Xingyi Huang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6663727/publications.pdf

Version: 2024-02-01

171 papers	16,645 citations	10373 72 h-index	14736 127 g-index
176 all docs	176 docs citations	176 times ranked	11467 citing authors

#	Article	IF	Citations
1	Coreâ€“Shell Structured Highâ€k Polymer Nanocomposites for Energy Storage and Dielectric Applications. Advanced Materials, 2015, 27, 546-554.	11.1	703
2	A review of dielectric polymer composites with high thermal conductivity. IEEE Electrical Insulation Magazine, 2011, 27, 8-16.	1.1	597
3	Cellulose Nanofiber Supported 3D Interconnected BN Nanosheets for Epoxy Nanocomposites with Ultrahigh Thermal Management Capability. Advanced Functional Materials, 2017, 27, 1604754.	7.8	546
4	Polyhedral Oligosilsesquioxaneâ€Modified Boron Nitride Nanotube Based Epoxy Nanocomposites: An Ideal Dielectric Material with High Thermal Conductivity. Advanced Functional Materials, 2013, 23, 1824-1831.	7.8	529
5	Highly Thermally Conductive Yet Electrically Insulating Polymer/Boron Nitride Nanosheets Nanocomposite Films for Improved Thermal Management Capability. ACS Nano, 2019, 13, 337-345.	7.3	514
6	Interfacial modification of boron nitride nanoplatelets for epoxy composites with improved thermal properties. Polymer, 2012, 53, 471-480.	1.8	410
7	Role of Interface on the Thermal Conductivity of Highly Filled Dielectric Epoxy/AlN Composites. Journal of Physical Chemistry C, 2012, 116, 13629-13639.	1.5	406
8	High-k polymer nanocomposites with 1D filler for dielectric and energy storage applications. Progress in Materials Science, 2019, 100, 187-225.	16.0	394
9	Mechanically Flexible and Multifunctional Polymerâ€Based Graphene Foams for Elastic Conductors and Oilâ€Water Separators. Advanced Materials, 2013, 25, 5658-5662.	11.1	358
10	Core-shell structured poly(methyl methacrylate)/BaTiO3 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. Journal of Materials Chemistry, 2011, 21, 5897.	6.7	349
11	Synergistic effect of graphene nanosheet and BaTiO3 nanoparticles on performance enhancement of electrospun PVDF nanofiber mat for flexible piezoelectric nanogenerators. Nano Energy, 2018, 52, 153-162.	8.2	340
12	Fluoro-Polymer@BaTiO₃ Hybrid Nanoparticles Prepared via RAFT Polymerization: Toward Ferroelectric Polymer Nanocomposites with High Dielectric Constant and Low Dielectric Loss for Energy Storage Application. Chemistry of Materials, 2013, 25, 2327-2338.	3.2	339
13	Large Dielectric Constant and High Thermal Conductivity in Poly(vinylidene fluoride)/Barium Titanate/Silicon Carbide Three-Phase Nanocomposites. ACS Applied Materials & Interfaces, 2011, 3, 4396-4403.	4.0	336
14	A high performance wearable strain sensor with advanced thermal management for motion monitoring. Nature Communications, 2020, 11, 3530.	5.8	313
15	Vertically Aligned and Interconnected Boron Nitride Nanosheets for Advanced Flexible Nanocomposite Thermal Interface Materials. ACS Applied Materials & Interfaces, 2017, 9, 30909-30917.	4.0	282
16	High Energy Density Polymer Dielectrics Interlayered by Assembled Boron Nitride Nanosheets. Advanced Energy Materials, 2019, 9, 1901826.	10.2	249
17	Hyperbranched-polymer functionalization of graphene sheets for enhanced mechanical and dielectric properties of polyurethane composites. Journal of Materials Chemistry, 2012, 22, 7010.	6.7	235
18	Core@Double-Shell Structured BaTiO₃â€“Polymer Nanocomposites with High Dielectric Constant and Low Dielectric Loss for Energy Storage Application. Journal of Physical Chemistry C, 2013, 117, 22525-22537.	1.5	223

#	Article	IF	Citations
19	Highly Conductive Nanocomposites with Threeâ€Dimensional, Compactly Interconnected Graphene Networks via a Selfâ€Assembly Process. Advanced Functional Materials, 2013, 23, 506-513.	7.8	200
20	â€œGrafting toâ€•route to PVDF-HFP-GMA/BaTiO3 nanocomposites with high dielectric constant and high thermal conductivity for energy storage and thermal management applications. Journal of Materials Chemistry A, 2014, 2, 5244.	5.2	200
21	Tailoring Dielectric Properties and Energy Density of Ferroelectric Polymer Nanocomposites by High-k Nanowires. ACS Applied Materials & Interfaces, 2015, 7, 18017-18027.	4.0	190
22	Cellulose/BaTiO3 aerogel paper based flexible piezoelectric nanogenerators and the electric coupling with triboelectricity. Nano Energy, 2019, 57, 450-458.	8.2	188
23	Thermal conductivity of graphene-based polymer nanocomposites. Materials Science and Engineering Reports, 2020, 142, 100577.	14.8	188
24	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. Journal of Materials Chemistry, 2012, 22, 23477.	6.7	183
25	Graphene oxide-encapsulated carbon nanotube hybrids for high dielectric performance nanocomposites with enhanced energy storage density. Nanoscale, 2013, 5, 3847.	2.8	182
26	Ferroelectric polymer/silver nanocomposites with high dielectric constant and high thermal conductivity. Applied Physics Letters, 2009, 95, .	1.5	181
27	Evaluation of polypropylene/polyolefin elastomer blends for potential recyclable HVDC cable insulation applications. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 673-681.	1.8	179
28	Combining RAFT Polymerization and Thiolâ€“Ene Click Reaction for Coreâ€“Shell Structured Polymer@BaTiO₃ Nanodielectrics with High Dielectric Constant, Low Dielectric Loss, and High Energy Storage Capability. ACS Applied Materials & Interfaces, 2014, 6, 1812-1822.	4.0	168
29	Wireless piezoelectric devices based on electrospun PVDF/BaTiO₃ NW nanocomposite fibers for human motion monitoring. Nanoscale, 2018, 10, 17751-17760.	2.8	165
30	Core-shell Structured Hyperbranched Aromatic Polyamide/BaTiO₃ Hybrid Filler for Poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) Nanocomposites with the Dielectric Constant Comparable to That of Percolative Composites. ACS Applied Materials & Interfaces, 2013, 5, 1747-1756.	4.0	161
31	Permittivity, thermal conductivity and thermal stability of poly(vinylidene fluoride)/graphene nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 478-484.	1.8	160
32	Interface induced performance enhancement in flexible BaTiO3/PVDF-TrFE based piezoelectric nanogenerators. Nano Energy, 2021, 80, 105515.	8.2	157
33	Toward Effective Synergetic Effects from Graphene Nanoplatelets and Carbon Nanotubes on Thermal Conductivity of Ultrahigh Volume Fraction Nanocarbon Epoxy Composites. Journal of Physical Chemistry C, 2012, 116, 23812-23820.	1.5	154
34	Millefeuille-Inspired Thermally Conductive Polymer Nanocomposites with Overlapping BN Nanosheets for Thermal Management Applications. ACS Applied Materials & Interfaces, 2019, 11, 31402-31410.	4.0	152
35	Grafted MXene/polymer electrolyte for high performance solid zinc batteries with enhanced shelf life at low/high temperatures. Energy and Environmental Science, 2021, 14, 3492-3501.	15.6	152
36	Coreâ€“satellite Ag@BaTiO3 nanoassemblies for fabrication of polymer nanocomposites with high discharged energy density, high breakdown strength and low dielectric loss. Physical Chemistry Chemical Physics, 2013, 15, 17560.	1.3	150

#	Article	IF	Citations
37	Electrical and thermophysical properties of epoxy/aluminum nitride nanocomposites: Effects of nanoparticle surface modification. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1201-1209.	3.8	142
38	Fluoro-polymer functionalized graphene for flexible ferroelectric polymer-based high-k nanocomposites with suppressed dielectric loss and low percolation threshold. Nanoscale, 2014, 6, 14740-14753.	2.8	142
39	Dielectric Modulated Cellulose Paper/PDMSâ€Based Triboelectric Nanogenerators for Wireless Transmission and Electropolymerization Applications. Advanced Functional Materials, 2020, 30, 1904536.	7.8	142
40	Energy Storage in Ferroelectric Polymer Nanocomposites Filled with Coreâ€“Shell Structured Polymer@BaTiO₃ Nanoparticles: Understanding the Role of Polymer Shells in the Interfacial Regions. ACS Applied Materials & Interfaces, 2014, 6, 19644-19654.	4.0	141
41	Strawberryâ€like Coreâ€“Shell Ag@Polydopamine@BaTiO₃ Hybrid Nanoparticles for Highâ€k Polymer Nanocomposites with High Energy Density and Low Dielectric Loss. Advanced Materials Interfaces, 2015, 2, 1500361.	1.9	141
42	Bio-Inspired Fluoro-polydopamine Meets Barium Titanate Nanowires: A Perfect Combination to Enhance Energy Storage Capability of Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2017, 9, 7547-7555.	4.0	137
43	Multifunctional 3D-MXene/PDMS nanocomposites for electrical, thermal and triboelectric applications. Composites Part A: Applied Science and Manufacturing, 2020, 130, 105754.	3.8	132
44	Novel Three-Dimensional Zinc Oxide Superstructures for High Dielectric Constant Polymer Composites Capable of Withstanding High Electric Field. Journal of Physical Chemistry C, 2012, 116, 24887-24895.	1.5	131
45	Morphology-controllable grapheneâ€“TiO2 nanorod hybrid nanostructures for polymer composites with high dielectric performance. Journal of Materials Chemistry, 2011, 21, 17729.	6.7	130
46	Influence of aspect ratio of carbon nanotubes on crystalline phases and dielectric properties of poly(vinylidene fluoride). European Polymer Journal, 2009, 45, 377-386.	2.6	129
47	Flexible and durable cellulose/MXene nanocomposite paper for efficient electromagnetic interference shielding. Composites Science and Technology, 2020, 188, 107995.	3.8	129
48	Coreâ€“Shell Structured Polystyrene/BaTiO₃ Hybrid Nanodielectrics Prepared by In Situ RAFT Polymerization: A Route to High Dielectric Constant and Low Loss Materials with Weak Frequency Dependence. Macromolecular Rapid Communications, 2012, 33, 1921-1926.	2.0	128
49	Polymer-Based Gate Dielectrics for Organic Field-Effect Transistors. Chemistry of Materials, 2019, 31, 2212-2240.	3.2	124
50	Decorating TiO₂ Nanowires with BaTiO₃ Nanoparticles: A New Approach Leading to Substantially Enhanced Energy Storage Capability of High-k Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2018, 10, 4077-4085.	4.0	123
51	High-entropy polymer produces a giant electrocaloric effect at low fields. Nature, 2021, 600, 664-669.	13.7	121
52	Nanoparticle surface modification induced space charge suppression in linear low density polyethylene. Applied Physics Letters, 2009, 95, .	1.5	120
53	Three-Dimensional Highly Conductive Grapheneâ€“Silver Nanowire Hybrid Foams for Flexible and Stretchable Conductors. ACS Applied Materials & Interfaces, 2014, 6, 21026-21034.	4.0	118
54	Preparation of hyperbranched aromatic polyamide grafted nanoparticles for thermal properties reinforcement of epoxy composites. Polymer Chemistry, 2011, 2, 1380.	1.9	117

#	Article	IF	Citations
55	Polypropylene based thermoplastic polymers for potential recyclable HVDC cable insulation applications. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1446-1456.	1.8	114
56	MoS₂ Nanosheet Superstructures Based Polymer Composites for High-Dielectric and Electrical Energy Storage Applications. Journal of Physical Chemistry C, 2016, 120, 10206-10214.	1.5	111
57	Electrical properties of polyethylene/aluminum nanocomposites. Journal of Applied Physics, 2007, 102, .	1.1	108
58	Temperature-dependent electrical property transition of graphene oxide paper. Nanotechnology, 2012, 23, 455705.	1.3	96
59	Spider Web-Inspired Graphene Skeleton-Based High Thermal Conductivity Phase Change Nanocomposites for Battery Thermal Management. Nano-Micro Letters, 2021, 13, 180.	14.4	92
60	Thermoâ€Optically Designed Scalable Photonic Films with High Thermal Conductivity for Subambient and Aboveâ€Ambient Radiative Cooling. Advanced Functional Materials, 2022, 32, 2109542.	7.8	91
61	Predicting the effective thermal conductivity of composites from cross sections images using deep learning methods. Composites Science and Technology, 2019, 184, 107861.	3.8	90
62	Poly(vinylidene fluoride) terpolymer and poly(methyl methacrylate) composite films with superior energy storage performance for electrostatic capacitor application. Composites Science and Technology, 2019, 179, 115-124.	3.8	90
63	Influence of functionalized MgO nanoparticles on electrical properties of polyethylene nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 1512-1519.	1.8	88
64	Boron nitride nanosheets endow the traditional dielectric polymer composites with advanced thermal management capability. Composites Science and Technology, 2019, 177, 88-95.	3.8	88
65	Hydrangea-like zinc oxide superstructures for ferroelectric polymer composites with high thermal conductivity and high dielectric constant. Composites Science and Technology, 2015, 107, 67-74.	3.8	84
66	Novel crosslinkable high-k copolymer dielectrics for high-energy-density capacitors and organic field-effect transistor applications. Journal of Materials Chemistry A, 2017, 5, 20737-20746.	5.2	84
67	Thermally conductive, electrically insulating and melt-processable polystyrene/boron nitride nanocomposites prepared by in situ reversible addition fragmentation chain transfer polymerization. Nanotechnology, 2015, 26, 015705.	1.3	83
68	Increasing the Energy Efficiency and Breakdown Strength of High-Energy-Density Polymer Nanocomposites by Engineering the Ba_{0.7}Sr_{0.3}TiO₃ Nanowire Surface via Reversible Additionâ€“Fragmentation Chain Transfer Polymerization. Journal of Physical Chemistry C, 2015, 119, 25307-25318.	1.5	83
69	Two-Dimensional High-k Nanosheets for Dielectric Polymer Nanocomposites with Ultrahigh Discharged Energy Density. Journal of Physical Chemistry C, 2018, 122, 18282-18293.	1.5	81
70	Effect of nanoparticle surface treatment on morphology, electrical and water treeing behavior of LLDPE composites. IEEE Transactions on Dielectrics and Electrical Insulation, 2010, 17, 1697-1704.	1.8	80
71	Enhancing electrical energy storage capability of dielectric polymer nanocomposites via the room temperature Coulomb blockade effect of ultra-small platinum nanoparticles. Physical Chemistry Chemical Physics, 2018, 20, 5001-5011.	1.3	80
72	Electrical, thermophysical and micromechanical properties of ethylene-vinyl acetate elastomer composites with surface modified BaTiO3nanoparticles. Journal Physics D: Applied Physics, 2009, 42, 245407.	1.3	75

#	Article	IF	Citations
73	Achieving large dielectric property improvement in polymer/carbon nanotube composites by engineering the nanotube surface via atom transfer radical polymerization. Carbon, 2015, 95, 895-903.	5.4	75
74	Coreâ€“Shell Structured Biopolymer@BaTiO₃ Nanoparticles for Biopolymer Nanocomposites with Significantly Enhanced Dielectric Properties and Energy Storage Capability. Journal of Physical Chemistry C, 2015, 119, 27330-27339.	1.5	74
75	Substantial enhancement of energy storage capability in polymer nanocomposites by encapsulation of BaTiO₃ NWs with variable shell thickness. Physical Chemistry Chemical Physics, 2017, 19, 21058-21068.	1.3	71
76	Core@Double-Shell Structured Nanocomposites: A Route to High Dielectric Constant and Low Loss Material. ACS Applied Materials & Interfaces, 2016, 8, 25496-25507.	4.0	70
77	Epoxy thermoset resins with high pristine thermal conductivity. High Voltage, 2017, 2, 139-146.	2.7	70
78	TiO2-nanorod decorated carbon nanotubes for high-permittivity and low-dielectric-loss polystyrene composites. Composites Science and Technology, 2012, 72, 521-527.	3.8	69
79	Chemical adsorption on 2D dielectric nanosheets for matrix free nanocomposites with ultrahigh electrical energy storage. Science Bulletin, 2022, 67, 609-618.	4.3	67
80	Rapid, high-efficient and scalable exfoliation of high-quality boron nitride nanosheets and their application in lithium-sulfur batteries. Nano Research, 2021, 14, 2424.	5.8	66
81	Influence of aluminum nanoparticle surface treatment on the electrical properties of polyethylene composites. Journal of Applied Physics, 2009, 105, 014105.	1.1	62
82	Bio-inspired polydopamine coating as a facile approach to constructing polymer nanocomposites for energy storage. Journal of Materials Chemistry C, 2017, 5, 3112-3120.	2.7	61
83	Role of interface in highly filled epoxy/BaTiO₃ nanocomposites. Part I-correlation between nanoparticle surface chemistry and nanocomposite dielectric property. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 467-479.	1.8	60
84	Morphology studies and ac electrical property of low density polyethylene/octavinyl polyhedral oligomeric silsesquioxane composite dielectrics. European Polymer Journal, 2009, 45, 2172-2183.	2.6	59
85	Dielectric phenomena and electrical energy storage of poly(vinylidene fluoride) based high-k polymers. Chinese Chemical Letters, 2017, 28, 2027-2035.	4.8	59
86	Recyclable Dielectric Polymer Nanocomposites with Voltage Stabilizer Interface: Toward New Generation of High Voltage Direct Current Cable Insulation. ACS Sustainable Chemistry and Engineering, 2019, 7, 513-525.	3.2	57
87	Influence of nanoparticle surface treatment on the electrical properties of cycloaliphatic epoxy nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2010, 17, 635-643.	1.8	56
88	Influence of BaTiO₃ Nanoparticles on Dielectric, Thermophysical and Mechanical Properties of Ethylene-Vinyl Acetate Elastomer/BaTiO₃ Microcomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 375-383.	1.8	56
89	Rational Design and Modification of High-k Bis(double-stranded) Block Copolymer for High Electrical Energy Storage Capability. Chemistry of Materials, 2018, 30, 1102-1112.	3.2	56
90	Ultrathin MXene-aramid nanofiber electromagnetic interference shielding films with tactile sensing ability withstanding harsh temperatures. Nano Research, 2021, 14, 2837-2845.	5.8	55

#	Article	IF	Citations
91	Electrical properties of epoxy/POSS composites with homogeneous nanostructure. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1516-1528.	1.8	54
92	Preparation, microstructure and properties of polyethylene aluminum nanocomposite dielectrics. Composites Science and Technology, 2008, 68, 2134-2140.	3.8	53
93	Achieving ultrahigh thermal conductivity in Ag/MXene/epoxy nanocomposites via filler-filler interface engineering. Composites Science and Technology, 2021, 213, 108953.	3.8	50
94	Material progress toward recyclable insulation of power cables part 2: Polypropylene-based thermoplastic materials. IEEE Electrical Insulation Magazine, 2020, 36, 8-18.	1.1	49
95	Nondestructive functionalization of carbon nanotubes by combining mussel-inspired chemistry and RAFT polymerization: Towards high dielectric nanocomposites with improved thermal management capability. Composites Science and Technology, 2018, 154, 154-164.	3.8	45
96	Role of interface in highly filled epoxy/BaTiO₃nanocomposites. Part II- effect of nanoparticle surface chemistry on processing, thermal expansion, energy storage and breakdown strength of the nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 480-487.	1.8	43
97	Tailoring the polarity of polymer shell on BaTiO3 nanoparticle surface for improved energy storage performance of dielectric polymer nanocomposites. Chinese Chemical Letters, 2021, 32, 2229-2232.	4.8	43
98	Mussel-inspired Fluoro-Polydopamine Functionalization of Titanium Dioxide Nanowires for Polymer Nanocomposites with Significantly Enhanced Energy Storage Capability. Scientific Reports, 2017, 7, 43071.	1.6	42
99	Role of reduced graphene oxide in dielectric enhancement of ferroelectric polymers composites. Applied Surface Science, 2019, 470, 348-359.	3.1	42
100	Wood annual ring structured elastomer composites with high thermal conduction enhancement efficiency. Chemical Engineering Journal, 2020, 389, 123467.	6.6	41
101	Investigation on water treeing behaviors of thermally aged XLPE cable insulation. Polymer Degradation and Stability, 2007, 92, 537-544.	2.7	39
102	Significantly enhancing the thermal oxidative stability while remaining the excellent electrical insulating property of low density polyethylene by addition of antioxidant functionalized graphene oxide. Carbon, 2016, 106, 218-227.	5.4	39
103	Thermoplastic isotactic polypropylene/ethylene-octene polyolefin copolymer nanocomposite for recyclable HVDC cable insulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1416-1429.	1.8	39
104	Nonisothermal crystallization behavior and nucleation of LDPE/Al nano- and microcomposites. Polymer Engineering and Science, 2007, 47, 1052-1061.	1.5	38
105	Wet-resilient graphene aerogel for thermal conductivity enhancement in polymer nanocomposites. Journal of Materials Science and Technology, 2021, 83, 219-227.	5.6	38
106	Polyethylene/aluminum nanocomposites: Improvement of dielectric strength by nanoparticle surface modification. Journal of Applied Polymer Science, 2009, 113, 3577-3584.	1.3	37
107	Nanostructured electrical insulating epoxy thermosets with high thermal conductivity, high thermal stability, high glass transition temperatures and excellent dielectric properties. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 906-915.	1.8	36
108	Poly(vinylidene fluoride) Nanocomposites with Simultaneous Organic Nanodomains and Inorganic Nanoparticles. Macromolecules, 2016, 49, 1026-1035.	2.2	36

#	ARTICLE	IF	CITATIONS
109	Seeking advanced thermal management for stretchable electronics. Npj Flexible Electronics, 2021, 5, .	5.1	35
110	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. Applied Surface Science, 2016, 364, 798-807.	3.1	33
111	All-Organic Cross-Linked Polysiloxane-Aromatic Thiourea Dielectric Films for Electrical Energy Storage Application. ACS Applied Energy Materials, 2020, 3, 5198-5207.	2.5	32
112	A stretchable laminated GNRs/BNNSs nanocomposite with high electrical and thermal conductivity. Nanoscale, 2019, 11, 20648-20658.	2.8	30
113	Conductive interlayer modulated ferroelectric nanocomposites for high performance triboelectric nanogenerator. Nano Energy, 2022, 91, 106668.	8.2	28
114	Atomic force microscopy analysis of morphology of low density polyethylene influenced by Al nanoâ€• and microparticles. Journal of Applied Polymer Science, 2008, 107, 2494-2499.	1.3	24
115	Enhancing discharged energy density and suppressing dielectric loss of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 5 Nanodielectrics, 2018, 1, 127-131.	2.0	22
116	Core-shell structured silk Fibroin/PVDF piezoelectric nanofibers for energy harvesting and self-powered sensing. Nano Materials Science, 2022, 4, 126-132.	3.9	22
117	Material progress toward recyclable insulation of power cables. Part 1: Polyethylene-based thermoplastic materials: Dedicated to the 80th birthday of professor Toshikatsu Tanaka. IEEE Electrical Insulation Magazine, 2019, 35, 7-19.	1.1	20
118	Highly conductive polymer nanocomposites for emerging high voltage power cable shields: experiment, simulation and applications. High Voltage, 2020, 5, 387-396.	2.7	20
119	Correlation between rheological, electrical, and microstructure characteristics in polyethylene/aluminum nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2143-2154.	2.4	17
120	Unidirectional thermal conduction in electrically insulating phase change composites for superior power output of thermoelectric generators. Composites Science and Technology, 2022, 225, 109500.	3.8	17
121	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. Polymer Testing, 2007, 26, 482-488.	2.3	16
122	Improving Energy Storage Density and Efficiency of Polymer Dielectrics by Adding Trace Biomimetic Lysozyme-Modified Boron Nitride. ACS Applied Energy Materials, 2020, 3, 7952-7963.	2.5	16
123	A comparative study of effects of SEBS and EPDM on the water tree resistance of cross-linked polyethylene. Polymer Degradation and Stability, 2010, 95, 1943-1949.	2.7	15
124	Crystalline properties, dielectric response and thermal stability of in-situ reduced graphene oxide/poly(vinylidene fluoride) nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1446-1454.	1.8	14
125	Is graphene oxide an insulating material?. , 2013, , .		13
126	Numerical analysis on water treeing deterioration of XLPE cable insulation using combination of FEM and Taguchi method. European Transactions on Electrical Power, 2010, 20, 747-759.	1.0	12

#	Article	IF	Citations
127	Effect of silaneâ€grafting on water tree resistance of XLPE cable insulation. Journal of Applied Polymer Science, 2010, 115, 3168-3176.	1.3	11
128	Self-cleaning of superhydrophobic nanostructured surfaces at low humidity enhanced by vertical electric field. Nano Research, 2022, 15, 4732-4738.	5.8	11
129	Protection of SEBS/PS blends against gamma radiation by aromatic compounds. Journal of Applied Polymer Science, 2009, 112, 1076-1081.	1.3	9
130	Influence of silica nanoparticle surface treatments on the water treeing characteristics of low density polyethylene. , 2009, , .		9
131	Perspective on emerging materials for high voltage applications. High Voltage, 2020, 5, 229-230.	2.7	9
132	Dielectric Manipulated Charge Dynamics in Contact Electrification. Research, 2022, 2022, 9862980.	2.8	9
133	Effects of high-dose gamma ray irradiation on the physicochemical properties and water-treeing deterioration of cross-linked polyethylene cable insulation. IEEE Electrical Insulation Magazine, 2011, 27, 17-25.	1.1	8
134	Guest Editorial: Thermally conductive but electrically insulating materials for highvoltage applications. High Voltage, 2017, 2, 137-138.	2.7	8
135	The ultrahigh discharge efficiency and energy density of P(VDF-HFP)viaelectrospinning-hot press with St-MMA copolymer. Materials Chemistry Frontiers, 2021, 5, 3646-3656.	3.2	8
136	Boron Nitride Based Poly(phenylene sulfide) Composites with Enhanced Thermal Conductivity and Breakdown Strength. IEEJ Transactions on Fundamentals and Materials, 2013, 133, 66-70.	0.2	8
137	Thermal effect on the efficiency and stability of luminescent solar concentrators based on colloidal quantum dots. Journal of Materials Chemistry C, 2021, 9, 5723-5731.	2.7	7
138	Effect of ethylene ionomers on the properties of crosslinked polyethylene. Journal of Applied Polymer Science, 2007, 103, 3483-3490.	1.3	6
139	Dielectric properties of Î³-irradiated POE highly filled with aluminum hydroxide. Polymer Engineering and Science, 2006, 46, 1721-1727.	1.5	5
140	Editorial: Dielectric materials for electrical energy storage. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 675-675.	1.8	5
141	Ultrahigh thermal conductivity enhancement in polymer insulating materials by constructing 3D BN nanosheet networks. , 2017, , .		5
142	Epoxy/silica nanocomposite dielectrics used for vacuum pressure impregnating application. , 2010, , .		4
143	Electrical conductivity of polyethylene aluminum nanocomposites with different particle surface chemistry characteristics. , 2008, , .		3
144	High-permittivity and low-dielectric-loss polymer composites based on TiO<inf>2</inf>-nanorod functionalized carbon nanotubes. , 2012, , .		3

#	Article	IF	Citations
145	Thermal conductivity and dielectric properties of epoxy composites with hyperbranched polymer modified boron nitride nanoplatelets. , 2012, , .		3
146	Boron Nitride Nanosheets: High Energy Density Polymer Dielectrics Interlayered by Assembled Boron Nitride Nanosheets (Adv. Energy Mater. 36/2019). Advanced Energy Materials, 2019, 9, 1970140.	10.2	3
147	Voltage Stabilizer Grafted Silica Nanoparticles for Significantly Enhanced Breakdown Strength Potential Thermoplastic Polypropylene Insulation. , 2019, , .		3
148	Core-double-shell structured nanocomposite dielectrics with high permittivity and low loss for electric energy storage. , 2014, , .		2
149	Influence of interface chemistry on dielectric properties of epoxy/alumina nanocomposites. , 2015, , .		2
150	The influence of dielectric permittivity and its distribution on water tree initiation and growth in XLPE cables. , 2008, , .		1
151	Effect of SEBS on water treeing behaviors of cross-linked polyethylene. , 2009, , .		1
152	Sandwich-structured polyaniline-graphene-polyaniline two-dimensional hybrid sheets for polymer nanocomposites with high dielectric constant and low dielectric loss. , 2013, , .		1
153	Comparative investigation on dielectric property and thermal conductivity of in situ polymerized and solution mixed polymer nanocoposites. , 2013, , .		1
154	Effect of processing method on the dielectric behavior of graphene oxide/PVDF nanocomposites. , 2013, , .		1
155	Dielectric Loss of Polymer Nanocomposites and How to Keep the Dielectric Loss Low. , 2016, , 29-50.		1
156	Bio-inspired modification of TiO<inf>2</inf> nanowires for fabrication of High-Îº polymer nanocomposites. , 2016, , .		1
157	Enhanced Dielectric Properties and Low Percolation Threshold of Ternary PVDF/BT/rGO Nanocomposites. Journal of Advanced Physics, 2015, 4, 314-323.	0.4	1
158	Tailoring carbon-matrix composites interfaces using reduced graphene oxide for high strength. Composites Communications, 2022, 33, 101234.	3.3	1
159	Effect of modifier TMPTMA on electrical properties of cured epoxy system for V.P.I. resin. , 2009, , .		0
160	Study on structures and properties of carbon nanotubes/thermosets nanocomposites subjected to external electric field during cure stage. , 2009, , .		0
161	Enhancing the permittivity, thermal conductivity and mechanical strength of elastomer composites by using surface modified BaTiO3 nanoparticles. , 2010, , .		0
162	Effects of elastomers modified with polar molecules on water tree resistance of cross-linked polyethylene. , 2010, , .		0

#	Article	IF	Citations
163	Boron nitride based poly (phenylene sulfide) compsoites with enhanced thermal conductivity and breakdown strength. , 2011, , .		0
164	Low loss and high dielectric constant poly(methyl methacrylate)/BaTiO<inf>3</inf> nanocomposites prepared by in situ atom transfer radical polymerization. , 2011, , .		0
165	Preparation of core-shell structured polystyrene/BaTiO<inf>3</inf> nanoparticles via in situ RAFT polymerization for high-performance dielectric nanocomposites. , 2013, , .		0
166	Functional graphene for high dielectric performance polymer composites. , 2013, , .		0
167	Diagnosis of generator stator winding insulation based on dissipation factor measurement. , 2014, , .		0
168	“Grafting to”D route to high-k and low-loss PS@BaTiO<inf>3</inf> nanocomposites for energy storage applications. , 2015, , .		0
169	Dielectric Polymer Nanocomposite with Interconnected Boron Nitride Nanosheets for Thermal Management Application. , 2018, , .		0
170	Significantly Improved Breakdown Strength of Sandwiched Polymer Dielectrics by Functionalized Boron Nitride Nanosheets. , 2021, , .		0
171	Chapter 4 Nanoparticle Surface Modification for Dielectric Polymer Nanocomposites. , 2016, , 77-110.		0