

Anna Morozovska

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298
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316
ext. papers

11,034
ext. citations

5.1
avg, IF

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L-index

#	Paper	IF	Citations
298	Nanoscale mapping of ion diffusion in a lithium-ion battery cathode. <i>Nature Nanotechnology</i> , 2010 , 5, 749-54	28.7	460
297	Local polarization dynamics in ferroelectric materials. <i>Reports on Progress in Physics</i> , 2010 , 73, 056502	14.4	341
296	Ferroelectrics. Observation of a periodic array of flux-closure quadrants in strained ferroelectric PbTiO ₃ films. <i>Science</i> , 2015 , 348, 547-51	33.3	308
295	Enhanced electric conductivity at ferroelectric vortex cores in BiFeO ₃ . <i>Nature Physics</i> , 2012 , 8, 81-88	16.2	271
294	Direct imaging of the spatial and energy distribution of nucleation centres in ferroelectric materials. <i>Nature Materials</i> , 2008 , 7, 209-15	27	235
293	Measuring oxygen reduction/evolution reactions on the nanoscale. <i>Nature Chemistry</i> , 2011 , 3, 707-13	17.6	220
292	Direct observation of ferroelectric field effect and vacancy-controlled screening at the BiFeO ₃ /La _x Sr _{1-x} MnO ₃ interface. <i>Nature Materials</i> , 2014 , 13, 1019-25	27	195
291	Spontaneous flexoelectric/flexomagnetic effect in nanoferroics. <i>Physical Review B</i> , 2009 , 79,	3.3	191
290	CuInPbS ₄ Room Temperature Layered Ferroelectric. <i>Nano Letters</i> , 2015 , 15, 3808-14	11.5	184
289	Static conductivity of charged domain walls in uniaxial ferroelectric semiconductors. <i>Physical Review B</i> , 2011 , 83,	3.3	181
288	Nanoscale Electromechanics of Ferroelectric and Biological Systems: A New Dimension in Scanning Probe Microscopy. <i>Annual Review of Materials Research</i> , 2007 , 37, 189-238	12.8	179
287	Atomic-scale evolution of modulated phases at the ferroelectric-antiferroelectric morphotropic phase boundary controlled by flexoelectric interaction. <i>Nature Communications</i> , 2012 , 3, 775	17.4	135
286	Mapping octahedral tilts and polarization across a domain wall in BiFeO ₃ from Z-contrast scanning transmission electron microscopy image atomic column shape analysis. <i>ACS Nano</i> , 2010 , 4, 6071-9	16.7	135
285	Tunable metallic conductance in ferroelectric nanodomains. <i>Nano Letters</i> , 2012 , 12, 209-13	11.5	131
284	Local probing of ionic diffusion by electrochemical strain microscopy: Spatial resolution and signal formation mechanisms. <i>Journal of Applied Physics</i> , 2010 , 108, 053712	2.5	131
283	Ferroelectricity enhancement in confined nanorods: Direct variational method. <i>Physical Review B</i> , 2006 , 73,	3.3	130
282	Intermittency, quasiperiodicity and chaos in probe-induced ferroelectric domain switching. <i>Nature Physics</i> , 2014 , 10, 59-66	16.2	116

281	Oxygen-vacancy-induced ferromagnetism in undoped SnO ₂ thin films. <i>Physical Review B</i> , 2012 , 85,	3.3	112
280	Phase transitions induced by confinement of ferroic nanoparticles. <i>Physical Review B</i> , 2007 , 76,	3.3	112
279	Thermotropic phase boundaries in classic ferroelectrics. <i>Nature Communications</i> , 2014 , 5, 3172	17.4	105
278	The internal electric field originating from the mismatch effect and its influence on ferroelectric thin film properties. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 3517-3531	1.8	104
277	Domain wall geometry controls conduction in ferroelectrics. <i>Nano Letters</i> , 2012 , 12, 5524-31	11.5	103
276	Surface Domain Structures and Mesoscopic Phase Transition in Relaxor Ferroelectrics. <i>Advanced Functional Materials</i> , 2011 , 21, 1977-1987	15.6	102
275	Thermodynamics of electromechanically coupled mixed ionic-electronic conductors: Deformation potential, Vegard strains, and flexoelectric effect. <i>Physical Review B</i> , 2011 , 83,	3.3	102
274	Domain Wall Conduction and Polarization-Mediated Transport in Ferroelectrics. <i>Advanced Functional Materials</i> , 2013 , 23, 2592-2616	15.6	96
273	Interfacial polarization and pyroelectricity in antiferrodistortive structures induced by a flexoelectric effect and rotostriction. <i>Physical Review B</i> , 2012 , 85,	3.3	94
272	Interplay of octahedral tilts and polar order in BiFeO ₃ films. <i>Advanced Materials</i> , 2013 , 25, 2497-504	24	94
271	Surface-screening mechanisms in ferroelectric thin films and their effect on polarization dynamics and domain structures. <i>Reports on Progress in Physics</i> , 2018 , 81, 036502	14.4	93
270	Resolution-function theory in piezoresponse force microscopy: Wall imaging, spectroscopy, and lateral resolution. <i>Physical Review B</i> , 2007 , 75,	3.3	89
269	Domain wall conduction in multiaxial ferroelectrics. <i>Physical Review B</i> , 2012 , 85,	3.3	85
268	Ferroelectric control of the conduction at the LaAlO ₃ /SrTiO ₃ heterointerface. <i>Advanced Materials</i> , 2013 , 25, 3357-64	24	78
267	Flexoelectricity and ferroelectric domain wall structures: Phase-field modeling and DFT calculations. <i>Physical Review B</i> , 2014 , 89,	3.3	77
266	Probing the role of single defects on the thermodynamics of electric-field induced phase transitions. <i>Physical Review Letters</i> , 2008 , 100, 155703	7.4	76
265	Mixed electrochemical ferroelectric states in nanoscale ferroelectrics. <i>Nature Physics</i> , 2017 , 13, 812-818	16.2	72
264	Ionically-mediated electromechanical hysteresis in transition metal oxides. <i>ACS Nano</i> , 2012 , 6, 7026-33	16.7	72

263	Atomically resolved mapping of polarization and electric fields across ferroelectric/oxide interfaces by Z-contrast imaging. <i>Advanced Materials</i> , 2011 , 23, 2474-9	24	72
262	Direct evidence of mesoscopic dynamic heterogeneities at the surfaces of ergodic ferroelectric relaxors. <i>Physical Review B</i> , 2010 , 81,	3.3	71
261	Electromechanical detection in scanning probe microscopy: Tip models and materials contrast. <i>Journal of Applied Physics</i> , 2007 , 102, 014109	2.5	71
260	Piezoresponse force spectroscopy of ferroelectric-semiconductor materials. <i>Journal of Applied Physics</i> , 2007 , 102, 114108	2.5	69
259	Intrinsic single-domain switching in ferroelectric materials on a nearly ideal surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 20204-9	11.5	67
258	Materials contrast in piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2006 , 88, 232904	3.4	66
257	Nanoscale electromechanics of paraelectric materials with mobile charges: Size effects and nonlinearity of electromechanical response of SrTiO ₃ films. <i>Physical Review B</i> , 2011 , 84,	3.3	64
256	Giant magnetoelectric effect induced by intrinsic surface stress in ferroic nanorods. <i>Physical Review B</i> , 2008 , 77,	3.3	64
255	Conductivity of twin-domain-wall/surface junctions in ferroelastics: Interplay of deformation potential, octahedral rotations, improper ferroelectricity, and flexoelectric coupling. <i>Physical Review B</i> , 2012 , 86,	3.3	63
254	Electromechanical probing of ionic currents in energy storage materials. <i>Applied Physics Letters</i> , 2010 , 96, 222906	3.4	63
253	General approach for the description of size effects in ferroelectric nanosystems. <i>Journal of Materials Science</i> , 2009 , 44, 5149-5160	4.3	60
252	Pyroelectric response of ferroelectric nanowires: Size effect and electric energy harvesting. <i>Journal of Applied Physics</i> , 2010 , 108, 042009	2.5	60
251	Direct mapping of ionic transport in a Si anode on the nanoscale: time domain electrochemical strain spectroscopy study. <i>ACS Nano</i> , 2011 , 5, 9682-95	16.7	59
250	Humidity effects on tip-induced polarization switching in lithium niobate. <i>Applied Physics Letters</i> , 2014 , 104, 092908	3.4	58
249	Correlated polarization switching in the proximity of a 180° domain wall. <i>Physical Review B</i> , 2010 , 82,	3.3	58
248	Thermodynamics of nanodomain formation and breakdown in scanning probe microscopy: Landau-Ginzburg-Devonshire approach. <i>Physical Review B</i> , 2009 , 80,	3.3	56
247	Finite size and intrinsic field effect on the polar-active properties of ferroelectric-semiconductor heterostructures. <i>Physical Review B</i> , 2010 , 81,	3.3	55
246	Ferroelectric thin films phase diagrams with self-polarized phase and electret state. <i>Journal of Applied Physics</i> , 2006 , 99, 114102	2.5	55

245	Anisotropic conductivity of uncharged domain walls in BiFeO ₃ . <i>Physical Review B</i> , 2012 , 86,	3.3	53
244	Epitaxial Bi ₅ Ti ₃ FeO ₁₅ -CoFe ₂ O ₄ pillar-matrix multiferroic nanostructures. <i>ACS Nano</i> , 2013 , 7, 11079-86	16.7	52
243	Domain nucleation and hysteresis loop shape in piezoresponse force spectroscopy. <i>Applied Physics Letters</i> , 2006 , 89, 192901	3.4	52
242	Symmetry breaking and electrical frustration during tip-induced polarization switching in the nonpolar cut of lithium niobate single crystals. <i>ACS Nano</i> , 2015 , 9, 769-77	16.7	50
241	Interface dipole between two metallic oxides caused by localized oxygen vacancies. <i>Physical Review B</i> , 2012 , 86,	3.3	50
240	Surface effect on domain wall width in ferroelectrics. <i>Journal of Applied Physics</i> , 2009 , 106, 084102	2.5	50
239	Bichiral structure of ferroelectric domain walls driven by flexoelectricity. <i>Physical Review B</i> , 2012 , 86,	3.3	49
238	Multiferroics: Focusing light on flexoelectricity. <i>Nature Nanotechnology</i> , 2015 , 10, 916-7	28.7	48
237	Mechanical control of electroresistive switching. <i>Nano Letters</i> , 2013 , 13, 4068-74	11.5	48
236	Spatially resolved mapping of ferroelectric switching behavior in self-assembled multiferroic nanostructures: strain, size, and interface effects. <i>Nanotechnology</i> , 2007 , 18, 405701	3.4	48
235	Thermodynamic potential and phase diagram for multiferroic bismuth ferrite (BiFeO ₃). <i>Npj Computational Materials</i> , 2017 , 3,	10.9	46
234	Intrinsic nucleation mechanism and disorder effects in polarization switching on ferroelectric surfaces. <i>Physical Review Letters</i> , 2009 , 102, 017601	7.4	46
233	Superparaelectric phase in the ensemble of noninteracting ferroelectric nanoparticles. <i>Physical Review B</i> , 2008 , 78,	3.3	46
232	The piezoresponse force microscopy of surface layers and thin films: Effective response and resolution function. <i>Journal of Applied Physics</i> , 2007 , 102, 074105	2.5	46
231	Room-temperature paramagnetoelectric effect in magnetoelectric multiferroics Pb(Fe _{1/2} Nb _{1/2})O ₃ and its solid solution with PbTiO ₃ . <i>Journal of Materials Science</i> , 2016 , 51, 5330-5342	4.3	45
230	The influence of 180° ferroelectric domain wall width on the threshold field for wall motion. <i>Journal of Applied Physics</i> , 2008 , 104, 084107	2.5	44
229	Structural phase transitions and electronic phenomena at 180-degree domain walls in rhombohedral BaTiO ₃ . <i>Physical Review B</i> , 2013 , 87,	3.3	43
228	Real space mapping of polarization dynamics and hysteresis loop formation in relaxor-ferroelectric PbMg _{1/3} Nb _{2/3} O ₃ PbTiO ₃ solid solutions. <i>Journal of Applied Physics</i> , 2010 , 108, 042006	2.5	43

227	Size effects and depolarization field influence on the phase diagrams of cylindrical ferroelectric nanoparticles. <i>Physica B: Condensed Matter</i> , 2007 , 387, 358-366	2.8	43
226	Compositional disorder, polar nanoregions and dipole dynamics in Pb(Mg _{1/3} Nb _{2/3})O ₃ -based relaxor ferroelectrics. <i>Zeitschrift für Kristallographie</i> , 2011 , 226, 99-107		42
225	Ionic field effect and memristive phenomena in single-point ferroelectric domain switching. <i>Nature Communications</i> , 2014 , 5, 4545	17.4	41
224	Ferroionic states in ferroelectric thin films. <i>Physical Review B</i> , 2017 , 95,	3.3	41
223	Tuning the polar states of ferroelectric films via surface charges and flexoelectricity. <i>Acta Materialia</i> , 2017 , 137, 85-92	8.4	40
222	Linear magnetoelectric coupling and ferroelectricity induced by the flexomagnetic effect in ferroics. <i>Physical Review B</i> , 2011 , 84,	3.3	40
221	Probing the temperature dependence of the mechanical properties of polymers at the nanoscale with band excitation thermal scanning probe microscopy. <i>Nanotechnology</i> , 2009 , 20, 395709	3.4	40
220	Nanoscale polarization profile across a 180° ferroelectric domain wall extracted by quantitative piezoelectric force microscopy. <i>Journal of Applied Physics</i> , 2008 , 104, 074110	2.5	39
219	Screening and retardation effects on 180°-domain wall motion in ferroelectrics: Wall velocity and nonlinear dynamics due to polarization-screening charge interactions. <i>Physical Review B</i> , 2008 , 78,	3.3	39
218	Extrinsic size effect in piezoresponse force microscopy of thin films. <i>Physical Review B</i> , 2007 , 76,	3.3	39
217	Size-effect in layered ferroelectric CuInP ₂ S ₆ . <i>Applied Physics Letters</i> , 2016 , 109, 172901	3.4	39
216	Interaction of a 180° ferroelectric domain wall with a biased scanning probe microscopy tip: Effective wall geometry and thermodynamics in Ginzburg-Landau-Devonshire theory. <i>Physical Review B</i> , 2008 , 78,	3.3	38
215	Electrostrictive and electrostatic responses in contact mode voltage modulated scanning probe microscopies. <i>Applied Physics Letters</i> , 2014 , 104, 232901	3.4	37
214	Structure and energetics of 180° domain walls in PbTiO ₃ by density functional theory. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 175902	1.8	37
213	Surface polar states and pyroelectricity in ferroelastics induced by flexo-rotto field. <i>Applied Physics Letters</i> , 2012 , 100, 142902	3.4	36
212	Possible electrochemical origin of ferroelectricity in HfO ₂ thin films. <i>Journal of Alloys and Compounds</i> , 2020 , 830, 153628	5.7	36
211	Pressure-induced switching in ferroelectrics: Phase-field modeling, electrochemistry, flexoelectric effect, and bulk vacancy dynamics. <i>Physical Review B</i> , 2017 , 96,	3.3	34
210	Spatial distribution of relaxation behavior on the surface of a ferroelectric relaxor in the ergodic phase. <i>Applied Physics Letters</i> , 2009 , 95, 142902	3.4	33

209	Universal emergence of spatially modulated structures induced by flexoantiferrodistortive coupling in multiferroics. <i>Physical Review B</i> , 2013 , 88,	3-3	32
208	Exploring mesoscopic physics of vacancy-ordered systems through atomic scale observations of topological defects. <i>Physical Review Letters</i> , 2012 , 109, 065702	7-4	32
207	Surface-induced piezomagnetic, piezoelectric, and linear magnetoelectric effects in nanosystems. <i>Physical Review B</i> , 2010 , 82,	3-3	32
206	Determination of ferroelectric contributions to electromechanical response by frequency dependent piezoresponse force microscopy. <i>Scientific Reports</i> , 2016 , 6, 30579	4-9	32
205	Defect-driven flexochemical coupling in thin ferroelectric films. <i>Physical Review B</i> , 2018 , 97,	3-3	31
204	Local polarization switching in the presence of surface-charged defects: Microscopic mechanisms and piezoresponse force spectroscopy observations. <i>Physical Review B</i> , 2008 , 78,	3-3	31
203	Frequency dependent dynamical electromechanical response of mixed ionic-electronic conductors. <i>Journal of Applied Physics</i> , 2012 , 111, 014107	2-5	30
202	Quantitative determination of tip parameters in piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2007 , 90, 212905	3-4	29
201	Flexocoupling impact on size effects of piezoresponse and conductance in mixed-type ferroelectric semiconductors under applied pressure. <i>Physical Review B</i> , 2016 , 94,	3-3	28
200	Misfit strain driven cation inter-diffusion across an epitaxial multiferroic thin film interface. <i>Journal of Applied Physics</i> , 2014 , 115, 054103	2-5	28
199	Novel room temperature multiferroics on the base of single-phase nanostructured perovskites. <i>Journal of Applied Physics</i> , 2014 , 116, 054101	2-5	28
198	Effect of Vegard strains on the extrinsic size effects in ferroelectric nanoparticles. <i>Physical Review B</i> , 2014 , 90,	3-3	27
197	Surface and finite size effects impact on the phase diagrams, polar, and dielectric properties of (Sr,Bi)Ta2O9 ferroelectric nanoparticles. <i>Journal of Applied Physics</i> , 2016 , 119, 204104	2-5	26
196	Influence of elastic strain gradient on the upper limit of flexocoupling strength, spatially modulated phases, and soft phonon dispersion in ferroics. <i>Physical Review B</i> , 2016 , 94,	3-3	25
195	Defect thermodynamics and kinetics in thin strained ferroelectric films: The interplay of possible mechanisms. <i>Physical Review B</i> , 2014 , 89,	3-3	25
194	Defect driven ferroelectricity and magnetism in nanocrystalline KTaO3. <i>Physica B: Condensed Matter</i> , 2012 , 407, 614-623	2-8	25
193	Strain effect on phase transitions of BaTiO3 nanowires. <i>Acta Materialia</i> , 2011 , 59, 7189-7198	8-4	25
192	Giant negative electrostriction and dielectric tunability in a van der Waals layered ferroelectric. <i>Physical Review Materials</i> , 2019 , 3,	3-2	25

191	Finite size effects in ferroelectric-semiconductor thin films under open-circuit electric boundary conditions. <i>Journal of Applied Physics</i> , 2015 , 117, 034102	2.5	24
190	Labyrinthine domains in ferroelectric nanoparticles: Manifestation of a gradient-induced morphological transition. <i>Physical Review B</i> , 2018 , 98,	3.3	24
189	New multiferroics based on EuxSr1-xTiO3 nanotubes and nanowires. <i>Journal of Applied Physics</i> , 2013 , 113, 024107	2.5	24
188	Spatially resolved mapping of oxygen reduction/evolution reaction on solid-oxide fuel cell cathodes with sub-10 nm resolution. <i>ACS Nano</i> , 2013 , 7, 3808-14	16.7	24
187	Nonlinear space charge dynamics in mixed ionic-electronic conductors: Resistive switching and ferroelectric-like hysteresis of electromechanical response. <i>Journal of Applied Physics</i> , 2014 , 116, 066808	2.5	24
186	Three-dimensional vector electrochemical strain microscopy. <i>Journal of Applied Physics</i> , 2012 , 112, 052020	2.5	24
185	Ferroelectricity induced by oxygen vacancies in relaxors with perovskite structure. <i>Physical Review B</i> , 2018 , 98,	3.3	24
184	Flexocoupling impact on the generalized susceptibility and soft phonon modes in the ordered phase of ferroics. <i>Physical Review B</i> , 2015 , 92,	3.3	23
183	Electroelastic fields in artificially created vortex cores in epitaxial BiFeO3 thin films. <i>Applied Physics Letters</i> , 2015 , 107, 052903	3.4	23
182	Probing Local and Global Ferroelectric Phase Stability and Polarization Switching in Ordered Macroporous PZT. <i>Advanced Functional Materials</i> , 2011 , 21, 941-947	15.6	23
181	Origin of piezoelectric response under a biased scanning probe microscopy tip across a 180° ferroelectric domain wall. <i>Physical Review B</i> , 2012 , 86,	3.3	23
180	Ferroelectricity enhancement in ferroelectric nanotubes. <i>Phase Transitions</i> , 2007 , 80, 71-77	1.3	22
179	Electric-field induced ferromagnetic phase in paraelectric antiferromagnets. <i>Physical Review B</i> , 2014 , 89,	3.3	21
178	Self-consistent modeling of electrochemical strain microscopy of solid electrolytes. <i>Nanotechnology</i> , 2014 , 25, 445701	3.4	21
177	Ferroelectricity and ferromagnetism in EuTiO3 nanowires. <i>Physical Review B</i> , 2011 , 84,	3.3	21
176	Phase diagram and domain splitting in thin ferroelectric films with incommensurate phase. <i>Physical Review B</i> , 2010 , 81,	3.3	21
175	Anion vacancy-driven magnetism in incipient ferroelectric SrTiO3 and KTaO3 nanoparticles. <i>Journal of Applied Physics</i> , 2011 , 109, 094105	2.5	21
174	Electrochemical strain microscopy with blocking electrodes: The role of electromigration and diffusion. <i>Journal of Applied Physics</i> , 2012 , 111, 014114	2.5	21

173	Domain dynamics in piezoresponse force spectroscopy: Quantitative deconvolution and hysteresis loop fine structure. <i>Applied Physics Letters</i> , 2008 , 92, 182909	3.4	21
172	Modelling of dielectric hysteresis loops in ferroelectric semiconductors with charged defects. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 8937-8956	1.8	21
171	Flexo-chemo effect in nanoferroics as a source of critical size disappearance at size-induced phase transitions. <i>Journal of Applied Physics</i> , 2016 , 119, 094109	2.5	21
170	Electrochemical strain microscopy of local electrochemical processes in solids: mechanism of imaging and spectroscopy in the diffusion limit. <i>Journal of Electroceramics</i> , 2014 , 32, 51-59	1.5	20
169	Effect of surface ionic screening on the polarization reversal scenario in ferroelectric thin films: Crossover from ferroionic to antiferroionic states. <i>Physical Review B</i> , 2017 , 96,	3.3	20
168	Landau-Ginzburg-Devonshire theory for electromechanical hysteresis loop formation in piezoresponse force microscopy of thin films. <i>Journal of Applied Physics</i> , 2011 , 110, 052011	2.5	20
167	Screening and size effects on the nanodomain tailoring in ferroelectrics semiconductors. <i>Physical Review B</i> , 2006 , 73,	3.3	20
166	Piezoelectric domain walls in van der Waals antiferroelectric CuInPSe. <i>Nature Communications</i> , 2020 , 11, 3623	17.4	20
165	Analytical description of domain morphology and phase diagrams of ferroelectric nanoparticles. <i>Acta Materialia</i> , 2018 , 160, 109-120	8.4	20
164	Rotomagnetic coupling in fine-grained multiferroic BiFeO ₃ : Theory and experiment. <i>Physical Review B</i> , 2018 , 97,	3.3	19
163	pπ Junction Dynamics Induced in a Graphene Channel by Ferroelectric-Domain Motion in the Substrate. <i>Physical Review Applied</i> , 2017 , 8,	4.3	19
162	Interface control of a morphotropic phase boundary in epitaxial samarium modified bismuth ferrite superlattices. <i>Physical Review B</i> , 2014 , 90,	3.3	19
161	Domain Wall Conduction in Ferroelectrics. <i>Ferroelectrics</i> , 2012 , 438, 3-19	0.6	19
160	Surface-induced magnetism of the solids with impurities and vacancies. <i>Physica B: Condensed Matter</i> , 2011 , 406, 1673-1688	2.8	19
159	Effect of the intrinsic width on the piezoelectric force microscopy of a single ferroelectric domain wall. <i>Journal of Applied Physics</i> , 2008 , 103, 124110	2.5	19
158	Intrinsic structural instabilities of domain walls driven by gradient coupling: Meandering antiferrodistortive-ferroelectric domain walls in BiFeO ₃ . <i>Physical Review B</i> , 2019 , 99,	3.3	18
157	Lost surface waves in nonpiezoelectric solids. <i>Physical Review B</i> , 2017 , 96,	3.3	18
156	Ballistic conductivity of graphene channel with p-n junction at ferroelectric domain wall. <i>Applied Physics Letters</i> , 2016 , 108, 232902	3.4	18

155	Finite-size effects of hysteretic dynamics in multilayer graphene on a ferroelectric. <i>Physical Review B</i> , 2015 , 91,	3.3	17
154	Roto-flexoelectric coupling impact on the phase diagrams and pyroelectricity of thin SrTiO ₃ films. <i>Journal of Applied Physics</i> , 2012 , 112, 064111	2.5	17
153	Variable temperature electrochemical strain microscopy of Sm-doped ceria. <i>Nanotechnology</i> , 2013 , 24, 145401	3.4	17
152	Analytical prediction of size-induced ferroelectricity in BaO nanowires under stress. <i>Physical Review B</i> , 2010 , 81,	3.3	17
151	Recent Advances in Electromechanical Imaging on the Nanometer Scale: Polarization Dynamics in Ferroelectrics, Biopolymers, and Liquid Imaging. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 5674-5685 ^{1.4}	1.4	17
150	Mapping gradient-driven morphological phase transition at the conductive domain walls of strained multiferroic films. <i>Physical Review B</i> , 2019 , 100,	3.3	16
149	Ferroelectric domain triggers the charge modulation in semiconductors (invited). <i>Journal of Applied Physics</i> , 2014 , 116, 066817	2.5	16
148	Effective piezoelectric response of twin walls in ferroelectrics. <i>Journal of Applied Physics</i> , 2013 , 113, 187222	2.2	16
147	Low-symmetry monoclinic ferroelectric phase stabilized by oxygen octahedra rotations in strained EuxSr _{1-x} TiO ₃ thin films. <i>Physical Review B</i> , 2013 , 87,	3.3	16
146	Ferroelectric switching by the grounded scanning probe microscopy tip. <i>Physical Review B</i> , 2015 , 91,	3.3	15
145	Polarization reversal in organic-inorganic ferroelectric composites: Modeling and experiment. <i>Applied Physics Letters</i> , 2015 , 107, 142907	3.4	15
144	Self-Assembly of Organic Ferroelectrics by Evaporative Dewetting: A Case of β -Glycine. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 20029-20037	9.5	14
143	Flexocoupling-induced soft acoustic modes and the spatially modulated phases in ferroelectrics. <i>Physical Review B</i> , 2017 , 96,	3.3	14
142	Piezoresponse of ferroelectric films in ferroionic states: Time and voltage dynamics. <i>Applied Physics Letters</i> , 2017 , 110, 182907	3.4	13
141	Ultrafast current imaging by Bayesian inversion. <i>Nature Communications</i> , 2018 , 9, 513	17.4	13
140	Graphene Exfoliation at a Ferroelectric Domain Wall Induced by the Piezoelectric Effect: Impact on the Conductance of the Graphene Channel. <i>Physical Review Applied</i> , 2017 , 8,	4.3	13
139	Self-consistent modelling of electrochemical strain microscopy in mixed ionic-electronic conductors: Nonlinear and dynamic regimes. <i>Journal of Applied Physics</i> , 2015 , 118, 072015	2.5	13
138	Pyroelectric origin of the carrier density modulation at graphene-ferroelectric interface. <i>Journal of Applied Physics</i> , 2013 , 114, 014101	2.5	13

137	Local Polarization Switching in Piezoresponse Force Microscopy. <i>Ferroelectrics</i> , 2007 , 354, 198-207	0.6	13
136	Phenomenological description of coercive field decrease in ferroelectric semiconductors with charged inhomogeneities. <i>Physica B: Condensed Matter</i> , 2005 , 355, 236-243	2.8	13
135	Controlling the domain structure of ferroelectric nanoparticles using tunable shells. <i>Acta Materialia</i> , 2020 , 183, 36-50	8.4	13
134	Control of polarization reversal temperature behavior by surface screening in thin ferroelectric films. <i>Acta Materialia</i> , 2018 , 160, 57-71	8.4	13
133	Size effects of ferroelectric and magnetoelectric properties of semi-ellipsoidal bismuth ferrite nanoparticles. <i>Journal of Alloys and Compounds</i> , 2017 , 714, 303-310	5.7	12
132	Nontrivial temperature behavior of the carrier concentration in graphene on ferroelectric substrate with domain walls. <i>Acta Materialia</i> , 2018 , 155, 302-317	8.4	12
131	Linear antiferrodistortive-antiferromagnetic effect in multiferroics: Physical manifestations. <i>Physical Review B</i> , 2015 , 92,	3.3	12
130	Local ferroelectric properties in polyvinylidene fluoride/barium lead zirconate titanate nanocomposites: Interface effect. <i>Journal of Applied Physics</i> , 2013 , 114, 144102	2.5	11
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