List of Publications by Year in descending order

348 papers	31,514 citations	4120 87 h-index	5227 165 g-index
349 all docs	349 docs citations	349 times ranked	21501 citing authors

#	Article	IF	Citations
1	From classical thermodynamics to phase-field method. Progress in Materials Science, 2022, 124, 100868.	16.0	172
2	Double-gradients design of polymer nanocomposites with high energy density. Energy Storage Materials, 2022, 44, 73-81.	9.5	51
3	Stability and low-energy orientations of interphase boundaries in multiaxial ferroelectrics: Phase-field simulations. Physical Review B, 2022, 105, .	1.1	3
4	Phaseâ€Field Simulations of Tunable Polar Topologies in Leadâ€Free Ferroelectric/Paraelectric Multilayers with Ultrahigh Energyâ€Storage Performance. Advanced Materials, 2022, 34, e2108772.	11.1	24
5	Tunable Nanoscale Evolution and Topological Phase Transitions of a Polar Vortex Supercrystal. Advanced Materials, 2022, 34, e2106401.	11.1	9
6	Liberating a hidden antiferroelectric phase with interfacial electrostatic engineering. Science Advances, 2022, 8, eabg5860.	4.7	18
7	Q-POP-Thermo: A general-purpose thermodynamics solver for ferroelectric materials. Computer Physics Communications, 2022, 275, 108302.	3.0	2
8	Orderâ€“Disorder Transitions in a Polar Vortex Lattice. Advanced Functional Materials, 2022, 32, .	7.8	9
9	Machine learning in energy storage materials. , 2022, 1, 175-195.		45
10	Flexoelectric Domain Walls Originated from Structural Phase Transition in Epitaxial BiVO₄ Films. Small, 2022, 18, e2107540.	5.2	8
11	Optimizing Piezoelectric Nanocomposites by Highâ€Throughput Phaseâ€Field Simulation and Machine Learning. Advanced Science, 2022, 9, e2105550.	5.6	42
12	Local manipulation and topological phase transitions of polar skyrmions. Matter, 2022, 5, 1031-1041.	5.0	12
13	The role of lattice dynamics in ferroelectric switching. Nature Communications, 2022, 13, 1110.	5.8	25
14	Bimodal polymorphic nanodomains in ferroelectric films for giant energy storage. Energy Storage Materials, 2022, 48, 306-313.	9.5	12
15	Ferroelectric crystals with giant electro-optic property enabling ultracompact Q-switches. Science, 2022, 376, 371-377.	6.0	46
16	High performance high-power textured Mn/Cu-doped PIN-PMN-PT ceramics. Acta Materialia, 2022, 234, 118015.	3.8	22
17	Phase-field model of stoichiometric compounds and solution phases. Acta Materialia, 2022, 234, 118007.	3.8	7
18	High-entropy enhanced capacitive energy storage. Nature Materials, 2022, 21, 1074-1080.	13.3	161

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19	Dynamical phase-field model of coupled electronic and structural processes. Npj Computational Materials, 2022, 8, .	3.5	7
20	Ferroelectric domain-wall logic units. Nature Communications, 2022, 13, .	5.8	37
21	Application of scalar auxiliary variable scheme to phase-field equations. Computational Materials Science, 2022, 212, 111556.	1.4	1
22	Ferroelastic Nanodomain-mediated Mechanical Switching of Ferroelectricity in Thick Epitaxial Films. Nano Letters, 2021, 21, 445-452.	4.5	10
23	Superhierarchical Inorganic/Organic Nanocomposites Exhibiting Simultaneous Ultrahigh Dielectric Energy Density and High Efficiency. Advanced Functional Materials, 2021, 31, 2007994.	7.8	46
24	Ultrasensitive magnetostrictive responses at the pre-transitional rhombohedral side of ferromagnetic morphotropic phase boundary. Journal of Materials Science, 2021, 56, 1713-1729.	1.7	8
25	Magnetoelectrics and Multiferroics. , 2021, , 1-29.		0
26	Dendrite-free Lithium Based on Lessons Learned from Lithium and Magnesium Electrodeposition Morphology Simulations. Cell Reports Physical Science, 2021, 2, 100294.	2.8	19
27	Strainâ€Induced Interlayer Parallelâ€toâ€Antiparallel Magnetic Transitions of Twisted Bilayers. Advanced Theory and Simulations, 2021, 4, 2000215.	1.3	2
28	Quasi-one-dimensional metallic conduction channels in exotic ferroelectric topological defects. Nature Communications, 2021, 12, 1306.	5.8	40
29	Toroidal polar topology in strained ferroelectric polymer. Science, 2021, 371, 1050-1056.	6.0	74
30	Quantifying the effect of hydride microstructure on zirconium alloys embrittlement using image analysis. Journal of Nuclear Materials, 2021, 547, 152817.	1.3	21
31	Vortex Domain Walls in Ferroelectrics. Nano Letters, 2021, 21, 3533-3539.	4.5	34
32	Polymer Dielectrics with Simultaneous Ultrahigh Energy Density and Low Loss. Advanced Materials, 2021, 33, e2008198.	11.1	85
33	Domain patterns and super-elasticity of freestanding BiFeO3 membranes via phase-field simulations. Acta Materialia, 2021, 208, 116689.	3.8	18
34	Subterahertz collective dynamics of polar vortices. Nature, 2021, 592, 376-380.	13.7	66
35	A multiscale insight into the growth of h-BN: effect of the enclosure. 2D Materials, 2021, 8, 035033.	2.0	11
36	In-situ domain structure characterization of Pb(Mg1/3Nb2/3)O3-PbTiO3 crystals under alternating current electric field poling. Acta Materialia, 2021, 210, 116853.	3.8	17

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37	Enhanced electric-field-induced strains in (K,Na)NbO3 piezoelectrics from heterogeneous structures. Materials Today, 2021, 46, 44-53.	8.3	36
38	Emergent chirality in a polar meron to skyrmion transition revealed by 4D-STEM. Microscopy and Microanalysis, 2021, 27, 348-350.	0.2	7
39	Precipitation Hardening in Ferroelectric Ceramics. Advanced Materials, 2021, 33, e2102421.	11.1	46
40	Designing polymer nanocomposites with high energy density using machine learning. Npj Computational Materials, 2021, 7, .	3.5	39
41	Phase diagrams, superdomains, and superdomain walls in K Na1-NbO3 epitaxial thin films. Acta Materialia, 2021, 215, 117038.	3.8	10
42	Investigation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:mi>Î´</mml:mi></mml:math> zirconium hydride morphology in a single crystal using quantitative phase field simulations supported by experiments. Journal of Nuclear Materials, 2021, 557, 153303.	1.3	12
43	Boundary conditions manipulation of polar vortex domains in BiFeO₃ membranes via phase-field simulations. Journal Physics D: Applied Physics, 2021, 54, 495301.	1.3	4
44	Ultrahigh energy storage in superparaelectric relaxor ferroelectrics. Science, 2021, 374, 100-104.	6.0	276
45	Inverse Domainâ€Size Dependence of Piezoelectricity in Ferroelectric Crystals. Advanced Materials, 2021, 33, e2105071.	11.1	17
46	Low-voltage magnetoelectric coupling in membrane heterostructures. Science Advances, 2021, 7, eabh2294.	4.7	18
47	Magnetoelectrics and Multiferroics. , 2021, , 595-623.		0
48	Microstructural impacts on ionic conductivity of oxide solid electrolytes from a combined atomistic-mesoscale approach. Npj Computational Materials, 2021, 7, .	3.5	25
49	Flexoelectric control of physical properties by atomic force microscopy. Applied Physics Reviews, 2021, 8, .	5.5	19
50	Electric-field-controlled magnetization switching in multiferroic heterostructures containing interactive magnetic nanoislands. Journal Physics D: Applied Physics, 2020, 53, 024002.	1.3	6
51	Presence of a purely tetragonal phase in ultrathin BiFeO3 films: Thermodynamics and phase-field simulations. Acta Materialia, 2020, 183, 110-117.	3.8	8
52	Extraordinarily Large Electrocaloric Strength of Metalâ€Free Perovskites. Advanced Materials, 2020, 32, e1906224.	11.1	43
53	Stability and dynamics of skyrmions in ultrathin magnetic nanodisks under strain. Acta Materialia, 2020, 183, 145-154.	3.8	30
54	Giant tuning of ferroelectricity in single crystals by thickness engineering. Science Advances, 2020, 6, .	4.7	38

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55	Giant piezoelectricity in oxide thin films with nanopillar structure. Science, 2020, 369, 292-297.	6.0	86
56	Phase-field model of deformation twin-grain boundary interactions in hexagonal systems. Acta Materialia, 2020, 200, 821-834.	3.8	15
57	Controlled Nucleation and Stabilization of Ferroelectric Domain Wall Patterns in Epitaxial (110) Bismuth Ferrite Heterostructures. Advanced Functional Materials, 2020, 30, 2003571.	7.8	8
58	Phase transition enhanced superior elasticity in freestanding single-crystalline multiferroic BiFeO ₃ membranes. Science Advances, 2020, 6, .	4.7	73
59	Temperature dependence of three-dimensional domain wall arrangement in ferroelectric K0.9Na0.1NbO3 epitaxial thin films. Journal of Applied Physics, 2020, 128, .	1.1	8
60	Mechanically induced ferroelectric switching in BaTiO3 thin films. Acta Materialia, 2020, 193, 151-162.	3.8	31
61	High-throughput data-driven interface design of high-energy-density polymer nanocomposites. Journal of Materiomics, 2020, 6, 573-581.	2.8	18
62	Ferroelectric Domain Wall Memristor. Advanced Functional Materials, 2020, 30, 2000109.	7.8	86
63	Spontaneous ferroelectric order in lead-free relaxor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:mrow>	1.1	14
64	Colossal flexoresistance in dielectrics. Nature Communications, 2020, 11, 2586.	5.8	21
65	Electric-field-driven Deterministic and Robust 120Â° Magnetic Rotation in a Concave Triangular Nanomagnet. Physical Review Applied, 2020, 13, .	1.5	2
66	An Allâ€Scale Hierarchical Architecture Induces Colossal Roomâ€Temperature Electrocaloric Effect at Ultralow Electric Field in Polymer Nanocomposites. Advanced Materials, 2020, 32, e1907927.	11.1	34
67	Low-energy complementary ferroelectric-nanocrack logic. Nano Energy, 2020, 75, 104871.	8.2	3
68	Multiscale computational understanding and growth of 2D materials: a review. Npj Computational Materials, 2020, 6, .	3.5	89
69	Strain engineering of dischargeable energy density of ferroelectric thin-film capacitors. Nano Energy, 2020, 72, 104665.	8.2	44
70	Domain Dynamics under Ultrafast Electric-Field Pulses. Physical Review Letters, 2020, 124, 107601.	2.9	36
71	A thermodynamic study of phase transitions and electrocaloric properties of K0.5Na0.5NbO3 single crystals. Applied Physics Letters, 2020, 116, .	1.5	8
72	Constructing Polymorphic Nanodomains in BaTiO₃ Films via Epitaxial Symmetry Engineering. Advanced Functional Materials, 2020, 30, 1910569.	7.8	28

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73	Transparent ferroelectric crystals with ultrahigh piezoelectricity. Nature, 2020, 577, 350-354.	13.7	360
74	Thermodynamic and phase-field studies of phase transitions, domain structures, and switching for Ba(Zr Ti1â^')O3 solid solutions. Acta Materialia, 2020, 186, 609-615.	3.8	12
75	Nanopore-induced dielectric and piezoelectric enhancement in PbTiO3 nanowires. Acta Materialia, 2020, 187, 146-152.	3.8	14
76	Deterministic reversal of single magnetic vortex circulation by an electric field. Science Bulletin, 2020, 65, 1260-1267.	4.3	21
77	Strain Control of Domain Structures in Ferroelectric Thin Films: Applications of Phase-Field Method. , 2020, , 1213-1230.		1
78	A thermodynamically consistent phaseâ€field model for viscous sintering. Journal of the American Ceramic Society, 2019, 102, 674-685.	1.9	11
79	In situ Electric Field Manipulation of Ferroelectric Vortices. Microscopy and Microanalysis, 2019, 25, 1844-1845.	0.2	3
80	Ultrahighâ€“energy density lead-free dielectric films via polymorphic nanodomain design. Science, 2019, 365, 578-582.	6.0	662
81	Periodicity-Doubling Cascades: Direct Observation in Ferroelastic Materials. Physical Review Letters, 2019, 123, 087603.	2.9	32
82	Interfacial Electronic Properties Dictate Li Dendrite Growth in Solid Electrolytes. Chemistry of Materials, 2019, 31, 7351-7359.	3.2	165
83	Emergence of the Vortex State in Confined Ferroelectric Heterostructures. Advanced Materials, 2019, 31, e1901014.	11.1	37
84	Strain anisotropy and magnetic domain structures in multiferroic heterostructures: High-throughput finite-element and phase-field studies. Acta Materialia, 2019, 176, 73-83.	3.8	14
85	Recent advances in understanding dendrite growth on alkali metal anodes. EnergyChem, 2019, 1, 100003.	10.1	146
86	Deterministic Ferroelastic Domain Switching Using Ferroelectric Bilayers. Nano Letters, 2019, 19, 5319-5326.	4.5	15
87	Revealing ferroelectric switching character using deep recurrent neural networks. Nature Communications, 2019, 10, 4809.	5.8	34
88	A phase-field model for hydride formation in polycrystalline metals: Application to Î´-hydride in zirconium alloys. Acta Materialia, 2019, 181, 262-277.	3.8	41
89	Phase field simulation of grain size effects on the phase coexistence and magnetostrictive behavior near the ferromagnetic morphotropic phase boundary. Applied Physics Letters, 2019, 115, .	1.5	10
90	Electrical Tunability of Domain Wall Conductivity in LiNbO₃ Thin Films. Advanced Materials, 2019, 31, e1902890.	11.1	61

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91	Super-elastic ferroelectric single-crystal membrane with continuous electric dipole rotation. Science, 2019, 366, 475-479.	6.0	272
92	Ferroelectric domain structures and temperature-misfit strain phase diagrams of K1-xNaxNbO3 thin films: A phase-field study. Applied Physics Letters, 2019, 115, .	1.5	19
93	Observation of Strong Polarization Enhancement in Ferroelectric Tunnel Junctions. Nano Letters, 2019, 19, 6812-6818.	4.5	18
94	Enhanced flexoelectricity at reduced dimensions revealed by mechanically tunable quantum tunnelling. Nature Communications, 2019, 10, 537.	5.8	64
95	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. Nature Nanotechnology, 2019, 14, 705-711.	15.6	773
96	Interaction Dynamics Between Ferroelectric and Antiferroelectric Domains in a PbZrO3 -Based Ceramic. Physical Review Applied, 2019, 11, .	1.5	19
97	Flexoelectricity in solids: Progress, challenges, and perspectives. Progress in Materials Science, 2019, 106, 100570.	16.0	223
98	Robust polarization switching in self-assembled BiFeO3 nanoislands with quad-domain structures. Acta Materialia, 2019, 175, 324-330.	3.8	21
99	Phase-field modeling and machine learning of electric-thermal-mechanical breakdown of polymer-based dielectrics. Nature Communications, 2019, 10, 1843.	5.8	174
100	Perspective: voltage control of magnetization in multiferroic heterostructures. National Science Review, 2019, 6, 621-624.	4.6	15
101	Electrokinetic Phenomena Enhanced Lithiumâ€ion Transport in Leaky Film for Stable Lithium Metal Anodes. Advanced Energy Materials, 2019, 9, 1900704.	10.2	76
102	Electrical polarization induced by atomically engineered compositional gradient in complex oxide solid solution. NPG Asia Materials, 2019, 11, .	3.8	4
103	Hydrogen in zirconium alloys: A review. Journal of Nuclear Materials, 2019, 518, 440-460.	1.3	203
104	Conformational Domain Wall Switch. Advanced Functional Materials, 2019, 29, 1807523.	7.8	47
105	Understanding, Predicting, and Designing Ferroelectric Domain Structures and Switching Guided by the Phase-Field Method. Annual Review of Materials Research, 2019, 49, 127-152.	4.3	101
106	New frontiers for the materials genome initiative. Npj Computational Materials, 2019, 5, .	3.5	312
107	Scalable Polymer Nanocomposites with Record Highâ€Temperature Capacitive Performance Enabled by Rationally Designed Nanostructured Inorganic Fillers. Advanced Materials, 2019, 31, e1900875.	11.1	236
108	First-principles lattice dynamics and thermodynamic properties of pre-perovskite PbTiO3. Acta Materialia, 2019, 171, 146-153.	3.8	11

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109	Direct observation of weakened interface clamping effect enabled ferroelastic domain switching. Acta Materialia, 2019, 171, 184-189.	3.8	18
110	Computational modeling of grain boundary electrostatic effect in polycrystalline SrTiO₃ thin film. Journal of the American Ceramic Society, 2019, 102, 4136-4151.	1.9	3
111	A Strainâ€Mediated Magnetoelectricâ€Spinâ€Torque Hybrid Structure. Advanced Functional Materials, 2019, 29, 1806371.	7.8	26
112	Conductivity of ironâ€doped strontium titanate in the quenched and degraded states. Journal of the American Ceramic Society, 2019, 102, 3567-3577.	1.9	12
113	A roadmap for electronic grade 2D materials. 2D Materials, 2019, 6, 022001.	2.0	205
114	Spatially resolved steady-state negative capacitance. Nature, 2019, 565, 468-471.	13.7	245
115	Switchable polar spirals in tricolor oxide superlattices. Acta Materialia, 2019, 164, 493-498.	3.8	17
116	Giant piezoelectricity of Sm-doped Pb(Mg _{1/3} Nb _{2/3})O ₃ -PbTiO ₃ single crystals. Science, 2019, 364, 264-268.	6.0	479
117	Light-Activated Gigahertz Ferroelectric Domain Dynamics. Physical Review Letters, 2018, 120, 096101.	2.9	39
118	Strain, temperature, and electric-field effects on the phase transition and piezoelectric responses of K0.5Na0.5NbO3 thin films. Journal of Applied Physics, 2018, 123, 154106.	1.1	25
119	Phaseâ€Field Model of Electrothermal Breakdown in Flexible Highâ€Temperature Nanocomposites under Extreme Conditions. Advanced Energy Materials, 2018, 8, 1800509.	10.2	90
120	Configurable topological textures in strain graded ferroelectric nanoplates. Nature Communications, 2018, 9, 403.	5.8	91
121	Role of Reversible Phase Transformation for Strong Piezoelectric Performance at the Morphotropic Phase Boundary. Physical Review Letters, 2018, 120, 055501.	2.9	84
122	Topological dynamics of vortex-line networks in hexagonal manganites. Physical Review B, 2018, 97, .	1.1	10
123	Phase-field modeling of Î‚â€² precipitation kinetics in 319 aluminum alloys. Computational Materials Science, 2018, 151, 84-94.	1.4	28
124	Strain effects on domain structures in ferroelectric thin films from phaseâ€field simulations. Journal of the American Ceramic Society, 2018, 101, 4783-4790.	1.9	7
125	Defect-Induced Hedgehog Polarization States in Multiferroics. Physical Review Letters, 2018, 120, 137602.	2.9	52
126	Ultrahigh piezoelectricity in ferroelectric ceramics by design. Nature Materials, 2018, 17, 349-354.	13.3	874

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127	Selective control of multiple ferroelectric switching pathways using a trailing flexoelectric field. Nature Nanotechnology, 2018, 13, 366-370.	15.6	124
128	Size effects of electrocaloric cooling in ferroelectric nanowires. Journal of the American Ceramic Society, 2018, 101, 1566-1575.	1.9	38
129	Tunneling Hot Spots in Ferroelectric SrTiO₃. Nano Letters, 2018, 18, 491-497.	4.5	30
130	Microstructural effects on effective piezoelectric responses of textured PMN-PT ceramics. Acta Materialia, 2018, 145, 62-70.	3.8	26
131	Strain-induced indium clustering in non-polar a-plane InGaN quantum wells. Acta Materialia, 2018, 145, 109-122.	3.8	7
132	Highâ€Throughput Phaseâ€Field Design of Highâ€Energyâ€Density Polymer Nanocomposites. Advanced Materials, 2018, 30, 1704380.	11.1	254
133	Stable metal battery anodes enabled by polyethylenimine sponge hosts by way of electrokinetic effects. Nature Energy, 2018, 3, 1076-1083.	19.8	338
134	Strain-mediated voltage-controlled switching of magnetic skyrmions in nanostructures. Npj Computational Materials, 2018, 4, .	3.5	46
135	Understanding and predicting geometrical constraint ferroelectric charged domain walls in a BiFeO3 island via phase-field simulations. Applied Physics Letters, 2018, 113, .	1.5	17
136	Strain Control of Domain Structures in Ferroelectric Thin Films: Applications of Phase-Field Method. , 2018, , 1-18.		0
137	Anisotropic polarization-induced conductance at a ferroelectricâ€“insulator interface. Nature Nanotechnology, 2018, 13, 1132-1136.	15.6	53
138	A Bottom-Up Formation Mechanism of Solid Electrolyte Interphase Revealed by Isotope-Assisted Time-of-Flight Secondary Ion Mass Spectrometry. Journal of Physical Chemistry Letters, 2018, 9, 5508-5514.	2.1	29
139	Multiscale framework for simulation-guided growth of 2D materials. Npj 2D Materials and Applications, 2018, 2, .	3.9	41
140	Water printing of ferroelectric polarization. Nature Communications, 2018, 9, 3809.	5.8	75
141	Phase Coexistence of Ferroelectric Vortices and Classical a1/a2 Domains in PbTiO3/SrTiO3 Superlattices.. Microscopy and Microanalysis, 2018, 24, 1638-1639.	0.2	2
142	Atomic-scale mechanism of internal structural relaxation screening at polar interfaces. Physical Review B, 2018, 97, .	1.1	4
143	Bioinspired elastic piezoelectric composites for high-performance mechanical energy harvesting. Journal of Materials Chemistry A, 2018, 6, 14546-14552.	5.2	104
144	Operando and three-dimensional visualization of anion depletion and lithium growth by stimulated Raman scattering microscopy. Nature Communications, 2018, 9, 2942.	5.8	138

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146	Controllable conductive readout in self-assembled, topologically confined ferroelectric domain walls. Nature Nanotechnology, 2018, 13, 947-952.	15.6	163
147	Local Structural Heterogeneity and Electromechanical Responses of Ferroelectrics: Learning from Relaxor Ferroelectrics. Advanced Functional Materials, 2018, 28, 1801504.	7.8	260
148	Electric Field Writing of Ferroelectric Nanoâ€Domains Near 71Â° Domain Walls with Switchable Interfacial Conductivity. Annalen Der Physik, 2018, 530, 1800130.	0.9	6
149	Blowing polar skyrmion bubbles in oxide superlattices. Acta Materialia, 2018, 152, 155-161.	3.8	57
150	Flexible energy harvesting polymer composites based on biofibril-templated 3-dimensional interconnected piezoceramics. Nano Energy, 2018, 50, 35-42.	8.2	107
151	Discovering minimum energy pathways via distortion symmetry groups. Physical Review B, 2018, 98, .	1.1	14
152	Synergy between phase transformation and domain switching in two morphotropic phase boundary ferroelectrics. Physical Review Materials, 2018, 2, .	0.9	5
153	Facilitation of Ferroelectric Switching via Mechanical Manipulation of Hierarchical Nanoscale Domain Structures. Physical Review Letters, 2017, 118, 017601.	2.9	41
154	Stability of Polar Vortex Lattice in Ferroelectric Superlattices. Nano Letters, 2017, 17, 2246-2252.	4.5	131
155	A thermodynamic potential and the temperature-composition phase diagram for single-crystalline K1-xNaxNbO3 (0â€‰â‰â€‰xâ€‰â‰â€‰0.5). Applied Physics Letters, 2017, 110, .	1.5	40
156	Understanding and designing magnetoelectric heterostructures guided by computation: progresses, remaining questions, and perspectives. Npj Computational Materials, 2017, 3, .	3.5	110
157	Role of flexoelectric coupling in polarization rotations at the a-c domain walls in ferroelectric perovskites. Applied Physics Letters, 2017, 110, .	1.5	13
158	Theory of strain phase separation and strain spinodal: Applications to ferroelastic and ferroelectric systems. Acta Materialia, 2017, 133, 147-159.	3.8	20
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160	Direct Imaging of the Relaxation of Individual Ferroelectric Interfaces in a Tensileâ€Strained Film. Advanced Electronic Materials, 2017, 3, 1600508.	2.6	7
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164	Micromagnetic simulation of electric field-modulation on precession dynamics of spin torque nano-oscillator. Applied Physics Letters, 2017, 111, .	1.5	4
165	Phase-Field Based Multiscale Modeling of Heterogeneous Solid Electrolytes: Applications to Nanoporous Li₃PS₄. ACS Applied Materials & Interfaces, 2017, 9, 33341-33350.	4.0	21
166	Understanding cementite dissolution in pearlitic steels subjected to rolling-sliding contact loading: A combined experimental and theoretical study. Acta Materialia, 2017, 141, 193-205.	3.8	23
167	Controlled manipulation of oxygen vacancies using nanoscale flexoelectricity. Nature Communications, 2017, 8, 615.	5.8	93
168	Highâ€Performance Polymers Sandwiched with Chemical Vapor Deposited Hexagonal Boron Nitrides as Scalable Highâ€Temperature Dielectric Materials. Advanced Materials, 2017, 29, 1701864.	11.1	270
169	Kinetics of Domain Switching by Mechanical and Electrical Stimulation in Relaxor-Based Ferroelectrics. Physical Review Applied, 2017, 8, .	1.5	11
170	Field enhancement of electronic conductance at ferroelectric domain walls. Nature Communications, 2017, 8, 1318.	5.8	32
171	On the speed of piezostrain-mediated voltage-driven perpendicular magnetization reversal: a computational elastodynamics-micromagnetic phase-field study. NPG Asia Materials, 2017, 9, e404-e404.	3.8	21
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173	Reversible phase transition induced large piezoelectric response in Sm-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BiFe</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> with a composition near the morphotropic phase boundary. Physical Review B, 2017, 95, .	1.1	46
174	Effect of strong nonuniformity in grain boundary energy on 3-D grain growth behavior: A phase-field simulation study. Computational Materials Science, 2017, 127, 67-77.	1.4	44
175	Determination of electrical properties of degraded mixed ionic conductors: Impedance studies with applied dc voltage. Journal of Applied Physics, 2017, 122, .	1.1	10
176	Multiferroic Heterostructures Integrating Ferroelectric and Magnetic Materials. Advanced Materials, 2016, 28, 15-39.	11.1	356
177	Giant Resistive Switching via Control of Ferroelectric Charged Domain Walls. Advanced Materials, 2016, 28, 6574-6580.	11.1	83
178	Local Probing of Ferroelectric and Ferroelastic Switching through Stressâ€Mediated Piezoelectric Spectroscopy. Advanced Materials Interfaces, 2016, 3, 1500470.	1.9	17
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182	The origin of ultrahigh piezoelectricity in relaxor-ferroelectric solid solution crystals. Nature Communications, 2016, 7, 13807.	5.8	510
183	Tunable thermal conductivity via domain structure engineering in ferroelectric thin films: A phase-field simulation. Acta Materialia, 2016, 111, 220-231.	3.8	40
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