

Qiming Zhang

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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.

258
papers

18,112
citations

68
h-index

130
g-index

283
ext. papers

20,095
ext. citations

6.7
avg, IF

6.64
L-index

#	Paper	IF	Citations
258	A dielectric polymer with high electric energy density and fast discharge speed. <i>Science</i> , 2006 , 313, 334-633	33.3	1686
257	Giant electrostriction and relaxor ferroelectric behavior in electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Science</i> , 1998 , 280, 2101-4	33.3	1284
256	An all-organic composite actuator material with a high dielectric constant. <i>Nature</i> , 2002 , 419, 284-7	50.4	895
255	Large electrocaloric effect in ferroelectric polymers near room temperature. <i>Science</i> , 2008 , 321, 821-3	33.3	813
254	Nanocomposites of Ferroelectric Polymers with TiO ₂ Nanoparticles Exhibiting Significantly Enhanced Electrical Energy Density. <i>Advanced Materials</i> , 2009 , 21, 217-221	24	423
253	Polymer-Based Dielectrics with High Energy Storage Density. <i>Annual Review of Materials Research</i> , 2015 , 45, 433-458	12.8	400
252	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
251	Topological-Structure Modulated Polymer Nanocomposites Exhibiting Highly Enhanced Dielectric Strength and Energy Density. <i>Advanced Functional Materials</i> , 2014 , 24, 3172-3178	15.6	304
250	High Electromechanical Responses in a Poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) Terpolymer. <i>Advanced Materials</i> , 2002 , 14, 1574-1577	24	256
249	Organic and inorganic relaxor ferroelectrics with giant electrocaloric effect. <i>Applied Physics Letters</i> , 2010 , 97, 162904	3.4	251
248	Ferroelectric and electromechanical properties of poly(vinylidene-fluoride-trifluoroethylene-chlorotrifluoroethylene) terpolymer. <i>Applied Physics Letters</i> , 2001 , 78, 2360-2362	3.4	246
247	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
246	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2010 , 17, 1036-1042	2.3	225
245	Electroactive Polymer Actuators and Sensors. <i>MRS Bulletin</i> , 2008 , 33, 173-181	3.2	223
244	Phase transitional behavior and piezoelectric properties of the orthorhombic phase of Pb(Mg _{1/3} Nb _{2/3})O ₃ BbTiO ₃ single crystals. <i>Applied Physics Letters</i> , 2001 , 78, 3109-3111	3.4	221
243	Electrical breakdown and ultrahigh electrical energy density in poly(vinylidene fluoride-hexafluoropropylene) copolymer. <i>Applied Physics Letters</i> , 2009 , 94, 162901	3.4	211
242	Novel polymer ferroelectric behavior via crystal isomorphism and the nanoconfinement effect. <i>Polymer</i> , 2013 , 54, 1709-1728	3.9	208

241	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
240	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
239	High-dielectric-constant all-polymer percolative composites. <i>Applied Physics Letters</i> , 2003 , 82, 3502-3504	3.4	189
238	All-organic dielectric-percolative three-component composite materials with high electromechanical response. <i>Applied Physics Letters</i> , 2004 , 84, 4391-4393	3.4	180
237	Pyroelectric and electrocaloric materials. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 23-37	7.1	177
236	A modular approach to ferroelectric polymers with chemically tunable curie temperatures and dielectric constants. <i>Journal of the American Chemical Society</i> , 2006 , 128, 8120-1	16.4	173
235	Comparison of directly and indirectly measured electrocaloric effect in relaxor ferroelectric polymers. <i>Applied Physics Letters</i> , 2010 , 97, 202901	3.4	167
234	Influence of the critical point on the electrocaloric response of relaxor ferroelectrics. <i>Journal of Applied Physics</i> , 2011 , 110, 064118	2.5	158
233	Ferroelectric polymer nanocomposites for room-temperature electrocaloric refrigeration. <i>Advanced Materials</i> , 2015 , 27, 1450-4	24	157
232	A chip scale electrocaloric effect based cooling device. <i>Applied Physics Letters</i> , 2013 , 102, 122904	3.4	136
231	Next-generation electrocaloric and pyroelectric materials for solid-state electrothermal energy interconversion. <i>MRS Bulletin</i> , 2014 , 39, 1099-1111	3.2	135
230	Electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymers. <i>Sensors and Actuators A: Physical</i> , 2001 , 90, 138-147	3.9	132
229	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
228	Electrocaloric Cooling Materials and Devices for Zero-Global-Warming-Potential, High-Efficiency Refrigeration. <i>Joule</i> , 2019 , 3, 1200-1225	27.8	122
227	Enhancement of the dielectric response in polymer nanocomposites with low dielectric constant fillers. <i>Nanoscale</i> , 2017 , 9, 10992-10997	7.7	122
226	High Electromechanical Response of Ionic Polymer Actuators with Controlled-Morphology Aligned Carbon Nanotube/Nafion Nanocomposite Electrodes. <i>Advanced Functional Materials</i> , 2010 , 20, 3266-3271	15.6	118
225	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
224	Electrocaloric effect in relaxor ferroelectrics. <i>Journal of Applied Physics</i> , 2011 , 110, 074113	2.5	110

223	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
222	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
221	Phase Transitions and Ferroelectric Relaxor Behavior in P(VDF/TrFE/CFE) Terpolymers. <i>Macromolecules</i> , 2007 , 40, 2371-2379	5-5	104
220	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
219	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
218	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
217	Piezoelectric, dielectric, and elastic properties of poly(vinylidene fluoride/trifluoroethylene). <i>Journal of Applied Physics</i> , 1993 , 74, 3394-3398	2-5	100
216	High-volumetric performance aligned nano-porous microwave exfoliated graphite oxide-based electrochemical capacitors. <i>Advanced Materials</i> , 2013 , 25, 4879-85	24	97
215	Microstructures and Dielectric Properties of the Ferroelectric Fluoropolymers Synthesized via Reductive Dechlorination of Poly(vinylidene fluoride-co-chlorotrifluoroethylene)s. <i>Macromolecules</i> , 2006 , 39, 6962-6968	5-5	95
214	A highly scalable dielectric metamaterial with superior capacitor performance over a broad temperature. <i>Science Advances</i> , 2020 , 6, eaax6622	14-3	93
213	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
212	Enhanced electromechanical properties in all-polymer percolative composites. <i>Applied Physics Letters</i> , 2004 , 84, 3124-3126	3-4	92
211	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
210	Single crystal PMN-PT/epoxy 1-3 composite for energy-harvesting application. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2006 , 53, 631-8	3-2	90
209	Upper bounds on the electrocaloric effect in polar solids. <i>Applied Physics Letters</i> , 2011 , 98, 021909	3-4	89
208	Investigation of electrostrictive polymers for energy harvesting. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005 , 52, 2411-7	3-2	88
207	Electroactive polymer based microfluidic pump. <i>Sensors and Actuators A: Physical</i> , 2006 , 125, 346-352	3-9	88
206	Poly(vinylidene fluoride-trifluoroethylene) based high performance electroactive polymers. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2004 , 11, 299-311	2-3	88

205	Dielectric Properties of Relaxor-like Vinylidene Fluoride-Trifluoroethylene-Based Electroactive Polymers. <i>Macromolecules</i> , 2003 , 36, 4436-4442	5.5	86
204	Polymer nanocomposites with high energy storage densities. <i>MRS Bulletin</i> , 2015 , 40, 753-759	3.2	85
203	Transverse strain responses in the electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 1999 , 74, 1901-1903	3.4	83
202	Advanced asymmetric supercapacitor based on conducting polymer and aligned carbon nanotubes with controlled nanomorphology. <i>Nano Energy</i> , 2014 , 9, 176-185	17.1	82
201	Space-charge-enhanced electromechanical response in thin-film polyurethane elastomers. <i>Applied Physics Letters</i> , 1997 , 71, 386-388	3.4	77
200	Microstructure and Dielectric Properties of P(VDF-TrFE-CFE) with Partially Grafted Copper Phthalocyanine Oligomer. <i>Macromolecules</i> , 2005 , 38, 2247-2252	5.5	77
199	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
198	Electromechanical properties of electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. <i>Applied Physics Letters</i> , 1998 , 73, 2054-2056	3.4	75
197	Ferroelectric copolymers and terpolymers for electrostrictors: synthesis and properties. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2004 , 11, 293-298	2.3	74
196	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
195	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
194	High-energy density in aromatic polyurea thin films. <i>Applied Physics Letters</i> , 2009 , 94, 202905	3.4	70
193	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
192	An active energy harvesting scheme with an electroactive polymer. <i>Applied Physics Letters</i> , 2007 , 91, 132910	3.4	68
191	Creating an Eco-Friendly Building Coating with Smart Subambient Radiative Cooling. <i>Advanced Materials</i> , 2020 , 32, e1906751	24	68
190	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
189	Recent advances in highly electrostrictive P(VDF-TrFE-CFE) terpolymers. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2006 , 13, 1149-1154	2.3	66
188	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

- 187 Giant electrocaloric effect in ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymers near a first-order ferroelectric transition. *Applied Physics Letters*, **2012**, 101, 132903 3.4 65
- 186 Colossal dielectric and electromechanical responses in self-assembled polymeric nanocomposites. *Applied Physics Letters*, **2005**, 87, 182901 3.4 64
- 185 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 2.5 64
- 184 A fast and efficient pre-doping approach to high energy density lithium-ion hybrid capacitors. *Journal of Materials Chemistry A*, **2014**, 2, 10029-10033 13 63
- 183 Field-Activated Electroactive Polymers. *MRS Bulletin*, **2008**, 33, 183-187 3.2 62
- 182 Influence of imidazolium-based ionic liquids on the performance of ionic polymer conductor network composite actuators. *Polymer International*, **2010**, 59, 321-328 3.3 61
- 181 High-performance micromachined unimorph actuators based on electrostrictive poly(vinylidene fluoride-trifluoroethylene) copolymer. *Applied Physics Letters*, **2002**, 80, 1082-1084 3.4 61
- 180 Generating high dielectric constant blends from lower dielectric constant dipolar polymers using nanostructure engineering. *Nano Energy*, **2017**, 32, 73-79 17.1 59
- 179 Ion transport and storage of ionic liquids in ionic polymer conductor network composites. *Applied Physics Letters*, **2010**, 96, 223503 3.4 59
- 178 Structural, Conformational, and Polarization Changes of Poly(vinylidene fluoride-trifluoroethylene) Copolymer Induced by High-Energy Electron Irradiation. *Macromolecules*, **2000**, 33, 4125-4131 5.5 59
- 177 Enhancement of dielectric energy density in the poly(vinylidene fluoride)-based terpolymer/copolymer blends. *Applied Physics Letters*, **2008**, 93, 152903 3.4 58
- 176 Dielectric study of the relaxor ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymer system. *Physical Review B*, **2001**, 63, 3.3 58
- 175 Nematic Anisotropic Liquid-Crystal Gels Self-Assembled Nanocomposites with High Electromechanical Response. *Advanced Functional Materials*, **2003**, 13, 525-529 15.6 57
- 174 A polymer blend approach to tailor the ferroelectric responses in P(VDF-TrFE) based copolymers. *Polymer*, **2013**, 54, 2373-2381 3.9 56
- 173 Polar-fluoropolymer blends with tailored nanostructures for high energy density low loss capacitor applications. *Applied Physics Letters*, **2011**, 99, 132901 3.4 52
- 172 Conduction Mechanisms and Structure-Property Relationships in High Energy Density Aromatic Polythiourea Dielectric Films. *Advanced Energy Materials*, **2013**, 3, 1051-1055 21.8 51
- 171 Piezoelectric responses in poly(vinylidene fluoride/hexafluoropropylene) copolymers. *Applied Physics Letters*, **2007**, 90, 242917 3.4 51
- 170 An electrocaloric refrigerator without external regenerator. *Applied Physics Letters*, **2014**, 105, 162905 3.4 49

169	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
168	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
167	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
166	Internal Biasing in Relaxor Ferroelectric Polymer to Enhance the Electrocaloric Effect. <i>Advanced Functional Materials</i> , 2015 , 25, 5134-5139	15.6	46
165	Charge Dynamics and Bending Actuation in Aquivion Membrane Swelled with Ionic Liquids. <i>Polymer</i> , 2011 , 52, 540-546	3.9	46
164	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
163	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
162	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
161	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
160	Influence of the conductor network composites on the electromechanical performance of ionic polymer conductor network composite actuators. <i>Sensors and Actuators A: Physical</i> , 2010 , 157, 267-275	3.9	44
159	An electrocaloric refrigerator with direct solid to solid regeneration. <i>Applied Physics Letters</i> , 2017 , 110, 243503	3.4	42
158	Thickness dependence of curvature, strain, and response time in ionic electroactive polymer actuators fabricated via layer-by-layer assembly. <i>Journal of Applied Physics</i> , 2011 , 109, 104301	2.5	41
157	Simulation of chip-size electrocaloric refrigerator with high cooling-power density. <i>Applied Physics Letters</i> , 2013 , 102, 112901	3.4	40
156	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
155	Direct observation of ion distributions near electrodes in ionic polymer actuators containing ionic liquids. <i>Scientific Reports</i> , 2013 , 3, 973	4.9	39
154	Structural and ferroelectric response in vinylidene fluoride/trifluoroethylene/hexafluoropropylene terpolymers. <i>Polymer</i> , 2007 , 48, 2124-2129	3.9	39
153	Microstructure and electromechanical responses in semicrystalline ferroelectric relaxor polymer blends. <i>Journal of Applied Physics</i> , 2006 , 100, 044113	2.5	39
152	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

151	Large piezoelectric properties in KNN-based lead-free single crystals grown by a seed-free solid-state crystal growth method. <i>Applied Physics Letters</i> , 2016 , 108, 182904	3-4	38
150	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2012 , 19, 1158-1166	2-3	37
149	Electrocaloric effect in ferroelectric polymers. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 107, 559-566	2.6	37
148	Interfaces in poly(vinylidene fluoride) terpolymer/ZrO ₂ nanocomposites and their effect on dielectric properties. <i>Journal of Applied Physics</i> , 2009 , 105, 014103	2.5	37
147	Enhanced electrocaloric effect in poly(vinylidene fluoride-trifluoroethylene)-based terpolymer/copolymer blends. <i>Applied Physics Letters</i> , 2012 , 100, 222902	3-4	36
146	Hybrid supercapacitor materials from poly(3,4-ethylenedioxythiophene) conformally coated aligned carbon nanotubes. <i>Electrochimica Acta</i> , 2013 , 112, 522-528	6-7	35
145	Resonance modes and losses in 1-3 piezocomposites for ultrasonic transducer applications. <i>Journal of Applied Physics</i> , 1999 , 85, 1342-1350	2.5	35
144	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
143	High volumetric electrochemical performance of ultra-high density aligned carbon nanotube supercapacitors with controlled nanomorphology. <i>Electrochimica Acta</i> , 2013 , 111, 608-613	6-7	34
142	Multiferroic Polymer Composites with Greatly Enhanced Magnetoelectric Effect under a Low Magnetic Bias. <i>Advanced Materials</i> , 2011 , 23, n/a-n/a	24	34
141	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
140	Polarization responses in lead magnesium niobate based relaxor ferroelectrics. <i>Applied Physics Letters</i> , 1997 , 71, 1649-1651	3-4	34
139	Effective optical properties associated with wave propagation in photonic crystals of finite length along the propagation direction. <i>Journal of Applied Physics</i> , 2002 , 92, 4194-4200	2.5	34
138	Optimizing nanostructure to achieve high dielectric response with low loss in strongly dipolar polymers. <i>Nano Energy</i> , 2015 , 16, 227-234	17.1	33
137	Flexible Ionic Diodes for Low-Frequency Mechanical Energy Harvesting. <i>Advanced Energy Materials</i> , 2017 , 7, 1601983	21.8	33
136	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
135	Intrinsic dielectric properties and charge transport in oligomers of organic semiconductor copper phthalocyanine. <i>Physical Review B</i> , 2005 , 71,	3-3	33
134	Advanced dielectric polymers for energy storage. <i>Energy Storage Materials</i> , 2022 , 44, 29-47	19.4	33

133	Large Electrocaloric Effect in a Dielectric Liquid Possessing a Large Dielectric Anisotropy Near the Isotropic-Nematic Transition. <i>Advanced Functional Materials</i> , 2013 , 23, 2894-2898	15.6	30
132	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
131	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
130	Equivalent circuit modeling of ionomer and ionic polymer conductive network composite actuators containing ionic liquids. <i>Sensors and Actuators A: Physical</i> , 2012 , 181, 70-76	3.9	29
129	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
128	Graphene enabled percolative nanocomposites with large electrocaloric efficient under low electric fields over a broad temperature range. <i>Nano Energy</i> , 2016 , 22, 461-467	17.1	28
127	Enhanced dielectric response in all-organic polyaniline/poly(vinylidene fluoride-trifluoroethylene-chlorotrifluoroethylene) composite. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 205-209	3.9	28
126	Reducing conduction losses in high energy density polymer using nanocomposites. <i>Applied Physics Letters</i> , 2017 , 110, 122905	3.4	27
125	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
124	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. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1997 , 44, 857-872	3.2	27
123	Nanocomposites with very large electro-optic effect and widely tunable refractive index. <i>Applied Physics Letters</i> , 2006 , 89, 141121	3.4	27
122	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
121	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
120	High-temperature polymers with record-high breakdown strength enabled by rationally designed chain-packing behavior in blends. <i>Matter</i> , 2021 , 4, 2448-2459	12.7	25
119	High performance supercapacitor under extremely low environmental temperature. <i>RSC Advances</i> , 2015 , 5, 71699-71703	3.7	24
118	Relaxor Ferroelectric Polymers Fundamentals and Applications. <i>Ferroelectrics</i> , 2007 , 354, 178-191	0.6	24
117	Electrical field dependence of electrocaloric effect in relaxor ferroelectrics. <i>Ceramics International</i> , 2015 , 41, S15-S18	5.1	23
116	LARGE ELECTROCALORIC EFFECT IN RELAXOR FERROELECTRICS. <i>Journal of Advanced Dielectrics</i> , 2012 , 02, 1230011	1.3	23

115	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
114	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
113	A nanocomposite approach to tailor electrocaloric effect in ferroelectric polymer. <i>Polymer</i> , 2013 , 54, 5299-5302	3.9	21
112	Electrocaloric Effect in Ferroelectric P(VDF-TrFE) Copolymers. <i>Integrated Ferroelectrics</i> , 2011 , 125, 176-183	3.3	21
111	Giant permittivity materials with low dielectric loss over a broad temperature range enabled by weakening intermolecular hydrogen bonds. <i>Nano Energy</i> , 2019 , 64, 103916	17.1	19
110	The refrigerant is also the pump. <i>Science</i> , 2017 , 357, 1094-1095	33.3	19
109	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
108	Electrocaloric effect in the relaxor ferroelectric polymer composition P(VDF-TrFE- ϵ -CFE) _{0.90} (VDF- ϵ -TFE) _{0.10} . <i>Phase Transitions</i> , 2010 , 83, 819-823	1.3	18
107	Core-free rolled actuators for Braille displays using P(VDF-TrFE-CFE). <i>Smart Materials and Structures</i> , 2012 , 21,	3.4	18
106	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
105	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
104	Biocompatible and Flexible Hydrogel Diode-Based Mechanical Energy Harvesting. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700118	6.8	17
103	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2011 , 18, 463-470	2.3	17
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