

Brian J Rodriguez

List of Publications by Year in Descending Order

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

211 papers	7,880 citations	49 h-index	81 g-index
224 ext. papers	8,608 ext. citations	5.6 avg, IF	5.81 L-index

#	Paper	IF	Citations
211	Topographical changes in high-protein, milk powders as a function of moisture sorption using amplitude-modulation atomic force microscopy. <i>Food Hydrocolloids</i> , 2022 , 127, 107504	10.6	0
210	Toward Single-Atomic-Layer Lithography on Highly Oriented Pyrolytic Graphite Surfaces Using AFM-Based Electrochemical Etching.. <i>Nanomanufacturing and Metrology</i> , 2022 , 5, 32-38	3.4	1
209	Deterministic Dual Control of Phase Competition in Strained BiFeO ₃ : A Multiparametric Structural Lithography Approach. <i>Nanomanufacturing and Metrology</i> , 2022 , 5, 60-66	3.4	
208	Graphene oxide modulates inter-particle interactions in 3D printable soft nanocomposite hydrogels restoring magnetic hyperthermia responses.. <i>Journal of Colloid and Interface Science</i> , 2021 , 611, 533-544	9.3	4
207	Maximizing Information: A Machine Learning Approach for Analysis of Complex Nanoscale Electromechanical Behavior in Defect-Rich PZT Films.. <i>Small Methods</i> , 2021 , 5, e2100552	12.8	4
206	Electric Field Tunability of Photoluminescence from a Hybrid Peptide-Plasmonic Metal Microfabricated Chip.. <i>Jacs Au</i> , 2021 , 1, 1987-1995		0
205	Spatiotemporally Resolved Heat Dissipation in 3D Patterned Magnetically Responsive Hydrogels. <i>Small</i> , 2021 , 17, e2004452	11	7
204	High Aspect Ratio Polymeric Nanoneedle Arrays. <i>Macromolecular Materials and Engineering</i> , 2021 , 306, 2000754	3.9	
203	An engineered coccolith-based hybrid that transforms light into swarming motion. <i>Cell Reports Physical Science</i> , 2021 , 2, 100373	6.1	2
202	Replica Exchange Molecular Dynamics of Diphenylalanine Amyloid Peptides in Electric Fields. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 5233-5242	3.4	1
201	Boosting Polarization Switching-Induced Current Injection by Mechanical Force in Ferroelectric Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 26180-26186	9.5	2
200	Mechanical writing of electrical polarization in poly (L-lactic) acid. <i>Acta Biomaterialia</i> , 2021 , 139, 249-249	10.8	1
199	Self-Assembly of Amyloid-Beta and Its Piezoelectric Properties. <i>American Journal of Molecular Biology</i> , 2021 , 11, 1-14	0.2	
198	Magnetic Hydrogels: Spatiotemporally Resolved Heat Dissipation in 3D Patterned Magnetically Responsive Hydrogels (Small 5/2021). <i>Small</i> , 2021 , 17, 2170018	11	
197	Fibril size-dependent control of polar ordering in type I collagen membranes. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2020 , 27, 1662-1667	2.3	0
196	Atomic and Close-to-Atomic Scale Manufacturing: A Review on Atomic Layer Removal Methods Using Atomic Force Microscopy. <i>Nanomanufacturing and Metrology</i> , 2020 , 3, 167-186	3.4	24
195	Direct Laser Writing to Generate Molds for Polymer Nanopillar Replication. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 3632-3641	4.3	6

194	Investigation of AFM-based machining of ferroelectric thin films at the nanoscale. <i>Journal of Applied Physics</i> , 2020 , 127, 034103	2.5	9
193	Replica molding of cicada wings: The role of water at point of synthesis on nanostructure feature size. <i>Biointerphases</i> , 2020 , 15, 061017	1.8	1
192	Polyhydroxyphenylvalerate/polycaprolactone nanofibers improve the life-span and mechanoreponse of human IPSC-derived cortical neuronal cells. <i>Materials Science and Engineering C</i> , 2020 , 111, 110832	8.3	6
191	Modulation of Jahn-Teller distortion and electromechanical response in a Mn spin crossover complex. <i>Journal of Physics Condensed Matter</i> , 2020 , 32, 404002	1.8	7
190	Biocompatible chitosan-based composites with properties suitable for hyperthermia therapy. <i>Journal of Materials Chemistry B</i> , 2020 , 8, 1256-1265	7.3	18
189	Flexing Piezoelectric Diphenylalanine-Plasmonic Metal Nanocomposites to Increase SERS Signal Strength. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 48874-48881	9.5	8
188	Bioelectronics on Mammalian Collagen. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000391	6.4	4
187	Electric Field-Driven Catalytic Activity Using a Bioinspired Peptide and Titanium Dioxide Semiconductor Composite with Metal Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 26874-26880	3.8	8
186	Temporal changes guided by mesenchymal stem cells on a 3D microgel platform enhance angiogenesis in vivo at a low-cell dose. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 19033-19044	11.5	19
185	Direct processing of PbZr _{0.53} Ti _{0.47} O ₃ films on glass and polymeric substrates. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 5369-5375	6	6
184	Sub-Toxic Concentrations of Ionic Liquids Enhance Cell Migration by Reducing the Elasticity of the Cellular Lipid Membrane. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 7327-7333	6.4	13
183	Energy harvesting with peptide nanotube-graphene oxide flexible substrates prepared with electric field and wettability assisted self-assembly. <i>Journal of Applied Physics</i> , 2020 , 128, 115101	2.5	4
182	Additive printing of pure nanocrystalline nickel thin films using room environment electroplating. <i>Nanotechnology</i> , 2020 , 31, 055301	3.4	8
181	Eco-friendly preparation of electrically conductive chitosan - reduced graphene oxide flexible bionanocomposites for food packaging and biological applications. <i>Composites Science and Technology</i> , 2019 , 173, 53-60	8.6	54
180	Bacteria-Resistant Single Chain Cyclized/Knotted Polymer Coatings. <i>Angewandte Chemie</i> , 2019 , 131, 10726-10730	3.6	
179	Enhanced photocatalysis and biomolecular sensing with field-activated nanotube-nanoparticle templates. <i>Nature Communications</i> , 2019 , 10, 2496	17.4	23
178	Bacteria-Resistant Single Chain Cyclized/Knotted Polymer Coatings. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 10616-10620	16.4	8
177	Nucleobase sensing using highly-sensitive surface-enhanced Raman spectroscopy templates comprising organic semiconductor peptide nanotubes and metal nanoparticles. <i>Sensing and Bio-Sensing Research</i> , 2019 , 24, 100287	3.3	6

176	Template-Assisted Synthesis of Luminescent Carbon Nanofibers from Beverage-Related Precursors by Microwave Heating. <i>Molecules</i> , 2019 , 24,	4.8	3
175	Electric Field-Induced Chemical Surface-Enhanced Raman Spectroscopy Enhancement from Aligned Peptide Nanotube-Graphene Oxide Templates for Universal Trace Detection of Biomolecules. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 1878-1887	6.4	26
174	3D-Printed Peptide-Hydrogel Nanoparticle Composites for Surface-Enhanced Raman Spectroscopy Sensing. <i>ACS Applied Nano Materials</i> , 2019 , 2, 5029-5034	5.6	12
173	Liquid-phase 3D bioprinting of gelatin alginate hydrogels: influence of printing parameters on hydrogel line width and layer height. <i>Bio-Design and Manufacturing</i> , 2019 , 2, 172-180	4.7	14
172	Giant negative electrostriction and dielectric tunability in a van der Waals layered ferroelectric. <i>Physical Review Materials</i> , 2019 , 3,	3.2	25
171	Electromechanical-mnemonic effects in BiFeO ₃ for electric field history-dependent crystallographic phase patterning. <i>Journal of Materials Science</i> , 2018 , 53, 10231-10239	4.3	5
170	Templated microwave synthesis of luminescent carbon nanofibers.. <i>RSC Advances</i> , 2018 , 8, 12907-12917	3.7	11
169	Single-Molecule Nonresonant Wide-Field Surface-Enhanced Raman Scattering from Ferroelectrically Defined Au Nanoparticle Microarrays. <i>ACS Omega</i> , 2018 , 3, 3165-3172	3.9	8
168	Applications of KPFM-Based Approaches for Surface Potential and Electrochemical Measurements in Liquid. <i>Springer Series in Surface Sciences</i> , 2018 , 391-433	0.4	2
167	Nitrogen reactive ion etch processes for the selective removal of poly-(4-vinylpyridine) in block copolymer films. <i>Nanotechnology</i> , 2018 , 29, 355302	3.4	3
166	Surface Chemistry Controls Anomalous Ferroelectric Behavior in Lithium Niobate. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 29153-29160	9.5	13
165	Locally Controlled Cu-Ion Transport in Layered Ferroelectric CuInPS. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 27188-27194	9.5	35
164	Conformational analysis of replica exchange MD: Temperature-dependent Markov networks for FF amyloid peptides. <i>Journal of Chemical Physics</i> , 2018 , 149, 072323	3.9	7
163	Towards nanoscale electrical measurements in liquid by advanced KPFM techniques: a review. <i>Reports on Progress in Physics</i> , 2018 , 81, 086101	14.4	45
162	Photo-induced surface-enhanced Raman spectroscopy from a diphenylalanine peptide nanotube-metal nanoparticle template. <i>Scientific Reports</i> , 2018 , 8, 3880	4.9	29
161	Photoinduced Enhanced Raman from Lithium Niobate on Insulator Template. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 30871-30878	9.5	11
160	Decoupling Mesoscale Functional Response in PLZT across the Ferroelectric-Relaxor Phase Transition with Contact Kelvin Probe Force Microscopy and Machine Learning. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42674-42680	9.5	6
159	Quantitative comparison of closed-loop and dual harmonic Kelvin probe force microscopy techniques. <i>Review of Scientific Instruments</i> , 2018 , 89, 123708	1.7	7

158	Revealing the Interplay of Structural Phase Transitions and Ferroelectric Switching in Mixed Phase BiFeO ₃ . <i>Advanced Materials Interfaces</i> , 2018 , 5, 1801019	4.6	7
157	Controlling the mechanoelasticity of model biomembranes with room-temperature ionic liquids. <i>Biophysical Reviews</i> , 2018 , 10, 751-756	3.7	6
156	Thermal and aqueous stability improvement of graphene oxide enhanced diphenylalanine nanocomposites. <i>Science and Technology of Advanced Materials</i> , 2017 , 18, 172-179	7.1	13
155	Charge and topography patterned lithium niobate provides physical cues to fluidically isolated cortical axons. <i>Applied Physics Letters</i> , 2017 , 110, 053702	3.4	17
154	Tunable Wettability of Ferroelectric Lithium Niobate Surfaces: The Role of Engineered Microstructure and Tailored Metallic Nanostructures. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 6643-6649	3.8	11
153	Protein assemblies on ferroelectrically patterned microarrays of Ag nanoparticles. <i>Ferroelectrics</i> , 2017 , 515, 143-150	0.6	1
152	Aligned diphenylalanine nanotube-silver nanoparticle templates for high-sensitivity surface-enhanced Raman scattering. <i>Journal of Raman Spectroscopy</i> , 2017 , 48, 1799-1807	2.3	17
151	Non-destructive determination of collagen fibril width in extruded collagen fibres by piezoresponse force microscopy. <i>Biomedical Physics and Engineering Express</i> , 2017 , 3, 055004	1.5	2
150	Functional and structural effects of layer periodicity in chemical solution-deposited Pb(Zr,Ti)O ₃ thin films. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 5561-5572	3.8	6
149	Piezoelectric Tensor of Collagen Fibrils Determined at the Nanoscale. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 929-935	5.5	42
148	Electrostatic and Kelvin Probe Force Microscopy for Domain Imaging of Ferroic Systems 2016 , 435-460		1
147	Thin-Film Porous Ferroic Nanostructures: Strategies and Characterization 2016 , 147-162		
146	Piezoresponse Force Microscopy for Bioelectromechanics 2016 , 435-450		0
145	The transition from linear to highly branched poly(β-amino ester)s: Branching matters for gene delivery. <i>Science Advances</i> , 2016 , 2, e1600102	14.3	117
144	Ferroelastic Fingerprints in Methylammonium Lead Iodide Perovskite. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 5724-5731	3.8	118
143	Multifrequency spectrum analysis using fully digital G Mode-Kelvin probe force microscopy. <i>Nanotechnology</i> , 2016 , 27, 105706	3.4	33
142	Applications of piezoresponse force microscopy in materials research: from inorganic ferroelectrics to biopiezoelectrics and beyond. <i>International Materials Reviews</i> , 2016 , 61, 46-70	16.1	74
141	Piezoresponse Force Microscopy and Spectroscopy 2016 , 3252-3263		

140	Biocompatible Gold Nanoparticle Arrays Photodeposited on Periodically Proton Exchanged Lithium Niobate. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 1351-1356	5.5	10
139	Influence of annealing on the photodeposition of silver on periodically poled lithium niobate. <i>Journal of Applied Physics</i> , 2016 , 119, 054102	2.5	9
138	Interface modulated currents in periodically proton exchanged Mg doped lithium niobate. <i>Journal of Applied Physics</i> , 2016 , 119, 114103	2.5	2
137	Wettability gradient-induced alignment of peptide nanotubes as templates for biosensing applications. <i>RSC Advances</i> , 2016 , 6, 41809-41815	3.7	28
136	Material- and feature-dependent effects on cell adhesion to micro injection moulded medical polymers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016 , 145, 46-54	6	9
135	Ferroelectricity in Synthetic Biomaterials: Hydroxyapatite and Polypeptides 2016 , 149-166		
134	Macromolecularly crowded in vitro microenvironments accelerate the production of extracellular matrix-rich supramolecular assemblies. <i>Scientific Reports</i> , 2015 , 5, 8729	4.9	72
133	Quantitative 3D-KPFM imaging with simultaneous electrostatic force and force gradient detection. <i>Nanotechnology</i> , 2015 , 26, 175707	3.4	23
132	Intramolecular Cyclization Dominating Homopolymerization of Multivinyl Monomers toward Single-Chain Cyclized/Knotted Polymeric Nanoparticles. <i>Macromolecules</i> , 2015 , 48, 6882-6889	5.5	33
131	Band excitation Kelvin probe force microscopy utilizing photothermal excitation. <i>Applied Physics Letters</i> , 2015 , 106, 104102	3.4	14
130	Tip-induced domain structures and polarization switching in ferroelectric amino acid glycine. <i>Journal of Applied Physics</i> , 2015 , 118, 072008	2.5	13
129	Covering vertically aligned carbon nanotubes with a multiferroic compound. <i>Carbon</i> , 2015 , 82, 408-416	10.4	
128	The role of nanoporosity on the local piezo and ferroelectric properties of lead titanate thin films. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 1035-1043	7.1	17
127	Conformational dynamics and aggregation behavior of piezoelectric diphenylalanine peptides in an external electric field. <i>Biophysical Chemistry</i> , 2015 , 196, 16-24	3.5	32
126	Porosity Advantage or Disadvantage?. <i>Microscopy and Microanalysis</i> , 2015 , 21 Suppl 5, 17-8	0.5	
125	Interface and thickness dependent domain switching and stability in Mg doped lithium niobate. <i>Journal of Applied Physics</i> , 2015 , 118, 224101	2.5	9
124	Local piezoresponse and polarization switching in nucleobase thymine microcrystals. <i>Journal of Applied Physics</i> , 2015 , 118, 072007	2.5	8
123	Thickness, humidity, and polarization dependent ferroelectric switching and conductivity in Mg doped lithium niobate. <i>Journal of Applied Physics</i> , 2015 , 118, 244103	2.5	16

122	Nanomechanics of Cells and Biomaterials Studied by Atomic Force Microscopy. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2456-74	10.1	24
121	Biocompatibility of ferroelectric lithium niobate and the influence of polarization charge on osteoblast proliferation and function. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 2540-8	5.4	42
120	Kelvin probe force microscopy in liquid using electrochemical force microscopy. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 201-14	3	28
119	Nanoscale Piezoelectric Properties of Self-Assembled Fmoc-FF Peptide Fibrous Networks. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 12702-7	9.5	44
118	Accelerated Development of Supramolecular Corneal Stromal-Like Assemblies from Corneal Fibroblasts in the Presence of Macromolecular Crowders. <i>Tissue Engineering - Part C: Methods</i> , 2015 , 21, 660-70	2.9	44
117	Probing charge screening dynamics and electrochemical processes at the solid-liquid interface with electrochemical force microscopy. <i>Nature Communications</i> , 2014 , 5, 3871	17.4	73
116	Macromolecular crowding meets tissue engineering by self-assembly: a paradigm shift in regenerative medicine. <i>Advanced Materials</i> , 2014 , 26, 3024-34	24	114
115	Piezoelectric properties of aligned collagen membranes. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014 , 102, 284-92	3.5	29
114	Anomalous Photodeposition of Ag on Ferroelectric Surfaces with Below-Bandgap Excitation. <i>Advanced Optical Materials</i> , 2014 , 2, 292-299	8.1	3
113	Dual harmonic Kelvin probe force microscopy at the graphene-liquid interface. <i>Applied Physics Letters</i> , 2014 , 104, 133103	3.4	42
112	Nanoscale characterization of ϵ -phase $\text{HxLi}_{1-x}\text{NbO}_3$ layers by piezoresponse force microscopy. <i>Journal of Applied Physics</i> , 2014 , 116, 066815	2.5	5
111	Breaking the limits of structural and mechanical imaging of the heterogeneous structure of coal macerals. <i>Nanotechnology</i> , 2014 , 25, 435402	3.4	12
110	High viscosity environments: an unexpected route to obtain true atomic resolution with atomic force microscopy. <i>Nanotechnology</i> , 2014 , 25, 175701	3.4	5
109	Piezoelectricity in collagen type II fibrils measured by scanning probe microscopy. <i>Journal of Applied Physics</i> , 2014 , 116, 066818	2.5	15
108	Nano-structured polymer-silica composite derived from a marine diatom via deactivation enhanced atom transfer radical polymerization grafting. <i>Small</i> , 2014 , 10, 469-73	11	16
107	Surface enhanced luminescence and Raman scattering from ferroelectrically defined Ag nanopatterned arrays. <i>Applied Physics Letters</i> , 2013 , 103, 083105	3.4	30
106	Functionalization of the living diatom <i>Thalassiosira weissflogii</i> with thiol moieties. <i>Nature Communications</i> , 2013 , 4, 2683	17.4	27
105	Open loop Kelvin probe force microscopy with single and multi-frequency excitation. <i>Nanotechnology</i> , 2013 , 24, 475702	3.4	53

104	Photoreduction of metal nanostructures on periodically proton exchanged MgO-doped lithium niobate crystals. <i>Applied Physics Letters</i> , 2013 , 103, 182904	3.4	12
103	Growth mechanism of photoreduced silver nanostructures on periodically proton exchanged lithium niobate: Time and concentration dependence. <i>Journal of Applied Physics</i> , 2013 , 113, 187212	2.5	9
102	Direct shape control of photoreduced nanostructures on proton exchanged ferroelectric templates. <i>Applied Physics Letters</i> , 2013 , 102, 042908	3.4	9
101	Integration of TiO ₂ into the diatom <i>Thalassiosira weissflogii</i> during frustule synthesis. <i>Scientific Reports</i> , 2013 , 3, 3205	4.9	33
100	A protective extracellular matrix-based gene delivery reservoir fabricated by electrostatic charge manipulation. <i>Molecular Pharmaceutics</i> , 2012 , 9, 3099-106	5.6	32
99	Fabricating ordered functional nanostructures onto polycrystalline substrates from the bottom-up. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 1	2.3	6
98	Visualizing molecular polar order in tissues via electromechanical coupling. <i>Journal of Structural Biology</i> , 2012 , 180, 409-19	3.4	25
97	Dual harmonic Kelvin probe force microscopy for surface potential measurements of ferroelectrics 2012 ,		9
96	Photoreduction of SERS-active metallic nanostructures on chemically patterned ferroelectric crystals. <i>ACS Nano</i> , 2012 , 6, 7373-80	16.7	50
95	Plasmon Enhanced Raman from Ag Nanopatterns Made Using Periodically Poled Lithium Niobate and Periodically Proton Exchanged Template Methods. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 26543-26550	3.8	45
94	KPFM and PFM of Biological Systems. <i>Springer Series in Surface Sciences</i> , 2012 , 243-287	0.4	7
93	Electromechanical properties of dried tendon and isoelectrically focused collagen hydrogels. <i>Acta Biomaterialia</i> , 2012 , 8, 3073-9	10.8	35
92	Lattice guiding for sputter deposition of single domain (Sr _{0.6} Ba _{0.4})Nb ₂ O ₆ ferroelectric thin films. <i>CrystEngComm</i> , 2012 , 14, 359-361	3.3	3
91	Scanning Probe Microscopy I Forces and Currents in the Nanoscale World 2012 , 539-614		2
90	Piezoresponse force microscopy on proton exchanged LiNbO ₃ layers 2012 ,		1
89	Atomic Force Microscopy 2012 , 34-58		
88	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
87	Surface Domain Structures and Mesoscopic Phase Transition in Relaxor Ferroelectrics. <i>Advanced Functional Materials</i> , 2011 , 21, 1977-1987	15.6	102

86	Nano-textured self-assembled aligned collagen hydrogels promote directional neurite guidance and overcome inhibition by myelin associated glycoprotein. <i>Soft Matter</i> , 2011 , 7, 2770	3.6	60
85	Bubble polarization domain patterns in periodically ordered epitaxial ferroelectric nanodot arrays. <i>Journal of Applied Physics</i> , 2011 , 110, 052006	2.5	10
84	Direct evidence of mesoscopic dynamic heterogeneities at the surfaces of ergodic ferroelectric relaxors. <i>Physical Review B</i> , 2010 , 81,	3.3	71
83	Web-like domain structure formation in barium titanate single crystals. <i>Applied Physics Letters</i> , 2010 , 97, 042902	3.4	5
82	Individual switching of film-based nanoscale epitaxial ferroelectric capacitors. <i>Journal of Applied Physics</i> , 2010 , 108, 042005	2.5	18
81	Dynamic and Spectroscopic Modes and Multivariate Data Analysis in Piezoresponse Force Microscopy 2010 , 491-528		5
80	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
79	Double-layer mediated electromechanical response of amyloid fibrils in liquid environment. <i>ACS Nano</i> , 2010 , 4, 689-98	16.7	32
78	Microstructure and properties of well-ordered multiferroic Pb(Zr,Ti)O ₃ /CoFe ₂ O ₄ nanocomposites. <i>ACS Nano</i> , 2010 , 4, 1099-107	16.7	83
77	Resolution theory, and static and frequency-dependent cross-talk in piezoresponse force microscopy. <i>Nanotechnology</i> , 2010 , 21, 405703	3.4	57
76	Local polarization dynamics in ferroelectric materials. <i>Reports on Progress in Physics</i> , 2010 , 73, 056502	14.4	341
75	Defect-mediated polarization switching in ferroelectrics and related materials: from mesoscopic mechanisms to atomistic control. <i>Advanced Materials</i> , 2010 , 22, 314-22	24	52
74	Mapping bias-induced phase stability and random fields in relaxor ferroelectrics. <i>Applied Physics Letters</i> , 2009 , 95, 092904	3.4	27
73	Impact of high interface density on ferroelectric and structural properties of PbZr _{0.2} Ti _{0.8} O ₃ /PbZr _{0.4} Ti _{0.6} O ₃ epitaxial multilayers. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 085303		11
72	Unraveling Deterministic Mesoscopic Polarization Switching Mechanisms: Spatially Resolved Studies of a Tilt Grain Boundary in Bismuth Ferrite. <i>Advanced Functional Materials</i> , 2009 , 19, 2053-2063	15.6	58
71	Ordered Ferroelectric Lead Titanate Nanocellular Structure by Conversion of Anodic TiO ₂ Nanotubes. <i>Advanced Materials</i> , 2009 , 21, 3121-3125	24	68
70	Intermittent contact mode piezoresponse force microscopy in a liquid environment. <i>Nanotechnology</i> , 2009 , 20, 195701	3.4	27
69	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

68	Vortex polarization states in nanoscale ferroelectric arrays. <i>Nano Letters</i> , 2009 , 9, 1127-31	11.5	175
67	Direct imaging of the spatial and energy distribution of nucleation centres in ferroelectric materials. <i>Nature Materials</i> , 2008 , 7, 209-15	27	235
66	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
65	Local probing of relaxation time distributions in ferroelectric polymer nanomesas: Time-resolved piezoresponse force spectroscopy and spectroscopic imaging. <i>Applied Physics Letters</i> , 2008 , 92, 232903	3.4	22
64	Direct measurement of periodic electric forces in liquids. <i>Journal of Applied Physics</i> , 2008 , 103, 014306	2.5	9
63	Ferroelectric domain wall pinning at a bicrystal grain boundary in bismuth ferrite. <i>Applied Physics Letters</i> , 2008 , 93, 142901	3.4	57
62	Doping characterization of InAs/GaAs quantum dot heterostructure by cross-sectional scanning capacitance microscopy. <i>Applied Physics Letters</i> , 2008 , 92, 092101	3.4	7
61	Structural, magnetic, and electric properties of La _{0.7} Sr _{0.3} MnO ₃ /PbZr _x Ti _{1-x} O ₃ heterostructures. <i>Journal of Applied Physics</i> , 2008 , 104, 063908	2.5	17
60	Imaging mechanism of piezoresponse force microscopy in capacitor structures. <i>Applied Physics Letters</i> , 2008 , 92, 152906	3.4	52
59	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
58	Piezoelectric response of nanoscale PbTiO ₃ in composite PbTiO ₃ /CoFe ₂ O ₄ epitaxial films. <i>Applied Physics Letters</i> , 2008 , 93, 074101	3.4	17
57	Nanoelectromechanics of Inorganic and Biological Systems: From Structural Imaging to Local Functionalities. <i>Microscopy Today</i> , 2008 , 16, 28-33	0.4	
56	Local bias-induced phase transitions. <i>Materials Today</i> , 2008 , 11, 16-27	21.8	46
55	Spatially Resolved Mapping of Polarization Switching Behavior in Nanoscale Ferroelectrics. <i>Advanced Materials</i> , 2008 , 20, 109-114	24	50
54	Ferroelectric materials and structures suitable for data storage: The role of microscopies in establishing preparation-microstructure-property relations 2008 , 101-102		
53	Piezoresponse force spectroscopy of ferroelectric-semiconductor materials. <i>Journal of Applied Physics</i> , 2007 , 102, 114108	2.5	69
52	Nanoscale polarization manipulation and imaging of ferroelectric Langmuir-Blodgett polymer films. <i>Applied Physics Letters</i> , 2007 , 90, 122904	3.4	78
51	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

50	Dual-frequency resonance-tracking atomic force microscopy. <i>Nanotechnology</i> , 2007 , 18, 475504	3-4	365
49	The band excitation method in scanning probe microscopy for rapid mapping of energy dissipation on the nanoscale. <i>Nanotechnology</i> , 2007 , 18, 435503	3-4	383
48	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
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