Qiming Zhang

List of Publications by Year
in descending order

281	22,139	8749 75	9334 143
papers	citations	h-index	g-index

283	283	283	10735
all docs	docs citations	times ranked	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	Polymer-Based Dielectrics with High Energy Storage Density. Annual Review of Materials Research, 2015, 45, 433-458.	4.3	513
6	Nanocomposites of Ferroelectric Polymers with TiO₂ Nanoparticles Exhibiting Significantly Enhanced Electrical Energy Density. Advanced Materials, 2009, 21, 217-221.	11.1	471
7	Electrocaloric Materials for Solidâ€State Refrigeration. Advanced Materials, 2009, 21, 1983-1987.	11.1	390
8	Giant Electrocaloric Response Over A Broad Temperature Range in Modified BaTiO₃ Ceramics. Advanced Functional Materials, 2014, 24, 1300-1305.	7.8	377
9	Topologicalâ€Structure Modulated Polymer Nanocomposites Exhibiting Highly Enhanced Dielectric Strength and Energy Density. Advanced Functional Materials, 2014, 24, 3172-3178.	7.8	371
10	High Electromechanical Responses in a Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (fluorideâ€“trifluoroethyleneâ€“ch 1574-1577.	11.1	287
11	Organic and inorganic relaxor ferroelectrics with giant electrocaloric effect. Applied Physics Letters, 2010, 97, .	1.5	287
12	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
13	Ferroelectric and electromechanical properties of poly(vinylidene-fluorideâ€“trifluoroethyleneâ€“chlorotrifluoroethylene) terpolymer. Applied Physics Letters, 2001, 78, 2360-2362.	1.5	280
14	Electroactive Polymer Actuators and Sensors. MRS Bulletin, 2008, 33, 173-181.	1.7	271
15	Recent development of high energy density polymers for dielectric capacitors. IEEE Transactions on Dielectrics and Electrical Insulation, 2010, 17, 1036-1042.	1.8	269
16	Novel polymer ferroelectric behavior via crystal isomorphism and the nanoconfinement effect. Polymer, 2013, 54, 1709-1728.	1.8	251
17	Electrical breakdown and ultrahigh electrical energy density in poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 102 Td (	1.5	242
18	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

#	Article	IF	Citations
19	Electrocaloric Cooling Materials and Devices for Zero-Global-Warming-Potential, High-Efficiency Refrigeration. Joule, 2019, 3, 1200-1225.	11.7	236
20	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
21	Enhancement of the dielectric response in polymer nanocomposites with low dielectric constant fillers. Nanoscale, 2017, 9, 10992-10997.	2.8	216
22	Electrical Energy Density and Discharge Characteristics of a Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (fluoride-chlor Insulation, 2007, 14, 1133-1138.	1.8	214
23	High-dielectric-constant all-polymer percolative composites. Applied Physics Letters, 2003, 82, 3502-3504.	1.5	213
24	Pyroelectric and electrocaloric materials. Journal of Materials Chemistry C, 2013, 1, 23-37.	2.7	202
25	All-organic dielectric-percolative three-component composite materials with high electromechanical response. Applied Physics Letters, 2004, 84, 4391-4393.	1.5	198
26	Comparison of directly and indirectly measured electrocaloric effect in relaxor ferroelectric polymers. Applied Physics Letters, 2010, 97, .	1.5	198
27	Creating an Ecoâ€Friendly Building Coating with Smart Subambient Radiative Cooling. Advanced Materials, 2020, 32, e1906751.	11.1	196
28	Ferroelectric Polymer Nanocomposites for Roomâ€Temperature Electrocaloric Refrigeration. Advanced Materials, 2015, 27, 1450-1454.	11.1	192
29	Influence of the critical point on the electrocaloric response of relaxor ferroelectrics. Journal of Applied Physics, 2011, 110, .	1.1	190
30	A highly scalable dielectric metamaterial with superior capacitor performance over a broad temperature. Science Advances, 2020, 6, eaax6622.	4.7	184
31	A Modular Approach to Ferroelectric Polymers with Chemically Tunable Curie Temperatures and Dielectric Constants. Journal of the American Chemical Society, 2006, 128, 8120-8121.	6.6	183
32	Advanced dielectric polymers for energy storage. Energy Storage Materials, 2022, 44, 29-47.	9.5	178
33	A chip scale electrocaloric effect based cooling device. Applied Physics Letters, 2013, 102, .	1.5	159
34	Next-generation electrocaloric and pyroelectric materials for solid-state electrothermal energy interconversion. MRS Bulletin, 2014, 39, 1099-1111.	1.7	155
35	Electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymers. Sensors and Actuators A: Physical, 2001, 90, 138-147.	2.0	148
36	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

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37	Electrocaloric effect in relaxor ferroelectrics. Journal of Applied Physics, 2011, 110, .	1.1	143
38	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
39	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
40	Enhancing the magnetoelectric response of Metglas/polyvinylidene fluoride laminates by exploiting the flux concentration effect. Applied Physics Letters, 2009, 95, .	1.5	126
41			

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55	Highâ€Volumetric Performance Aligned Nanoâ€Porous Microwave Exfoliated Graphite Oxideâ€based Electrochemical Capacitors. Advanced Materials, 2013, 25, 4879-4885.	11.1	102
56	Electroactive polymer based microfluidic pump. Sensors and Actuators A: Physical, 2006, 125, 346-352.	2.0	101
57	Microstructures and Dielectric Properties of the Ferroelectric Fluoropolymers Synthesized via Reductive Dechlorination of Poly(vinylidene fluoride-co-chlorotrifluoroethylene)s. Macromolecules, 2006, 39, 6962-6968.	2.2	100
58	High-temperature polymers with record-high breakdown strength enabled by rationally designed chain-packing behavior in blends. Matter, 2021, 4, 2448-2459.	5.0	100
59	Polymer nanocomposites with high energy storage densities. MRS Bulletin, 2015, 40, 753-759.	1.7	99
60	Dielectric Properties of Relaxor-like Vinylidene Fluorideâ^'Trifluoroethylene-Based Electroactive Polymers. Macromolecules, 2003, 36, 4436-4442.	2.2	97
61	Advanced asymmetric supercapacitor based on conducting polymer and aligned carbon nanotubes with controlled nanomorphology. Nano Energy, 2014, 9, 176-185.	8.2	93
62	High-energy density in aromatic polyurea thin films. Applied Physics Letters, 2009, 94, 202905.	1.5	90
63	Transverse strain responses in the electrostrictive poly(vinylidene fluorideâ€“trifluorethylene) copolymer. Applied Physics Letters, 1999, 74, 1901-1903.	1.5	89
64	Generating high dielectric constant blends from lower dielectric constant dipolar polymers using nanostructure engineering. Nano Energy, 2017, 32, 73-79.	8.2	89
65	Space-charge-enhanced electromechanical response in thin-film polyurethane elastomers. Applied Physics Letters, 1997, 71, 386-388.	1.5	85
66	Electromechanical properties of electrostrictive poly(vinylidene fluorideâ€“trifluoroethylene) copolymer. Applied Physics Letters, 1998, 73, 2054-2056.	1.5	85
67	Giant electrocaloric effect in BaZr0.2Ti0.8O3 thick film. Applied Physics Letters, 2014, 105, .	1.5	84
68	Large enhancement in polarization response and energy density of poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (fluoric Physics Letters, 2007, 91, .	1.5	83
69	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
70	Recent advances in highly electrostrictive P(VDF-TrFE-CFE) terpolymers. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1149-1154.	1.8	82
71	Ferroelectric copolymers and terpolymers for electrostrictors: synthesis and properties. IEEE Transactions on Dielectrics and Electrical Insulation, 2004, 11, 293-298.	1.8	81
72	Microstructure and Dielectric Properties of P(VDFâ^'TrFEâ^'CFE) with Partially Grafted Copper Phthalocyanine Oligomer. Macromolecules, 2005, 38, 2247-2252.	2.2	81

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73	Field-Activated Electroactive Polymers. MRS Bulletin, 2008, 33, 183-187.	1.7	79
74	An active energy harvesting scheme with an electroactive polymer. Applied Physics Letters, 2007, 91, .	1.5	78
75	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
76	Giant electrocaloric effect in ferroelectric poly(vinylidenefluoride-trifluoroethylene) copolymers near a first-order ferroelectric transition. Applied Physics Letters, 2012, 101, .	1.5	77
77	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
78	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
79	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
80	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
81	Relaxor ferroelectric polymer exhibits ultrahigh electromechanical coupling at low electric field. Science, 2022, 375, 1418-1422.	6.0	74
82	Multiferroic Polymer Composites with Greatly Enhanced Magnetoelectric Effect under a Low Magnetic Bias. Advanced Materials, 2011, 23, 3853-3858.	11.1	72
83	Colossal dielectric and electromechanical responses in self-assembled polymeric nanocomposites. Applied Physics Letters, 2005, 87, 182901.	1.5	70
84	Conduction Mechanisms and Structureâ€“Property Relationships in High Energy Density Aromatic Polythiourea Dielectric Films. Advanced Energy Materials, 2013, 3, 1051-1055.	10.2	70
85	High-performance micromachined unimorph actuators based on electrostrictive poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	69
86	A polymer blend approach to tailor the ferroelectric responses in P(VDFâ€“TrFE) based copolymers. Polymer, 2013, 54, 2373-2381.	1.8	69
87	Structural, Conformational, and Polarization Changes of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (fluoride) Macromolecules, 2000, 33, 4125-4131.	2.2	68
88	Enhancement of dielectric energy density in the poly(vinylidene fluoride)-based terpolymer/copolymer blends. Applied Physics Letters, 2008, 93, 152903.	1.5	67
89	Influence of imidazoliumâ€based ionic liquids on the performance of ionic polymer conductor network composite actuators. Polymer International, 2010, 59, 321-328.	1.6	67
90	Dielectric study of the relaxor ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymer system. Physical Review B, 2001, 63, .	1.1	66

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91	Ion transport and storage of ionic liquids in ionic polymer conductor network composites. Applied Physics Letters, 2010, 96, .	1.5	66
92	Internal Biasing in Relaxor Ferroelectric Polymer to Enhance the Electrocaloric Effect. Advanced Functional Materials, 2015, 25, 5134-5139.	7.8	64
93	An electrocaloric refrigerator with direct solid to solid regeneration. Applied Physics Letters, 2017, 110, .	1.5	62
94	Nematic Anisotropic Liquid-Crystal Gelsâ€”Self-Assembled Nanocomposites with High Electromechanical Response. Advanced Functional Materials, 2003, 13, 525-529.	7.8	61
95	Piezoelectric responses in poly(vinylidene fluoride/hexafluoropropylene) copolymers. Applied Physics Letters, 2007, 90, 242917.	1.5	60
96	Polar-fluoropolymer blends with tailored nanostructures for high energy density low loss capacitor applications. Applied Physics Letters, 2011, 99, .	1.5	58
97	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
98	An electrocaloric refrigerator without external regenerator. Applied Physics Letters, 2014, 105, .	1.5	57
99	Realizing excellent energy storage properties in Na0.5Bi0.5TiO3-based lead-free relaxor ferroelectrics. Journal of the European Ceramic Society, 2022, 42, 2221-2229.	2.8	57
100	Meta-aromatic polyurea with high dipole moment and dipole density for energy storage capacitors. Applied Physics Letters, 2014, 104, .	1.5	56
101	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
102	Large piezoelectric properties in KNN-based lead-free single crystals grown by a seed-free solid-state crystal growth method. Applied Physics Letters, 2016, 108, .	1.5	54
103	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
104	Characteristics of the electromechanical response and polarization of electric field biased ferroelectrics. Journal of Applied Physics, 1995, 77, 2549-2555.	1.1	51
105	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
106	Flexible Ionic Diodes for Lowâ€Frequency Mechanical Energy Harvesting. Advanced Energy Materials, 2017, 7, 1601983.	10.2	51
107	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
108	Normal ferroelectric to ferroelectric relaxor conversion in fluorinated polymers and the relaxor dynamics. Journal of Materials Science, 2006, 41, 271-280.	1.7	50

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109	Charge dynamics and bending actuation in Aquivion membrane swelled with ionic liquids. Polymer, 2011, 52, 540-546.	1.8	49
110	Simulation of chip-size electrocaloric refrigerator with high cooling-power density. Applied Physics Letters, 2013, 102, .	1.5	48
111	Hydrogel Ionic Diodes toward Harvesting Ultralowâ€Frequency Mechanical Energy. Advanced Materials, 2021, 33, e2103056.	11.1	48
112	Influence of the conductor network composites on the electromechanical performance of ionic polymer conductor network composite actuators. Sensors and Actuators A: Physical, 2010, 157, 267-275.	2.0	46
113	Thickness dependence of curvature, strain, and response time in ionic electroactive polymer actuators fabricated via layer-by-layer assembly. Journal of Applied Physics, 2011, 109, .	1.1	46
114	A high-K ferroelectric relaxor terpolymer as a gate dielectric for organic thin film transistors. Applied Physics Letters, 2013, 102, 013301.	1.5	46
115	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
116	Enhanced Electromechanical Response of Ionic Polymer Actuators by Improving Mechanical Coupling between Ions and Polymer Matrix. Macromolecules, 2012, 45, 5128-5133.	2.2	45
117	Microstructure and electromechanical responses in semicrystalline ferroelectric relaxor polymer blends. Journal of Applied Physics, 2006, 100, 044113.	1.1	44
118	Enhanced electrocaloric effect in poly(vinylidene fluoride-trifluoroethylene)-based terpolymer/copolymer blends. Applied Physics Letters, 2012, 100, .	1.5	44
119	Electrocaloric effect in ferroelectric polymers. Applied Physics A: Materials Science and Processing, 2012, 107, 559-566.	1.1	44
120	Optimizing nanostructure to achieve high dielectric response with low loss in strongly dipolar polymers. Nano Energy, 2015, 16, 227-234.	8.2	44
121	Structural and ferroelectric response in vinylidene fluoride/trifluoroethylene/hexafluoropropylene terpolymers. Polymer, 2007, 48, 2124-2129.	1.8	43
122	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
123	Reducing conduction losses in high energy density polymer using nanocomposites. Applied Physics Letters, 2017, 110, .	1.5	43
124	Resonance modes and losses in 1-3 piezocomposites for ultrasonic transducer applications. Journal of Applied Physics, 1999, 85, 1342-1350.	1.1	42
125	High volumetric electrochemical performance of ultra-high density aligned carbon nanotube supercapacitors with controlled nanomorphology. Electrochimica Acta, 2013, 111, 608-613.	2.6	42
126	Polarization responses in lead magnesium niobate based relaxor ferroelectrics. Applied Physics Letters, 1997, 71, 1649-1651.	1.5	41

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127	Interfaces in poly(vinylidene fluoride) terpolymer/ZrO2 nanocomposites and their effect on dielectric properties. Journal of Applied Physics, 2009, 105, .	1.1	41
128	Direct Observation of Ion Distributions near Electrodes in Ionic Polymer Actuators Containing Ionic Liquids. Scientific Reports, 2013, 3, 973.	1.6	41
129	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
130	Graphene enabled percolative nanocomposites with large electrocaloric efficient under low electric fields over a broad temperature range. Nano Energy, 2016, 22, 461-467.	8.2	39
131	Giant permittivity materials with low dielectric loss over a broad temperature range enabled by weakening intermolecular hydrogen bonds. Nano Energy, 2019, 64, 103916.	8.2	39
132	Intrinsic dielectric properties and charge transport in oligomers of organic semiconductor copper phthalocyanine. Physical Review B, 2005, 71, .	1.1	38
133	Effective optical properties associated with wave propagation in photonic crystals of finite length along the propagation direction. Journal of Applied Physics, 2002, 92, 4194-4200.	1.1	37
134	Large Electrocaloric Effect in a Dielectric Liquid Possessing a Large Dielectric Anisotropy Near the Isotropicâ€“Nematic Transition. Advanced Functional Materials, 2013, 23, 2894-2898.	7.8	37
135	Hybrid supercapacitor materials from poly(3,4-ethylenedioxythiophene) conformally coated aligned carbon nanotubes. Electrochimica Acta, 2013, 112, 522-528.	2.6	36
136	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
137	High performance supercapacitor under extremely low environmental temperature. RSC Advances, 2015, 5, 71699-71703.	1.7	34
138	LARGE ELECTROCALORIC EFFECT IN RELAXOR FERROELECTRICS. Journal of Advanced Dielectrics, 2012, 02, 1230011.	1.5	33
139	A nanocomposite approach to tailor electrocaloric effect inÂferroelectric polymer. Polymer, 2013, 54, 5299-5302.	1.8	33
140	Electrical field dependence of electrocaloric effect in relaxor ferroelectrics. Ceramics International, 2015, 41, S15-S18.	2.3	33
141	Evaluation of piezocomposites for ultrasonic transducer applications influence of the unit cell dimensions and the properties of constituents on the performance of 2-2 piezocomposites. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1997, 44, 857-872.	1.7	32
142	High Performance Electroactive Polymers and Nano-composites for Artificial Muscles. Journal of Intelligent Material Systems and Structures, 2007, 18, 133-145.	1.4	32
143	Enhanced dielectric response in all-organic polyanilineâ€“poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (fluor 2007, 353, 205-209.	1.5	32
144	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

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145	Equivalent circuit modeling of ionomer and ionic polymer conductive network composite actuators containing ionic liquids. Sensors and Actuators A: Physical, 2012, 181, 70-76.	2.0	31
146	Towards electrocaloric heat pumpâ€"A relaxor ferroelectric polymer exhibiting large electrocaloric response at low electric field. Applied Physics Letters, 2018, 113, .	1.5	31
147	Effect of high energy electron irradiation on the electromechanical properties of poly (vinylidene) Tj ETQq1 1 0.784314 rgBT /Overloc Ferroelectrics, and Frequency Control, 2000, 47, 1296-1307.	1.7	30
148	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
149	Biocompatible and Flexible Hydrogel Diodeâ€Based Mechanical Energy Harvesting. Advanced Materials Technologies, 2017, 2, 1700118.	3.0	29
150	Nanocomposites with very large electro-optic effect and widely tunable refractive index. Applied Physics Letters, 2006, 89, 141121.	1.5	28
151	Relaxor Ferroelectric Polymersâ€"Fundamentals and Applications. Ferroelectrics, 2007, 354, 178-191.	0.3	28
152	Tailoring Thickness of Conformal Conducting Polymer Decorated Aligned Carbon Nanotube Electrodes for Energy Storage. Advanced Materials Interfaces, 2014, 1, 1400076.	1.9	28
153	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
154	Morphology-induced dielectric enhancement in polymer nanocomposites. Nanoscale, 2021, 13, 10933-10942.	2.8	27
155	The refrigerant is also the pump. Science, 2017, 357, 1094-1095.	6.0	25
156	Enhancing the electrocaloric effect in a relaxor polymer by including minor normal ferroelectric phase. Applied Physics Letters, 2018, 113, .	1.5	24
157	Electrocaloric Effect in Ferroelectric P(VDF-TrFE) Copolymers. Integrated Ferroelectrics, 2011, 125, 176-185.	0.3	23
158	Core-free rolled actuators for Braille displays using P(VDFâ€"TrFEâ€"CFE). Smart Materials and Structures, 2012, 21, 012001.	1.8	23
159	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
160	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
161	Ferroelectric polymers as multifunctional electroactive materials: recent advances, potential, and challenges. MRS Communications, 2015, 5, 115-129.	0.8	22
162	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

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163	Enhanced electrocaloric effect in composition gradient bilayer thick films. Applied Physics Letters, 2016, 108, .	1.5	21
164	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
165	Electrocaloric effect in the relaxor ferroelectric polymer composition P(VDFâ€“TrFEâ€“CFE)_{0.90}â€“P(VDFâ€“CTFE)_{0.10}. Phase Transitions, 2010, 83, 819-823.	0.6	20
166	Influence of the Electrolyte Film Thickness on Charge Dynamics of Ionic Liquids in Ionic Electroactive Devices. Macromolecules, 2012, 45, 2050-2056.	2.2	19
167	Large Displacement in Relaxor Ferroelectric Terpolymer Blend Derived Actuators Using Al Electrode for Braille Displays. Scientific Reports, 2015, 5, 11361.	1.6	19
168	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
169	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
170	Aromatic Polyurea Possessing High Electrical Energy Density and Low Loss. Journal of Electronic Materials, 2016, 45, 4721-4725.	1.0	18
171	A Room Temperature Ultrasensitive Magnetoelectric Susceptometer for Quantitative Tissue Iron Detection. Scientific Reports, 2016, 6, 29740.	1.6	18
172	Maxwell relation, giant (negative) electrocaloric effect, and polarization hysteresis. Applied Physics Letters, 2021, 118, .	1.5	18
173	Piezoelectric stepper motor with direct coupling mechanism to achieve high efficiency and precise control of motion. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2000, 47, 1059-1067.	1.7	17
174	Thermally mediated multiferroic composites for the magnetoelectric materials. Applied Physics Letters, 2010, 96, 102902.	1.5	17
175	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
176	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
177	Topological structure enhanced nanostructure of high temperature polymer exhibiting more than ten times enhancement of dipolar response. Nano Energy, 2021, 88, 106225.	8.2	16
178	Investigation of tuning characteristics of electrically tunable long-period gratings with a precise four-Layer model. Journal of Lightwave Technology, 2006, 24, 2954-2962.	2.7	15
179	Tailoring electrically induced properties by stretching relaxor polymer films. Journal of Applied Physics, 2012, 111, 083515.	1.1	15
180	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

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181	Dielectric relaxation of relaxor ferroelectric P(VDF-TrFE-CFE) terpolymer over broad frequency range. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 444-449.	1.7	14
182	Low-frequency voltage mode sensing of magnetoelectric sensor in package. Electronics Letters, 2010, 46, 1132.	0.5	14
183	PEN/Si3N4 bilayer film for dc bus capacitors in power converters in hybrid electric vehicles. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	14
184	Interface Effect on Polarization Switching and Critical Thickness of Crystallization in P(VDF-TRFE) Copolymer Thin Films. Ferroelectrics, 2002, 273, 377-382.	0.3	13
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