

Q M Zhang

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208
papers

15,955
citations

64
h-index

123
g-index

213
ext. papers

17,432
ext. citations

5
avg, IF

6.33
L-index

#	Paper	IF	Citations
208	A dielectric polymer with high electric energy density and fast discharge speed. <i>Science</i> , 2006 , 313, 334-339	33.3	1686
207	Giant electrostriction and relaxor ferroelectric behavior in electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Science</i> , 1998 , 280, 2101-4	33.3	1284
206	An all-organic composite actuator material with a high dielectric constant. <i>Nature</i> , 2002 , 419, 284-7	50.4	895
205	Large electrocaloric effect in ferroelectric polymers near room temperature. <i>Science</i> , 2008 , 321, 821-3	33.3	813
204	High-dielectric-constant ceramic-powder polymer composites. <i>Applied Physics Letters</i> , 2000 , 76, 3804-3806	6	626
203	Direct evaluation of domain-wall and intrinsic contributions to the dielectric and piezoelectric response and their temperature dependence on lead zirconate-titanate ceramics. <i>Journal of Applied Physics</i> , 1994 , 75, 454-459	2.5	524
202	Giant Electrocaloric Response Over A Broad Temperature Range in Modified BaTiO ₃ Ceramics. <i>Advanced Functional Materials</i> , 2014 , 24, 1300-1305	15.6	307
201	Large displacement transducers based on electric field forced phase transitions in the tetragonal (Pb _{0.97} La _{0.02}) (Ti,Zr,Sn)O ₃ family of ceramics. <i>Journal of Applied Physics</i> , 1989 , 66, 6014-6023	2.5	253
200	Organic and inorganic relaxor ferroelectrics with giant electrocaloric effect. <i>Applied Physics Letters</i> , 2010 , 97, 162904	3.4	251
199	Ferroelectric and electromechanical properties of poly(vinylidene-fluoride-trifluoroethylene-chlorotrifluoroethylene) terpolymer. <i>Applied Physics Letters</i> , 2001 , 78, 2360-2362	3.4	246
198	Aromatic polythiourea dielectrics with ultrahigh breakdown field strength, low dielectric loss, and high electric energy density. <i>Advanced Materials</i> , 2013 , 25, 1734-8	24	225
197	Phase transitional behavior and piezoelectric properties of the orthorhombic phase of Pb(Mg _{1/3} Nb _{2/3})O ₃ /PbTiO ₃ single crystals. <i>Applied Physics Letters</i> , 2001 , 78, 3109-3111	3.4	221
196	Electrical breakdown and ultrahigh electrical energy density in poly(vinylidene fluoride-hexafluoropropylene) copolymer. <i>Applied Physics Letters</i> , 2009 , 94, 162901	3.4	211
195	Domain wall excitations and their contributions to the weak-signal response of doped lead zirconate titanate ceramics. <i>Journal of Applied Physics</i> , 1988 , 64, 6445-6451	2.5	198
194	Electrical Energy Density and Discharge Characteristics of a Poly(vinylidene fluoride-chlorotrifluoroethylene) Copolymer. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2007 , 14, 1133-1138	2.3	193
193	High-dielectric-constant all-polymer percolative composites. <i>Applied Physics Letters</i> , 2003 , 82, 3502-3504	3.4	189
192	All-organic dielectric-percolative three-component composite materials with high electromechanical response. <i>Applied Physics Letters</i> , 2004 , 84, 4391-4393	3.4	180

191	Pyroelectric and electrocaloric materials. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 23-37	7.1	177
190	Comparison of directly and indirectly measured electrocaloric effect in relaxor ferroelectric polymers. <i>Applied Physics Letters</i> , 2010 , 97, 202901	3.4	167
189	Electrostriction: Nonlinear Electromechanical Coupling in Solid Dielectrics. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 10141-10150	3.4	159
188	Influence of the critical point on the electrocaloric response of relaxor ferroelectrics. <i>Journal of Applied Physics</i> , 2011 , 110, 064118	2.5	158
187	Laser interferometer for the study of piezoelectric and electrostrictive strains. <i>Journal of Applied Physics</i> , 1988 , 63, 2492-2496	2.5	139
186	A chip scale electrocaloric effect based cooling device. <i>Applied Physics Letters</i> , 2013 , 102, 122904	3.4	136
185	Change of the weak-field properties of Pb(ZrTi)O ₃ piezoceramics with compressive uniaxial stresses and its links to the effect of dopants on the stability of the polarizations in the materials. <i>Journal of Materials Research</i> , 1997 , 12, 226-234	2.5	133
184	Critical thickness of crystallization and discontinuous change in ferroelectric behavior with thickness in ferroelectric polymer thin films. <i>Journal of Applied Physics</i> , 2001 , 89, 2613-2616	2.5	131
183	Enhancement of the dielectric response in polymer nanocomposites with low dielectric constant fillers. <i>Nanoscale</i> , 2017 , 9, 10992-10997	7.7	122
182	High Electromechanical Response of Ionic Polymer Actuators with Controlled-Morphology Aligned Carbon Nanotube/Nafion Nanocomposite Electrodes. <i>Advanced Functional Materials</i> , 2010 , 20, 3266-3274	15.6	118
181	Electromechanical properties of lead zirconate titanate piezoceramics under the influence of mechanical stresses. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1999 , 46, 1518-26	3.2	116
180	An experimental investigation of electromechanical responses in a polyurethane elastomer. <i>Journal of Applied Physics</i> , 1997 , 81, 2770-2776	2.5	113
179	Electrocaloric effect in relaxor ferroelectrics. <i>Journal of Applied Physics</i> , 2011 , 110, 074113	2.5	110
178	Tunable temperature dependence of electrocaloric effect in ferroelectric relaxor poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) terpolymer. <i>Applied Physics Letters</i> , 2011 , 99, 052907	3.4	107
177	Enhancing the magnetoelectric response of Metglas/polyvinylidene fluoride laminates by exploiting the flux concentration effect. <i>Applied Physics Letters</i> , 2009 , 95, 112903	3.4	105
176	Phase Transitions and Ferroelectric Relaxor Behavior in P(VDF/rFE/FE) Terpolymers. <i>Macromolecules</i> , 2007 , 40, 2371-2379	5.5	104
175	Influence of Crystallization Conditions on the Microstructure and Electromechanical Properties of Poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) Terpolymers. <i>Macromolecules</i> , 2003 , 36, 7220-7226	5.5	104
174	Enhanced electrocaloric effect in ferroelectric poly(vinylidene-fluoride/trifluoroethylene) 55/45 mol % copolymer at ferroelectric-paraelectric transition. <i>Applied Physics Letters</i> , 2011 , 98, 122906	3.4	102

173	Polarization and structural properties of high-energy electron irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer films. <i>Journal of Applied Physics</i> , 2000 , 87, 452-461	2.5	101
172	Piezoelectric, dielectric, and elastic properties of poly(vinylidene fluoride/trifluoroethylene). <i>Journal of Applied Physics</i> , 1993 , 74, 3394-3398	2.5	100
171	High-volumetric performance aligned nano-porous microwave exfoliated graphite oxide-based electrochemical capacitors. <i>Advanced Materials</i> , 2013 , 25, 4879-85	24	97
170	Diffuse X-Ray Scattering Study of Lead Magnesium Niobate Single Crystals. <i>Physical Review Letters</i> , 1997 , 79, 3950-3953	7.4	97
169	A highly scalable dielectric metamaterial with superior capacitor performance over a broad temperature. <i>Science Advances</i> , 2020 , 6, eaax6622	14.3	93
168	High field tunneling as a limiting factor of maximum energy density in dielectric energy storage capacitors. <i>Applied Physics Letters</i> , 2008 , 92, 142909	3.4	93
167	Dielectric relaxation behavior and its relation to microstructure in relaxor ferroelectric polymers: High-energy electron irradiated poly(vinylidene fluoride-trifluoroethylene) copolymers. <i>Journal of Applied Physics</i> , 2002 , 92, 6749-6755	2.5	91
166	Upper bounds on the electrocaloric effect in polar solids. <i>Applied Physics Letters</i> , 2011 , 98, 021909	3.4	89
165	Dielectric Properties of Relaxor-like Vinylidene Fluoride-trifluoroethylene-Based Electroactive Polymers. <i>Macromolecules</i> , 2003 , 36, 4436-4442	5.5	86
164	Polymer nanocomposites with high energy storage densities. <i>MRS Bulletin</i> , 2015 , 40, 753-759	3.2	85
163	Transverse strain responses in the electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 1999 , 74, 1901-1903	3.4	83
162	Electrocaloric effect of the relaxor ferroelectric poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) terpolymer. <i>Applied Physics Letters</i> , 2009 , 94, 042910	3.4	80
161	Thickness dependence of ferroelectric polarization switching in poly(vinylidene fluoride-trifluoroethylene) spin cast films. <i>Applied Physics Letters</i> , 2001 , 78, 1122-1124	3.4	78
160	Space-charge-enhanced electromechanical response in thin-film polyurethane elastomers. <i>Applied Physics Letters</i> , 1997 , 71, 386-388	3.4	77
159	Microstructure and Dielectric Properties of P(VDF-trFE-rFE) with Partially Grafted Copper Phthalocyanine Oligomer. <i>Macromolecules</i> , 2005 , 38, 2247-2252	5.5	77
158	Structural Changes and Transitional Behavior Studied from Both Micro- and Macroscale in the High-Energy Electron-Irradiated Poly(vinylidene fluoride-trifluoroethylene) Copolymer. <i>Macromolecules</i> , 2002 , 35, 664-672	5.5	75
157	Electromechanical properties of electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 1998 , 73, 2054-2056	3.4	75
156	Dependence of threshold thickness of crystallization and film morphology on film processing conditions in poly(vinylidene fluoride-trifluoroethylene) copolymer thin films. <i>Journal of Applied Physics</i> , 2002 , 92, 3111-3115	2.5	74

155	Giant electrocaloric effect in BaZr _{0.2} Ti _{0.8} O ₃ thick film. <i>Applied Physics Letters</i> , 2014 , 105, 152908	3.4	73
154	High-energy density in aromatic polyurea thin films. <i>Applied Physics Letters</i> , 2009 , 94, 202905	3.4	70
153	Large enhancement in polarization response and energy density of poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) by interface effect in nanocomposites. <i>Applied Physics Letters</i> , 2007 , 91, 122909	3.4	70
152	An active energy harvesting scheme with an electroactive polymer. <i>Applied Physics Letters</i> , 2007 , 91, 132910	3.4	68
151	Maximizing the number of coexisting phases near invariant critical points for giant electrocaloric and electromechanical responses in ferroelectrics. <i>Applied Physics Letters</i> , 2012 , 101, 082904	3.4	67
150	Influence of composition on relaxor ferroelectric and electromechanical properties of poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene). <i>Journal of Applied Physics</i> , 2005 , 97, 094105	2.5	66
149	Shear response of lead zirconate titanate piezoceramics. <i>Journal of Applied Physics</i> , 1998 , 83, 3754-3761	2.5	66
148	Electromechanical Properties of Relaxor Ferroelectric Lead Magnesium Niobate-Lead Titanate Ceramics. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 5658-5663	1.4	66
147	Giant electrocaloric effect in ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymers near a first-order ferroelectric transition. <i>Applied Physics Letters</i> , 2012 , 101, 132903	3.4	65
146	Colossal dielectric and electromechanical responses in self-assembled polymeric nanocomposites. <i>Applied Physics Letters</i> , 2005 , 87, 182901	3.4	64
145	Transverse strain responses in electrostrictive poly(vinylidene fluoride-trifluoroethylene) films and development of a dilatometer for the measurement. <i>Journal of Applied Physics</i> , 1999 , 86, 2208-2214	2.5	64
144	A fast and efficient pre-doping approach to high energy density lithium-ion hybrid capacitors. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 10029-10033	1.3	63
143	Direct Measurements of the Giant Electrocaloric Effect in Soft and Solid Ferroelectric Materials. <i>Ferroelectrics</i> , 2010 , 405, 26-31	0.6	63
142	High-performance micromachined unimorph actuators based on electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 2002 , 80, 1082-1084	3.4	61
141	Structural, Conformational, and Polarization Changes of Poly(vinylidene fluoride-trifluoroethylene) Copolymer Induced by High-Energy Electron Irradiation. <i>Macromolecules</i> , 2000 , 33, 4125-4131	5.5	59
140	Enhancement of dielectric energy density in the poly(vinylidene fluoride)-based terpolymer/copolymer blends. <i>Applied Physics Letters</i> , 2008 , 93, 152903	3.4	58
139	Dielectric study of the relaxor ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymer system. <i>Physical Review B</i> , 2001 , 63,	3.3	58
138	Phase stabilities of morphotropic phases in Pb(Zn _{1/3} Nb _{2/3})O ₃ PbTiO ₃ single crystals. <i>Applied Physics Letters</i> , 2002 , 80, 1918-1920	3.4	57

137	High-frequency strain response in ferroelectrics and its measurement using a modified Mach-Zehnder interferometer. <i>Journal of Applied Physics</i> , 1989 , 65, 2807-2813	2.5	57
136	Nonlinearity and scaling behavior in donor-doped lead zirconate titanate piezoceramic. <i>Applied Physics Letters</i> , 1998 , 72, 2692-2694	3.4	56
135	Neutron diffraction study of electrostrictive coefficients of prototype cubic phase of relaxor ferroelectric PbMg _{1/3} Nb _{2/3} O ₃ . <i>Applied Physics Letters</i> , 1998 , 72, 1048-1050	3.4	56
134	Aging of the dielectric and piezoelectric properties of relaxor ferroelectric lead magnesium niobate/lead titanate in the electric field biased state. <i>Journal of Applied Physics</i> , 1996 , 79, 3181-3187	2.5	56
133	Polar-fluoropolymer blends with tailored nanostructures for high energy density low loss capacitor applications. <i>Applied Physics Letters</i> , 2011 , 99, 132901	3.4	52
132	Change in electromechanical properties of 0.9PMN:0.1PT relaxor ferroelectric induced by uniaxial compressive stress directed perpendicular to the electric field. <i>Applied Physics Letters</i> , 1999 , 74, 436-438	3.4	52
131	Conduction Mechanisms and Structure-Property Relationships in High Energy Density Aromatic Polythiourea Dielectric Films. <i>Advanced Energy Materials</i> , 2013 , 3, 1051-1055	21.8	51
130	Piezoelectric responses in poly(vinylidene fluoride/hexafluoropropylene) copolymers. <i>Applied Physics Letters</i> , 2007 , 90, 242917	3.4	51
129	An electrocaloric refrigerator without external regenerator. <i>Applied Physics Letters</i> , 2014 , 105, 162905	3.4	49
128	Normal ferroelectric to ferroelectric relaxor conversion in fluorinated polymers and the relaxor dynamics. <i>Journal of Materials Science</i> , 2006 , 41, 271-280	4.3	49
127	A high performance hybrid asymmetric supercapacitor via nano-scale morphology control of graphene, conducting polymer, and carbon nanotube electrodes. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9964-9969	13	48
126	Distinctive contributions from organic filler and relaxorlike polymer matrix to dielectric response of CuPc-P(VDF-TrFE-CFE) composite. <i>Physical Review Letters</i> , 2004 , 92, 047604	7.4	48
125	A bimorph based dilatometer for field induced strain measurement in soft and thin free standing polymer films. <i>Review of Scientific Instruments</i> , 1998 , 69, 2480-2483	1.7	46
124	Schottky emission at the metal polymer interface and its effect on the polarization switching of ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymer thin films. <i>Applied Physics Letters</i> , 2004 , 85, 1719-1721	3.4	45
123	Characteristics of the electromechanical response and polarization of electric field biased ferroelectrics. <i>Journal of Applied Physics</i> , 1995 , 77, 2549-2555	2.5	45
122	Meta-aromatic polyurea with high dipole moment and dipole density for energy storage capacitors. <i>Applied Physics Letters</i> , 2014 , 104, 072903	3.4	44
121	An electrocaloric refrigerator with direct solid to solid regeneration. <i>Applied Physics Letters</i> , 2017 , 110, 243503	3.4	42
120	Piezoelectric tubes and tubular composites for actuator and sensor applications. <i>Journal of Materials Science</i> , 1993 , 28, 3962-3968	4.3	41

119	Simulation of chip-size electrocaloric refrigerator with high cooling-power density. <i>Applied Physics Letters</i> , 2013 , 102, 112901	3.4	40
118	Effects of transitional phenomena on the electric field induced strain-Electrostrictive response of a segmented polyurethane elastomer. <i>Journal of Applied Polymer Science</i> , 1997 , 65, 1363-1370	2.9	40
117	Effect of metal-polymer interface on the breakdown electric field of poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) terpolymer. <i>Applied Physics Letters</i> , 2007 , 91, 062907	3.4	40
116	A high-K ferroelectric relaxor terpolymer as a gate dielectric for organic thin film transistors. <i>Applied Physics Letters</i> , 2013 , 102, 013301	3.4	39
115	Direct observation of ion distributions near electrodes in ionic polymer actuators containing ionic liquids. <i>Scientific Reports</i> , 2013 , 3, 973	4.9	39
114	Microstructure and electromechanical responses in semicrystalline ferroelectric relaxor polymer blends. <i>Journal of Applied Physics</i> , 2006 , 100, 044113	2.5	39
113	Enhanced Electromechanical Response of Ionic Polymer Actuators by Improving Mechanical Coupling between Ions and Polymer Matrix. <i>Macromolecules</i> , 2012 , 45, 5128-5133	5.5	38
112	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2012 , 19, 1158-1166	2.3	37
111	Electrocaloric effect in ferroelectric polymers. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 107, 559-566	2.6	37
110	Enhanced electrocaloric effect in poly(vinylidene fluoride-trifluoroethylene)-based terpolymer/copolymer blends. <i>Applied Physics Letters</i> , 2012 , 100, 222902	3.4	36
109	Aromatic poly(arylene ether urea) with high dipole moment for high thermal stability and high energy density capacitors. <i>Applied Physics Letters</i> , 2015 , 106, 202902	3.4	34
108	Layer-by-layer self-assembled conductor network composites in ionic polymer metal composite actuators with high strain response. <i>Applied Physics Letters</i> , 2009 , 95, 023505	3.4	34
107	Polarization responses in lead magnesium niobate based relaxor ferroelectrics. <i>Applied Physics Letters</i> , 1997 , 71, 1649-1651	3.4	34
106	High electrostrictive strain under high mechanical stress in electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 1999 , 75, 2653-2655	3.4	34
105	Strongly Dipolar Polythiourea and Polyurea Dielectrics with High Electrical Breakdown, Low Loss, and High Electrical Energy Density. <i>Journal of Electronic Materials</i> , 2014 , 43, 4548-4551	1.9	33
104	Intrinsic dielectric properties and charge transport in oligomers of organic semiconductor copper phthalocyanine. <i>Physical Review B</i> , 2005 , 71,	3.3	33
103	Characterization of the performance of 1B type piezocomposites for low-frequency applications. <i>Journal of Applied Physics</i> , 1993 , 73, 1403-1410	2.5	32
102	Direct spectroscopic evidence of field-induced solid-state chain conformation transformation in a ferroelectric relaxor polymer. <i>Journal of Applied Physics</i> , 2006 , 99, 044107	2.5	30

101	High Performance Electroactive Polymers and Nano-composites for Artificial Muscles. <i>Journal of Intelligent Material Systems and Structures</i> , 2007 , 18, 133-145	2.3	30
100	Effect of high energy electron irradiation on the electromechanical properties of poly (vinylidene fluoride-trifluoroethylene) 50/50 and 65/35 copolymers. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2000 , 47, 1296-307	3.2	29
99	Direct piezoelectric response of piezopolymer polyvinylidene fluoride under high mechanical strain and stress. <i>Applied Physics Letters</i> , 2007 , 91, 222905	3.4	28
98	Reducing conduction losses in high energy density polymer using nanocomposites. <i>Applied Physics Letters</i> , 2017 , 110, 122905	3.4	27
97	Tailoring the dipole properties in dielectric polymers to realize high energy density with high breakdown strength and low dielectric loss. <i>Journal of Applied Physics</i> , 2015 , 117, 114104	2.5	27
96	Enhancing the magnetoelectric response of Terfenol-D/polyvinylidene fluoride/Terfenol-D laminates by exploiting the shear mode effect. <i>Applied Physics Letters</i> , 2015 , 106, 112905	3.4	26
95	Effect of Driving Field and Temperature on the Response Behavior of Ferroelectric Actuator and Sensor Materials. <i>Journal of Intelligent Material Systems and Structures</i> , 1995 , 6, 84-93	2.3	26
94	Tailoring Thickness of Conformal Conducting Polymer Decorated Aligned Carbon Nanotube Electrodes for Energy Storage. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400076	4.6	25
93	High performance supercapacitor under extremely low environmental temperature. <i>RSC Advances</i> , 2015 , 5, 71699-71703	3.7	24
92	Relaxor Ferroelectric Polymers Fundamentals and Applications. <i>Ferroelectrics</i> , 2007 , 354, 178-191	0.6	24
91	Fabrication and characterization of three-dimensional periodic ferroelectric polymer-silica opal composites and inverse opals. <i>Journal of Applied Physics</i> , 2000 , 88, 405-409	2.5	24
90	Glassy dynamics in an electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer system. <i>Physical Review B</i> , 2003 , 67,	3.3	23
89	Large magnetoelectric coupling coefficient in poly(vinylidene fluoride-hexafluoropropylene)/Metglas laminates. <i>Journal of Applied Physics</i> , 2011 , 110, 104103	2.5	22
88	Towards electrocaloric heat pump: A relaxor ferroelectric polymer exhibiting large electrocaloric response at low electric field. <i>Applied Physics Letters</i> , 2018 , 113, 113902	3.4	22
87	Electrocaloric response near room temperature in Zr- and Sn-doped BaTiO ₃ systems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016 , 374,	3	21
86	Electrocaloric Effect in Ferroelectric P(VDF-TrFE) Copolymers. <i>Integrated Ferroelectrics</i> , 2011 , 125, 176-185	3.3	21
85	The effect of ferroelastic coupling in controlling the abnormal aging behavior in lead magnesium niobate-lead titanate relaxor ferroelectrics. <i>Journal of Materials Research</i> , 1997 , 12, 1777-1784	2.5	21
84	The refrigerant is also the pump. <i>Science</i> , 2017 , 357, 1094-1095	3.3	19

83	Electro-optical response of the ferroelectric relaxor poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) terpolymer. <i>Journal of Applied Physics</i> , 2004 , 96, 316-319	2.5	19
82	Piezoelectric property of hot pressed electrospun poly(L-benzyl-L-glutamate) fibers. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 107, 639-646	2.6	18
81	Core-free rolled actuators for Braille displays using P(VDF-TrFE-CFE). <i>Smart Materials and Structures</i> , 2012 , 21,	3.4	18
80	Relaxor Ferroelectric Polymer Poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) Terpolymer High Electric Energy Density and Field Dependent Dielectric Response. <i>Ferroelectrics</i> , 2006 , 331, 35-42	0.6	18
79	Anomalous negative electrocaloric effect in a relaxor/normal ferroelectric polymer blend with controlled nano- and meso-dipolar couplings. <i>Applied Physics Letters</i> , 2016 , 108, 142902	3.4	18
78	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2011 , 18, 463-470	2.3	17
77	Piezoelectric polymers actuators for precise shape control of large scale space antennas 2007 ,		17
76	Photoelastic effects in tetragonal Pb(Zn _{1/3} Nb _{2/3})O ₃ PbTiO ₃ single crystals near the morphotropic phase boundary. <i>Journal of Applied Physics</i> , 2001 , 89, 5075-5078	2.5	17
75	Enhanced electrocaloric effect in composition gradient bilayer thick films. <i>Applied Physics Letters</i> , 2016 , 108, 133501	3.4	17
74	Enhancing the electrocaloric effect in a relaxor polymer by including minor normal ferroelectric phase. <i>Applied Physics Letters</i> , 2018 , 113, 153903	3.4	17
73	High-entropy polymer produces a giant electrocaloric effect at low fields.. <i>Nature</i> , 2021 , 600, 664-669	50.4	17
72	Influence of the Electrolyte Film Thickness on Charge Dynamics of Ionic Liquids in Ionic Electroactive Devices. <i>Macromolecules</i> , 2012 , 45, 2050-2056	5.5	16
71	The Giant Electrocaloric Effect in Inorganic and Organic Ferroelectric Relaxor Systems. <i>Ferroelectrics</i> , 2012 , 430, 98-102	0.6	16
70	Influence of the annealing conditions on the polarization and electromechanical response of high-energy-electron-irradiated poly(vinylidene fluoride trifluoroethylene) copolymer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003 , 41, 797-806	2.6	16
69	Large Displacement in Relaxor Ferroelectric Terpolymer Blend Derived Actuators Using Al Electrode for Braille Displays. <i>Scientific Reports</i> , 2015 , 5, 11361	4.9	15
68	Thermally mediated multiferroic composites for the magnetoelectric materials. <i>Applied Physics Letters</i> , 2010 , 96, 102902	3.4	15
67	A type of poly(vinylidene fluoride-trifluoroethylene) copolymer exhibiting ferroelectric relaxor behavior at high temperature (~100°C). <i>Applied Physics Letters</i> , 2008 , 92, 042903	3.4	15
66	Dielectric Properties and Charge Transport in All-Organic Relaxorlike CuPc-P(VDF-TrFE-CFE) Composite and its Constituents. <i>Ferroelectrics</i> , 2006 , 338, 107-116	0.6	15

65	Torsional Actuator and Stepper Motor Based on Piezoelectric d15 Shear Response. <i>Journal of Intelligent Material Systems and Structures</i> , 2000 , 11, 456-468	2.3	15
64	Pressure-temperature study of dielectric relaxation of a polyurethane elastomer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999 , 37, 983-990	2.6	15
63	Aromatic Polyurea Possessing High Electrical Energy Density and Low Loss. <i>Journal of Electronic Materials</i> , 2016 , 45, 4721-4725	1.9	14
62	Ferroelectric polymers as multifunctional electroactive materials: recent advances, potential, and challenges. <i>MRS Communications</i> , 2015 , 5, 115-129	2.7	14
61	Tailoring electrically induced properties by stretching relaxor polymer films. <i>Journal of Applied Physics</i> , 2012 , 111, 083515	2.5	14
60	Fabrication of strain tunable infrared frequency selective surfaces on electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer films using a stencil mask method. <i>Applied Physics Letters</i> , 2004 , 85, 654-656	3.4	14
59	Morphology-induced dielectric enhancement in polymer nanocomposites. <i>Nanoscale</i> , 2021 , 13, 10933-10942	2.7	14
58	All-polymer electromechanical systems consisting of electrostrictive poly(vinylidene fluoride-trifluoroethylene) and conductive polyaniline. <i>Journal of Applied Polymer Science</i> , 2000 , 75, 945-951	2.9	13
57	Conduction behavior of doped polyaniline films at high current density regime. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999 , 37, 2845-2850	2.6	12
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