

Ya Ping Du

List of Publications by Year in descending order

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158
papers

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430754

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158
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158
docs citations

158
times ranked

643
citing authors

#	ARTICLE	IF	CITATIONS
1	Principles of power-frequency magnetic field shielding with flat sheets in a source of long conductors. IEEE Transactions on Electromagnetic Compatibility, 1996, 38, 450-459.	1.4	77
2	Lightning Grounding Grid Model Considering Both the Frequency-Dependent Behavior and Ionization Phenomenon. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 157-165.	1.4	56
3	Failure analysis of composite dielectric of power capacitors in distribution systems. IEEE Transactions on Dielectrics and Electrical Insulation, 1998, 5, 583-588.	1.8	42
4	Tripping Characteristics of Residual Current Devices Under Nonsinusoidal Currents. IEEE Transactions on Industry Applications, 2011, 47, 1515-1521.	3.3	36
5	Lightning protection design of solar photovoltaic systems: Methodology and guidelines. Electric Power Systems Research, 2019, 174, 105877.	2.1	36
6	Lightning Data Observed With Lightning Location System in Guang-Dong Province, China. IEEE Transactions on Power Delivery, 2004, 19, 1148-1153.	2.9	35
7	Circuit Parameters of Vertical Wires Above a Lossy Ground in PEEC Models. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 871-879.	1.4	29
8	A lightning location system in China: its performances and applications. IEEE Transactions on Electromagnetic Compatibility, 2002, 44, 555-560.	1.4	28
9	Considerations of Photovoltaic System Structure Design for Effective Lightning Protection. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1333-1341.	1.4	27
10	Lightning Surge Analysis of Transmission Line Towers With a Hybrid FDTD-PEEC Method. IEEE Transactions on Power Delivery, 2022, 37, 1275-1284.	2.9	25
11	Power transformer fault diagnosis considering data imbalance and data set fusion. High Voltage, 2021, 6, 543-554.	2.7	25
12	Lightning Transient Analysis of Radio Base Stations. IEEE Transactions on Power Delivery, 2018, 33, 2187-2197.	2.9	23
13	A Full-Wave PEEC Model of Thin-Wire Structures Above the Lossy Ground. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2055-2064.	1.4	23
14	Comprehensive Assessment of Lightning Protection Schemes for 10 kV Overhead Distribution Lines. IEEE Transactions on Power Delivery, 2022, 37, 2326-2336.	2.9	21
15	Evaluation of the Guang Dong lightning location system with transmission line fault data. IET Science, Measurement and Technology, 2002, 149, 9-16.	0.7	20
16	An improved ray theory and transfer matrix method-based model for lightning electromagnetic pulses propagating in Earth-ionosphere waveguide and its applications. Journal of Geophysical Research D: Atmospheres, 2017, 122, 712-727.	1.2	20
17	Current distribution in single-core cables connected in parallel. IET Generation, Transmission and Distribution, 2001, 148, 406.	1.1	19
18	An Efficient Modeling Method for 3-D Magnetic Plates in Magnetic Shielding. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 608-614.	1.4	19

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19	Model of ferromagnetic steels for lightning transient analysis. IET Science, Measurement and Technology, 2018, 12, 301-307.	0.9	19
20	Simultaneous observations of optical and electrical signals in altitude-triggered negative lightning flashes. Journal of Geophysical Research, 2003, 108, .	3.3	18
21	Design Consideration of the Shielding Wire in 10 kV Overhead Distribution Lines Against Lightning-Induced Overvoltage. IEEE Transactions on Power Delivery, 2021, 36, 3005-3013.	2.9	18
22	Using EMTP for Evaluation of Surge Current Distribution in Metallic Gridlike Structures. IEEE Transactions on Industry Applications, 2005, 41, 1113-1117.	3.3	17
23	Comprehensive transient analysis for low-voltage system in a wind turbine under direct lightning. International Journal of Electrical Power and Energy Systems, 2020, 121, 106131.	3.3	16
24	Power-frequency magnetic shielding of heavy-current conductors by rectangular shields. IET Generation, Transmission and Distribution, 1999, 146, 223.	1.1	15
25	Experimental and numerical evaluation of busbar trunking impedance. Electric Power Systems Research, 2000, 55, 113-119.	2.1	15
26	The magnetic field and induced current arising from a cylindrical shell loop with an unbalanced current. Electric Power Systems Research, 2004, 71, 21-26.	2.1	15
27	A comprehensive study on the nonlinear behavior of metal oxide varistors. , 2016, , .		15
28	Lightning-Induced Voltages on a Distribution Line With Surge Arresters Using a Hybrid FDTDâ€“SPICE Method. IEEE Transactions on Power Delivery, 2018, 33, 2354-2363.	2.9	15
29	Evaluation of Green's Functions for PEEC Models in the Air and Lossy-Ground Space. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1930-1940.	1.4	15
30	Evolution of line charge density of steadilyâ€“developing upward positive leaders in triggered lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4670-4678.	1.2	14
31	Experimental investigation into harmonic impedance of low-voltage cables. IET Generation, Transmission and Distribution, 2000, 147, 322.	1.1	13
32	Equivalent Circuit Approach for Evaluating Low-Frequency Magnetic Fields in the Presence of Non-Ferromagnetic Plates. IEEE Transactions on Magnetics, 2009, 45, 960-963.	1.2	13
33	Surges induced in building electrical systems during a lightning strike. Electric Power Systems Research, 2016, 139, 68-74.	2.1	13
34	Lightning Surge Propagation on a Single Conductor in Free Space. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 119-127.	1.4	13
35	Effective Grounding of the Photovoltaic Power Plant Protected by Lightning Rods. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1128-1136.	1.4	13
36	A leaderâ€“returnâ€“stroke consistent macroscopic model for calculations of return stroke current and its optical and electromagnetic emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8686-8704.	1.2	12

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37	Proximity effect in transient analysis of radio base stations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2335.	1.2	12
38	An FDTD Thin-Wire Model for Lossy Wire Structures With Noncircular Cross Section. IEEE Transactions on Power Delivery, 2018, 33, 3055-3064.	2.9	12
39	Transients in solar photovoltaic systems during lightning strikes to a transmission line. International Journal of Electrical Power and Energy Systems, 2022, 134, 106885.	3.3	12
40	Transient surge impedance of a vertical conductor over the ground. Electric Power Systems Research, 2013, 94, 106-112.	2.1	11
41	SPD Protection Distances to Household Appliances Connected in Parallel. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1377-1385.	1.4	11
42	The Spatial Evolution of Upward Positive Stepped Leaders Initiated From a 356m Tall Tower in Southern China. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031508.	1.2	11
43	Fast Simulation of Litz Wire Using Multilevel PEEC Method. IEEE Transactions on Power Electronics, 2020, 35, 12612-12616.	5.4	11
44	Litz Wire and Uninsulated Twisted Wire Assessment Using a Multilevel PEEC Method. IEEE Transactions on Power Electronics, 2022, 37, 2372-2381.	5.4	11
45	Lightning-Generated Transients in Buildings With an Efficient PEEC Method. IEEE Transactions on Magnetics, 2019, 55, 1-5.	1.2	10
46	Time-Domain PEEC Transient Analysis for a Wire Structure Above the Perfectly Conducting Ground With the Incident Field From a Distant Lightning Channel. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1787-1795.	1.4	10
47	Practical Schemes on Lightning Energy Suppression in Arresters for Transformers on 10 kV Overhead Distribution Lines. IEEE Transactions on Power Delivery, 2022, 37, 4272-4281.	2.9	10
48	A novel control method for shunt active power filters using SVPWM. , 0, , .		9
49	Influence of Building Structures on the Lightning Return Stroke Current. IEEE Transactions on Power Delivery, 2010, 25, 307-315.	2.9	9
50	Properties of lightning direction-finder (DF) and its modeling. Atmospheric Research, 2013, 129-130, 97-109.	1.8	9
51	Lightning Transient Analysis of Telecommunication System With a Tubular Tower. IEEE Access, 2018, 6, 60088-60099.	2.6	9
52	A GPU-Based Grid Traverse Algorithm for Accelerating Lightning Geolocation Process. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 489-497.	1.4	9
53	Lightning Transient Analysis of Main and Submain Circuits in Commercial Buildings Using PEEC Method. IEEE Transactions on Industry Applications, 2020, 56, 106-116.	3.3	9
54	Analysis of Lightning Transients in a DC Traction Power System of Electrified Railway Using EMTP. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	8

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55	Fractal dynamics analysis of the VHF radiation pulses during initial breakdown process of lightning. Geophysical Research Letters, 2010, 37, .	1.5	8
56	A statistical method for evaluating detection efficiency of lightning location network and its application. Atmospheric Research, 2013, 128, 13-23.	1.8	8
57	Lightning current among closely-spaced cables. , 2014, , .		8
58	Analysis of Transient Magnetic Shielding Made by Conductive Plates With a PEEC Method. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	8
59	A macroscopic physical model for self-initiated upward leaders from tall grounded objects and its application. Atmospheric Research, 2018, 200, 13-24.	1.8	8
60	Proximity effect modelling for cables of finite length using the hybrid partial element equivalent circuit and artificial neural network method. IET Generation, Transmission and Distribution, 2018, 12, 3876-3882.	1.4	8
61	Experimental and Numerical Evaluation of Surge Current Distribution in Buildings During a Direct Lightning Stroke. HKIE Transactions, 2001, 8, 1-6.	1.9	7
62	Induced Voltages and Power Losses in Single-Conductor Armored Cables. IEEE Transactions on Industry Applications, 2009, 45, 2145-2151.	3.3	7
63	The effect of ground altitude on lightning striking distance based on a bi-directional leader model. Atmospheric Research, 2013, 125-126, 76-83.	1.8	7
64	Analysis of the Grounding for the Substation Under Very Fast Transient Using Improved Lossy Thin-Wire Model for FDTD. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1833-1841.	1.4	7
65	Lightning Surge Propagation on a Grounded Vertical Conductor. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 276-279.	1.4	7
66	Thin-Wire Models for Inclined Conductors With Frequency-Dependent Losses. IEEE Transactions on Power Delivery, 2020, 35, 1083-1092.	2.9	7
67	Joint Modeling for Conductive Plates in Low-Frequency Magnetic Shielding. IEEE Transactions on Magnetics, 2013, 49, 2005-2008.	1.2	6
68	Principles of power-frequency magnetic shielding with finite-width plates. International Transactions on Electrical Energy Systems, 2014, 24, 1168-1184.	1.2	6
69	An improved wave impedance approach for locating close lightning stroke from single station observation and its validation. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 122, 1-8.	0.6	6
70	Lightning Propagation Analysis on Telecommunication Towers Above the Perfect Ground Using Full-Wave Time Domain PEEC Method. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 697-704.	1.4	6
71	ELF magnetic fields from nonarmoured multi-core power cables. IET Science, Measurement and Technology, 1999, 146, 2-8.	0.7	5
72	A Novel Shunt Active Power Filter Based on Voltage Detection for Harmonic Voltage Mitigation. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	5

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73	Directional field enhancement of dielectric nano optical disc antenna arrays. Optical Materials, 2011, 34, 126-130.	1.7	5
74	Performance of TOA/DF Lightning Location Network in China — Site errors and detection efficiency. , 2011, , .		5
75	Lightning-induced surges in building electrical systems. , 2014, , .		5
76	The Extended Thin Wire Model of Lossy Round Wire Structures for FDTD Simulations. IEEE Transactions on Power Delivery, 2016, , 1-1.	2.9	5
77	TAES: A PEEC-based tool for transient simulation. , 2016, , .		5
78	Leader Charges, Currents, Ambient Electric Fields, and Space Charges Along Downward Positive Leader Paths Retrieved From Ground Measurements in Metropolis. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032818.	1.2	5
79	A Stable Extended FDTD Thin-Wire Model for Lossy Wire Structures With Irregular Cross Sections. IEEE Transactions on Power Delivery, 2022, 37, 349-358.	2.9	5
80	A 3-D FDTD Thin-Wire Model of Single-Core Coaxial Cables With Multiple Conductive Layers. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 762-771.	1.4	5
81	Performance against Direct Lightning on 10kV Overhead Distribution Lines with Counterpoise Wires. , 2021, , .		5
82	Harmonic impedance of single-core armored cables. , 0, , .		4
83	A shunt active harmonic filter based on a voltage detection method for harmonic voltage control. , 0, , .		4
84	Capacitance matrix of screened/insulated single-core cables of finite length. IET Science, Measurement and Technology, 2005, 152, 233-239.	0.7	4
85	Current Distribution in Parallel Single-Core Cables on Metal Tray. IEEE Transactions on Industry Applications, 2008, 44, 1886-1891.	3.3	4
86	Transient responses of switching mode power supplies under a lightning surge. , 2011, , .		4
87	Reduction of PEEC Unknowns for 3D Metallic Plates in Magnetic Shielding. IEEE Transactions on Magnetics, 2013, 49, 2001-2004.	1.2	4
88	Surge behavior at the discontinuity of a vertical line over the ground. Electric Power Systems Research, 2014, 113, 129-133.	2.1	4
89	Influence of different factors on coordination of two cascaded SPDs. Electric Power Systems Research, 2016, 139, 139-145.	2.1	4
90	A Comparative Study of the Ray Theory Model With the Finite Difference Time Domain Model for Lightning Sferic Transmission in Earth's Ionosphere Waveguide. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3335-3349.	1.2	4

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91	Prima Facie Evidence of the Fast Impact of a Lightning Stroke on the Lower Ionosphere. Geophysical Research Letters, 2020, 47, e2020GL090274.	1.5	4
92	Spectral Patterns of Lightning Radiations in Intervals of 25 to 100 MHz. IEEJ Transactions on Power and Energy, 2005, 125, 97-102.	0.1	4
93	Stable thin-wire model of buried pipe-type power distribution cables for 3D FDTD transient simulation. IET Generation, Transmission and Distribution, 2020, 14, 6168-6178.	1.4	4
94	Experiment on finite-width planar sheets for ELF magnetic field shielding. , 0, , .		3
95	A Novel Shunt Active Power Filter Based on Voltage Detection for Harmonic Voltage Mitigation. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	3
96	Lightning-induced magnetic fields in a building with large metallic plates. Atmospheric Research, 2009, 91, 574-581.	1.8	3
97	Numerical investigation of transient surge impedance of a vertical conductor over a perfect ground. , 2011, , .		3
98	Induced surges in railway signaling systems during an indirect lightning strike. , 2016, , .		3
99	A statistical approach for site error correction in lightning location networks with DF/TOA technique and its application results. Atmospheric Research, 2017, 184, 103-111.	1.8	3
100	Analysis of Lightning Transients in a Commercial Building Using the PEEC Method. , 2019, , .		3
101	Line Charge Densities and Currents of Downward Negative Leaders Estimated From VHF Images and VLF Electric Fields Observed at Close Distances. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1507-1514.	1.4	3
102	Fast Design of Multilayered Shields Using Surrogate Model and Space Mapping. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 698-706.	1.4	3
103	Harmonic Characteristics of Large Single-core Cables in Low-voltage Installations. HKIE Transactions, 2002, 9, 46-51.	1.9	2
104	Monitoring the competitiveness in the supply of low-voltage switchboards. Building and Environment, 2003, 38, 787-793.	3.0	2
105	Phenomena of Parallel Discharges and Flashovers in Lightning Triggered to Conventional and Non-conventional Lightning Rods. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 531-535.	0.2	2
106	Electrical and Thermal Analysis of Parallel Single-Conductor Cable Installations. , 2009, , .		2
107	Tripping Characteristics of Residual Current Devices under Non-Sinusoidal Currents. , 2010, , .		2
108	Surge propagation and characteristics in building wiring systems. , 2014, , .		2

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109	Dynamic modelling of lightning return stroke and its optical and electromagnetic radiations based on Maxwell'S integral-equations. , 2015, , .		2
110	Low-frequency magnetic shielding against unbalanced currents. , 2015, , .		2
111	Lightning surge analysis in light rail transit using the FDTD method. , 2018, , .		2
112	Extended Traveling Wave Theory for the Multistage Tower Under a Direct Lightning Strike. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 830-839.	1.4	2
113	Harmonic characteristics, limits and design strategies for compliance in office buildings. , 0, , .		1
114	Magnetic Shielding by Ferromagnetic Trunking in Low-Voltage Installations. HKIE Transactions, 2000, 7, 35-39.	1.9	1
115	A Preliminary Survey of Lightning Protection Practices in Hong Kong Buildings. HKIE Transactions, 2003, 10, 59-65.	1.9	1
116	Analytical analysis of shunt active power filters based on voltage detection. , 0, , .		1
117	Harmonic impedance of armored cables for low-voltage power distribution in buildings. , 0, , .		1
118	Experimental study of single-station lightning locating technique. , 2011, , .		1
119	Site errors estimation and correction for MDF/TOA combined lightning location network. , 2012, , .		1
120	Surge behavior at the discontinuity of a vertical line over the ground. , 2012, , .		1
121	Influence of different impulse waveforms on coordination of two cascaded SPDs. , 2014, , .		1
122	A modified FDTD method using a hybrid Cartesian-cylindrical coordinate system. , 2016, , .		1
123	Simulation of transients in electrical systems with ferromagnetic steels. , 2016, , .		1
124	Surge behavior on the single conductor with a discontinuity. , 2016, , .		1
125	Fine spatial evolution of leaders and M-components in rocket-triggered lightning observed with a broadband interferometer. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 161, 170-184.	0.6	1
126	Early Warning of Incipient Faults for Power Transformer Based on DGA Using a Two-Stage Feature Extraction Technique. IEEE Transactions on Power Delivery, 2021, , 1-1.	2.9	1

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127	Simulation of Ground Potential Distribution around Grounding Grids using a PEEC Method. , 2022, , .		1
128	Multimode wave theory application to the analysis of very fast transients in lossless systems. Electric Power Systems Research, 1996, 38, 25-32.	2.1	0
129	Experimental measurements of ELF magnetic fields from cable trunking. , 0, , .		0
130	Management of magnetic fields in large commercial buildings. , 0, , .		0
131	Magnetic Field Mitigation in Large Commercial Buildings. HKIE Transactions, 2002, 9, 37-41.	1.9	0
132	Reliability of standby generators in Hong Kong buildings. , 0, , .		0
133	Magnetic Fields of a Cylindrical Shell Excited by an Unbalanced Current Source. HKIE Transactions, 2004, 11, 5-9.	1.9	0
134	Using EMTP for evaluation of surge current distribution in metallic gridlike structures. , 0, , .		0
135	Some new observations of vightning spectra in the bands above 25 MHz. , 0, , .		0
136	Numerical Evaluation of Electromagnetic Fields in the Presence of Non-ferromagnetic Plates. , 0, , .		0
137	Current Distribution in Parallel Single-Core Cables on Metal Tray. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
138	Current Distribution in Parallel Single-Core Cables on Metal Tray. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
139	Induced Voltages and Power Losses in Single-Conductor Armored Cables. , 2008, , .		0
140	Shielding formulas for wire-grid structures during an indirect lightning strike. , 2010, , .		0
141	Possible effect of the ground altitude on the lightning striking distance. , 2010, , .		0
142	Temporal and spatial characteristics of lightning activity versus terrain in Hong Kong. , 2010, , .		0
143	Broadband optical antenna with a disk structure. , 2011, , .		0
144	Study of the effect of propagation path on lightning-produced electromagnetic pulses based on LLN data. , 2012, , .		0

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145	Volume and surface elements-based PEEC for magnetic plate shielding at low frequency. , 2012, , .		0
146	Magnetic field environments at power frequency inside modern buildings. , 2013, , .		0
147	Corrigendum to "Properties of "site error" of lightning direction-finder (DF) and its modelling"™ [Atmos. Res. 129"130 (2013) 97"109]. Atmospheric Research, 2015, 153, 578.	1.8	0
148	Analysis of transient magnetic shielding made by conductive plates with a PEEC method. , 2016, , .		0
149	A simple physical model for self-triggered upward leaders from high-rise buildings. , 2016, , .		0
150	Hybrid MoM/FDTD method for thin wire structures with rectangular cross section. , 2016, , .		0
151	Fast Surrogate-Assisted Design of Multilayered Magnetic Shields.. , 2018, , .		0
152	Lightning Current Distribution of the Radio Base Station With a Steel Tower. , 2018, , .		0
153	Rapid Design of Litz Wire Through Inverse Surrogate Modeling.. , 2018, , .		0
154	A Study on the Cable Grounding Condition in Wind Turbines Under Direct Lightning. , 2019, , .		0
155	The Influence of Bonding Conditions on Lightning Current Distribution in Radio Base Stations. , 2019, , .		0
156	Potential of GPU-Based Grid Traverse Algorithm for Lightning Geolocation. , 2019, , .		0
157	Experimental study of a Phased Array Antenna for Lightning Observation. Journal of Atmospheric Electricity, 2003, 23, 41-48.	0.1	0
158	Hybrid <sc>TDPEEC</sc> / <sc>FDTD</sc> Method for Lightning Transient Analysis in Solar Panels. IEEJ Transactions on Electrical and Electronic Engineering, 0, , .	0.8	0