electrocaloric multilayer capacitors. Journal of Alloys and Compounds, 2020, 834, 155042.	5.5	13

#	ARTICLE	IF	CITATIONS
199	Self-organized (Ba _{0.7} ,Sr _{0.3})TiO ₃ nanocomposite with improved figure of merit. Applied Physics Letters, 2009, 95, .	3.3	9
200	In situ observation of the nanocrystal growth and their piezoelectric performance change in P(VDF-TrFE) films by hot stage piezoresponse force microscopy. Journal of Applied Physics, 2013, 113, 187210.	2.5	9
201	Effective driving voltage on polarization fatigue in (Pb,La)(Zr,Ti)O ₃ antiferroelectric thin films. Ceramics International, 2015, 41, 109-114.	4.8	9
202	Large heat flux in electrocaloric multilayer capacitors. Journal Physics D: Applied Physics, 2017, 50, 464002.	2.8	9
203	Nanocrystalline Ni _x Co _(0.5-^x) Zn _{0.5} Fe ₂ O ₄ ferrites: fabrication through co-precipitation route with enhanced structural, magnetic and photo-catalytic activity. Journal of Materials Science: Materials in Electronics, 2018, 29, 7333-7344.	2.2	9
204	Magnetoelastic and magnetoelectric couplings across the antiferromagnetic transition in multiferroic BiFeO_3 . Physical Review B, 2019, 99, .	3.2	9
205	Ultrafast light-induced shear strain probed by time-resolved x-ray diffraction: Multiferroic BiFeO_3 as a case study. Physical Review B, 2020, 102, .	3.2	9
206	Polar and chemical order in relation with morphotropic phase boundaries and relaxor behaviour in bulk and nanostructured PSN-PT. Phase Transitions, 2006, 79, 123-134.	1.3	8
207	Phase transitional behavior of potassium sodium niobate thin films. Thin Solid Films, 2013, 539, 317-322.	1.8	8
208	Activation of B_1 silent Raman modes and its potential origin as source for phonon-assisted replicas in photoluminescence response in N-doped ZnO nanowires. Journal of Applied Physics, 2018, 123, .	2.5	8
209	Enhanced electrocaloric effect in BaSn/TiO ₃ ceramics by addition of CuO. Journal of Alloys and Compounds, 2021, 851, 156772.	5.5	8
210	Optical absorption by design in a ferroelectric: co-doping in BaTiO ₃ . Journal of Materials Chemistry C, 2021, 10, 227-234.	5.5	8
211	Hidden phases with neuromorphic responses and highly enhanced piezoelectricity in an antiferroelectric prototype. Physical Review B, 2022, 105, .	3.2	8
212	Observation of Rotation of Polarization in Thin Films of Pb(Sc _{1/2} Nb _{1/2})O ₃ -PbTiO ₃ via a Monoclinic Phase. Japanese Journal of Applied Physics, 2006, 45, L42-L45.	1.5	7
213	Threshold fields in the dc bias dependence of dielectric responses of relaxor ferroelectric terpolymer films. Journal of Applied Physics, 2009, 106, 104102.	2.5	7
214	Orthorhombic polar Nd-doped BiFeO ₃ thin film on MgO substrate. Journal of Physics Condensed Matter, 2011, 23, 332201.	1.8	7
215	Tunnel-mediated coupling between antiferromagnetic thin films. Physical Review B, 2014, 90, .	3.2	7
216	Thickness dependence of the properties of epitaxial barium strontium titanate thin films. Physics of the Solid State, 2015, 57, 1529-1534.	0.6	7

#	ARTICLE	IF	CITATIONS
217	Physical investigations on $\text{LaMn}_{1-x}\text{Ni}_x\text{O}_3$ perovskite sprayed thin films along with surface magnetic applications. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	7
218	Doping-induced Polar Defects Improve the Electrocaloric Performance of $\text{Ba}_{0.9}\text{MnO}_3$. Physical Review Applied, 2021, 16, .	3.8	7
219	Low temperature perovskite crystallization of $70\%\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ thin films deposited by sputtering and their electrical performance evaluation. Applied Physics Letters, 2007, 91, .	3.3	6
220	Critical temperatures of $70\%\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3}\text{O}_3)$ thin films investigated by dielectric, ferroelectric, and structural measurements. Applied Physics Letters, 2007, 90, 132904.	3.3	6
221	Non-ergodicity and polar features of the transitional phase in lead zirconate. Applied Physics Letters, 2014, 105, .	3.3	6
222	Polarization fatigue in antiferroelectric $(\text{Pb},\text{La})(\text{Zr},\text{Ti})\text{O}_3$ thin films: The role of the effective strength of driving waveform. Ceramics International, 2015, 41, S289-S295.	4.8	6
223	Interfacial memristors in $\text{Al}_2\text{O}_3/\text{LaNiO}_3$ heterostructures. Physical Chemistry Chemical Physics, 2017, 19, 16960-16968.	2.8	6
224	Surface and bulk ferroelectric phase transition in super-tetragonal BiFeO_3 thin films. Physical Review Materials, 2021, 5, .	2.4	6
225	Switching on superferromagnetism. Physical Review Materials, 2019, 3, .	2.4	6
226	Domain structure and dielectric properties of metal-ferroelectric superlattices with asymmetric interfaces. Physical Review Materials, 2020, 4, .	2.4	6
227	Temperature Dependent Structural Properties of $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ Thin Films. Ferroelectrics, 2003, 288, 277-285.	0.6	5
228	Stability of the polydomain state in epitaxial ferroelectric PbTiO_3 films. Applied Physics Letters, 2008, 93, 242907.	3.3	5
229	High-temperature ferroic phase transitions and paraelectric cubic phase in multiferroic $\text{Bi}_{0.95}\text{Fe}_{0.9}\text{Zr}_{0.1}\text{O}_3$. Journal of Applied Physics, 2012, 111, 114106.	2.5	5
230	The intermediate temperature T^* revealed in relaxor polymers. Applied Physics Letters, 2014, 104, .	3.3	5
231	Polarization-controlled spin reorientation transition and resistive switching in ferromagnetic-ferroelectric nanostructures and tunnel junctions. Physical Review B, 2014, 90, .	3.2	5
232	Macroscopic polarization in the nominally ergodic relaxor state of lead magnesium niobate. Applied Physics Letters, 2020, 117, .	3.3	5
233	Evidence for Goldstone-like and Higgs-like structural modes in the model $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ relaxor ferroelectric. Physical Review B, 2020, 102, .	3.2	5
234	Facile synthesis of pure BiFeO_3 and $\text{Bi}_2\text{Fe}_4\text{O}_9$ nanostructures with enhanced photocatalytic activity. Journal of Materials Science: Materials in Electronics, 2022, 33, 2518-2533.	2.2	5

#	ARTICLE	IF	CITATIONS
235	Thermal and Electron Plasma Effects on Phase Separation Dynamics Induced by Ultrashort Laser Pulses. <i>Crystals</i> , 2022, 12, 496.	2.2	5
236	Structural Studies of Relaxor/Ferroelectric $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3/\text{PbTiO}_3$ Superlattices. <i>Ferroelectrics</i> , 2005, 316, 131-137.	0.6	4
237	From the structure of relaxors to the structure of MPB systems. , 2008, , 391-446.		4
238	Structure evolution and photocatalytic activity of BiFeO_3 powders synthesized by hydrothermal decomposition of metal-EDTA complexes. <i>Journal of Materials Science: Materials in Electronics</i> , 2012, 23, 2145-2151.	2.2	4
239	New relativistic Hamiltonian: the angular magnetoelectric coupling. , 2016, , .		4
240	New approach for designing bulk multiferroic composites made of two perovskite oxides with enhanced direct magnetoelectric coupling. <i>Scripta Materialia</i> , 2021, 194, 113673.	5.2	4
241	Effect of Zn Substitution on the Structural, Optical Properties and Photocatalytic Activity of BiFeO_3 Nanopowders. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	2.4	4
242	Disorder and anharmonicity in simple and complex perovskites. <i>Ferroelectrics</i> , 1999, 235, 87-96.	0.6	3
243	Antiferroelectric Thin Films: Giant Negative Electrocaloric Effect in Antiferroelectric La-Doped $\text{Pb}(\text{ZrTi})\text{O}_3$ Thin Films Near Room Temperature (Adv. Mater. 20/2015). <i>Advanced Materials</i> , 2015, 27, 3164-3164.	21.0	3
244	Tailoring the room temperature ferroelectric/paraelectric state in polycrystalline $(\text{Ba}_{0.70}\text{Sr}_{0.30})\text{TiO}_3$ thin films for silicon compatible integration. <i>Ceramics International</i> , 2015, 41, 14412-14418.	4.8	3
245	Spin transitions in $\text{La}_{0.7}\text{Ba}_{0.3}\text{CoO}_3$ thin films revealed by combining Raman spectroscopy and X-ray diffraction. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	3
246	Ferroelectric Synapses: A Robust Artificial Synapse Based on Organic Ferroelectric Polymer (Adv.) <i>Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 3</i>	5.1	3
247	Structural and dielectric properties of ferroelectric poly(vinylidene fluoride-trifluoroethylene) thin films with different bottom electrodes. <i>Journal of Applied Physics</i> , 2009, 106, 054111.	2.5	2
248	Publisher's Note: Bridging Multiferroic Phase Transitions by Epitaxial Strain in BiFeO_3 [Phys. Rev. Lett. 105, 057601 (2010)]. <i>Physical Review Letters</i> , 2010, 105, .	7.8	2
249	Ferroc phase transition sequence in epitaxial BiFeO_3 thin films. <i>Phase Transitions</i> , 2011, 84, 453-473.	1.3	2
250	Size effects on the macroscopic properties of the relaxor ferroelectric $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ PbTiO_3 solid solution. , 2008, , 447-471.		1
251	Study of the formation processes of a domain nanostructure in relaxor ferroelectrics. <i>Physics of Particles and Nuclei Letters</i> , 2011, 8, 1061-1062.	0.4	1
252	Toy model for uncommon spin-orbit-driven spin-torque terms. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 254001.	1.8	1

#	ARTICLE	IF	CITATIONS
253	Study of the spontaneous relaxor to normal ferroelectric phase transition in la-doped lead titanate. <i>Ferroelectrics</i> , 2000, 240, 1457-1464.	0.6	0
254	The Debye-like relaxation mechanism in poly(vinylidene fluoride-trifluoroethylene) ferroelectric polymers. <i>Journal of Applied Physics</i> , 2009, 106, 104113.	2.5	0
255	Thin ferroelectric Nd-doped BiFeO ₃ films with orthorhombic structure. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2010, 74, 1112-1114.	0.6	0
256	Structure Change of Poly(Vinylidene Fluoride-Trifluoroethylene) Ferroelectric Thin Films on Different Electrodes. <i>Ferroelectrics</i> , 2010, 405, 183-187.	0.6	0
257	Oxygen tilts against polar shifts in the multiferroic BiFeO ₃ . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2011, 67, C179-C179.	0.3	0
258	Guest editorsâ€™ note. <i>Phase Transitions</i> , 2013, 86, 1051-1051.	1.3	0
259	Expression of Concern: Nanocrystalline Ni _x Co(0.5â€‰%âˆ™â€‰% _x)Zn _{0.5} Fe ₂ O ₄ ferrites: fabrication through coprecipitation route with enhanced structural, magnetic and photocatalytic activity. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 2651-2651.	2.2	0
260	Expression of Concern: Synthesis, structural, optical, morphological and magnetic characterization of Copper substituted nickel ferrite (Cu _x Ni _{1-x} Fe ₂ O ₄) through co-precipitation method. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 2650-2650.	2.2	0
261	Electronic interactions between graphene and cobaltite thin film La _{0.7} Sr _{0.3} CoO ₃ and its magnetic consequences. <i>Surfaces and Interfaces</i> , 2021, 23, 100919.	3.0	0
262	Pulsed laser deposition of PbMg _{1/3} Nb _{2/3} O ₃ thin films and PbMg _{1/3} Nb _{2/3} O ₃ /PbTiO ₃ multilayers. <i>European Physical Journal Special Topics</i> , 2001, 11, Pr11-65-Pr11-69.	0.2	0
263	10.1007/s11451-008-3015-7. , 2010, 50, 485.		0
264	Energy-filtered electron diffuse scattering of ferroelectrics PMN and PMN-xPT. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, C623-C623.	0.1	0
265	Electron spin interaction with the angular momentum of the electromagnetic field. , 2016, , .		0
266	Anti-polar state in BiFeO ₃ /NdFeO ₃ superlattices. <i>Journal of Applied Physics</i> , 2021, 130, 244101.	2.5	0
267	Strain engineering of the magnetic anisotropy and magnetic moment in NdFeO ₃ epitaxial thin films. <i>Physical Review Materials</i> , 2022, 6, .		