Xuetong Zhao

List of Publications by Year
in descending order

76 papers	1,637 citations	279798 23 h-index	302126 39 g-index
77 all docs	77 docs citations	77 times ranked	1226 citing authors

#	Article	IF	Citations
1	Highâ€Temperature Highâ€Energyâ€Density Dielectric Polymer Nanocomposites Utilizing Inorganic Coreâ€"Shell Nanostructured Nanofillers. Advanced Energy Materials, 2021, 11, 2101297.	19.5	130
2	Largely enhanced dielectric properties of polymer composites with HfO2 nanoparticles for high-temperature film capacitors. Composites Science and Technology, 2021, 201, 108528.	7.8	121
3	Recent Progress in Applications of the Cold Sintering Process for Ceramicâ€"Polymer Composites. Advanced Functional Materials, 2018, 28, 1801724.	14.9	110
4	Anti-frosting performance of superhydrophobic surface with ZnO nanorods. Applied Thermal Engineering, 2017, 110, 39-48.	6.0	98
5	Fabrication and anti-icing property of coral-like superhydrophobic aluminum surface. Applied Surface Science, 2015, 331, 132-139.	6.1	92
6	The effect of accelerated water tree ageing on the properties of XLPE cable insulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 1562-1569.	2.9	76
7	Intrinsic and extrinsic relaxation of CaCu3Ti4O12 ceramics: Effect of sintering. Journal of Applied Physics, 2010, 108, .	2.5	74
8	Intrinsic and extrinsic defect relaxation behavior of ZnO ceramics. Journal of Applied Physics, 2012, 111, .	2.5	68
9	Colossal breakdown electric field and dielectric response of Al-doped CaCu3Ti4O12 ceramics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 185, 79-85.	3.5	65
10	Defects and dc electrical degradation in CaCu3Ti4O12 ceramics: Role of oxygen vacancy migration. Applied Physics Letters, 2012, 100, .	3.3	57
11	Introducing a ZnOâ€"PTFE (Polymer) Nanocomposite Varistor via the Cold Sintering Process. Advanced Engineering Materials, 2018, 20, 1700902.	3.5	55
12	Improvement of breakdown field and dielectric properties of CaCu3Ti4O12 ceramics by Bi and Al co-doping. Journal of Alloys and Compounds, 2018, 768, 652-658.	5.5	51
13	Role of defects in determining the electrical properties of ZnO ceramics. Journal of Applied Physics, 2014, 116, .	2.5	42
14	Effects of temperature and aging on furfural partitioning in the oil-paper system of power transformers. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 1393-1401.	2.9	40
15	Ice accretion on superhydrophobic insulators under freezing condition. Cold Regions Science and Technology, 2015, 112, 87-94.	3.5	38
16	Enhanced electrical properties of CaCu3Ti4O12 ceramics by spark plasma sintering: Role of Zn and Al co-doping. Journal of Alloys and Compounds, 2019, 792, 1079-1087.	5.5	35
17	A novel and facile way to fabricate transparent superhydrophobic film on glass with self-cleaning and stability. Materials Letters, 2019, 239, 48-51.	2.6	32
18	Anti-icing performance in glaze ice of nanostructured film prepared by RF magnetron sputtering. Applied Surface Science, 2015, 356, 539-545.	6.1	31

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19	Enhanced electric breakdown field of CaCu₃Ti₄O₁₂ceramics: tuning of grain boundary by a secondary phase. Journal Physics D: Applied Physics, 2013, 46, 325304.	2.8	30
20	Understanding the anti-icing property of nanostructured superhydrophobic aluminum surface during glaze ice accretion. International Journal of Heat and Mass Transfer, 2019, 133, 119-128.	4.8	29
21	Cold sintering ZnO based varistor ceramics with controlled grain growth to realize superior breakdown electric field. Journal of the European Ceramic Society, 2021, 41, 430-435.	5.7	26
22	Preparation of zinc oxide/poly-ether-ether-ketone (PEEK) composites via the cold sintering process. Acta Materialia, 2021, 215, 117036.	7.9	26
23	Tuning interfacial relaxations in P(VDF-HFP) with Al2O3@ZrO2 core-shell nanofillers for enhanced dielectric and energy storage performance. Composites Science and Technology, 2022, 222, 109379.	7.8	25
24	Cold sintering of ZnO-PTFE: Utilizing polymer phase to promote ceramic anisotropic grain growth. Acta Materialia, 2020, 186, 511-516.	7.9	24
25	Improving the anti-icing/frosting property of a nanostructured superhydrophobic surface by the optimum selection of a surface modifier. RSC Advances, 2018, 8, 19906-19916.	3.6	21
26	Enhanced electrical properties of ZnO varistor ceramics by spark plasma sintering: Role of annealing. Ceramics International, 2020, 46, 15076-15083.	4.8	17
27	Microstructural evolution of ZnO via hybrid cold sintering/spark plasma sintering. Journal of the European Ceramic Society, 2022, 42, 5738-5746.	5.7	16
28	Effect of impulse current degradation on the electrical properties and dielectric relaxations of ZnO-based ceramic varistors. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 975-983.	2.9	13
29	Structure and dielectric relaxations of CaCu3Ti4O12 ceramics by heat treatments in different atmospheres. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 764-773.	2.9	12
30	Numerical Simulation of the Characteristics of Electrons in Bar-plate DC Negative Corona Discharge Based on a Plasma Chemical Model. Journal of Electrical Engineering and Technology, 2015, 10, 1804-1814.	2.0	12
31	Altering interfacial properties through the integration of C60 into ZnO ceramic via cold sintering process. Carbon, 2022, 190, 255-261.	10.3	12
32	Fractal analysis of side channels for breakdown structures in XLPE cable insulation. Journal of Materials Science: Materials in Electronics, 2013, 24, 1640-1643.	2.2	11
33	Calculating model of insulation life loss of dry- type transformer based on the hot-spot temperature. , 2015, , .		11
34	Cold sintered composites consisting of PEEK and metal oxides with improved electrical properties via the hybrid interfaces. Composites Part B: Engineering, 2021, 226, 109349.	12.0	10
35	Role of Relaxation on the Giant Permittivity and Electrical Properties of CaCu3Ti4O12 Ceramics. Journal of Electronic Materials, 2016, 45, 3079-3086.	2.2	9
36	Fabrication of Self-Cleaning and Anti-Icing Durable Surface on Glass. Journal of Nanoscience and Nanotechnology, 2017, 17, 420-426.	0.9	9

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37	A Comparative Study on the Insulation Ageing of 10ÂkV XLPE Cable via Accelerated Electrical Test and Accelerated Water Tree Test. Journal of Electrical Engineering and Technology, 2022, 17, 475-484.	2.0	9
38	Effect of temperature on 2-furfural partitioning in the oil-paper system of power transformers. , 2016, , .		7
39	Improved dielectric properties of indium and tantalum co-doped CaCu₃Ti₄O₁₂ ceramic prepared by spark plasma sintering. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1400-1408.	2.9	7
40	PVDF energy-harvesting devices: Film preparation, electric poling, energy-harvesting efficiency. , 2015, , .		6
41	Corona onset criterion and surface electric field intensity characterized by space charge density. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 1973-1980.	2.9	6
42	Effect of Relative Humidity on the Surface Electric Field Intensity Characteristics under DC Voltage in a Corona Cage. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 888-896.	2.9	6
43	The Effect of DC degradation and heat-treatment on defects in ZnO varistor. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 077701.	0.5	6
44	The influence of thermal insulation position in building exterior walls on indoor thermal comfort and energy consumption of residential buildings in Chongqing. IOP Conference Series: Earth and Environmental Science, 2016, 40, 012081.	0.3	5
45	Measuring the charge density along the radius in concentric cylinders configuration by sensing system. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 181-189.	2.9	5
46	The effect of air pressure on the surface electric field intensity characteristics under negative DC corona discharge in a corona cage. International Journal of Electrical Power and Energy Systems, 2019, 113, 244-250.	5.5	5
47	Calculation of Space Charge Density in Negative Corona Based on Finite-Element Iteration and Sound Pulse Method. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	4
48	High temperature ac conductivity relaxations in dielectric ceramics: grain boundary/intergranular phase effects. Journal of Materials Science: Materials in Electronics, 2020, 31, 16468-16478.	2.2	4
49	The impulse current degradation of ZnO varistor ceramics. , 2011, , .		3
50	Fabrication and anti-icing property of superhydrophobic coatings on insulator. , 2015, , .		3
51	A new accelerated thermal aging test for over-loading condition transformer. , 2016, , .		3
52	Preparation, characterization and dielectric response of a high-breakdown-field ZnO-based varistor. Journal of Materials Science: Materials in Electronics, 2016, 27, 9196-9205.	2.2	3
53	AC breakdown and frequency dielectric response characteristics of the mixed oil-paper insulation with different moisture content. , 2017, , .		3
54	Research on Corona Discharge Characteristics Based on Hybrid Numerical Algorithm. IEEE Transactions on Plasma Science, 2018, 46, 4037-4043.	1.3	3

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55	DC degradation of ZnO varistor and its restorability by heat-treatment. , 2012, , .		2
56	Effect of nano-Al2O3 on the thermal aging physicochemical properties of insulating paper. , 2016, , .		2
57	Study on ageing characteristics of insulating pressboard impregnated by mineral-vegetable oil. , 2016, , .		2
58	Variation of surface electric field intensity determined by space charge density at different temperatures. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 1660-1668.	2.9	2
59	Measurement of space charges in air based on sound pulse method. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 164301.	0.5	2
60	Enhanced Energy Storage Performance with High-Temperature Stability of Polyetherimide Nanocomposites. , 2020, , .		2
61	Large breakdown field and dielectric performance of CaCu<inf>3</inf>Ti<inf>4</inf>O<inf>12</inf> ceramics modified by Al<inf>2</inf>O<inf>3</inf>. , 2013, , .		1
62	Influence of nano-Al<inf>2</inf>O<inf>3</inf> on electrical properties of insulation paper under thermal aging. , 2016, , .		1
63	Facile Fabrication of Transparent Superhydrophobic Film Based on PTFE by One-Step Hot Melting Process. Journal of Nanoscience and Nanotechnology, 2016, 16, 9867-9869.	0.9	1
64	Measurement of Charge Density Distribution in Negative Corona on a Coaxial Cylinder Model Using Sound Wave. IEEE Transactions on Power Delivery, 2016, 31, 404-406.	4.3	1
65	Effect of the Oxidizing Atmosphere on the Microstructure and Dielectric Properties of CaCu$lt;inf$gt;3$lt;/inf$gt;Ti$lt;inf$gt;4$lt;/inf$gt;O$lt;inf$gt;12$lt;/inf$gt; Ceramics. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2015, 30, 1303.	1.3	1
66	Effect of direct current degradation on dielectric property of CaCu3Ti4O12 ceramic. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 127701.	0.5	1
67	Recent research progress of relaxation performances of defects in ZnO-Bi2O3 varistor ceamics. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 027701.	0.5	1
68	Roles of Al2O3@ZrO2 Particles in Modulating Crystalline Morphology and Electrical Properties of P(VDF-HFP) Nanocomposites. Molecules, 2022, 27, 4289.	3.8	1
69	Study on the electrical properties and defect structures of a high voltage gradient ZnO varistor. , 2014, , .		0
70	Improvement on dielectric properties of CaCu3Ti4O12 ceramics by heat treatment in rich oxygen atmosphere. , 2015, , .		0
71	Influence of DC degradation on the dielectric response of CaCu<inf>3</inf>Ti<inf>4</inf>O<inf>12</inf> Ceramics. , 2015, , .		0
72	Development of a one-dimensional distribution of space charge measurement system. , 2016, , .		0

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73	Effect of CeO<inf>2</inf> and ZrO<inf>2</inf> doping on the dielectric characteristics of CCTO ceramics. , 2017, , .		0
74	Effect of spark plasma sintering process on dielectric properties of CaCu<inf>3</inf> Ti<inf>4</inf> O<inf>12</inf> ceramics. , 2018, , .		0
75	Characterization of dielectric relaxations in CaCu₃Ti₄O₁₂ via diverse complex planes: Effect of dipole polarization and dc conductivity. Journal of the Ceramic Society of Japan, 2021, 129, 97-104.	1.1	0
76	The Variation of Electric Field on the Conductor Surface Characterized by Space Charge Density. Lecture Notes in Electrical Engineering, 2020, , 282-291.	0.4	0