

Liming Wang

List of Publications by Year in descending order

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139
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1,839
citations

257450

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139
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139
docs citations

139
times ranked

1454
citing authors

#	ARTICLE	IF	CITATIONS
1	Wetting characteristics of the hydrophobic material surface through condensation. High Voltage, 2023, 8, 31-37.	4.7	2
2	Review of flash sintering with strong electric field. High Voltage, 2022, 7, 1-11.	4.7	31
3	A Semisupervised Learning Framework for Recognition and Classification of Defects in Transient Thermography Detection. IEEE Transactions on Industrial Informatics, 2022, 18, 2632-2640.	11.3	9
4	Photothermal Radar Shearography: A Novel Transient-Based Speckle Pattern Interferometry for Depth-Tomographic Inspection. IEEE Transactions on Industrial Informatics, 2022, 18, 4352-4360.	11.3	4
5	Intelligent Aging Diagnosis of Conductor in Smart Grid Using Label-Distribution Deep Convolutional Neural Networks. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	4.7	6
6	Health Monitoring of RTV Silicone Rubber Coating on Insulators Based on Multimode Features of Active Infrared Thermography. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	1
7	Streamer Propagation along the Insulator with the Different Curved Profiles of the Shed. Polymers, 2022, 14, 897.	4.5	4
8	Novel microcapsule-doped insulating material with hydrophobicity transfer capability triggered by creepage discharge. High Voltage, 2022, 7, 950-959.	4.7	4
9	Comparative analysis of single- and multiple-frequency thermal wave radar imaging inspection of glass fiber reinforced polymer (GFRP). International Journal of Extreme Manufacturing, 2022, 4, 025201.	12.7	4
10	Transient thermal pattern separation and detection of conductive defects in composite insulators using eddy current pulsed thermography. NDT and E International, 2022, 129, 102653.	3.7	9
11	A Terahertz 3-D Imaging Method for Complex Internal Structure of Object. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	2
12	Simultaneously improving toughness and hydrophobic properties of cycloaliphatic epoxy resin through silicone prepolymer. Journal of Applied Polymer Science, 2022, 139, .	2.6	7
13	Influence of Shed Shape on Direct-Current Pollution Flashover Voltage and Pressure Decrease Exponent. IEEE Access, 2022, 10, 51804-51813.	4.2	2
14	Characteristics of Small-Molecule Migration of Silicone Rubber Insulator in Electrical Power Systems. Polymers, 2022, 14, 2519.	4.5	2
15	Porcelain Bushing Internal Defects Intelligent Detection Based on Transient Thermography. , 2022, , .		0
16	Detection Method for Metal Impurities and Interlayer Moisture in Power Insulation Equipment by Terahertz Technology. , 2022, , .		2
17	A Terahertz Identification Method for Internal Interface Structures of Polymers Based on the Long Short-Term Memory Classification Network. Polymers, 2022, 14, 2611.	4.5	1
18	Pixel-Level Classification of Pollution Severity on Insulators Using Photothermal Radiometry and Multiclass Semisupervised Support Vector Machine. IEEE Transactions on Industrial Informatics, 2021, 17, 441-449.	11.3	25

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19	Detection of Internal Defects of Full-Size Composite Insulators Based on Microwave Technique. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	7
20	Terahertz Imaging Method for Composite Insulator Defects Based on Edge Detection Algorithm. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	16
21	Aminiaturized device for detecting defects of porcelain insulators based on high-level impulse voltage breakdown. , 2021, , .		0
22	Research on the Ice Shedding of UHV Transmission Lines and its Prevention Measures. , 2021, , .		0
23	Simulation Research on Suppression Measures Against Severe Ice-Shedding of Ultra-high Voltage Alternating Current Ultra-Long Span Transmission Lines. , 2021, , .		1
24	Detection of Double-layer Air Gap Defects Based on Terahertz Imaging Method. , 2021, , .		5
25	Comparison of RTV Coating Thickness Identified by Different Frequency Domain Thermal Characteristics. , 2021, , .		0
26	DC Breakdown Characteristic of Air Gap With Water Droplets. IEEE Transactions on Plasma Science, 2021, 49, 1962-1968.	1.3	4
27	Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. IEEE Transactions on Smart Grid, 2021, 12, 2760-2775.	9.0	30
28	Sigmoid Generalized Complementary Equation for Evaporation Over Wet Surfaces: A Nonlinear Modification of the Priestley–Taylor Equation. Water Resources Research, 2021, 57, e2020WR028737.	4.2	18
29	Influence of Silicone Rubber Coating on the Characteristics of Surface Streamer Discharge. Polymers, 2021, 13, 3784.	4.5	5
30	Analysis and Optimization on Non-uniformity of Temperature Distribution in Hydrophobic Cycloaliphatic Epoxy Resin Insulators during the Curing Process. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1810-1818.	2.9	7
31	Equipotential shielding voltage sensor for contact measurement of transient voltage in EHV/UHV power grids. High Voltage, 2021, 6, 291-301.	4.7	5
32	Characteristics of Wind Swing of Carbon Fiber Composite Core Conductor Transmission Lines. , 2021, , .		0
33	Study on the Material Used for On-site Insulation of Bare Overhead Conductors. , 2021, , .		2
34	Electromagnetic Induction Position Sensor Applied to Anti-Misalignment Wireless Charging for UAVs. IEEE Sensors Journal, 2020, 20, 515-524.	4.7	22
35	Differential Evolution Fitting-Based Optical Step-Phase Thermography for Micrometer Thickness Measurement of Atmospheric Corrosion Layer. IEEE Transactions on Industrial Informatics, 2020, 16, 5213-5222.	11.3	15
36	The Shed Hole Influence on the Electrical Performance of Composite Insulator. IEEE Access, 2020, 8, 217447-217455.	4.2	8

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37	Eddy Current Thermography for the Detection of Conductive Defects in Composite Insulators. , 2020, , .		0
38	Determinants of the Asymmetric Parameter in the Generalized Complementary Principle of Evaporation. Water Resources Research, 2020, 56, e2019WR026570.	4.2	25
39	Remote Optical Thermography Detection Method and System for Silicone Polymer Insulating Materials Used in Power Industry. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 5782-5790.	4.7	15
40	Distributed Event-Triggered ∞ Consensus Based Current Sharing Control of DC Microgrids Considering Uncertainties. IEEE Transactions on Industrial Informatics, 2020, 16, 7413-7425.	11.3	52
41	Pollution flashover performance of RTV coatings with partial damage. International Journal of Electrical Power and Energy Systems, 2020, 121, 106102.	5.5	23
42	Detection of Small Defects in Composite Insulators Using Terahertz Technique and Deconvolution Method. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8146-8155.	4.7	25
43	On the Potential Impacts of Extreme Low Temperature on Threshold Inception Characteristics of Negative Corona Discharge. IEEE Transactions on Plasma Science, 2020, 48, 4071-4079.	1.3	0
44	Characterisation parameter of atmospheric pollutant concentration for external insulation. IET Generation, Transmission and Distribution, 2020, 14, 4547-4552.	2.5	4
45	Temporal and spatial characteristics of soluble salt components accreted on the insulator surface. IET Science, Measurement and Technology, 2020, 14, 891-896.	1.6	4
46	Research of Short Air Gap Flashover Characteristic with Water Droplets. , 2020, , .		0
47	Effect of decabromodiphenylethane on the thermo-oxidative ageing property of epoxy resin. , 2020, , .		0
48	Detecting Defects in Porcelain Postinsulator Coated With Room Temperature Vulcanized Silicone Rubber by Pulsed Thermography. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 225-233.	4.7	19
49	Measurement of Saturated Water Absorption of the Contamination Layer Deposited on Insulator Surface. IEEE Sensors Journal, 2019, 19, 10804-10811.	4.7	11
50	A Low-Cost Evaluation and Correction Method for the Soluble Salt Components of the Insulator Contamination Layer. IEEE Sensors Journal, 2019, 19, 5266-5273.	4.7	22
51	Trait-Based Climate Change Predictions of Vegetation Sensitivity and Distribution in China. Frontiers in Plant Science, 2019, 10, 908.	3.6	11
52	Quantitative Detection of Interfacial Air Gap in Insulation Equipment Based on Terahertz Wave Contrast Method. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4896-4905.	4.7	15
53	Nondestructive Visualization and Quantitative Characterization of Defects in Silicone Polymer Insulators Based on Laser Shearography. IEEE Sensors Journal, 2019, 19, 6508-6516.	4.7	14
54	Impact of Large-Scale Afforestation on Surface Temperature: A Case Study in the Kubuqi Desert, Inner Mongolia Based on the WRF Model. Forests, 2019, 10, 368.	2.1	9

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55	A Power Supply Technology for a Low-Power Online Monitoring Sensor Based on Electric Field Induction. <i>Sensors</i> , 2019, 19, 2169.	3.8	12
56	Improved Current Sensor for Water Diffusion Testing of Composite Insulators. <i>Sensors</i> , 2019, 19, 778.	3.8	1
57	Effect of ultraviolet radiation on surface structure, thermal, and mechanical and electrical properties of liquid silicone rubber. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47652.	2.6	30
58	Research on the UAV Intelligent Inspection System to Monitor and Prevent Abnormal Heat of Composite Insulators for 500kV Transmission System. , 2019, , .		1
59	Study on Series Printed-Circuit-Board Coil Matrix for Misalignment-Insensitive Wireless Charging. , 2019, , .		2
60	Flash Sintering of 8YSZ Ceramics under AC Fiel. , 2019, , .		1
61	Comparison of four commonly used high temperature vulcanized silicone rubber formulas for outdoor insulator and their regional adaptability. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47477.	2.6	23
62	Surface Hardness Analysis of Aged Composite Insulators via Laser-Induced Plasma Spectra Characterization. <i>IEEE Transactions on Plasma Science</i> , 2019, 47, 387-394.	1.3	21
63	Characteristic properties of High Consistency Rubber and Liquid Silicone Rubber. , 2018, , .		4
64	Unmanned Aerial Vehicle Intelligent Patrol-Inspection System Applied to Transmission Grid. , 2018, , .		7
65	Study on Formulation and Hydrophobicity of Polyurethane Filled with DC Post Insulators. , 2018, , .		1
66	Effect of different curing parameters on UV aging resistance of silicone rubber. , 2018, , .		0
67	AdaBoost-SVM for Electrical Theft Detection and GRNN for Stealing Time Periods Identification. , 2018, , .		13
68	Predictive calculation of ion current environment of dc transmission line based on ionised flow model of embedded short-term wind speed. <i>IET Generation, Transmission and Distribution</i> , 2018, 12, 3837-3843.	2.5	6
69	On the radiated EMI current extraction of dc transmission line based on corona current statistical measurements. <i>AIP Advances</i> , 2018, 8, 055001.	1.3	0
70	Temperature sensitivity of voltage-current characteristics for positive corona in coaxial cylindrical electrode. , 2018, , .		0
71	The Effect of a Vertical Electric Field on the Surface Flashover Characteristics of a Bushing Model. <i>Energies</i> , 2018, 11, 1607.	3.1	6
72	A full hydrodynamic steady-state model of positive dc corona in coaxial cylindrical electrode. <i>Physics of Plasmas</i> , 2018, 25, 063526.	1.9	1

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73	In-situ Monitoring of Electrolytic Corrosion on the Caps of HVDC Insulators. IEEE Sensors Journal, 2018, , 1-1.	4.7	1
74	Metal Contamination Distribution Detection in High-Voltage Transmission Line Insulators by Laser-induced Breakdown Spectroscopy (LIBS). Sensors, 2018, 18, 2623.	3.8	26
75	Time-domain virtual EMI receiver model algorithm for corona-originated electromagnetic interference of dc transmission line. IET Science, Measurement and Technology, 2018, 12, 603-608.	1.6	1
76	Conductor Surface Conditions Effects on the Ion-Flow Field of Long-Term Operating Conductors of the HVDC Transmission Line. IEEE Transactions on Power Delivery, 2017, 32, 2171-2178.	4.3	20
77	A Comprehensive Numerical Model of Steady-State Negative Corona for Coaxial Cylindrical Electrode in Atmosphere Air. IEEE Transactions on Plasma Science, 2017, 45, 200-207.	1.3	3
78	Inception threshold conditions for positive dc corona in a rod-plane electrode at low atmospheric temperatures. Physics of Plasmas, 2017, 24, .	1.9	4
79	Fully distributed multi-area dynamic economic dispatch method with second-order convergence for active distribution networks. IET Generation, Transmission and Distribution, 2017, 11, 3955-3965.	2.5	28
80	Effects of natural contamination components on the surface conductivity under saturated moisture. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 2945-2951.	2.9	16
81	Pulsed infrared thermography to inspect the internal defects of composite insulators. , 2017, , .		8
82	Mechanism of fracture related heating for 500-kV composite insulators in highly humid areas. International Transactions on Electrical Energy Systems, 2016, 26, 641-654.	1.9	12
83	Effect of surface aging on UV intensity characteristics for long-term energized conductors of HVDC transmission lines. , 2016, , .		1
84	Time-domain performance of audible noise for positive dc corona: Numerical simulations and measurements. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 3275-3282.	2.9	12
85	A new method to measure RTV coatings thickness with laser-induced breakdown spectroscopy (LIBS) technique. , 2016, , .		4
86	Conductor Surface Conditions Effects on Audible Noise Spectrum Characteristics of Positive Corona Discharge. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 1872-1878.	2.9	13
87	Characteristics of streamer propagation along insulation surface: influence of shed configuration. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 2145-2155.	2.9	10
88	Characteristics of streamer propagation along insulation surface: quantitative influence of permittivity and surface properties. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 2867-2874.	2.9	14
89	Investigation of DC discharge behavior of polluted porcelain post insulator in artificial rain. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 331-338.	2.9	27
90	Characteristics of streamer propagation along the insulation surface: influence of dielectric material. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 1193-1203.	2.9	28

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91	Development of contamination flashover pre-warning system and analysis of operating experience. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 2234-2241.	2.9	19
92	Influencing Factors of Dielectric Breakdown in the PEF Treatment Chamber. IEEE Transactions on Plasma Science, 2015, 43, 610-616.	1.3	11
93	Enhancement of Active Species Formation by TiO_2 Catalysis in the Bipolar Pulsed Discharge Plasma System. IEEE Transactions on Plasma Science, 2013, 41, 3268-3274.	1.3	3
94	Pollution flashover performance of full-scale ± 800 kV converter station post insulators at high altitude area. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 717-726.	2.9	32
95	Effects of low pressure on DC pollution performance under different insulator profiles. , 2012, , .		2
96	Hydrophobicity transfer property of silicone rubber material. , 2012, , .		6
97	An experimental study of AC arc propagation over a contaminated surface. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1360-1368.	2.9	18
98	A new multi-gap spark switch connected with frequency-dependent network for EHV overvoltage protection applications. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1369-1376.	2.9	7
99	Influence of sugar as a contaminant on outdoor insulation characteristics of insulators in a substation. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1318-1324.	2.9	19
100	Formation of Active Species by Bipolar Pulsed Discharge in Water. IEEE Transactions on Plasma Science, 2012, 40, 2360-2365.	1.3	6
101	Impact of Surface Roughness on Corona Discharge for 30-year Operating Conductors in 500-kV ac Power Transmission Line. IEEE Transactions on Power Delivery, 2012, 27, 1693-1695.	4.3	32
102	Installing insulation jacket to improve outdoor insulation performance of composite insulator. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 2004-2012.	2.9	7
103	Included Angle Selection of V-Shape Insulator String for 750-kV Compact Transmission Line. IEEE Transactions on Power Delivery, 2011, 26, 385-393.	4.3	8
104	Influence of composite insulator shed design on contamination flashover performance at high altitudes. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 739-744.	2.9	30
105	Negative corona inception voltages in rod-plane gaps at various air pressures and humidities. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 613-619.	2.9	56
106	The Effect of Sphere Size on Bipolar Pulsed Discharges in Glass-Sphere/Water/Air Columns. IEEE Transactions on Plasma Science, 2010, 38, 100-105.	1.3	2
107	The generation and characteristic study of large-volume microwave plasma produced with parallel rectangular waveguides. , 2010, , .		0
108	Experimental Investigation on Outdoor Insulation for DC Transmission Line at High Altitudes. IEEE Transactions on Power Delivery, 2010, 25, 351-357.	4.3	30

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109	Positive corona inception voltages and corona currents for air at various pressures and humidities. IEEE Transactions on Dielectrics and Electrical Insulation, 2010, 17, 63-70.	2.9	65
110	Characteristics of Microwave Plasma Torch at Atmospheric Pressure. IEEE Transactions on Plasma Science, 2010, 38, 3197-3200.	1.3	12
111	Influence of air pressure on positive DC corona inception voltage of stranded conductors in the corona cage. , 2010, , .		3
112	Anti-icing performance of RTV coating with different resistivity on insulators. , 2010, , .		0
113	Study on stator winding degradation under bar vibration. , 2009, , .		0
114	Study on process of DC pollution flashover of porcelain insulators of parallel double-strings form at high altitude. , 2009, , .		2
115	Reducing ice coating on insulators by combining RTV with different volume resistivity. , 2009, , .		1
116	Effect of pulsed electric fields on proanthocyanidins in young red wine. , 2009, , .		2
117	Influence of sugar in contaminant to outdoor insulation characteristics of glass insulator. , 2009, , .		1
118	Measurement of the electron density in a microwave plasma torch at atmospheric pressure. Applied Physics Letters, 2009, 95, .	3.3	15
119	An application of RTV with different conductivities in anti-icing. , 2009, , .		4
120	Simulation and design of new microwae plasma source with slotted straight waveguides. , 2009, , .		0
121	Variation of the Dynamics of Positive Streamer with Pressure and Humidity in Air. IEEE Transactions on Dielectrics and Electrical Insulation, 2008, 15, 382-389.	2.9	28
122	Effect of electric field distribution uniformity on electrospinning. Journal of Applied Physics, 2008, 103, .	2.5	88
123	Effect of arcing on DC flashover performance of contaminated porcelain insulators for various suspension patterns at high altitudes. IEEE Transactions on Dielectrics and Electrical Insulation, 2008, 15, 783-791.	2.9	27
124	Effect of Hydrophobicity on Electric Field Distribution and Discharges Along Various Wetted Hydrophobic Surfaces. IEEE Transactions on Dielectrics and Electrical Insulation, 2008, 15, 435-443.	2.9	46
125	Investigation on Field-Aged RTV-Coated Insulators Used in Heavily Contaminated Areas. IEEE Transactions on Power Delivery, 2007, 22, 1117-1124.	4.3	29
126	Radial evolution of dielectric barrier glowlike discharge in helium at atmospheric pressure. Applied Physics Letters, 2007, 91, 231504.	3.3	34

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127	Reducing Ice Accumulation on Insulators by Applying Semiconducting RTV Silicone Coating. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 1446-1454.	2.9	48
128	Observation of the transition from a Townsend discharge to a glow discharge in helium at atmospheric pressure. Applied Physics Letters, 2007, 91, .	3.3	94
129	Prospects of anaerobic digestion technology in China. Tsinghua Science and Technology, 2007, 12, 435-440.	6.1	11
130	Synergy Study for Plasma-Facilitated C_2H_4 Selective Catalytic Reduction of NO_x Over $\text{Ag}/\gamma\text{-Al}_2\text{O}_3$ Catalyst. IEEE Transactions on Plasma Science, 2007, 35, 663-669.	1.3	24
131	Spectroscopic investigation of the bipolar pulsed discharge in water-air mixture. IEEE Transactions on Plasma Science, 2006, 34, 1033-1037.	1.3	11
132	Inactivation Effects of PEF on Horseradish Peroxidase (HRP) and Pectinesterase (PE). IEEE Transactions on Plasma Science, 2006, 34, 2630-2636.	1.3	22
133	Study on hydrophobicity transfer of RTV coatings based on a modification of absorption and cohesion theory. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1317-1324.	2.9	53
134	Dynamics characteristic of V-string composite insulators for 330kV overhead transmission line. , 2006, , .		4
135	Multiple Jets in Electrospinning. , 2006, , .		7
136	Electric Field Analysis of Water Drop Corona. IEEE Transactions on Power Delivery, 2005, 20, 964-969.	4.3	49
137	Study on air insulator strength under conductor galloping condition by phase to phase spacer. , 0, , .		3
138	Sparkover behavior of insulator under composite switching impulse/alternating or direct voltage. , 0, , .		2
139	Evaluation of Electrical Insulation Properties on Aged Composite Insulators in Heavily Contaminated Areas. , 0, , .		0