Q M Zhang

List of Publications by Year in descending order

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213 papers	18,811 citations	13827 67 h-index	12233 133 g-index
213 all docs	213 docs citations	213 times ranked	9620 citing authors

#	Article	IF	Citations
1	A Dielectric Polymer with High Electric Energy Density and Fast Discharge Speed. Science, 2006, 313, 334-336.	6.0	2,068
2	Giant Electrostriction and Relaxor Ferroelectric Behavior in Electron-Irradiated Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	6.0	1,455
3	Large Electrocaloric Effect in Ferroelectric Polymers Near Room Temperature. Science, 2008, 321, 821-823.	6.0	1,004
4	An all-organic composite actuator material with a high dielectric constant. Nature, 2002, 419, 284-287.	13.7	985
5	High-dielectric-constant ceramic-powder polymer composites. Applied Physics Letters, 2000, 76, 3804-3806.	1.5	696
6	Direct evaluation of domainâ€wall and intrinsic contributions to the dielectric and piezoelectric response and their temperature dependence on lead zirconateâ€titanate ceramics. Journal of Applied Physics, 1994, 75, 454-459.	1.1	580
7	Giant Electrocaloric Response Over A Broad Temperature Range in Modified BaTiO₃ Ceramics. Advanced Functional Materials, 2014, 24, 1300-1305.	7.8	377
8	Organic and inorganic relaxor ferroelectrics with giant electrocaloric effect. Applied Physics Letters, 2010, 97, .	1.5	287
9	Large displacement transducers based on electric field forced phase transitions in the tetragonal (Pb0.97La0.02) (Ti,Zr,Sn)O3family of ceramics. Journal of Applied Physics, 1989, 66, 6014-6023.	1.1	285
10	Aromatic Polythiourea Dielectrics with Ultrahigh Breakdown Field Strength, Low Dielectric Loss, and High Electric Energy Density. Advanced Materials, 2013, 25, 1734-1738.	11.1	285
11	Ferroelectric and electromechanical properties of poly(vinylidene-fluorideâ€“trifluoroethyleneâ€“chlorotrifluoroethylene) terpolymer. Applied Physics Letters, 2001, 78, 2360-2362.	1.5	280
12	Electrical breakdown and ultrahigh electrical energy density in poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (fluoride-he	1.5	242
13	Phase transitional behavior and piezoelectric properties of the orthorhombic phase of Pb(Mg1/3Nb2/3)O3â€“PbTiO3 single crystals. Applied Physics Letters, 2001, 78, 3109-3111.	1.5	239
14	Domain wall excitations and their contributions to the weakâ€signal response of doped lead zirconate titanate ceramics. Journal of Applied Physics, 1988, 64, 6445-6451.	1.1	224
15	Enhancement of the dielectric response in polymer nanocomposites with low dielectric constant fillers. Nanoscale, 2017, 9, 10992-10997.	2.8	216
16	Electrical Energy Density and Discharge Characteristics of a Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (fluoride-chlor Insulation, 2007, 14, 1133-1138.	1.8	214
17	High-dielectric-constant all-polymer percolative composites. Applied Physics Letters, 2003, 82, 3502-3504.	1.5	213
18	Pyroelectric and electrocaloric materials. Journal of Materials Chemistry C, 2013, 1, 23-37.	2.7	202

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19	All-organic dielectric-percolative three-component composite materials with high electromechanical response. Applied Physics Letters, 2004, 84, 4391-4393.	1.5	198
20	Comparison of directly and indirectly measured electrocaloric effect in relaxor ferroelectric polymers. Applied Physics Letters, 2010, 97, .	1.5	198
21	Electrostriction:Â Nonlinear Electromechanical Coupling in Solid Dielectrics. Journal of Physical Chemistry B, 1997, 101, 10141-10150.	1.2	193
22	Influence of the critical point on the electrocaloric response of relaxor ferroelectrics. Journal of Applied Physics, 2011, 110, .	1.1	190
23	A highly scalable dielectric metamaterial with superior capacitor performance over a broad temperature. Science Advances, 2020, 6, eaax6622.	4.7	184
24	A chip scale electrocaloric effect based cooling device. Applied Physics Letters, 2013, 102, .	1.5	159
25	Laser interferometer for the study of piezoelectric and electrostrictive strains. Journal of Applied Physics, 1988, 63, 2492-2496.	1.1	154
26	Change of the weak-field properties of Pb(ZrTi)O₃ piezoceramics with compressive uniaxial stresses and its links to the effect of dopants on the stability of the polarizations in the materials. Journal of Materials Research, 1997, 12, 226-234.	1.2	144
27	Electromechanical properties of lead zirconate titanate piezoceramics under the influence of mechanical stresses. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1999, 46, 1518-1526.	1.7	143
28	Electrocaloric effect in relaxor ferroelectrics. Journal of Applied Physics, 2011, 110, .	1.1	143
29	Critical thickness of crystallization and discontinuous change in ferroelectric behavior with thickness in ferroelectric polymer thin films. Journal of Applied Physics, 2001, 89, 2613-2616.	1.1	136
30	High Electromechanical Response of Ionic Polymer Actuators with Controlledâ€Morphology Aligned Carbon Nanotube/Nafion Nanocomposite Electrodes. Advanced Functional Materials, 2010, 20, 3266-3271.	7.8	130
31	Enhancing the magnetoelectric response of Metglas/polyvinylidene fluoride laminates by exploiting the flux concentration effect. Applied Physics Letters, 2009, 95, .	1.5	126
32	An experimental investigation of electromechanical responses in a polyurethane elastomer. Journal of Applied Physics, 1997, 81, 2770-2776.	1.1	122
33			

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37	Enhanced electrocaloric effect in ferroelectric poly(vinylidene-fluoride/trifluoroethylene) 55/45 molâ€‰% copolymer at ferroelectric-paraelectric transition. Applied Physics Letters, 2011, 98, 122906.	1.5	115
38	Polarization and structural properties of high-energy electron irradiated poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (fl	1.1	114
39	Piezoelectric, dielectric, and elastic properties of poly(vinylidene fluoride/trifluoroethylene). Journal of Applied Physics, 1993, 74, 3394-3398.	1.1	108
40	Diffuse X-Ray Scattering Study of Lead Magnesium Niobate Single Crystals. Physical Review Letters, 1997, 79, 3950-3953.	2.9	104
41	High field tunneling as a limiting factor of maximum energy density in dielectric energy storage capacitors. Applied Physics Letters, 2008, 92, .	1.5	104
42	Upper bounds on the electrocaloric effect in polar solids. Applied Physics Letters, 2011, 98, .	1.5	103
43	Dielectric relaxation behavior and its relation to microstructure in relaxor ferroelectric polymers: High-energy electron irradiated poly(vinylidene fluorideâ€“trifluoroethylene) copolymers. Journal of Applied Physics, 2002, 92, 6749-6755.	1.1	102
44	Highâ€Volumetric Performance Aligned Nanoâ€Porous Microwave Exfoliated Graphite Oxideâ€based Electrochemical Capacitors. Advanced Materials, 2013, 25, 4879-4885.	11.1	102
45	Polymer nanocomposites with high energy storage densities. MRS Bulletin, 2015, 40, 753-759.	1.7	99
46	Dielectric Properties of Relaxor-like Vinylidene Fluorideâ^'Trifluoroethylene-Based Electroactive Polymers. Macromolecules, 2003, 36, 4436-4442.	2.2	97
47	High-energy density in aromatic polyurea thin films. Applied Physics Letters, 2009, 94, 202905.	1.5	90
48	Electrocaloric effect of the relaxor ferroelectric poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (fluoride-trifluoroethylene-c	1.5	90
49	Transverse strain responses in the electrostrictive poly(vinylidene fluorideâ€“trifluorethylene) copolymer. Applied Physics Letters, 1999, 74, 1901-1903.	1.5	89
50	Space-charge-enhanced electromechanical response in thin-film polyurethane elastomers. Applied Physics Letters, 1997, 71, 386-388.	1.5	85
51	Electromechanical properties of electrostrictive poly(vinylidene fluorideâ€“trifluoroethylene) copolymer. Applied Physics Letters, 1998, 73, 2054-2056.	1.5	85
52	Giant electrocaloric effect in BaZr0.2Ti0.8O3 thick film. Applied Physics Letters, 2014, 105, .	1.5	84
53	Large enhancement in polarization response and energy density of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Physics Letters, 2007, 91, .	1.5	83
54	Structural Changes and Transitional Behavior Studied from Both Micro- and Macroscale in the High-Energy Electron-Irradiated Poly(vinylidene fluorideâ^'trifluoroethylene) Copolymer. Macromolecules, 2002, 35, 664-672.	2.2	82

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55	Thickness dependence of ferroelectric polarization switching in poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 742 Td (fl	1.5	81
56	Microstructure and Dielectric Properties of P(VDFâ^'TrFEâ^'CFE) with Partially Grafted Copper Phthalocyanine Oligomer. Macromolecules, 2005, 38, 2247-2252.	2.2	81
57	Electromechanical Properties of Relaxor Ferroelectric Lead Magnesium Niobate-Lead Titanate Ceramics. Japanese Journal of Applied Physics, 1995, 34, 5658-5663.	0.8	80
58	An active energy harvesting scheme with an electroactive polymer. Applied Physics Letters, 2007, 91, .	1.5	78
59	Influence of composition on relaxor ferroelectric and electromechanical properties of poly(vinylidene fluoride-trifluoroethylene- chlorofluoroethylene). Journal of Applied Physics, 2005, 97, 094105.	1.1	77
60	Giant electrocaloric effect in ferroelectric poly(vinylidenefluoride-trifluoroethylene) copolymers near a first-order ferroelectric transition. Applied Physics Letters, 2012, 101, .	1.5	77
61	A fast and efficient pre-doping approach to high energy density lithium-ion hybrid capacitors. Journal of Materials Chemistry A, 2014, 2, 10029-10033.	5.2	77
62	Dependence of threshold thickness of crystallization and film morphology on film processing conditions in poly(vinylidene fluorideâ€“trifluoroethylene) copolymer thin films. Journal of Applied Physics, 2002, 92, 3111-3115.	1.1	75
63	Maximizing the number of coexisting phases near invariant critical points for giant electrocaloric and electromechanical responses in ferroelectrics. Applied Physics Letters, 2012, 101, 082904.	1.5	75
64	Shear response of lead zirconate titanate piezoceramics. Journal of Applied Physics, 1998, 83, 3754-3761.	1.1	74
65	Transverse strain responses in electrostrictive poly(vinylidene fluoride-trifluoroethylene) films and development of a dilatometer for the measurement. Journal of Applied Physics, 1999, 86, 2208-2214.	1.1	74
66	Relaxor ferroelectric polymer exhibits ultrahigh electromechanical coupling at low electric field. Science, 2022, 375, 1418-1422.	6.0	74
67	Direct Measurements of the Giant Electrocaloric Effect in Soft and Solid Ferroelectric Materials. Ferroelectrics, 2010, 405, 26-31.	0.3	73
68	Colossal dielectric and electromechanical responses in self-assembled polymeric nanocomposites. Applied Physics Letters, 2005, 87, 182901.	1.5	70
69	Conduction Mechanisms and Structureâ€“Property Relationships in High Energy Density Aromatic Polythiourea Dielectric Films. Advanced Energy Materials, 2013, 3, 1051-1055.	10.2	70
70	High-performance micromachined unimorph actuators based on electrostrictive poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	1.5	69
71	Structural, Conformational, and Polarization Changes of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (fluori Macromolecules, 2000, 33, 4125-4131.	2.2	68
72	Enhancement of dielectric energy density in the poly(vinylidene fluoride)-based terpolymer/copolymer blends. Applied Physics Letters, 2008, 93, 152903.	1.5	67

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73	Dielectric study of the relaxor ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymer system. Physical Review B, 2001, 63, .	1.1	66
74	Phase stabilities of â€œmorphotropicâ€•phases in Pb(Zn1/3Nb2/3)O3â€“PbTiO3 single crystals. Applied Physics Letters, 2002, 80, 1918-1920.	1.5	64
75	Highâ€frequency strain response in ferroelectrics and its measurement using a modified Machâ€Zehnder interferometer. Journal of Applied Physics, 1989, 65, 2807-2813.	1.1	63
76	Aging of the dielectric and piezoelectric properties of relaxor ferroelectric lead magnesium niobateâ€“lead titanate in the electric field biased state. Journal of Applied Physics, 1996, 79, 3181-3187.	1.1	62
77	An electrocaloric refrigerator with direct solid to solid regeneration. Applied Physics Letters, 2017, 110, .	1.5	62
78	Nonlinearity and scaling behavior in donor-doped lead zirconate titanate piezoceramic. Applied Physics Letters, 1998, 72, 2692-2694.	1.5	60
79	Piezoelectric responses in poly(vinylidene fluoride/hexafluoropropylene) copolymers. Applied Physics Letters, 2007, 90, 242917.	1.5	60
80	Polar-fluoropolymer blends with tailored nanostructures for high energy density low loss capacitor applications. Applied Physics Letters, 2011, 99, .	1.5	58
81	Neutron diffraction study of electrostrictive coefficients of prototype cubic phase of relaxor ferroelectric PbMg1/3â€‰Nb2/3â€‰O3. Applied Physics Letters, 1998, 72, 1048-1050.	1.5	57
82	A high performance hybrid asymmetric supercapacitor via nano-scale morphology control of graphene, conducting polymer, and carbon nanotube electrodes. Journal of Materials Chemistry A, 2014, 2, 9964-9969.	5.2	57
83	An electrocaloric refrigerator without external regenerator. Applied Physics Letters, 2014, 105, .	1.5	57
84	Meta-aromatic polyurea with high dipole moment and dipole density for energy storage capacitors. Applied Physics Letters, 2014, 104, .	1.5	56
85	Semicrystalline polymers with high dielectric constant, melting temperature, and charge-discharge efficiency. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1158-1166.	1.8	55
86	Change in electromechanical properties of 0.9PMN:0.1PT relaxor ferroelectric induced by uniaxial compressive stress directed perpendicular to the electric field. Applied Physics Letters, 1999, 74, 436-438.	1.5	53
87	Distinctive Contributions from Organic Filler and Relaxorlike Polymer Matrix to Dielectric Response of CuPc-P(VDF-TrFE-CFE) Composite. Physical Review Letters, 2004, 92, 047604.	2.9	52
88	Piezoelectric tubes and tubular composites for actuator and sensor applications. Journal of Materials Science, 1993, 28, 3962-3968.	1.7	51
89	Characteristics of the electromechanical response and polarization of electric field biased ferroelectrics. Journal of Applied Physics, 1995, 77, 2549-2555.	1.1	51
90	A bimorph based dilatometer for field induced strain measurement in soft and thin free standing polymer films. Review of Scientific Instruments, 1998, 69, 2480-2483.	0.6	51

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91	Schottky emission at the metal polymer interface and its effecton the polarization switching of ferroelectric poly(vinylidenefluoride-trifluoroethylene) copolymer thin films. Applied Physics Letters, 2004, 85, 1719-1721.	1.5	50
92	Normal ferroelectric to ferroelectric relaxor conversion in fluorinated polymers and the relaxor dynamics. Journal of Materials Science, 2006, 41, 271-280.	1.7	50
93	Effects of transitional phenomena on the electric field induced strain-electrostrictive response of a segmented polyurethane elastomer. Journal of Applied Polymer Science, 1997, 65, 1363-1370.	1.3	49
94	Simulation of chip-size electrocaloric refrigerator with high cooling-power density. Applied Physics Letters, 2013, 102, .	1.5	48
95	A high-K ferroelectric relaxor terpolymer as a gate dielectric for organic thin film transistors. Applied Physics Letters, 2013, 102, 013301.	1.5	46
96	Aromatic poly(arylene ether urea) with high dipole moment for high thermal stability and high energy density capacitors. Applied Physics Letters, 2015, 106, .	1.5	46
97	Enhanced Electromechanical Response of Ionic Polymer Actuators by Improving Mechanical Coupling between Ions and Polymer Matrix. Macromolecules, 2012, 45, 5128-5133.	2.2	45
98	Microstructure and electromechanical responses in semicrystalline ferroelectric relaxor polymer blends. Journal of Applied Physics, 2006, 100, 044113.	1.1	44
99	Enhanced electrocaloric effect in poly(vinylidene fluoride-trifluoroethylene)-based terpolymer/copolymer blends. Applied Physics Letters, 2012, 100, .	1.5	44
100	Electrocaloric effect in ferroelectric polymers. Applied Physics A: Materials Science and Processing, 2012, 107, 559-566.	1.1	44
101	Strongly Dipolar Polythiourea and Polyurea Dielectrics with High Electrical Breakdown, Low Loss, and High Electrical Energy Density. Journal of Electronic Materials, 2014, 43, 4548-4551.	1.0	43
102	Reducing conduction losses in high energy density polymer using nanocomposites. Applied Physics Letters, 2017, 110, .	1.5	43
103	Effect of metal-polymer interface on the breakdown electric field of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 26 062907.	1.5	42
104	Polarization responses in lead magnesium niobate based relaxor ferroelectrics. Applied Physics Letters, 1997, 71, 1649-1651.	1.5	41
105	Direct Observation of Ion Distributions near Electrodes in Ionic Polymer Actuators Containing Ionic Liquids. Scientific Reports, 2013, 3, 973.	1.6	41
106	Characterization of the performance of 1â€“3 type piezocomposites for lowâ€frequency applications. Journal of Applied Physics, 1993, 73, 1403-1410.	1.1	39
107	High electrostrictive strain under high mechanical stress in electron-irradiated poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	39
108	Layer-by-layer self-assembled conductor network composites in ionic polymer metal composite actuators with high strain response. Applied Physics Letters, 2009, 95, 023505.	1.5	39

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109	Intrinsic dielectric properties and charge transport in oligomers of organic semiconductor copper phthalocyanine. Physical Review B, 2005, 71, .	1.1	38
110	Tailoring the dipole properties in dielectric polymers to realize high energy density with high breakdown strength and low dielectric loss. Journal of Applied Physics, 2015, 117, .	1.1	36
111	High performance supercapacitor under extremely low environmental temperature. RSC Advances, 2015, 5, 71699-71703.	1.7	34
112	Effect of Driving Field and Temperature on the Response Behavior of Ferroelectric Actuator and Sensor Materials. Journal of Intelligent Material Systems and Structures, 1995, 6, 84-93.	1.4	33
113	Direct piezoelectric response of piezopolymer polyvinylidene fluoride under high mechanical strain and stress. Applied Physics Letters, 2007, 91, .	1.5	33
114	High Performance Electroactive Polymers and Nano-composites for Artificial Muscles. Journal of Intelligent Material Systems and Structures, 2007, 18, 133-145.	1.4	32
115	Direct spectroscopic evidence of field-induced solid-state chain conformation transformation in a ferroelectric relaxor polymer. Journal of Applied Physics, 2006, 99, 044107.	1.1	31
116	Towards electrocaloric heat pumpâ€"A relaxor ferroelectric polymer exhibiting large electrocaloric response at low electric field. Applied Physics Letters, 2018, 113, .	1.5	31
117	Effect of high energy electron irradiation on the electromechanical properties of poly (vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock Ferroelectrics, and Frequency Control, 2000, 47, 1296-1307.	1.7	30
118	Enhancing the magnetoelectric response of Terfenol-D/polyvinylidene fluoride/Terfenol-D laminates by exploiting the shear mode effect. Applied Physics Letters, 2015, 106, .	1.5	29
119	Relaxor Ferroelectric Polymersâ€"Fundamentals and Applications. Ferroelectrics, 2007, 354, 178-191.	0.3	28
120	Tailoring Thickness of Conformal Conducting Polymer Decorated Aligned Carbon Nanotube Electrodes for Energy Storage. Advanced Materials Interfaces, 2014, 1, 1400076.	1.9	28
121	Anomalous negative electrocaloric effect in a relaxor/normal ferroelectric polymer blend with controlled nano- and meso-dipolar couplings. Applied Physics Letters, 2016, 108, .	1.5	28
122	The effect of ferroelastic coupling in controlling the abnormal aging behavior in lead magnesium niobate-lead titanate relaxor ferroelectrics. Journal of Materials Research, 1997, 12, 1777-1784.	1.2	27
123	Morphology-induced dielectric enhancement in polymer nanocomposites. Nanoscale, 2021, 13, 10933-10942.	2.8	27
124	Fabrication and characterization of three-dimensional periodic ferroelectric polymer-silica opal composites and inverse opals. Journal of Applied Physics, 2000, 88, 405-409.	1.1	26
125	Electro-optical response of the ferroelectric relaxor poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (fluoride-trif 316-319.	1.1	26
126	The refrigerant is also the pump. Science, 2017, 357, 1094-1095.	6.0	25

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127	Glassy dynamics in an electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer system. Physical Review B, 2003, 67, .	1.1	24
128	Large magnetoelectric coupling coefficient in poly(vinylidene fluoride-hexafluoropropylene)/Metglas laminates. Journal of Applied Physics, 2011, 110, .	1.1	24
129	Enhancing the electrocaloric effect in a relaxor polymer by including minor normal ferroelectric phase. Applied Physics Letters, 2018, 113, .	1.5	24
130	Electrocaloric Effect in Ferroelectric P(VDF-TrFE) Copolymers. Integrated Ferroelectrics, 2011, 125, 176-185.	0.3	23
131	Core-free rolled actuators for Braille displays using P(VDFâ€“TrFEâ€“CFE). Smart Materials and Structures, 2012, 21, 012001.	1.8	23
132	Electrocaloric response near room temperature in Zr- and Sn-doped BaTiO ₃ systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160055.	1.6	23
133	Piezoelectric property of hot pressed electrospun poly(Î³-benzyl-Î±, L-glutamate) fibers. Applied Physics A: Materials Science and Processing, 2012, 107, 639-646.	1.1	22
134	Ferroelectric polymers as multifunctional electroactive materials: recent advances, potential, and challenges. MRS Communications, 2015, 5, 115-129.	0.8	22
135	Photoelastic effects in tetragonal Pb(Zn1/3Nb2/3)O3â€“PbTiO3 single crystals near the morphotropic phase boundary. Journal of Applied Physics, 2001, 89, 5075-5078.	1.1	21
136	Enhanced electrocaloric effect in composition gradient bilayer thick films. Applied Physics Letters, 2016, 108, .	1.5	21
137	Relaxor Ferroelectric Polymerâ€“Poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) Terpolymer High Electric Energy Density and Field Dependent Dielectric Response. Ferroelectrics, 2006, 331, 35-42.	0.3	20
138	Influence of the Electrolyte Film Thickness on Charge Dynamics of Ionic Liquids in Ionic Electroactive Devices. Macromolecules, 2012, 45, 2050-2056.	2.2	19
139	The Giant Electrocaloric Effect in Inorganic and Organic Ferroelectric Relaxor Systems. Ferroelectrics, 2012, 430, 98-102.	0.3	19
140	Large Displacement in Relaxor Ferroelectric Terpolymer Blend Derived Actuators Using Al Electrode for Braille Displays. Scientific Reports, 2015, 5, 11361.	1.6	19
141	Pressure-temperature study of dielectric relaxation of a polyurethane elastomer. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 983-990.	2.4	18
142	Conduction behavior of doped polyaniline films at high current density regime. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2845-2850.	2.4	18
143	Influence of the annealing conditions on the polarization and electromechanical response of high-energy-electron-irradiated poly(vinylidene fluoride trifluoroethylene) copolymer. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 797-806.	2.4	18
144	Piezoelectric polymers actuators for precise shape control of large scale space antennas. , 2007, , .		18

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145	Dielectric behavior of bilayer films of P(VDF-CTFE) and low temperature PECVD fabricated Si₃N₄. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 463-470.	1.8	18
146	Aromatic Polyurea Possessing High Electrical Energy Density and Low Loss. Journal of Electronic Materials, 2016, 45, 4721-4725.	1.0	18
147	Maxwell relation, giant (negative) electrocaloric effect, and polarization hysteresis. Applied Physics Letters, 2021, 118, .	1.5	18
148	Thermally mediated multiferroic composites for the magnetoelectric materials. Applied Physics Letters, 2010, 96, 102902.	1.5	17
149	Torsional Actuator and Stepper Motor Based on Piezoelectric d15 Shear Response. Journal of Intelligent Material Systems and Structures, 2000, 11, 456-468.	1.4	16
150	Fabrication of strain tunable infrared frequency selective surfaceson electrostrictive poly(vinylidene fluorideâ€“trifluoroethylene) copolymer films using a stencil mask method. Applied Physics Letters, 2004, 85, 654-656.	1.5	16
151	Dielectric Properties and Charge Transport in All-Organic Relaxorlike CuPc-P(VDF-TrFE-CFE) Composite and its Constituents. Ferroelectrics, 2006, 338, 107-116.	0.3	16
152	A type of poly(vinylidene fluoride-trifluoroethylene) copolymer exhibiting ferroelectric relaxor behavior at high temperature (â¼100Â°C). Applied Physics Letters, 2008, 92, 042903.	1.5	16
153	All-polymer electromechanical systems consisting of electrostrictive poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 945-951.	1.3	15
154	Tailoring electrically induced properties by stretching relaxor polymer films. Journal of Applied Physics, 2012, 111, 083515.	1.1	15
155	Dielectric and electrocaloric responses of Ba(Zr_{0.2}Ti_{0.8})O₃ bulk ceramics and thick films with sintering aids. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 1501-1505.	1.8	15
156	Large electric tunability in poly(vinylidene fluoride-trifluoroethylene) based polymers. Applied Physics Letters, 2008, 93, 042905.	1.5	13
157	An investigation of a thermally steerable electroactive polymer/shape memory polymer hybrid actuator. Applied Physics Letters, 2016, 108, .	1.5	13
158	Clamping effect on the piezoelectric properties of poly(vinylidene fluoride-trifluoroethylene) copolymer. Ferroelectrics, 1993, 150, 255-266.	0.3	12
159	Relaxor Ferroelectric Polymers. Ferroelectrics, 2006, 339, 37-45.	0.3	12
160	Magnetoelectric Sensors With Directly Integrated Charge Sensitive Readout Circuitâ€”Improved Field Sensitivity and Signal-to-Noise Ratio. IEEE Sensors Journal, 2011, 11, 2260-2265.	2.4	12
161	Electrical tunable Fabryâ€“Perot interferometer using a poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (fluorid 4857-4859.	1.5	11
162	The effect of defects on the electronic structure of long chain ferroelectric polymers. Journal of Applied Physics, 2009, 106, .	1.1	11

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163	Electrocaloric Effect in the Relaxor Ferroelectric Terpolymer P(VDF-TrFE-CFE). Ferroelectrics, 2011, 422, 81-85.	0.3	10
164	Aligned Nanoâ€Porous Microwave Exfoliated Graphite Oxide Ionic Actuators with High Strain and Elastic Energy Density. Advanced Materials, 2013, 25, 6277-6283.	11.1	10
165	Temperature dependence of magnetoelectric coupling in FeBSiC/PZT/FeBSiC laminates. Journal of Applied Physics, 2014, 116, 074103.	1.1	10
166	Influencing dielectric properties of relaxor polymer system by blending vinylidene fluorideâ€“trifluoroethylene-based terpolymer with a ferroelectric copolymer. Journal of Applied Physics, 2014, 115, .	1.1	10
167	Dielectric enhancement over a broad temperature by nanofiller at ultra-low volume content in poly(ether methyl ether urea). Applied Physics Letters, 2020, 117, 072905.	1.5	10
168	Finite-size effect on highly dispersive photonic-crystal optical components. Applied Physics Letters, 2003, 82, 2380-2382.	1.5	9
169	A highly aromatic and sulfonated ionomer for high elastic modulus ionic polymer membrane micro-actuators. Smart Materials and Structures, 2012, 21, 055015.	1.8	9
170	Direct Measurements of the Electrocaloric Effect in P(VDF-TrFE) (68/32) Copolymer Ferroelectric Films. Ferroelectrics, 2011, 416, 139-143.	0.3	8
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172	The influence of the external stress on the electromechanical response of electrostrictive 0.9Pb(Mg_{1/3}Nb_{2/3})O₃â^'0.1PbTiO₃ in the dc electrical field-biased state. Journal of Materials Research, 1999, 14, 948-956.	1.2	7
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