

# Xingyi Huang

## List of Publications by Citations

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154  
papers

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63  
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108  
g-index

176  
ext. papers

14,396  
ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
154	Core-shell structured high-k polymer nanocomposites for energy storage and dielectric applications. <i>Advanced Materials</i> , <b>2015</b> , 27, 546-54	24	591
153	. <i>IEEE Electrical Insulation Magazine</i> , <b>2011</b> , 27, 8-16	2.1	431
152	Polyhedral Oligosilsesquioxane-Modified Boron Nitride Nanotube Based Epoxy Nanocomposites: An Ideal Dielectric Material with High Thermal Conductivity. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 1824-1831	15.6	420
151	Cellulose Nanofiber Supported 3D Interconnected BN Nanosheets for Epoxy Nanocomposites with Ultrahigh Thermal Management Capability. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604754	15.6	394
150	Interfacial modification of boron nitride nanoplatelets for epoxy composites with improved thermal properties. <i>Polymer</i> , <b>2012</b> , 53, 471-480	3.9	349
149	Role of Interface on the Thermal Conductivity of Highly Filled Dielectric Epoxy/AlN Composites. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 13629-13639	3.8	333
148	Mechanically flexible and multifunctional polymer-based graphene foams for elastic conductors and oil-water separators. <i>Advanced Materials</i> , <b>2013</b> , 25, 5658-62	24	307
147	Core-shell structured poly(methyl methacrylate)/BaTiO <sub>3</sub> nanocomposites prepared by in situ atom transfer radical polymerization: a route to high dielectric constant materials with the inherent low loss of the base polymer. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 5897		307
146	Large dielectric constant and high thermal conductivity in poly(vinylidene fluoride)/barium titanate/silicon carbide three-phase nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 4396-403	9.5	302
145	Highly Thermally Conductive Yet Electrically Insulating Polymer/Boron Nitride Nanosheets Nanocomposite Films for Improved Thermal Management Capability. <i>ACS Nano</i> , <b>2019</b> , 13, 337-345	16.7	293
144	Fluoro-Polymer@BaTiO <sub>3</sub> Hybrid Nanoparticles Prepared via RAFT Polymerization: Toward Ferroelectric Polymer Nanocomposites with High Dielectric Constant and Low Dielectric Loss for Energy Storage Application. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 2327-2338	9.6	272
143	High-k polymer nanocomposites with 1D filler for dielectric and energy storage applications. <i>Progress in Materials Science</i> , <b>2019</b> , 100, 187-225	42.2	251
142	Hyperbranched-polymer functionalization of graphene sheets for enhanced mechanical and dielectric properties of polyurethane composites. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 7010		217
141	Synergistic effect of graphene nanosheet and BaTiO <sub>3</sub> nanoparticles on performance enhancement of electrospun PVDF nanofiber mat for flexible piezoelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 52, 153-162	17.1	206
140	[email[protected]] Structured BaTiO <sub>3</sub> Polymer Nanocomposites with High Dielectric Constant and Low Dielectric Loss for Energy Storage Application. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 22525-22537	3.8	195
139	Vertically Aligned and Interconnected Boron Nitride Nanosheets for Advanced Flexible Nanocomposite Thermal Interface Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 30909-30917	9.5	186
138	Highly Conductive Nanocomposites with Three-Dimensional, Compactly Interconnected Graphene Networks via a Self-Assembly Process. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 506-513	15.6	180

137	Grafting to route to PVDF-HFP-GMA/BaTiO <sub>3</sub> nanocomposites with high dielectric constant and high thermal conductivity for energy storage and thermal management applications. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 5244	13	167
136	Fabrication of two-dimensional hybrid sheets by decorating insulating PANI on reduced graphene oxide for polymer nanocomposites with low dielectric loss and high dielectric constant. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23477		162
135	Tailoring Dielectric Properties and Energy Density of Ferroelectric Polymer Nanocomposites by High-k Nanowires. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 18017-27	9.5	157
134	Graphene oxide-encapsulated carbon nanotube hybrids for high dielectric performance nanocomposites with enhanced energy storage density. <i>Nanoscale</i> , <b>2013</b> , 5, 3847-55	7.7	157
133	Ferroelectric polymer/silver nanocomposites with high dielectric constant and high thermal conductivity. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 242901	3.4	154
132	Combining RAFT polymerization and thiol-ene click reaction for core-shell structured polymer@BaTiO <sub>3</sub> nanodielectrics with high dielectric constant, low dielectric loss, and high energy storage capability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 1812-22	9.5	145
131	Core-shell structured hyperbranched aromatic polyamide/BaTiO <sub>3</sub> hybrid filler for poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) nanocomposites with the dielectric constant comparable to that of percolative composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 1747-56	9.5	142
130	A high performance wearable strain sensor with advanced thermal management for motion monitoring. <i>Nature Communications</i> , <b>2020</b> , 11, 3530	17.4	141
129	Permittivity, thermal conductivity and thermal stability of poly(vinylidene fluoride)/graphene nanocomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2011</b> , 18, 478-484	2.3	139
128	Toward Effective Synergetic Effects from Graphene Nanoplatelets and Carbon Nanotubes on Thermal Conductivity of Ultrahigh Volume Fraction Nanocarbon Epoxy Composites. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 23812-23820	3.8	133
127	Core-satellite Ag@BaTiO <sub>3</sub> nanoassemblies for fabrication of polymer nanocomposites with high discharged energy density, high breakdown strength and low dielectric loss. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 17560-9	3.6	131
126	High Energy Density Polymer Dielectrics Interlayered by Assembled Boron Nitride Nanosheets. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901826	21.8	130
125	Energy storage in ferroelectric polymer nanocomposites filled with core-shell structured polymer@BaTiO <sub>3</sub> nanoparticles: understanding the role of polymer shells in the interfacial regions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 19644-54	9.5	127
124	Fluoro-polymer functionalized graphene for flexible ferroelectric polymer-based high-k nanocomposites with suppressed dielectric loss and low percolation threshold. <i>Nanoscale</i> , <b>2014</b> , 6, 14740-53	7.3	121
123	Cellulose/BaTiO <sub>3</sub> aerogel paper based flexible piezoelectric nanogenerators and the electric coupling with triboelectricity. <i>Nano Energy</i> , <b>2019</b> , 57, 450-458	17.1	121
122	Influence of aspect ratio of carbon nanotubes on crystalline phases and dielectric properties of poly(vinylidene fluoride). <i>European Polymer Journal</i> , <b>2009</b> , 45, 377-386	5.2	117
121	Bio-Inspired Fluoro-polydopamine Meets Barium Titanate Nanowires: A Perfect Combination to Enhance Energy Storage Capability of Polymer Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 7547-7555	9.5	114
120	Evaluation of polypropylene/polyolefin elastomer blends for potential recyclable HVDC cable insulation applications. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2015</b> , 22, 673-681	2.3	114

119	Electrical and thermophysical properties of epoxy/aluminum nitride nanocomposites: Effects of nanoparticle surface modification. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2010</b> , 41, 1201-1209	8.4	114
118	Morphology-controllable graphene/TiO <sub>2</sub> nanorod hybrid nanostructures for polymer composites with high dielectric performance. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 17729		114
117	Novel Three-Dimensional Zinc Oxide Superstructures for High Dielectric Constant Polymer Composites Capable of Withstanding High Electric Field. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 24887-24895	3.8	111
116	Core-shell structured polystyrene/BaTiO <sub>3</sub> hybrid nanodielectrics prepared by in situ RAFT polymerization: a route to high dielectric constant and low loss materials with weak frequency dependence. <i>Macromolecular Rapid Communications</i> , <b>2012</b> , 33, 1921-6	4.8	111
115	Strawberry-like Core/Shell Ag@Polydopamine@BaTiO <sub>3</sub> Hybrid Nanoparticles for High-k Polymer Nanocomposites with High Energy Density and Low Dielectric Loss. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500361	4.6	107
114	Preparation of hyperbranched aromatic polyamide grafted nanoparticles for thermal properties reinforcement of epoxy composites. <i>Polymer Chemistry</i> , <b>2011</b> , 2, 1380	4.9	106
113	Three-dimensional highly conductive graphene-silver nanowire hybrid foams for flexible and stretchable conductors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 21026-34	9.5	102
112	Wireless piezoelectric devices based on electrospun PVDF/BaTiO NW nanocomposite fibers for human motion monitoring. <i>Nanoscale</i> , <b>2018</b> , 10, 17751-17760	7.7	97
111	Electrical properties of polyethylene/aluminum nanocomposites. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 124103	2.5	93
110	Decorating TiO Nanowires with BaTiO Nanoparticles: A New Approach Leading to Substantially Enhanced Energy Storage Capability of High-k Polymer Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 4077-4085	9.5	91
109	Nanoparticle surface modification induced space charge suppression in linear low density polyethylene. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 242905	3.4	91
108	Temperature-dependent electrical property transition of graphene oxide paper. <i>Nanotechnology</i> , <b>2012</b> , 23, 455705	3.4	86
107	MoS <sub>2</sub> Nanosheet Superstructures Based Polymer Composites for High-Dielectric and Electrical Energy Storage Applications. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 10206-10214	3.8	86
106	Millefeuille-Inspired Thermally Conductive Polymer Nanocomposites with Overlapping BN Nanosheets for Thermal Management Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 31402-31410	9.5	83
105	Polymer-Based Gate Dielectrics for Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2212-2240	9.6	80
104	Thermal conductivity of graphene-based polymer nanocomposites. <i>Materials Science and Engineering Reports</i> , <b>2020</b> , 142, 100577	30.9	77
103	Multifunctional 3D-MXene/PDMS nanocomposites for electrical, thermal and triboelectric applications. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2020</b> , 130, 105754	8.4	76
102	Flexible and durable cellulose/MXene nanocomposite paper for efficient electromagnetic interference shielding. <i>Composites Science and Technology</i> , <b>2020</b> , 188, 107995	8.6	75

101	Hydrangea-like zinc oxide superstructures for ferroelectric polymer composites with high thermal conductivity and high dielectric constant. <i>Composites Science and Technology</i> , <b>2015</b> , 107, 67-74	8.6	73
100	Influence of functionalized MgO nanoparticles on electrical properties of polyethylene nanocomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2015</b> , 22, 1512-1519	2.3	71
99	Thermally conductive, electrically insulating and melt-processable polystyrene/boron nitride nanocomposites prepared by in situ reversible addition fragmentation chain transfer polymerization. <i>Nanotechnology</i> , <b>2015</b> , 26, 015705	3.4	71
98	Dielectric Modulated Cellulose Paper/PDMS-Based Triboelectric Nanogenerators for Wireless Transmission and Electropolymerization Applications. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1904536	15.6	71
97	Novel crosslinkable high-k copolymer dielectrics for high-energy-density capacitors and organic field-effect transistor applications. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 20737-20746	13	69
96	Increasing the Energy Efficiency and Breakdown Strength of High-Energy-Density Polymer Nanocomposites by Engineering the Ba <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> Nanowire Surface via Reversible Addition Fragmentation Chain Transfer Polymerization. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 25307-25318	3.8	68
95	Achieving large dielectric property improvement in polymer/carbon nanotube composites by engineering the nanotube surface via atom transfer radical polymerization. <i>Carbon</i> , <b>2015</b> , 95, 895-903	10.4	67
94	TiO <sub>2</sub> -nanorod decorated carbon nanotubes for high-permittivity and low-dielectric-loss polystyrene composites. <i>Composites Science and Technology</i> , <b>2012</b> , 72, 521-527	8.6	66
93	Effect of nanoparticle surface treatment on morphology, electrical and water treeing behavior of LLDPE composites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2010</b> , 17, 1697-1704	2.3	64
92	Electrical, thermophysical and micromechanical properties of ethylene-vinyl acetate elastomer composites with surface modified BaTiO <sub>3</sub> nanoparticles. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 245407	2.07	64
91	Core@Double-Shell Structured Nanocomposites: A Route to High Dielectric Constant and Low Loss Material. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 25496-507	9.5	59
90	Polypropylene based thermoplastic polymers for potential recyclable HVDC cable insulation applications. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2017</b> , 24, 1446-1456	2.3	55
89	Enhancing electrical energy storage capability of dielectric polymer nanocomposites via the room temperature Coulomb blockade effect of ultra-small platinum nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 5001-5011	3.6	54
88	Substantial enhancement of energy storage capability in polymer nanocomposites by encapsulation of BaTiO NWs with variable shell thickness. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 21058-21068	3.6	53
87	Morphology studies and ac electrical property of low density polyethylene/octavinyl polyhedral oligomeric silsesquioxane composite dielectrics. <i>European Polymer Journal</i> , <b>2009</b> , 45, 2172-2183	5.2	53
86	Influence of aluminum nanoparticle surface treatment on the electrical properties of polyethylene composites. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 014105	2.5	53
85	Two-Dimensional High-k Nanosheets for Dielectric Polymer Nanocomposites with Ultrahigh Discharged Energy Density. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 18282-18293	3.8	52
84	Interface induced performance enhancement in flexible BaTiO <sub>3</sub> /PVDF-TrFE based piezoelectric nanogenerators. <i>Nano Energy</i> , <b>2021</b> , 80, 105515	17.1	52

83	Bio-inspired polydopamine coating as a facile approach to constructing polymer nanocomposites for energy storage. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 3112-3120	7.1	50
82	Boron nitride nanosheets endow the traditional dielectric polymer composites with advanced thermal management capability. <i>Composites Science and Technology</i> , <b>2019</b> , 177, 88-95	8.6	48
81	Core-shell Structured [email-protected]3 Nanoparticles for Biopolymer Nanocomposites with Significantly Enhanced Dielectric Properties and Energy Storage Capability. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 27330-27339	3.8	47
80	Influence of BaTiO <sub>3</sub> Nanoparticles on Dielectric, Thermophysical and Mechanical Properties of Ethylene-Vinyl Acetate Elastomer/BaTiO <sub>3</sub> Microcomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2011</b> , 18, 375-383	2.3	47
79	Preparation, microstructure and properties of polyethylene aluminum nanocomposite dielectrics. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 2134-2140	8.6	47
78	Predicting the effective thermal conductivity of composites from cross sections images using deep learning methods. <i>Composites Science and Technology</i> , <b>2019</b> , 184, 107861	8.6	46
77	Role of interface in highly filled epoxy/BaTiO <sub>3</sub> nanocomposites. Part I-correlation between nanoparticle surface chemistry and nanocomposite dielectric property. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2014</b> , 21, 467-479	2.3	45
76	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2010</b> , 17, 635-643	2.3	45
75	Poly(vinylidene fluoride) terpolymer and poly(methyl methacrylate) composite films with superior energy storage performance for electrostatic capacitor application. <i>Composites Science and Technology</i> , <b>2019</b> , 179, 115-124	8.6	44
74	Grafted MXene/polymer electrolyte for high performance solid zinc batteries with enhanced shelf life at low/high temperatures. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3492-3501	35.4	44
73	Electrical properties of epoxy/POSS composites with homogeneous nanostructure. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2014</b> , 21, 1516-1528	2.3	42
72	Dielectric phenomena and electrical energy storage of poly(vinylidene fluoride) based high-k polymers. <i>Chinese Chemical Letters</i> , <b>2017</b> , 28, 2027-2035	8.1	41
71	Rational Design and Modification of High-k Bis(double-stranded) Block Copolymer for High Electrical Energy Storage Capability. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 1102-1112	9.6	40
70	Role of interface in highly filled epoxy/BaTiO <sub>3</sub> nanocomposites. Part II- effect of nanoparticle surface chemistry on processing, thermal expansion, energy storage and breakdown strength of the nanocomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2014</b> , 21, 480-487	2.3	40
69	Nondestructive functionalization of carbon nanotubes by combining mussel-inspired chemistry and RAFT polymerization: Towards high dielectric nanocomposites with improved thermal management capability. <i>Composites Science and Technology</i> , <b>2018</b> , 154, 154-164	8.6	37
68	Mussel-inspired Fluoro-Polydopamine Functionalization of Titanium Dioxide Nanowires for Polymer Nanocomposites with Significantly Enhanced Energy Storage Capability. <i>Scientific Reports</i> , <b>2017</b> , 7, 43074-9	4.9	36
67	Epoxy thermoset resins with high pristine thermal conductivity. <i>High Voltage</i> , <b>2017</b> , 2, 139-146	4.1	36
66	Polyethylene/aluminum nanocomposites: Improvement of dielectric strength by nanoparticle surface modification. <i>Journal of Applied Polymer Science</i> , <b>2009</b> , 113, 3577-3584	2.9	35



65	Nonisothermal crystallization behavior and nucleation of LDPE/Al nano- and microcomposites. <i>Polymer Engineering and Science</i> , <b>2007</b> , 47, 1052-1061	2.3	35
64	Poly(vinylidene fluoride) Nanocomposites with Simultaneous Organic Nanodomains and Inorganic Nanoparticles. <i>Macromolecules</i> , <b>2016</b> , 49, 1026-1035	5.5	32
63	Significantly enhancing the thermal oxidative stability while remaining the excellent electrical insulating property of low density polyethylene by addition of antioxidant functionalized graphene oxide. <i>Carbon</i> , <b>2016</b> , 106, 218-227	10.4	31
62	Recyclable Dielectric Polymer Nanocomposites with Voltage Stabilizer Interface: Toward New Generation of High Voltage Direct Current Cable Insulation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 513-525	8.3	31
61	Role of reduced graphene oxide in dielectric enhancement of ferroelectric polymers composites. <i>Applied Surface Science</i> , <b>2019</b> , 470, 348-359	6.7	30
60	Molecular structures of (3-aminopropyl)trialkoxysilane on hydroxylated barium titanate nanoparticle surfaces induced by different solvents and their effect on electrical properties of barium titanate based polymer nanocomposites. <i>Applied Surface Science</i> , <b>2016</b> , 364, 798-807	6.7	29
59	Investigation on water treeing behaviors of thermally aged XLPE cable insulation. <i>Polymer Degradation and Stability</i> , <b>2007</b> , 92, 537-544	4.7	28
58	Thermoplastic isotactic polypropylene/ethylene-octene polyolefin copolymer nanocomposite for recyclable HVDC cable insulation. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2017</b> , 24, 1416-1429	2.3	24
57	Nanostructured electrical insulating epoxy thermosets with high thermal conductivity, high thermal stability, high glass transition temperatures and excellent dielectric properties. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2015</b> , 22, 906-915	2.3	23
56	Atomic force microscopy analysis of morphology of low density polyethylene influenced by Al nano- and microparticles. <i>Journal of Applied Polymer Science</i> , <b>2008</b> , 107, 2494-2499	2.9	23
55	Wood annual ring structured elastomer composites with high thermal conduction enhancement efficiency. <i>Chemical Engineering Journal</i> , <b>2020</b> , 389, 123467	14.7	22
54	Rapid, high-efficient and scalable exfoliation of high-quality boron nitride nanosheets and their application in lithium-sulfur batteries. <i>Nano Research</i> , <b>2020</b> , 14, 2424	10	22
53	Ultrathin MXene-aramid nanofiber electromagnetic interference shielding films with tactile sensing ability withstanding harsh temperatures. <i>Nano Research</i> , <b>2021</b> , 14, 2837-2845	10	22
52	A stretchable laminated GNRs/BNNSs nanocomposite with high electrical and thermal conductivity. <i>Nanoscale</i> , <b>2019</b> , 11, 20648-20658	7.7	21
51	All-Organic Cross-Linked Polysiloxane-Aromatic Thiourea Dielectric Films for Electrical Energy Storage Application. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5198-5207	6.1	20
50	Correlation between rheological, electrical, and microstructure characteristics in polyethylene/aluminum nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2008</b> , 46, 2143-2154	2.6	17
49	. <i>IEEE Electrical Insulation Magazine</i> , <b>2020</b> , 36, 8-18	2.1	17
48	High-entropy polymer produces a giant electrocaloric effect at low fields.. <i>Nature</i> , <b>2021</b> , 600, 664-669	50.4	17

47	Wet-resilient graphene aerogel for thermal conductivity enhancement in polymer nanocomposites. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 83, 219-227	9.1	16
46	Chemical adsorption on 2D dielectric nanosheets for matrix free nanocomposites with ultrahigh electrical energy storage. <i>Science Bulletin</i> , <b>2021</b> ,	10.6	15
45	Tailoring the polarity of polymer shell on BaTiO <sub>3</sub> nanoparticle surface for improved energy storage performance of dielectric polymer nanocomposites. <i>Chinese Chemical Letters</i> , <b>2021</b> , 32, 2229-2232	8.1	14
44	Achieving ultrahigh thermal conductivity in Ag/MXene/epoxy nanocomposites via filler-filler interface engineering. <i>Composites Science and Technology</i> , <b>2021</b> , 213, 108953	8.6	13
43	Enhancing discharged energy density and suppressing dielectric loss of poly(vinylidene fluoride-ter-trifluoroethylene-ter-chlorofluoroethylene) by a sandwiched structure. <i>IET Nanodielectrics</i> , <b>2018</b> , 1, 127-131	2.8	12
42	Crystalline properties, dielectric response and thermal stability of in-situ reduced graphene oxide/poly(vinylidene fluoride) nanocomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2014</b> , 21, 1446-1454	2.3	11
41	A comparative study of effects of SEBS and EPDM on the water tree resistance of cross-linked polyethylene. <i>Polymer Degradation and Stability</i> , <b>2010</b> , 95, 1943-1949	4.7	11
40	Finite element analysis of electric field distribution in water treed XLPE cable insulation (1): The influence of geometrical configuration of water electrode for accelerated water treeing test. <i>Polymer Testing</i> , <b>2007</b> , 26, 482-488	4.5	11
39	Seeking advanced thermal management for stretchable electronics. <i>Npj Flexible Electronics</i> , <b>2021</b> , 5,	10.7	10
38	Is graphene oxide an insulating material? <b>2013</b> ,		9
37	Numerical analysis on water treeing deterioration of XLPE cable insulation using combination of FEM and Taguchi method. <i>European Transactions on Electrical Power</i> , <b>2010</b> , 20, 747-759		9
36	Effect of silane-grafting on water tree resistance of XLPE cable insulation. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 115, 3168-3176	2.9	9
35	Material progress toward recyclable insulation of power cables. Part 1: Polyethylene-based thermoplastic materials: Dedicated to the 80th birthday of professor Toshikatsu Tanaka. <i>IEEE Electrical Insulation Magazine</i> , <b>2019</b> , 35, 7-19	2.1	8
34	Protection of SEBS/PS blends against gamma radiation by aromatic compounds. <i>Journal of Applied Polymer Science</i> , <b>2009</b> , 112, 1076-1081	2.9	8
33	Spider Web-Inspired Graphene Skeleton-Based High Thermal Conductivity Phase Change Nanocomposites for Battery Thermal Management. <i>Nano-Micro Letters</i> , <b>2021</b> , 13, 180	19.5	8
32	Influence of silica nanoparticle surface treatments on the water treeing characteristics of low density polyethylene <b>2009</b> ,		7
31	Thermo-Optically Designed Scalable Photonic Films with High Thermal Conductivity for Subambient and Above-Ambient Radiative Cooling. <i>Advanced Functional Materials</i> , 2109542	15.6	7
30	Effects of high-dose gamma ray irradiation on the physicochemical properties and water-treeing deterioration of cross-linked polyethylene cable insulation. <i>IEEE Electrical Insulation Magazine</i> , <b>2011</b> , 27, 17-25	2.1	6



29	Highly conductive polymer nanocomposites for emerging high voltage power cable shields: experiment, simulation and applications. <i>High Voltage</i> , <b>2020</b> , 5, 387-396	4.1	6
28	Boron Nitride Based Poly(phenylene sulfide) Composites with Enhanced Thermal Conductivity and Breakdown Strength. <i>IEEE Transactions on Fundamentals and Materials</i> , <b>2013</b> , 133, 66-70	0.2	5
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11	Comparative investigation on dielectric property and thermal conductivity of in situ polymerized and solution mixed polymer nanocomposites <b>2013</b> ,		1
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