Qing Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5252269/publications.pdf

Version: 2024-02-01

248 papers	22,360 citations	7551 77 h-index	9553 142 g-index
249 all docs	249 docs citations	249 times ranked	11895 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	Flexible high-temperature dielectric materials from polymer nanocomposites. Nature, 2015, 523, 576-579.	13.7	1,476
3	Solution-processed ferroelectric terpolymer nanocomposites with high breakdown strength and energy density utilizing boron nitride nanosheets. Energy and Environmental Science, 2015, 8, 922-931.	15.6	541
4	High-Temperature Dielectric Materials for Electrical Energy Storage. Annual Review of Materials Research, 2018, 48, 219-243.	4.3	540
5	Novel Ferroelectric Polymers for High Energy Density and Low Loss Dielectrics. Macromolecules, 2012, 45, 2937-2954.	2.2	535
6	Nanocomposites of Ferroelectric Polymers with TiO₂ Nanoparticles Exhibiting Significantly Enhanced Electrical Energy Density. Advanced Materials, 2009, 21, 217-221.	11.1	471
7	Polymer nanocomposites for electrical energy storage. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1421-1429.	2.4	451
8	High Energy and Power Density Capacitors from Solutionâ€Processed Ternary Ferroelectric Polymer Nanocomposites. Advanced Materials, 2014, 26, 6244-6249.	11.1	448
9	Nanostructure-based WO3 photoanodes for photoelectrochemical water splitting. Physical Chemistry Chemical Physics, 2012, 14, 7894.	1.3	409
10	Ferroelectric polymer networks with high energy density and improved discharged efficiency for dielectric energy storage. Nature Communications, 2013, 4, 2845.	5.8	382
11	Electrical Energy Storage in Ferroelectric Polymer Nanocomposites Containing Surface-Functionalized BaTiO₃Nanoparticles. Chemistry of Materials, 2008, 20, 6304-6306.	3.2	339
12	Highâ€Energyâ€Density Dielectric Polymer Nanocomposites with Trilayered Architecture. Advanced Functional Materials, 2017, 27, 1606292.	7.8	338
13	Sandwich-structured polymer nanocomposites with high energy density and great chargeâ€“discharge efficiency at elevated temperatures. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9995-10000.	3.3	317
14	Highâ€Performance Polymers Sandwiched with Chemical Vapor Deposited Hexagonal Boron Nitrides as Scalable Highâ€Temperature Dielectric Materials. Advanced Materials, 2017, 29, 1701864.	11.1	270
15	Dielectric polymers for high-temperature capacitive energy storage. Chemical Society Reviews, 2021, 50, 6369-6400.	18.7	262
16	A Scalable, Highâ€Throughput, and Environmentally Benign Approach to Polymer Dielectrics Exhibiting Significantly Improved Capacitive Performance at High Temperatures. Advanced Materials, 2018, 30, e1805672.	11.1	260
17	Tuning Nanofillers in In Situ Prepared Polyimide Nanocomposites for Highâ€Temperature Capacitive Energy Storage. Advanced Energy Materials, 2020, 10, 1903881.	10.2	259
18	Highly Stretchable Polymer Composite with Strainâ€Enhanced Electromagnetic Interference Shielding Effectiveness. Advanced Materials, 2020, 32, e1907499.	11.1	242

#	Article	IF	Citations
19	Ultrahigh energy density and greatly enhanced discharged efficiency of sandwich-structured polymer nanocomposites with optimized spatial organization. Nano Energy, 2018, 44, 364-370.	8.2	241
20	Scalable Polymer Nanocomposites with Record Highâ€Temperature Capacitive Performance Enabled by Rationally Designed Nanostructured Inorganic Fillers. Advanced Materials, 2019, 31, e1900875.	11.1	236
21	Compositional tailoring effect on electric field distribution for significantly enhanced breakdown strength and restrained conductive loss in sandwich-structured ceramic/polymer nanocomposites. Journal of Materials Chemistry A, 2017, 5, 4710-4718.	5.2	217
22	Ferroelectric polymers exhibiting behaviour reminiscent of a morphotropic phase boundary. Nature, 2018, 562, 96-100.	13.7	200
23	Ultrahigh electric displacement and energy density in gradient layer-structured BaTiO₃/PVDF nanocomposites with an interfacial barrier effect. Journal of Materials Chemistry A, 2017, 5, 10849-10855.	5.2	197
24	Crystal Orientation Effect on Electric Energy Storage in Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (fluoride-co	2.2	196
25	Ferroelectric Polymers and Their Energyâ€Related Applications. Macromolecular Chemistry and Physics, 2016, 217, 1228-1244.	1.1	193
26	Ferroelectric Polymer Nanocomposites for Roomâ€Temperature Electrocaloric Refrigeration. Advanced Materials, 2015, 27, 1450-1454.	11.1	192
27	Flexible three-dimensional interconnected piezoelectric ceramic foam based composites for highly efficient concurrent mechanical and thermal energy harvesting. Energy and Environmental Science, 2018, 11, 2046-2056.	15.6	188
28	Crosslinked fluoropolymers exhibiting superior high-temperature energy density and chargeâ€“discharge efficiency. Energy and Environmental Science, 2020, 13, 1279-1286.	15.6	188
29	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
30	Integrated Triboelectric Nanogenerators in the Era of the Internet of Things. Advanced Science, 2019, 6, 1802230.	5.6	174
31	Self-healing of electrical damage in polymers using superparamagnetic nanoparticles. Nature Nanotechnology, 2019, 14, 151-155.	15.6	169
32	Highâ€Energy Storage Performance of (Pb_{0.87}Ba_{0.1}La_{0.02})(Zr_{0.68}Sn_{0.24}Ti_{0.08})O₃ Antiferroelectric Ceramics Fabricated by the Hotâ€Press Sintering Method. Journal of the American Ceramic Society, 2015, 98, 1175-1181.	1.9	168
33	Colossal Room-Temperature Electrocaloric Effect in Ferroelectric Polymer Nanocomposites Using Nanostructured Barium Strontium Titanates. ACS Nano, 2015, 9, 7164-7174.	7.3	164
34	Multilayered ferroelectric polymer films incorporating low-dielectric-constant components for concurrent enhancement of energy density and chargeâ€“discharge efficiency. Nano Energy, 2018, 54, 288-296.	8.2	161
35	Poly(methyl methacrylate)/boron nitride nanocomposites with enhanced energy density as high temperature dielectrics. Composites Science and Technology, 2017, 142, 139-144.	3.8	153
36	Multilayered hierarchical polymer composites for high energydensity capacitors. Journal of Materials Chemistry A, 2019, 7, 2965-2980.	5.2	153

#	Article	IF	Citations
37	A Hybrid Material Approach Toward Solutionâ€Processable Dielectrics Exhibiting Enhanced Breakdown Strength and High Energy Density. Advanced Functional Materials, 2015, 25, 3505-3513.	7.8	152
38	3D boron nitride foam filled epoxy composites with significantly enhanced thermal conductivity by a facial and scalable approach. Chemical Engineering Journal, 2020, 397, 125447.	6.6	152
39	Nanostructured Ferroelectricâ€Polymer Composites for Capacitive Energy Storage. Small Methods, 2018, 2, 1700399.	4.6	147
40	Relaxor Ferroelectricâ€Based Electrocaloric Polymer Nanocomposites with a Broad Operating Temperature Range and High Cooling Energy. Advanced Materials, 2015, 27, 2236-2241.	11.1	143
41	Dielectric materials for highâ€temperature capacitors. IET Nanodielectrics, 2018, 1, 32-40.	2.0	139
42	Gradient-layered polymer nanocomposites with significantly improved insulation performance for dielectric energy storage. Energy Storage Materials, 2020, 24, 626-634.	9.5	137
43	High-Temperature Poly(phthalazinone ether ketone) Thin Films for Dielectric Energy Storage. ACS Applied Materials & Interfaces, 2010, 2, 1286-1289.	4.0	136
44	Confined Ferroelectric Properties in Poly(Vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (Fluorideâ€coâ€Chlorotrifluoro Energy Storage Applications. Advanced Functional Materials, 2011, 21, 3176-3188.	7.8	135
45	Multiscale structural engineering of dielectric ceramics for energy storage applications: from bulk to thin films. Nanoscale, 2020, 12, 17165-17184.	2.8	131
46	Effects of Polymorphism and Crystallite Size on Dipole Reorientation in Poly(vinylidene fluoride) and Its Random Copolymers. Macromolecules, 2010, 43, 6739-6748.	2.2	130
47	Highâ€Temperature Highâ€Energyâ€Density Dielectric Polymer Nanocomposites Utilizing Inorganic Coreâ€“Shell Nanostructured Nanofillers. Advanced Energy Materials, 2021, 11, 2101297.	10.2	130
48	New Route Toward High-Energy-Density Nanocomposites Based on Chain-End Functionalized Ferroelectric Polymers. Chemistry of Materials, 2010, 22, 5350-5357.	3.2	129
49	Y doping and grain size co-effects on the electrical energy storage performance of (Pb0.87Ba0.1La0.02)(Zr0.65Sn0.3Ti0.05)O3 anti-ferroelectric ceramics. Ceramics International, 2014, 40, 5455-5460.	2.3	129
50	Poly(arylene ether)-Based Single-Ion Conductors for Lithium-Ion Batteries. Chemistry of Materials, 2016, 28, 188-196.	3.2	129
51	Multifunctional hydrogel enables extremely simplified electrochromic devices for smart windows and ionic writing boards. Materials Horizons, 2018, 5, 1000-1007.	6.4	129
52	Confinement-Induced High-Field Antiferroelectric-like Behavior in a Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (fluorid Graft Copolymer. Macromolecules, 2011, 44, 2190-2199.	2.2	125
53	Largely enhanced dielectric properties of polymer composites with HfO2 nanoparticles for high-temperature film capacitors. Composites Science and Technology, 2021, 201, 108528.	3.8	121
54	A Facile In Situ Surfaceâ€Functionalization Approach to Scalable Laminated Highâ€Temperature Polymer Dielectrics with Ultrahigh Capacitive Performance. Advanced Functional Materials, 2021, 31, 2102644.	7.8	117

#	Article	IF	Citations
55	Ternary polymer nanocomposites with concurrently enhanced dielectric constant and breakdown strength for highâ€temperature electrostatic capacitors. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 389-400.	8.5	114
56	Fatigueâ€Free Aurivillius Phase Ferroelectric Thin Films with Ultrahigh Energy Storage Performance. Advanced Energy Materials, 2020, 10, 2001536.	10.2	114
57	Review of ionic liquids containing, polymer/inorganic hybrid electrolytes for lithium metal batteries. Materials and Design, 2020, 190, 108563.	3.3	111
58	Flexible energy harvesting polymer composites based on biofibril-templated 3-dimensional interconnected piezoceramics. Nano Energy, 2018, 50, 35-42.	8.2	107
59	Bioinspired elastic piezoelectric composites for high-performance mechanical energy harvesting. Journal of Materials Chemistry A, 2018, 6, 14546-14552.	5.2	104
60	Significant Improvements in Dielectric Constant and Energy Density of Ferroelectric Polymer Nanocomposites Enabled by Ultralow Contents of Nanofillers. Advanced Materials, 2021, 33, e2102392.	11.1	102
61	Toward Wearable Cooling Devices: Highly Flexible Electrocaloric Ba_{0.67}Sr_{0.33}TiO₃ Nanowire Arrays. Advanced Materials, 2016, 28, 4811-4816.	11.1	101
62	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
63	Dielectric characteristics of poly(ether ketone ketone) for high temperature capacitive energy storage. Applied Physics Letters, 2009, 95, .	1.5	100
64	Ultrahigh Energy Storage Performance of Layered Polymer Nanocomposites over a Broad Temperature Range. Advanced Materials, 2021, 33, e2103338.	11.1	96
65	Understanding of Relaxor Ferroelectric Behavior of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 Td (fluorideâ€“ri 2731-2739.	2.2	93
66	Chirality-induced relaxor properties in ferroelectric polymers. Nature Materials, 2020, 19, 1169-1174.	13.3	93
67	Improved Energy Storage Properties Accompanied by Enhanced Interface Polarization in Annealed Microwaveâ€Sintered BST. Journal of the American Ceramic Society, 2015, 98, 3212-3222.	1.9	90
68	Advanced polymer dielectrics for high temperature capacitive energy storage. Journal of Applied Physics, 2020, 127, .	1.1	90
69	Polymers Containing Highly Polarizable Conjugated Side Chains as Highâ€Performance Allâ€Organic Nanodielectric Materials. Advanced Functional Materials, 2013, 23, 5638-5646.	7.8	88
70	Bioinspired Hierarchically Structured Allâ€Inorganic Nanocomposites with Significantly Improved Capacitive Performance. Advanced Functional Materials, 2020, 30, 2000191.	7.8	88
71	Oxygen vacancies-rich Ce0.9Gd0.1O2-Î´ decorated Pr0.5Ba0.5CoO3-Î´ bifunctional catalyst for efficient and long-lasting rechargeable Zn-air batteries. Applied Catalysis B: Environmental, 2020, 266, 118656.	10.8	87
72	Ultrahigh discharge efficiency and energy density achieved at low electric fields in sandwich-structured polymer films containing dielectric elastomers. Journal of Materials Chemistry A, 2019, 7, 3729-3736.	5.2	85

#	Article	IF	Citations
73	Lightweight Porous Polystyrene with High Thermal Conductivity by Constructing 3D Interconnected Network of Boron Nitride Nanosheets. ACS Applied Materials & Interfaces, 2020, 12, 46767-46778.	4.0	85
74	Soft liquid-metal/elastomer foam with compression-adjustable thermal conductivity and electromagnetic interference shielding. Chemical Engineering Journal, 2021, 410, 128288.	6.6	85
75	Structural Insight in the Interfacial Effect in Ferroelectric Polymer Nanocomposites. Advanced Materials, 2020, 32, e2005431.	11.1	84
76	Structural Dependence of Phase Transition and Dielectric Relaxation in Ferroelectric Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 10411-10416.	1.2	83
77	Synthesis and Characterization of Self-Assembled Sulfonated Poly(styrene-b-vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2007, 19, 5937-5945.	3.2	81
78	Enhanced energy storage performance of ferroelectric polymer nanocomposites at relatively low electric fields induced by surface modified BaTiO3 nanofibers. Composites Science and Technology, 2018, 164, 214-221.	3.8	80
79	Enabling Highâ€Energyâ€Density Highâ€Efficiency Ferroelectric Polymer Nanocomposites with Rationally Designed Nanofillers. Advanced Functional Materials, 2021, 31, .	7.8	80
80	Electrical Storage in Poly(vinylidene fluoride) based Ferroelectric Polymers: Correlating Polymer Structure to Electrical Breakdown Strength. Chemistry of Materials, 2008, 20, 2078-2080.	3.2	79
81	Suppression of energy dissipation and enhancement of breakdown strength in ferroelectric polymerâ€“graphene percolative composites. Journal of Materials Chemistry C, 2013, 1, 7034.	2.7	78
82	Effect of molecular weight on the dielectric breakdown strength of ferroelectric poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	1.5	73
83	Multiferroic Polymer Composites with Greatly Enhanced Magnetoelectric Effect under a Low Magnetic Bias. Advanced Materials, 2011, 23, 3853-3858.	11.1	72
84	Synergetic enhancement of mechanical and electrical strength in epoxy/silica nanocomposites via chemically-bonded interface. Composites Science and Technology, 2018, 167, 539-546.	3.8	70
85	Conjugated Polymers Containing Mixed-Ligand Ruthenium(II) Complexes. Synthesis, Characterization, and Investigation of Photoconductive Properties. Journal of the American Chemical Society, 2000, 122, 11806-11811.	6.6	69
86	Selfâ€Healable Polymer Nanocomposites Capable of Simultaneously Recovering Multiple Functionalities. Advanced Functional Materials, 2016, 26, 3524-3531.	7.8	69
87	Multiferroic polymer composites with greatly enhanced magnetoelectric effect under a low magnetic bias. Advanced Materials, 2011, 23, 3853-8.	11.1	69
88	Ferroelectric Polymers Exhibiting Negative Longitudinal Piezoelectric Coefficient: Progress and Prospects. Advanced Science, 2020, 7, 1902468.	5.6	66
89	Ternary PVDF-based terpolymer nanocomposites with enhanced energy density and high power density. Composites Part A: Applied Science and Manufacturing, 2018, 109, 597-603.	3.8	64
90	Autonomous Self-Healing of Electrical Degradation in Dielectric Polymers Using In Situ Electroluminescence. Matter, 2020, 2, 451-463.	5.0	63

#	Article	IF	Citations
91	Progress in lead-free piezoelectric nanofiller materials and related composite nanogenerator devices. Nanoscale Advances, 2020, 2, 3131-3149.	2.2	62
92	Significantly enhancing the discharge efficiency of sandwich-structured polymer dielectrics at elevated temperature by building carrier blocking interface. Nano Energy, 2022, 97, 107215.	8.2	62
93	Multiferroic Polymer Laminate Composites Exhibiting High Magnetoelectric Response Induced by Hydrogenâ€Bonding Interactions. Advanced Functional Materials, 2014, 24, 1067-1073.	7.8	61
94	Organicâ€“inorganic hybrid electrolytes from ionic liquid-functionalized octasilsesquioxane for lithium metal batteries. Journal of Materials Chemistry A, 2017, 5, 18012-18019.	5.2	60
95	Recent progress in polymer dielectrics containing boron nitride nanosheets for high energy density capacitors. High Voltage, 2020, 5, 365-376.	2.7	60
96	TiO2-decorated graphenes as efficient photoswitches with high oxygen sensitivity. Chemical Science, 2011, 2, 1860.	3.7	59
97	A microcube-based hybrid piezocomposite as a flexible energy generator. RSC Advances, 2017, 7, 32502-32507.	1.7	59
98	Nanoconfinementâ€Induced Giant Electrocaloric Effect in Ferroelectric Polymer Nanowire Array Integrated with Aluminum Oxide Membrane to Exhibit Record Cooling Power Density. Advanced Materials, 2019, 31, e1806642.	11.1	56
99	Acid-Functionalized Polysilsesquioxaneâ^'Nafion Composite Membranes with High Proton Conductivity and Enhanced Selectivity. ACS Applied Materials & Interfaces, 2009, 1, 2573-2579.	4.0	55
100	Sandwich structured poly(vinylidene fluoride)/polyacrylate elastomers with significantly enhanced electric displacement and energy density. Journal of Materials Chemistry A, 2018, 6, 24367-24377.	5.2	54
101	Significantly enhancing the dielectric constant and breakdown strength of linear dielectric polymers by utilizing ultralow loadings of nanofillers. Journal of Materials Chemistry A, 2021, 9, 23028-23036.	5.2	54
102	Development of fully functionalized photorefractive polymers. Macromolecular Rapid Communications, 2000, 21, 723-745.	2.0	51
103	Achieving high electric energy storage in a polymer nanocomposite at low filling ratios using a highly polarizable phthalocyanine interphase. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1669-1680.	2.4	51
104	Large enhancement of the electrocaloric effect in PLZT ceramics prepared by hot-pressing. APL Materials, 2016, 4, .	2.2	51
105	Flexible Ionic Diodes for Lowâ€Frequency Mechanical Energy Harvesting. Advanced Energy Materials, 2017, 7, 1601983.	10.2	51
106	Partially reduced Sn/SnO2 porous hollow fiber: A highly selective, efficient and robust electrocatalyst towards carbon dioxide reduction. Electrochimica Acta, 2018, 285, 70-77.	2.6	51
107	Highly Conductive Aromatic Ionomers with Perfluorosulfonic Acid Side Chains for Elevated Temperature Fuel Cells. Macromolecules, 2011, 44, 4605-4609.	2.2	50
108	Synthesis and Unusual Physical Behavior of a Photorefractive Polymer Containing Tris(bipyridyl)ruthenium(II) Complexes as a Photosensitizer and Exhibiting a Low Glass-Transition Temperature. Journal of the American Chemical Society, 1998, 120, 12860-12868.	6.6	49

#	Article	IF	Citations
109	Harvesting Energy from Human Activity: Ferroelectric Energy Harvesters for Portable, Implantable, and Biomedical Electronics. Energy Technology, 2018, 6, 791-812.	1.8	49
110	Hydrogel Ionic Diodes toward Harvesting Ultralowâ€Frequency Mechanical Energy. Advanced Materials, 2021, 33, e2103056.	11.1	48
111	High Energy Density and Breakdown Strength from Î² and Î³ Phases in Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 66 6, 18981-18988.	4.0	47
112	Self-Powered Rewritable Electrochromic Display based on WO_{3-x} Film with Mechanochemically Synthesized MoO_{3â€“y} Nanosheets. ACS Applied Materials & Interfaces, 2021, 13, 20326-20335.	4.0	46
113	Enhancing high-temperature capacitor performance of polymer nanocomposites by adjusting the energy level structure in the micro-/meso-scopic interface region. Nano Energy, 2022, 99, 107314.	8.2	45
114	Enhanced Permittivity and Energy Density in Neat Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (fluoride-trifluoroethyler Morphology. ACS Applied Materials & Interfaces, 2014, 6, 9584-9589.	4.0	43
115	Superior electrostrictive strain achieved under low electric fields in relaxor ferroelectric polymers. Journal of Materials Chemistry A, 2019, 7, 5201-5208.	5.2	43
116	Significantly improved breakdown strength and energy density of tri-layered polymer nanocomposites with optimized graphene oxide. Composites Science and Technology, 2020, 186, 107912.	3.8	43
117	Ultrahigh charge-discharge efficiency and enhanced energy density of the sandwiched polymer nanocomposites with poly(methyl methacrylate) layer. Composites Science and Technology, 2021, 202, 108591.	3.8	43
118	Ferroelectric Polymer Nanocomposites with Complementary Nanostructured Fillers for Electrocaloric Cooling with High Power Density and Great Efficiency. ACS Applied Energy Materials, 2018, 1, 1344-1354.	2.5	42
119	Injectable self-crosslinking HA-SH/Col I blend hydrogels for in vitro construction of engineered cartilage. Carbohydrate Polymers, 2018, 190, 57-66.	5.1	42
120	Enhanced pyroelectric properties of porous Ba0.67Sr0.33TiO3 ceramics fabricated with carbon nanotubes. Journal of Alloys and Compounds, 2015, 636, 93-96.	2.8	41
121	High breakdown strength and low loss binary polymer blends of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (Advanced Technologies, 2018, 29, 1271-1277.	1.6	39
122	SnSe₂ Nanorods on Carbon Cloth as a Highly Selective, Active, and Flexible Electrocatalyst for Electrochemical Reduction of CO₂ into Formate. ACS Applied Energy Materials, 2019, 2, 7655-7662.	2.5	39
123	Largely enhanced energy storage performance of sandwich-structured polymer nanocomposites with synergistic inorganic nanowires. Ceramics International, 2019, 45, 8216-8221.	2.3	39
124	Controlling Chain Conformations of Highâ€k Fluoropolymer Dielectrics to Enhance Charge Mobilities in Rubrene Singleâ€Crystal Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 10095-10102.	11.1	38
125	Size effects of electrocaloric cooling in ferroelectric nanowires. Journal of the American Ceramic Society, 2018, 101, 1566-1575.	1.9	38
126	Synthesis and Structure/Property Correlation of Fully Functionalized Photorefractive Polymers. Macromolecules, 2002, 35, 4636-4645.	2.2	37

#	Article	IF	Citations
127	Doping dependence of electrical and thermal conductivity of nanoscale polyaniline thin films. Journal Physics D: Applied Physics, 2010, 43, 205302.	1.3	37
128	Synthesis and characterization of compartmented Ca-alginate/silica self-healing fibers containing bituminous rejuvenator. Construction and Building Materials, 2018, 190, 623-631.	3.2	37
129	Microfluidic synthesis of polymeric fibers containing rejuvenating agent for asphalt self-healing. Construction and Building Materials, 2019, 219, 176-183.	3.2	37
130	High efficiency and selectivity from synergy: Bi nanoparticles embedded in nitrogen doped porous carbon for electrochemical reduction of CO2 to formate. Electrochimica Acta, 2020, 334, 135563.	2.6	37
131	Self-healing capability of asphalt mixture containing polymeric composite fibers under acid and saline-alkali water solutions. Journal of Cleaner Production, 2020, 268, 122387.	4.6	37
132	Synthesis of Telechelic Fluoropolymers with Well-Defined Functional End Groups for Cross-Linked Networks and Nanocomposites. Macromolecules, 2007, 40, 4121-4123.	2.2	36
133	Self-Assembly and Optical Property of Triblock Copolymers Made of Polystyrene and Oligo(p-phenyleneethynylene) in Different Mixtures of Toluene and Hexane. Macromolecules, 2007, 40, 6692-6698.	2.2	35
134	Effect of crystal structure on polarization reversal and energy storage of ferroelectric poly(vinylidene fluoride-co-chlorotrifluoroethylene) thin films. Polymer, 2012, 53, 1277-1281.	1.8	35
135	Multilayer Assembly and Patterning of Poly(p-phenylenevinylene)s via Covalent Coupling Reactions. Langmuir, 2004, 20, 9600-9606.	1.6	34
136	Synthesis and Solution Aggregation of Polystyreneâ^'Oligo(p-phenyleneethynylene)â^'Polystyrene Triblock Copolymer. Macromolecules, 2004, 37, 1172-1174.	2.2	34
137	Towards multicaloric effect with ferroelectrics. Physical Review B, 2016, 94, .	1.1	33
138	Molecular Rectification in Conjugated Block Copolymer Photovoltaics. Journal of Physical Chemistry C, 2016, 120, 6978-6988.	1.5	32
139	A multifunctional smart window: detecting ultraviolet radiation and regulating the spectrum automatically. Journal of Materials Chemistry C, 2019, 7, 10446-10453.	2.7	32
140	Bilayer-Structured Polymer Nanocomposites Exhibiting High Breakdown Strength and Energy Density via Interfacial Barrier Design. ACS Applied Energy Materials, 2020, 3, 8055-8063.	2.5	32
141	Improper molecular ferroelectrics with simultaneous ultrahigh pyroelectricity and figures of merit. Science Advances, 2021, 7, .	4.7	32
142	Synthesis of Dumbbell-Shaped Triblock Structures Containing Ferroelectric Polymers and Oligoanilines with High Dielectric Constants. Macromolecules, 2008, 41, 6265-6268.	2.2	31
143	In-plane thermal conductivity of nanoscale polyaniline thin films. Applied Physics Letters, 2009, 95, .	1.5	31
144	Flexible thiophene polymers: a concerted macromolecular architecture for dielectrics. Polymer Chemistry, 2016, 7, 2929-2933.	1.9	31

#	Article	IF	Citations
145	Towards electrocaloric heat pumpâ€"A relaxor ferroelectric polymer exhibiting large electrocaloric response at low electric field. Applied Physics Letters, 2018, 113, .	1.5	31
146	Enhanced electrocaloric effect in lead-free organic and inorganic relaxor ferroelectric composites near room temperature. Applied Physics Letters, 2018, 112, .	1.5	31
147	High electrocaloric effect in hotâ€pressed Pb_{0.85}La_{0.1}(Zr_{0.65}Ti_{0.35})O₃ ceramics with a wide operating temperature range. Journal of the American Ceramic Society, 2017, 100, 4581-4589.	1.9	30
148	Microfluidic Synthesis of Ca-Alginate Microcapsules for Self-Healing of Bituminous Binder. Materials, 2018, 11, 630.	1.3	30
149	Insights into Ni-Fe couple in perovskite electrocatalysts for highly efficient electrochemical oxygen evolution. Electrochimica Acta, 2019, 293, 240-246.	2.6	30
150	High Capacity Lithium Ion Battery Anodes Using Sn Nanowires Encapsulated Al₂O₃ Tubes in Carbon Matrix. Advanced Materials Interfaces, 2016, 3, 1500491.	1.9	29
151	Biocompatible and Flexible Hydrogel Diodeâ€Based Mechanical Energy Harvesting. Advanced Materials Technologies, 2017, 2, 1700118.	3.0	29
152	Synergistic Enhancement of Thermal Conductivity and Dielectric Properties in Al2O3/BaTiO3/PP Composites. Materials, 2018, 11, 1536.	1.3	29
153	Molecular Ferroelectricâ€Based Flexible Sensors Exhibiting Supersensitivity and Multimodal Capability for Detection. Advanced Materials, 2021, 33, e2104107.	11.1	29
154	Synthesis of triblock copolymers composed of poly(vinylidene fluoride-co-hexafluoropropylene) and ionic liquid segments. Journal of Materials Chemistry, 2012, 22, 341-344.	6.7	28
155	Ferroelectric Poly(vinylidene fluorideâ€trifluoroethyleneâ€chlorotrifluoroethylene)s: Effect of Molecular Weight on Dielectric Property. Macromolecular Symposia, 2009, 279, 52-58.	0.4	27
156	In situ exsolved Co nanoparticles coupled on LiCoO₂ nanofibers to induce oxygen electrocatalysis for rechargeable Znâ€"air batteries. Journal of Materials Chemistry A, 2020, 8, 19946-19953.	5.2	27
157	Synthesis of poly(vinylidene fluoride-co-bromotrifluoroethylene) and effects of molecular defects on microstructure and dielectric properties. Polymer Chemistry, 2014, 5, 5957-5966.	1.9	26
158	Free volume dependence of dielectric behaviour in sandwich-structured high dielectric performances of poly(vinylidene fluoride) composite films. Nanoscale, 2021, 13, 300-310.	2.8	26
159	Relaxor Ferroelectric Polymers: Insight into High Electrical Energy Storage Properties from a Molecular Perspective. Small Science, 2021, 1, 2000061.	5.8	26
160	Photovoltaic Performance of Block Copolymer Devices Is Independent of the Crystalline Texture in the Active Layer. Macromolecules, 2016, 49, 4599-4608.	2.2	25
161	Effect of preparation process on properties of PLZT (9/65/35) transparent ceramics. Journal of Alloys and Compounds, 2017, 723, 602-610.	2.8	25
162	Integrated Ultrafine Co_{0.85}Se in Carbon Nanofibers: An Efficient and Robust Bifunctional Catalyst for Oxygen Electrocatalysis. Chemistry - A European Journal, 2020, 26, 4063-4069.	1.7	25

#	Article	IF	Citations
163	A Multifunctional Photorefractive Material Showing High Optical Gain and Diffraction Efficiency. Advanced Materials, 1998, 10, 927-931.	11.1	24
164	Multiple self-assembled nanostructures from an oligo(p-phenyleneethynylene) containing rodâ€“coilâ€“rod triblock copolymer. Chemical Communications, 2005, , 4786.	2.2	24
165	Crystal phase transition dependence of the energy storage performance of poly(vinylidene fluoride) and poly(vinylidene fluorideâ€hexafluoropropene) copolymers. Journal of Applied Polymer Science, 2018, 135, 46306.	1.3	24
166	Ruthenium-Catalyzed Knoevenagel Condensation:Â A New Route toward Cyano-Substituted Poly(p-phenylenevinylene)s. Macromolecules, 2004, 37, 7061-7063.	2.2	23
167	Vibrational Sum Frequency Generation (SFG) Analysis of Ferroelectric Response of PVDF-Based Copolymer and Terpolymer. Macromolecules, 2017, 50, 2838-2844.	2.2	23
168	Synthesis and Effect of Encapsulating Rejuvenator Fiber on the Performance of Asphalt Mixture. Materials, 2019, 12, 1266.	1.3	23
169	High energy storage density of tetragonal PBLZST antiferroelectric ceramics with enhanced dielectric breakdown strength. Ceramics International, 2020, 46, 3921-3926.	2.3	23
170	Flexoelectric-boosted piezoelectricity of BaTiO3@SrTiO3 core-shell nanostructure determined by multiscale simulations for flexible energy harvesters. Nano Energy, 2021, 89, 106469.	8.2	23
171	Micropatterning of Conducting Polymer Thin Films on Reactive Self-assembled Monolayers. Chemistry of Materials, 2003, 15, 2699-2701.	3.2	22
172	Lead-free Ba(1-x)SrxTiO3 ceramics for room-temperature pyroelectric energy conversion. Ceramics International, 2018, 44, 8270-8276.	2.3	21
173	Synthesis and properties of microwave and crack responsive fibers encapsulating rejuvenator for bitumen self-healing. Materials Research Express, 2019, 6, 085306.	0.8	21
174	Bionic composite hydrogel with a hybrid covalent/noncovalent network promoting phenotypic maintenance of hyaline cartilage. Journal of Materials Chemistry B, 2020, 8, 4402-4411.	2.9	21
175	Enhanced electrocaloric effect and energy-storage performance in PBLZT films with various Ba2+ content. Ceramics International, 2016, 42, 16439-16447.	2.3	20
176	High-performance insulation materials from poly(ether imide)/boron nitride nanosheets with enhanced DC breakdown strength and thermal stability. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 722-729.	1.8	20
177	Experimental and numerical study on formation of interface separation and interfacial dielectric strength of GIL insulator. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 1738-1746.	1.8	20
178	Tuning the synthesis of fully conjugated block copolymers to minimize architectural heterogeneity. Journal of Materials Chemistry A, 2017, 5, 20412-20421.	5.2	19
179	Composition-Dependent Dielectric Properties of Poly(vinylidene fluoride-trifluoroethylene)s Near the Morphotropic Phase Boundary. Macromolecules, 2019, 52, 6741-6747.	2.2	19
180	Dumbbell-Shaped Octasilsesquioxanes Functionalized with Ionic Liquids as Hybrid Electrolytes for Lithium Metal Batteries. Chemistry of Materials, 2017, 29, 9275-9283.	3.2	18

#	Article	IF	Citations
181	Large energy density in Ba doped Pb0.97La0.02(Zr0.65Sn0.3Ti0.05)O3 antiferroelectric ceramics with improved temperature stability. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 744-748.	1.8	17
182	Polarized Soft X-ray Scattering Reveals Chain Orientation within Nanoscale Polymer Domains. Macromolecules, 2019, 52, 2803-2813.	2.2	17
183	Conjugated Block Copolymers as Model Systems to Examine Mechanisms of Charge Generation in Donorâ€“Acceptor Materials. Advanced Functional Materials, 2019, 29, 1804858.	7.8	17
184	Fluorous effect-induced emission of azido substituted poly(vinylidene fluoride) with high photostability and film formation. Polymer Chemistry, 2020, 11, 1307-1313.	1.9	17
185	Highly stretchable and mechanically tunable antennas based on three-dimensional liquid metal network. Materials Letters, 2020, 270, 127727.	1.3	17
186	Optimal design of high temperature metalized thin-film polymer capacitors: A combined numerical and experimental method. Journal of Power Sources, 2017, 357, 149-157.	4.0	16
187	Insights into the Morphotropic Phase Boundary in Ferroelectric Polymers from the Molecular Perspective. Journal of Physical Chemistry C, 2019, 123, 8727-8730.	1.5	16
188	Ferroelectric Polymer Nanofibers Reminiscent of Morphotropic Phase Boundary Behavior for Improved Piezoelectric Energy Harvesting. Small, 2022, 18, e2104472.	5.2	16
189	Length-scale effects on electrical and thermal transport in polyaniline thin films. Organic Electronics, 2010, 11, 29-35.	1.4	15
190	Oligothiophene-containing polymer brushes by ROMP and RAFT: Synthesis, characterization and dielectric properties. Polymer, 2015, 72, 428-435.	1.8	15
191	Random Copolymers Allow Control of Crystallization and Microphase Separation in Fully Conjugated Block Copolymers. Macromolecules, 2018, 51, 8844-8852.	2.2	15
192	Nickelâ€Based Bicarbonates as Bifunctional Catalysts for Oxygen Evolution and Reduction Reaction in Alkaline Media. Chemistry - A European Journal, 2018, 24, 17665-17671.	1.7	15
193	Highly selective proton conductive networks based on chain-end functionalized polymers with perfluorosulfonate side groups. Journal of Materials Chemistry, 2010, 20, 6291.	6.7	14
194	Synthesis and magnetoelectric properties of multiferroic composites of lead lanthanum zirconate titanate and mesoporous cobalt ferrite. Scripta Materialia, 2017, 136, 29-32.	2.6	14
195	High cyclic stability of electrocaloric effect in relaxor poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (fluoride-tri transition. Journal of Applied Physics, 2019, 126, .	1.1	14
196	Recent progress on dielectric polymers and composites for capacitive energy storage. , 2022, 1, 50-71.		14
197	Synthesis of multiwalled carbon nanotube/fluorineâ€containing poly(pâ€phenylene benzoxazole) composites exhibiting greatly enhanced dielectric constants. Journal of Polymer Science Part A, 2012, 50, 4732-4739.	2.5	13
198	Modular synthesis and dielectric properties of high-performance fluorinated poly(arylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (e	1.9	13

#	Article	IF	Citations
199	Time and poling history dependent energy storage and discharge behaviors in poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.0	12
200	Ordered porous structure of nitrogen-self-doped carbon supporting Co₃O₄nanoparticles as anode for improving cycle stability in lithium-ion batteries. Journal of Materials Research, 2018, 33, 1226-1235.	1.2	12
201	Revealing the Importance of Energetic and Entropic Contributions to the Driving Force for Charge Photogeneration. ACS Applied Materials & Interfaces, 2018, 10, 39933-39941.	4.0	12
202	Co 3+ â€Rich Na 1.95 CoP 2 O 7 Phosphates as Efficient Bifunctional Catalysts for Oxygen Evolution and Reduction Reactions in Alkaline Solution. Chemistry - A European Journal, 2019, 25, 11007-11014.	1.7	12
203	Observation of a Negative Thermal Hysteresis in Relaxor Ferroelectric Polymers. Advanced Functional Materials, 2020, 30, 2000648.	7.8	12
204	Electrical properties of Bi(Ni1/2Ti1/2)O3â€“PbTiO3 high-T piezoelectric ceramics fabricated by the microwave sintering process. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 179, 36-40.	1.7	11
205	Co₃O₄/C/graphene nanocomposites as novel anode materials for high capacity lithium ion batteries. RSC Advances, 2015, 5, 73677-73683.	1.7	11
206	Ion Pair Integrated Organicâ€Inorganic Hybrid Electrolyte Network for Solidâ€State Lithium Ion Batteries. Energy Technology, 2018, 6, 2319-2325.	1.8	11
207	Widely tunable reflection-type Fabry-Perot interferometer based on relaxor ferroelectric poly(vinylidenefluoride-chlorotrifluoroethylene-trifluoroethylene). Optics Express, 2008, 16, 9595.	1.7	10
208	Synthesis of Proton Conductive Polymers with High Electrochemical Selectivity. Macromolecules, 2010, 43, 1692-1694.	2.2	10
209	The effect of the Zn/Sn ratio on the formation of single phase kesterite Cu 2 ZnSnS 4 solar cell material. Ceramics International, 2017, 43, 8103-8108.	2.3	10
210	Highly stretchable liquid-metal based strain sensor with high sensitivity for human activity monitoring. Materials Letters, 2022, 308, 131277.	1.3	10
211	Perspective on scalable high-energy-density polymer dielectrics with ultralow loadings of inorganic nanofillers. Applied Physics Letters, 2022, 120, .	1.5	9
212	Protonâ€conductive polymer nanocomposite membranes prepared from telechelic fluorinated polymers containing perfluorosulfonic acid side chains. Journal of Polymer Science Part A, 2010, 48, 4800-4810.	2.5	8
213	Effects of film processing conditions on electric energy storage for pulsed power applications. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 1293-1300.	1.8	8
214	Tuning the electrocaloric reversibility in ferroelectric copolymers by a blend approach. Europhysics Letters, 2019, 125, 57001.	0.7	8
215	Microstructures, mechanical properties and compressive creep behaviors of as-cast Mg-5%Sn-(0â€“1.0)%Pb alloys. Journal of Central South University, 2011, 18, 290-295.	1.2	7
216	Copper nanowires/cellulose biodegradable flexible transparent conductor with improved thermal stability and its application. Organic Electronics, 2018, 63, 392-397.	1.4	7

#	Article	IF	Citations
217	Na incorporation controlled single phase kesterite Cu2ZnSnS4 solar cell material. Materials Letters, 2020, 265, 127355.	1.3	7
218	Scalable graphene fluoride sandwiched aramid nanofiber paper with superior high-temperature capacitive energy storage. Chemical Engineering Journal, 2022, 444, 136504.	6.6	7
219	Effect of a local electric field on photogeneration efficiency in a photorefractive polymer. Applied Physics Letters, 1998, 73, 2546-2548.	1.5	6
220	Nanosheets-based ZnOâ€“NiO microspheres for lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2015, 26, 5279-5286.	1.1	6
221	Large Quadratic Electro-Optic Effect of the PLZT Thin Films for Optical Communication Integrated Devices. ACS Photonics, 2020, 7, 3166-3176.	3.2	6
222	Ag-modified carbon fiber as a stable sensor. Composites Part A: Applied Science and Manufacturing, 2020, 137, 106034.	3.8	6
223	Dielectric materials for electrical energy storage. Journal of Materiomics, 2022, 8, 1287-1289.	2.8	6
224	Ferroelectric Polymer Based Nanocomposites for Electrical Energy Storage. ACS Symposium Series, 2010, , 37-52.	0.5	5
225	Giant electrocaloric effect of free-standing Pb0.85La0.1(Zr0.65Ti0.35)O3 thick films fabricated by the self-lift-off screen printing method. Ceramics International, 2018, 44, 193-200.	2.3	5
226	Pushâ€“pull architecture eliminates chain length effects on exciton dissociation. Journal of Materials Chemistry A, 2018, 6, 22758-22767.	5.2	5
227	Enhanced Energy Storage Properties of Polyetherimide Film Capacitors Filled with Boron Nitride Nanosheets. , 2019, , .		5
228	Composition Dependence of Microstructures and Ferroelectric Properties in Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 T Macromolecules, 2020, 53, 3139-3147.	2.2	5
229	Enhanced Piezoelectricity in Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (fluoride-co-trifluoroethylene- Mixed Ferroelectric Phases. Macromolecules, 2022, 55, 2703-2713.	2.2	5
230	Nanomaterials: Polymers Containing Highly Polarizable Conjugated Side Chains as Highâ€Performance Allâ€Organic Nanodielectric Materials (Adv. Funct. Mater. 45/2013). Advanced Functional Materials, 2013, 23, 5570-5570.	7.8	3
231	Low Youngâ€™s moduli inducedDâ€“Eloop dispersion and its effect on the energy discharging performance of PVDF and P(VDF-co-HFP) films. AIP Advances, 2018, 8, 035211.	0.6	3
232	Modified carbon fiber electrodes with enhanced impedance performance for marine sensor. Journal of the Taiwan Institute of Chemical Engineers, 2020, 109, 137-144.	2.7	3
233	Lanthanum modified lead zirconate titanate thin films by sol-gel and plasma annealing for integrated passive nanophotonic devices. Optical Materials Express, 2019, 9, 2279.	1.6	3
234	PICOSECOND OPTICAL LIMITING PERFORMANCE OF A NOVEL PPV-ZnPc CONJUGATED POLYMER. Journal of Nonlinear Optical Physics and Materials, 2000, 09, 289-296.	1.1	2

#	Article	IF	Citations
235	Flexible Transparent Conductive Au/Polythiophene/Cellulose Sheet. Nanoscience and Nanotechnology Letters, 2018, 10, 108-111.	0.4	2
236	Research on Electrical Properties of Surface-Modified Nano-SiO2/Epoxy Composites. , 2020, , .		2
237	Novel Photorefractive Materials Based on Multifunctional Organic Glasses. ACS Symposium Series, 1999, , 226-236.	0.5	1
238	Mobility Improvement of Solâ€“Gel Method Processed Transparent SnSx Thin Films by Na Doping. Journal of Nanoscience and Nanotechnology, 2020, 20, 5102-5106.	0.9	1
239	Ferroelectric Polymer Nanofibers Reminiscent of Morphotropic Phase Boundary Behavior for Improved Piezoelectric Energy Harvesting (Small 15/2022). Small, 2022, 18, .	5.2	1
240	Progress in Fully Functionalized Photorefractive Materials. Materials Research Society Symposia Proceedings, 1999, 597, 203.	0.1	0
241	Ferroelectric Polymers with Chemically Tunable Dielectric Constants. Materials Research Society Symposia Proceedings, 2006, 949, 1.	0.1	0
242	Water Uptake Characteristics and Backbone Flexibility of Novel Polymers for Proton Exchange Membranes. ECS Meeting Abstracts, 2008, , .	0.0	0
243	Electrochemical Treatment of Reverse Osmosis Concentrate of Oil Refining Wastewater by Mn-Sn-Ce/gamma-Al2O3 Particle Electrode. , 2012, , .		0
244	Polymer Nanocomposites for Power Energy Storage. , 2016, , 139-163.		0
245	Polymer Nanocomposite Capacitors with Largely Reduced Conduction Loss Utilizing Wide-Bandgap Inorganic Nanofillers. , 2020, , .		0
246	Ferroelectric polymer composites for capacitive energy storage. , 2022, , 477-502.		0
247	Ferroelectric polymers for energy harvesting. , 2022, , 503-533.		0
248	Response to Comment on â€œImproper molecular ferroelectrics with simultaneous ultrahigh pyroelectricity and figures of meritâ€• Science Advances, 2022, 8, .	4.7	0