

# Zhengyong Huang

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

1,933  
citations

257450

24  
h-index

254184

43  
g-index

52  
all docs

52  
docs citations

52  
times ranked

2273  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synergistic effect of electric field and temperature on POSS modified natural ester insulating oil: A molecular dynamics study. <i>Journal of Molecular Liquids</i> , 2022, 355, 118923.	4.9	5
2	Transition-Metal Carbides as Hydrogen Evolution Reduction Electrocatalysts: Synthetic Methods and Optimization Strategies. <i>Chemistry - A European Journal</i> , 2021, 27, 5074-5090.	3.3	41
3	Branching Initial Streamers to Inhibit the Streamer Propagation in Natural Ester-based Nanofluid. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 116-123.	2.9	8
4	Enhanced Pollution Flashover of a Slurry Coalescence Superhydrophobic Coating. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 310-317.	2.9	14
5	Molecular Dynamics Simulation for the Effect of Fluorinated Graphene Oxide Layer Spacing on the Thermal and Mechanical Properties of Fluorinated Epoxy Resin. <i>Nanomaterials</i> , 2021, 11, 1344.	4.1	7
6	A Comparative Study of Gas-phase Fluorination and Nano-Al <sub>2</sub> O <sub>3</sub> Doping on Space Charge Behavior and Trap Level in Epoxy Resin. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 1093-1100.	2.9	5
7	Numerical Evaluation on the Propagation of Non-breakdown Streamer in Natural Ester under Negative Lightning Impulse Voltage via Shadowgraph Imaging. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 1198-1206.	2.9	3
8	Molecular-level evaluation of ionic transport under external electric fields in biological dielectric liquids. <i>Journal of Molecular Liquids</i> , 2021, 340, 116883.	4.9	5
9	Preparation of two-dimensional titanium carbide (Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> ) and NiCo <sub>2</sub> O <sub>4</sub> composites to achieve excellent microwave absorption properties. <i>Composites Part B: Engineering</i> , 2020, 180, 107577.	12.0	201
10	Preparation of Ionic Liquid-Coated Graphene Nanosheets/PTFE Nanocomposite for Stretchable, Flexible Conductor via a Pre-Stretch Processing. <i>Nanomaterials</i> , 2020, 10, 40.	4.1	4
11	Simulation of the effect of carrier density fluctuations on initial streamer branching in natural ester during pulsed positive discharges. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2020, 27, 1604-1610.	2.9	10
12	Rational design of perfect interface coupling to boost electrocatalytical oxygen reduction. <i>Nano Energy</i> , 2020, 76, 105055.	16.0	20
13	Influence of treated nano-alumina and gas-phase fluorination on the dielectric properties of epoxy resin/alumina nanocomposites. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2020, 27, 410-417.	2.9	14
14	Flexible triboelectric 3D touch pad with unit subdivision structure for effective XY positioning and pressure sensing. <i>Nano Energy</i> , 2020, 76, 105047.	16.0	69
15	Relationship between the Electrical Characteristics of Molecules and Fast Streamers in Ester Insulation Oil. <i>International Journal of Molecular Sciences</i> , 2020, 21, 974.	4.1	16
16	Recent advancements in heterostructured interface engineering for hydrogen evolution reaction electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 6926-6956.	10.3	158
17	Self-ejections of multiple isolated slushes on disorderly grooved superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2020, 116, 053702.	3.3	2
18	Surface-Electron Coupling for Efficient Hydrogen Evolution. <i>Angewandte Chemie</i> , 2019, 131, 17873-17881.	2.0	8

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19	Synthesis of trimethylolpropane fatty acid triester as a high performance electrical insulating oil. <i>Industrial Crops and Products</i> , 2019, 142, 111834.	5.2	25
20	Surface-Enhanced Electron Coupling for Efficient Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17709-17717.	13.8	42
21	Improved Thermal Conductivity and Mechanical Property of PTFE Reinforced with Al <sub>2</sub> O <sub>3</sub> . <i>Nano</i> , 2019, 14, 1950064.	1.0	8
22	A strategy to promote efficiency and durability for sliding energy harvesting by designing alternating magnetic stripe arrays in triboelectric nanogenerator. <i>Nano Energy</i> , 2019, 66, 104087.	16.0	60
23	Molecular dynamics studies of the mechanical behaviors and thermal conductivity of the DGEBA/MTHPA/CNB composites. <i>Composites Part B: Engineering</i> , 2019, 164, 659-666.	12.0	34
24	A review of metal oxide-related microwave absorbing materials from the dimension and morphology perspective. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 10961-10984.	2.2	103
25	Tunable microwave absorbing property of La <sub>x</sub> FeO <sub>3</sub> /C by introducing A-site cation deficiency. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13474-13487.	2.2	50
26	Significantly Improved Electrical Breakdown Strength of Natural Ester Liquid Dielectrics by Doping Ultraviolet Absorbing Molecules. <i>IEEE Access</i> , 2019, 7, 73448-73454.	4.2	16
27	Development of spindle-cone shaped of Fe <sub>1±</sub> -Fe <sub>2</sub> O <sub>3</sub> hybrids and their superior wideband electromagnetic absorption performance. <i>Journal of Alloys and Compounds</i> , 2019, 799, 216-223.	5.5	75
28	Molecular Dynamics Simulation and Experimental Studies on the Thermomechanical Properties of Epoxy Resin with Different Anhydride Curing Agents. <i>Polymers</i> , 2019, 11, 975.	4.5	46
29	New vesicular carbon-based rhenium phosphides with all-pH range electrocatalytic hydrogen evolution activity. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117851.	20.2	32
30	Electrical and thermal properties of insulating oil-based nanofluids: a comprehensive overview. <i>IET Nanodielectrics</i> , 2019, 2, 27-40.	4.1	57
31	Mesoporous carbon hollow microspheres with tunable pore size and shell thickness as efficient electromagnetic wave absorbers. <i>Composites Part B: Engineering</i> , 2019, 167, 690-699.	12.0	194
32	A sandwich-like Si/SiC/nanographite sheet as a high performance anode for lithium-ion batteries. <i>Dalton Transactions</i> , 2019, 48, 17683-17690.	3.3	41
33	Covalent Bonding of Si Nanoparticles on Graphite Nanosheets as Anodes for Lithium-Ion Batteries Using Diazonium Chemistry. <i>Nanomaterials</i> , 2019, 9, 1741.	4.1	20
34	Component-controllable cobalt telluride nanoparticles encapsulated in nitrogen-doped carbon frameworks for efficient hydrogen evolution in alkaline conditions. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 568-575.	20.2	60
35	Epitaxial growth of graphene on V8C7 nanomeshes for highly efficient and stable hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2019, 369, 47-53.	6.2	40
36	Streamer characteristics of dielectric natural ester-based liquids under long gap distances. <i>AIP Advances</i> , 2018, 8, .	1.3	24

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37	One-Step Preparation of Durable Super-Hydrophobic MSR/SiO <sub>2</sub> Coatings by Suspension Air Spraying. <i>Micromachines</i> , 2018, 9, 677.	2.9	7
38	Acids generated and influence on electrical lifetime of natural ester impregnated paper insulation. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2018, 25, 1904-1914.	2.9	11
39	Effect of nanoparticles on streamer propagation and breakdown of vegetable oil-pressboard interface in non-uniform electric field. <i>AIP Advances</i> , 2018, 8, 085211.	1.3	5
40	Ganoderma-like MoS <sub>2</sub> /NiS <sub>2</sub> with Single Platinum Atoms Doping as an Efficient and Stable Hydrogen Evolution Reaction Catalyst. <i>Small</i> , 2018, 14, e1800697.	10.0	60
41	Selectively anchoring Pt single atoms at hetero-interfaces of $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /NiS to promote the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11783-11789.	10.3	49
42	Influence of hydrophobicity on ice accumulation process under sleet and wind conditions. <i>AIP Advances</i> , 2018, 8, .	1.3	7
43	A New Platinum-like Efficient Electrocatalyst for Hydrogen Evolution Reaction at All pH: Single-Crystal Metallic Interweaved V <sub>8</sub> C <sub>7</sub> Networks. <i>Advanced Energy Materials</i> , 2018, 8, 1800575.	19.5	62
44	Structure, microparameters and properties of crosslinked DGEBA/MTHPA: A molecular dynamics simulation. <i>AIP Advances</i> , 2018, 8, .	1.3	37
45	Micro-Structure and Thermomechanical Properties of Crosslinked Epoxy Composite Modified by Nano-SiO <sub>2</sub> : A Molecular Dynamics Simulation. <i>Polymers</i> , 2018, 10, 801.	4.5	39
46	Electrohydrodynamic behavior of water droplets on a horizontal super hydrophobic surface and its self-cleaning application. <i>Applied Surface Science</i> , 2017, 403, 133-140.	6.1	72
47	Droplet condensation on superhydrophobic surfaces with enhanced dewetting under a tangential AC electric field. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	20
48	Investigation of the electric field driven self-propelled motion of water droplets on a super-hydrophobic surface. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 3007-3015.	2.9	18
49	An OH-PDMS-modified nano-silica/carbon hybrid coating for anti-icing of insulators part I: Fabrication and small-scale testing. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 935-942.	2.9	8
50	One-step preparation of transparent superhydrophobic coatings using atmospheric arc discharge. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	18
51	Fabrication of superhydrophobic surface with discarded silicone under arc exposure. <i>RSC Advances</i> , 2015, 5, 103739-103743.	3.6	3
52	One-step preparation and application of semiconductive and durable superhydrophobic coating. , 2012, , .		0