Zhengyong Huang

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Oriented BN/Silicone rubber composite thermal interface materials with high out-of-plane thermal conductivity and flexibility. Composites Part A: Applied Science and Manufacturing, 2022, 152, 106681.	7.6	59
2	Pomegranate-Inspired Biomimetic Pressure Sensor Arrays With a Wide Range and High Linear Sensitivity for Human–Machine Interaction. IEEE Transactions on Electron Devices, 2022, 69, 1353-1358.	3.0	8
3	Low-Temperature Property Improvement on Green and Low-Carbon Natural Ester Insulating Oil. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1459-1464.	2.9	8
4	Recyclable and High-Performance Thermosetting Polymers for Digital Light Processing 3D Printing. , 2022, , .		0
5	Gas-Sensing Properties of Dissolved Gases in Insulating Material Adsorbed on SnO2–GeSe Monolayer. Chemosensors, 2022, 10, 212.	3.6	9
6	Strong anharmonicity induced low lattice thermal conductivity and high thermoelectric performance in (CuInTe ₂) _{1â^'} _{<i>x</i>} (AgSbTe ₂) _{<i>x</i>} system. Applied Physics Letters, 2022, 121, 013903.	3.3	1
7	Filler concentration effect on breakdown strength and trap level of epoxy resin–Al2O3 nanocomposites. Polymer Bulletin, 2021, 78, 5891-5903.	3.3	7
8	Transitionâ€Metal Carbides as Hydrogen Evolution Reduction Electrocatalysts: Synthetic Methods and Optimization Strategies. Chemistry - A European Journal, 2021, 27, 5074-5090.	3.3	41
9	Suppressing ion aggregation on cellulose surface by bio-dielectric liquids: Insights from molecular dynamics simulations. Journal of Molecular Liquids, 2021, 327, 114805.	4.9	1
10	Branching Initial Streamers to Inhibit the Streamer Propagation in Natural Ester-based Nanofluid. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 116-123.	2.9	8
11	Role of Cellulose Nanofiber/Boron Nitride Hybrids in the Thermal Conductivity and Dielectric Strength of Liquid-Crystalline Epoxy Resin. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 11-18.	2.9	9
12	Enhanced Pollution Flashover of a Slurry Coalescence Superhydrophobic Coating. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 310-317.	2.9	14
13	A Real-Time Electricity Price Decision Model for Demand Side Management in Wind Power Heating Mode. Frontiers in Energy Research, 2021, 9, .	2.3	3
14	Design of 3D printed bioinspired nacre-like structured materials with significantly enhanced thermal conductivity. Applied Physics Letters, 2021, 118, .	3.3	18
15	Study on energy storage properties of Metal-organic frameworks nanofluids (UIO-67/Water and) Tj ETQq1 1 0.78 10008-10017.	34314 rgB 3.7	7 /Overlock 3
16	Optimized Energy Storage System Configuration for Voltage Regulation of Distribution Network With PV Access. Frontiers in Energy Research, 2021, 9, .	2.3	11
17	Influence of Fiber Diameters on the Thermal Conductivity of Liquid Crystal Epoxy Resin Film. , 2021, , .		2

18 Effect of Temperature on Dielectric Properties of Metallized Film Capacitor., 2021,,.

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#	Article	IF	CITATIONS
19	The Orientation of BN Nanosheet in Polyimide to Improve the Thermal Conductivity of Epoxy Resin. , 2021, , .		0
20	Oil Flow Electrification of Insulating Oil Detected by The Triboelectric Effect. , 2021, , .		0
21	Enhanced Thermoelectric Performance of Bi2Te3 through Uniform Dispersion of Ti3C2Tx. , 2021, , .		0
22	Enhance the Surface Flashover Performance of the Fluorocarbon Coating Composited with SiC Particles. , 2021, , .		1
23	Molecular Dynamics Simulation for the Effect of Fluorinated Graphene Oxide Layer Spacing on the Thermal and Mechanical Properties of Fluorinated Epoxy Resin. Nanomaterials, 2021, 11, 1344.	4.1	7
24	Experiment and Simulation of Pressboard Barrier Effect on the Streamer Propagation in Natural Ester During Positive Pulsed Voltage. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 864-871.	2.9	1
25	Plasmonic photothermal film for defogging and anti-icing/deicing on PTFE. Journal of Alloys and Compounds, 2021, 866, 158827.	5.5	25
26	Study on the Thermal Stability of Ureaâ€Formaldehyde Resin Microcapsules with Nanosilica Incorporation by Molecular Dynamics Simulation and Experiments. Macromolecular Theory and Simulations, 2021, 30, 2100009.	1.4	2
27	A hybrid plasma de-icing actuator by using SiC hydrophobic coating-based quartz glass as barrier dielectric. Journal Physics D: Applied Physics, 2021, 54, 375202.	2.8	6
28	A Comparative Study of Gas-phase Fluorination and Nano-Al ₂ O ₃ Doping on Space Charge Behavior and Trap Level in Epoxy Resin. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1093-1100.	2.9	5
29	Numerical Evaluation on the Propagation of Non-breakdown Streamer in Natural Ester under Negative Lightning Impulse Voltage via Shadowgraph Imaging. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1198-1206.	2.9	3
30	Molecular-level evaluation of ionic transport under external electric fields in biological dielectric liquids. Journal of Molecular Liquids, 2021, 340, 116883.	4.9	5
31	Exponentially reduced carrier mobility of natural ester via blocking effect of 2D hexagonal boron nitride nanosheets. High Voltage, 2021, 6, 219-229.	4.7	8
32	Self-healing of mechanical damage of polyethylene/microcapsules electrical insulation composite material. Journal of Materials Science: Materials in Electronics, 2021, 32, 26329-26340.	2.2	4
33	Synthesis of NiCo2O4 nanostructures with different morphologies for supercapacitor. Synthetic Metals, 2021, 282, 116954.	3.9	9
34	DLP 3D Printing of High-Performance Epoxy Resin Via Dual Curing. , 2021, , .		3
35	Preparation of two-dimensional titanium carbide (Ti3C2Tx) and NiCo2O4 composites to achieve excellent microwave absorption properties. Composites Part B: Engineering, 2020, 180, 107577.	12.0	201
36	Preparation of Ionic Liquid-Coated Graphene Nanosheets/PTFE Nanocomposite for Stretchable, Flexible Conductor via a Pre-Stretch Processing. Nanomaterials, 2020, 10, 40.	4.1	4

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37	D-ribose directed one-step fabrication of modifier-free C/NiCo2O4 nanowires with advanced electrochemical performance. Electrochimica Acta, 2020, 358, 136926.	5.2	5
38	Achieving Ultrahigh Output Energy Density of Triboelectric Nanogenerators in Highâ€Pressure Gas Environment. Advanced Science, 2020, 7, 2001757.	11.2	59
39	Simulation of the effect of carrier density fluctuations on initial streamer branching in natural ester during pulsed positive discharges. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1604-1610.	2.9	10
40	Decomposition analysis of camellia oil under electric fields: An experimental and molecular simulation study. Modern Physics Letters B, 2020, 34, 2050431.	1.9	1
41	Triboelectric Energy Harvesting of the Superhydrophobic Coating from Dropping Water. Polymers, 2020, 12, 1936.	4.5	15
42	Molecular dynamics simulations of performance degradation of cellulose nanofibers (CNFs) under hygrothermal environments. Molecular Simulation, 2020, 46, 1172-1180.	2.0	5
43	3D porous graphene/NiCo2O4 hybrid film as an advanced electrode for supercapacitors. Applied Surface Science, 2020, 534, 147598.	6.1	23
44	Rational design of perfect interface coupling to boost electrocatalytical oxygen reduction. Nano Energy, 2020, 76, 105055.	16.0	20
45	Influence of treated nano-alumina and gas-phase fluorination on the dielectric properties of epoxy resin/alumina nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 410-417.	2.9	14
46	Flexible triboelectric 3D touch pad with unit subdivision structure for effective XY positioning and pressure sensing. Nano Energy, 2020, 76, 105047.	16.0	69
47	Experimental and theoretical studies on the thermal stability and decomposition mechanism of HFO-1336mzz(Z) with POE lubricant. Journal of Analytical and Applied Pyrolysis, 2020, 147, 104795.	5.5	13
48	Relationship between the Electrical Characteristics of Molecules and Fast Streamers in Ester Insulation Oil. International Journal of Molecular Sciences, 2020, 21, 974.	4.1	16
49	Recent advancements in heterostructured interface engineering for hydrogen evolution reaction electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 6926-6956.	10.3	158
50	Self-ejections of multiple isolated slushes on disorderly grooved superhydrophobic surfaces. Applied Physics Letters, 2020, 116, 053702.	3.3	2
51	Is There Existing A Gaseous Process During the Propagation of Streamer in the Natural Ester?. , 2020, , .		0
52	Graphene/NiCo2O4 Composite as Electrode Material for Supercapacitors. , 2020, , .		0
53	Surface Charge Stability of High Temperature Phosphatized Biaxially Oriented Polypropylene Film. , 2020, , .		0
54	Ageing Characterization of Transformer Paper Insulation Based on Dispersion Staining Colors of Cellulose Fibers in Oil. , 2020, , .		2

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55	Nickel Cobalt Hydroxide/Reduced Graphene Oxide and Its Electrochemical Performance. , 2020, , .		0
56	Effect of water states on mechanical properties of cellulose insulation paper: A molecular dynamics simulation study. , 2020, , .		1
57	Controlled preparation of MOF for performance improvement of vegetable insulating oil. , 2020, , .		0
58	Suppression of Surface Charge Accumulation on Rough RTV Silicone Rubber. , 2020, , .		0
59	Low Water Adhesion Enhances the Pollution Flashover Performance of Superhydrophobic Coating. , 2020, , .		2
60	Preparation and Properties of Nano-Cellulose Modified Natural Ester Liquids. , 2019, , .		1
61	Effect of h-BN and Fe3O4 nanoparticles on streamer propagation and dissipation in vegetable oil based nanofluids. AIP Advances, 2019, 9, .	1.3	8
62	Study on electrical properties of superhydrophobic coating covered with moss. , 2019, , .		0
63	Significantly Enhanced Electrical Performances of Eco-Friendly Dielectric Liquids for Harsh Conditions with Fullerene. Nanomaterials, 2019, 9, 989.	4.1	24
64	Study on Preparation and Thermal Conductivity of Liquid Crystal Epoxy Resin filled with Nano-cellulose/ BNNSs. , 2019, , .		1
65	Surfaceâ€Electron Coupling for Efficient Hydrogen Evolution. Angewandte Chemie, 2019, 131, 17873-17881.	2.0	8
66	Synthesis of trimethylolpropane fatty acid triester as a high performance electrical insulating oil. Industrial Crops and Products, 2019, 142, 111834.	5.2	25
67	Surfaceâ€Electron Coupling for Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2019, 58, 17709-17717.	13.8	42
68	The Energy Storage Properties of Refrigerants (R170, R134a, R143a, and R152a) in Mof-5 Nanoparticles: A Molecular Simulation Approach. Materials, 2019, 12, 3577.	2.9	4
69	Improved Thermal Conductivity and Mechanical Property of PTFE Reinforced with Al ₂ O ₃ . Nano, 2019, 14, 1950064.	1.0	8
70	A strategy to promote efficiency and durability for sliding energy harvesting by designing alternating magnetic stripe arrays in triboelectric nanogenerator. Nano Energy, 2019, 66, 104087.	16.0	60
71	Morphology-dependent electromagnetic wave absorbing properties of iron-based absorbers: one-dimensional, two-dimensional, and three-dimensional classification. EPJ Applied Physics, 2019, 87, 20901.	0.7	14
72	Molecular dynamics studies of the mechanical behaviors and thermal conductivity of the DGEBA/MTHPA/CNB composites. Composites Part B: Engineering, 2019, 164, 659-666.	12.0	34

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73	Dual Substitution and Spark Plasma Sintering to Improve Ionic Conductivity of Garnet Li7La3Zr2O12. Nanomaterials, 2019, 9, 721.	4.1	13
74	A review of metal oxide-related microwave absorbing materials from the dimension and morphology perspective. Journal of Materials Science: Materials in Electronics, 2019, 30, 10961-10984.	2.2	103
75	Tunable microwave absorbing property of LaxFeO3/C by introducing A-site cation deficiency. Journal of Materials Science: Materials in Electronics, 2019, 30, 13474-13487.	2.2	50
76	Significantly Improved Electrical Breakdown Strength of Natural Ester Liquid Dielectrics by Doping Ultraviolet Absorbing Molecules. IEEE Access, 2019, 7, 73448-73454.	4.2	16
77	Development of spindle-cone shaped of Fe/α-Fe2O3 hybrids and their superior wideband electromagnetic absorption performance. Journal of Alloys and Compounds, 2019, 799, 216-223.	5.5	75
78	DC breakdown and flashover characteristics of direct fluorinated epoxy/Al ₂ O ₃ nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 702-737.	2.9	5
79	Molecular Dynamics Simulation and Experimental Studies on the Thermomechanical Properties of Epoxy Resin with Different Anhydride Curing Agents. Polymers, 2019, 11, 975.	4.5	46
80	New vesicular carbon-based rhenium phosphides with all-pH range electrocatalytic hydrogen evolution activity. Applied Catalysis B: Environmental, 2019, 256, 117851.	20.2	32
81	Electrical and thermal properties of insulating oilâ€based nanofluids: a comprehensive overview. IET Nanodielectrics, 2019, 2, 27-40.	4.1	57
82	Mesoporous carbon hollow microspheres with tunable pore size and shell thickness as efficient electromagnetic wave absorbers. Composites Part B: Engineering, 2019, 167, 690-699.	12.0	194
83	Effect of Gas-phase Fluorination on Trap Level of Nano-Alumina / Epoxy Resin Nanocomposites. , 2019, , .		0
84	Frontispiz: Surfaceâ€Electron Coupling for Efficient Hydrogen Evolution. Angewandte Chemie, 2019, 131,	2.0	0
85	A sandwich-like Si/SiC/nanographite sheet as a high performance anode for lithium-ion batteries. Dalton Transactions, 2019, 48, 17683-17690.	3.3	41
86	Accelerated Charge Dissipation by Gas-Phase Fluorination on Nomex Paper. Applied Sciences (Switzerland), 2019, 9, 3879.	2.5	6
87	Frontispiece: Surfaceâ€Electron Coupling for Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2019, 58, .	13.8	0
88	Covalent Bonding of Si Nanoparticles on Graphite Nanosheets as Anodes for Lithium-Ion Batteries Using Diazonium Chemistry. Nanomaterials, 2019, 9, 1741.	4.1	20
89	Component-controllable cobalt telluride nanoparticles encapsulated in nitrogen-doped carbon frameworks for efficient hydrogen evolution in alkaline conditions. Applied Catalysis B: Environmental, 2019, 244, 568-575.	20.2	60
90	Epitaxial growth of graphene on V8C7 nanomeshs for highly efficient and stable hydrogen evolution reaction. Journal of Catalysis, 2019, 369, 47-53.	6.2	40

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91	Novel Approaches of DGA to Transformers Filled with Natural Ester Based Insulating Oils. , 2018, , .		3
92	Analysis of Dielectric Properties and Breakdown Characteristics of Vegetable Insulating Oil with Modified by ZnO Nanoparticles. , 2018, , .		3
93	Study on the Analysis and Diagnosis of Dissolved Gases in Camellia Insulating Oil. , 2018, , .		1
94	Gas diffusion behavior in green camellia insulating oils. AIP Advances, 2018, 8, 115127.	1.3	0
95	Effects of Suspended Moisture Particles on AC Breakdown Voltage and Electric Field Distribution of Vegetable Insulation Oil. , 2018, , .		1
96	Effect of Fluorination and Isothermal Crystallization on Polypropylene Electret Fiber Films for Transformer-oil Filtration. , 2018, , .		0
97	Analysis of creeping discharges on oil-impregnated pressboard under combined AC and DC voltages. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 2380-2388.	2.9	9
98	Graphic approaches for faults diagnosis for Camellia insulating liquid filled transformers based on dissolved gas analysis. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 1897-1903.	2.9	27
99	Streamer characteristics of dielectric natural ester-based liquids under long gap distances. AIP Advances, 2018, 8, .	1.3	24
100	Analyzing the health condition and chemical degradation in field aged transformer insulation oil using spectroscopic techniques. , 2018, , .		14
101	One-Step Preparation of Durable Super-Hydrophobic MSR/SiO2 Coatings by Suspension Air Spraying. Micromachines, 2018, 9, 677.	2.9	7
102	The Effect of Polyhedral Oligomeric Silsesquioxanes on Electrical Properties of Mineral Oil. , 2018, , .		0
103	Acids generated and influence on electrical lifetime of natural ester impregnated paper insulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 1904-1914.	2.9	11
104	Influence of Temperature on Electrical Properties of POSS/Mineral Oil based Nanofluids. , 2018, , .		0
105	Effect of nanoparticles on streamer propagation and breakdown of vegetable oil-pressboard interface in non-uniform electric field. AIP Advances, 2018, 8, 085211.	1.3	5
106	Significantly Reduced Secondary-Electron-Yield of Aluminum Sheet with Fluorocarbon Coating. Coatings, 2018, 8, 249.	2.6	10
107	The Effect of Polyhedral Oligomeric Silsesquioxanes on Electrical Properties of Mineral Oil. , 2018, , .		0
108	Phenomenon analysis and state classification of surface discharge on oil-impregnated pressboard under AC-DC combined voltage. AIP Advances, 2018, 8, 105023.	1.3	1

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109	Ganodermaâ€Like MoS ₂ /NiS ₂ with Single Platinum Atoms Doping as an Efficient and Stable Hydrogen Evolution Reaction Catalyst. Small, 2018, 14, e1800697.	10.0	60
110	Selectively anchoring Pt single atoms at hetero-interfaces of γ-Al ₂ O ₃ /NiS to promote the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 11783-11789.	10.3	49
111	Influence of hydrophobicity on ice accumulation process under sleet and wind conditions. AIP Advances, 2018, 8, .	1.3	7
112	A New Platinumâ€Like Efficient Electrocatalyst for Hydrogen Evolution Reaction at All pH: Singleâ€Crystal Metallic Interweaved V ₈ C ₇ Networks. Advanced Energy Materials, 2018, 8, 1800575.	19.5	62
113	Enhanced Electrical Insulation and Heat Transfer Performance of Vegetable Oil Based Nanofluids. Journal of Nanomaterials, 2018, 2018, 1-12.	2.7	26
114	Structure, microparameters and properties of crosslinked DGEBA/MTHPA: A molecular dynamics simulation. AIP Advances, 2018, 8, .	1.3	37
115	Micro-Structure and Thermomechanical Properties of Crosslinked Epoxy Composite Modified by Nano-SiO2: A Molecular Dynamics Simulation. Polymers, 2018, 10, 801.	4.5	39
116	A novel aging indicator of transformer paper insulation based on dispersion staining colors of cellulose fibers in oil. IEEE Electrical Insulation Magazine, 2018, 34, 8-16.	0.8	22
117	Electrohydrodynamic behavior of water droplets on a horizontal super hydrophobic surface and its self-cleaning application. Applied Surface Science, 2017, 403, 133-140.	6.1	72
118	Thermally-manageable superhydrophobic soot/fluorocarbon hybrid thin films. , 2017, , .		1
119	Aging characteristics of epoxy resin in hygrothermal environment. , 2017, , .		2
120	Electric heating performance of soot/silicon-oxide/fluorocarbon super-hydrophobic thin film. , 2017, ,		0
121	Molecular Structure and Electronic Properties of Triolein Molecule under an External Electric Field Related to Streamer Initiation and Propagation. Energies, 2017, 10, 510.	3.1	18
122	Influence of nano boron nitride (BN) on electric corrosion of fluororesin based super hydrophobic coatings for insulators. , 2016, , .		4
123	Droplet condensation on superhydrophobic surfaces with enhanced dewetting under a tangential AC electric field. Applied Physics Letters, 2016, 109, .	3.3	20
124	An OH-PDMS-modified nano-silica/carbon hybrid coating for anti-icing of insulators part ii: anti-icing performance. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 2165-2173.	2.9	13
125	Investigation of the electric field driven self-propelled motion of water droplets on a super-hydrophobic surface. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 3007-3015.	2.9	18
10.6			0

126 Fractal simulation of breakdown in oil impregnated paper at pulsating DC voltage. , 2016, , .

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127	An OH-PDMS-modified nano-silica/carbon hybrid coating for anti-icing of insulators part I: Fabrication and small-scale testing. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 935-942.	2.9	8
128	One-step preparation of transparent superhydrophobic coatings using atmospheric arc discharge. Applied Physics Letters, 2015, 107, .	3.3	18
129	Transforming PDMS surface to super-hydrophobic by surface arc-discharge. , 2015, , .		Ο
130	Fabrication of superhydrophobic surface with discarded silicone under arc exposure. RSC Advances, 2015, 5, 103739-103743.	3.6	3
131	Electrical driven rolling behavior of water droplet on a super hydrophobic surface. , 2014, , .		1
132	Time delay of water contact with acrylic polyurethane super-hydrophobic surfaces. , 2014, , .		0
133	Anti-icing performances of super hydrophobic insulator. , 2013, , .		1
134	Ice bonding strength detection of the super-hydrophobic coating. , 2013, , .		2
135	One-step preparation and application of semiconductive and durable superhydrophobic coating. , 2012, , .		0