Yan-Zhao Xie

List of Publications by Year
in descending order

86	688	567281 15	713466 21
papers	citations	h-index	g-index

86	86	86	402
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Full-Scale Experimental Validation of Electromagnetic Time Reversal Applied to Locate Disturbances in Overhead Power Distribution Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1562-1570.	2.2	42
2	Norm Criteria in the Electromagnetic Time Reversal Technique for Fault Location in Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1240-1248.	2.2	33
3	Design and Optimization of High-Power UWB Combined Antenna Based on Klopfenstein Impedance Taper. IEEE Transactions on Antennas and Propagation, 2017, 65, 6960-6967.	5.1	30
4	A Semi-Analytical Method to Evaluate Lightning-Induced Overvoltages on Overhead Lines Using the Matrix Pencil Method. IEEE Transactions on Power Delivery, 2018, 33, 2837-2848.	4.3	27
5	Analytic Iterative Solution of Electromagnetic Pulse Coupling to Multiconductor Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 451-466.	2.2	22
6	High-Voltage Circuit-Breaker Insulation Fault Diagnosis in Synthetic Test Based on Noninvasive Switching Electric-Field Pulses Measurement. IEEE Transactions on Power Delivery, 2016, 31, 1168-1175.	4.3	21
7	Fault Detection for High-Voltage Circuit Breakers Based on Timeâ€“Frequency Analysis of Switching Transient E -Fields. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1620-1631.	4.7	21
8	Electromagnetic Time Reversal as a Correlation Estimator: Improved Metrics and Design Criteria for Fault Location in Power Grids. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 598-611.	2.2	21
9	Behavior Comparison of Metal Oxide Arrester Blocks When Excited by VFTO and Lightning. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1608-1615.	2.2	18
10	Traveling-Wave Marx Circuit for Generating Repetitive Sub-Nanosecond Pulses. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1271-1279.	2.2	18
11	Gauss–Seidel Iterative Solution of Electromagnetic Pulse Coupling to Three-Conductor Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 292-298.	2.2	17
12	Calculation of High-Frequency Electromagnetic Field Coupling to Overhead Transmission Line Above a Lossy Ground and Terminated With a Nonlinear Load. IEEE Transactions on Antennas and Propagation, 2019, 67, 4119-4132.	5.1	16
13	Optimizing High-Power Ultra-Wideband Combined Antennas for Maximum Radiation Within Finite Aperture Area. IEEE Transactions on Antennas and Propagation, 2019, 67, 834-842.	5.1	16
14	Development of One-Dimensional Norm Detector for Nanosecond-Level Transient Electric Field Measurement. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1035-1040.	2.2	15
15	Calculation of Lightning Induced Voltages on Overhead Lines Using an Analytical Fitting Representation of Electric Fields. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 879-886.	2.2	15
16	A threeâ€dimensional direct lightning strike model for lightning protection of the substation. IET Generation, Transmission and Distribution, 2021, 15, 2760-2772.	2.5	15
17	Crosstalk Analysis of Multiconductor Transmission Lines Based on Distributed Analytical Representation and Iterative Technique. IEEE Transactions on Electromagnetic Compatibility, 2010, 52, 712-727.	2.2	14
18	An Efficient Model of Transient Electromagnetic Field Coupling to Multiconductor Transmission Lines Based on Analytical Iterative Technique in Time Domain. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2663-2673.	4.6	14

#	Article	IF	Citations
19	Multinomial Regression Model for the Evaluation of Multilevel Effects Caused by High-Power Electromagnetic Environments. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 149-156.	2.2	14
20	An Iterative Scheme for the Power-Flow Analysis of Distribution Networks based on Decoupled Circuit Equivalents in the Phasor Domain. Energies, 2020, 13, 386.	3.1	14
21	Bayesian Inference for Susceptibility of Electronics to Transient Electromagnetic Disturbances With Failure Mechanism Consideration. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1669-1677.	2.2	12
22	10-kV Transmission Line Experimental Platform for HEMP Immunity Test of Electrical Equipment in Operation. IEEE Transactions on Power Delivery, 2021, 36, 1034-1040.	4.3	12
23	Response of 10-kV Metal-Oxide Surge Arresters Excited by Nanosecond-Level Transient Electromagnetic Disturbances. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 614-621.	2.2	12
24	On Nonuniform Transient Electromagnetic Field Coupling to Overhead Transmission Lines. IEEE Transactions on Antennas and Propagation, 2018, 66, 3087-3096.	5.1	11
25	Experimental Study on Breakdown Time Delay of Hundreds of Nanoseconds Pulse Under Different du/dt for mm Gaps. IEEE Transactions on Plasma Science, 2019, 47, 4579-4583.	1.3	10
26	Statistical Inference of Serial Communication Errors Caused by Repetitive Electromagnetic Disturbances. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1160-1168.	2.2	10
27	Impact of Propagation Losses on Fault Location Accuracy in Full Transient-Based Methods. IEEE Transactions on Power Delivery, 2021, 36, 383-396.	4.3	10
28	Surge Compression for Improved Fault Location Accuracy in Full Transient-Based Methods. IEEE Sensors Journal, 2021, 21, 995-1008.	4.7	9
29	Modeling and Performance Evaluation of Inductive Couplers for Pulsed Current Injection. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 710-719.	2.2	9
30	A Correlation-Based Electromagnetic Time Reversal Technique to Locate Indoor Transient Radiation Sources. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 3945-3957.	4.6	9
31	High power and high pulse repetition frequency transistorized pulser by time base stability improvement and power synthesis technique. Review of Scientific Instruments, 2020, 91, 084703.	1.3	8
32	On the Spatial Resolution of Fault-Location Techniques Based on Full-Fault Transients. IEEE Transactions on Power Delivery, 2020, 35, 1527-1540.	4.3	8
33	Vulnerability Assessment of Equipment Excited by Disturbances Based on Support Vector Machine and Gaussian Process Regression. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 103-110.	2.2	8
34	JOR Iterative Method for the Modeling of MTLs Excited by EMP. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 536-539.	4.0	7
35	On the virtual cathode oscillatorâ€™s energy optimization. AIP Advances, 2018, 8, 125210.	1.3	7
36	A Portable Electric Field Detector With Precise Time Base for Transient Electromagnetic Radiation Source Location. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1408-1415.	4.7	7

#	ARTICLE	IF	CITATIONS
37	Uncertainty Quantification of Geo-Magnetically Induced Currents in UHV Power Grid. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 258-265.	2.2	7
38	Analysis of Time-Domain Shielding Effectiveness of Enclosures Above Lossy Half-Space Using an Improved Half-Space FDTD Method. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2076-2083.	2.2	7
39	A wideband picosecond pulsed electric fields (psPEF) exposure system for the nanoporation of biological cells. Bioelectrochemistry, 2021, 140, 107790.	4.6	7
40	A portable ultrawideband electromagnetic radiator with a 1.4 MW/50 kHz solid-state subnanosecond pulser. Review of Scientific Instruments, 2019, 90, 066102.	1.3	6
41	Determining Incidence and Polarization of Electromagnetic Field for Maximal/Minimal Coupling to Transmission Line System. IEEE Microwave and Wireless Components Letters, 2020, 30, 1021-1024.	3.2	6
42	A Multigap Loop Antenna and Norm Detector-Based Nano-Second-Level Transient Magnetic-Field Sensor. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8393-8400.	4.7	6
43	A Test Method for Response Behavior of Metal-Oxide Arrester Subjected to Transient Electromagnetic Disturbances. IEEE Transactions on Power Delivery, 2022, 37, 4749-4756.	4.3	6
44	A Spice-Compatible Macromodel for Field Coupling to Multiconductor Transmission Lines Based on the Analog Behavioral Modeling. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1884-1890.	2.2	5
45	Geomagnetically Induced Current Calculation of High Voltage Power System With Long Transmission Lines Using Kriging Method. IEEE Transactions on Power Delivery, 2022, 37, 650-657.	4.3	5
46	A Method to Evaluate the Performance of Ultra-Wideband Antennas for the Radiation of High-Power Electromagnetic Pulses. IEEE Transactions on Antennas and Propagation, 2022, 70, 7142-7146.	5.1	5
47	A broadband optical fiber transmission-based time domain measurement system for nanosecond-level transient electric field. Review of Scientific Instruments, 2022, 93, 014701.	1.3	5
48	Parameter optimization for rise time of sub-nanosecond pulser based on avalanche transistors. , 2017, , .		4
49	Methodical Approach for Immunity Assessment of Electronic Devices Excited by High Power EMP. Journal of Electronic Testing: Theory and Applications (JETTA), 2018, 34, 547-557.	1.2	4
50	Farâ€field boundary estimation for the highâ€power UWB pulsed antennas. IET Microwaves, Antennas and Propagation, 2018, 12, 2199-2205.	1.4	4
51	Effect of electrode surface micro-protrusions on the breakdown time delay and jitter for nanosecond pulsed gas discharge under hundreds of kV/cm in sulfur hexafluoride. Physics of Plasmas, 2020, 27, .	1.9	4
52	Waveform Shaping for Maximizing the Sharpness of Receiving Voltage Waveform for an Ultra-Wideband Antenna System. IEEE Transactions on Antennas and Propagation, 2021, 69, 5924-5930.	5.1	4
53	A transient electromagnetic disturbance testing system based on low-frequency-compensated symmetric TEM horn antenna. Review of Scientific Instruments, 2020, 91, 124702.	1.3	4
54	Study on All-Solid High Repetition-Rate Pulse Generator Based on DSRD. IEEE Letters on EMC Practice and Applications, 2020, 2, 142-146.	1.1	4

#	ARTICLE	IF	CITATIONS
55	Noninvasive and Accurate Measuring Method of the MMC and HVDC Circuit Breaker Action Moment Based on Transient E-Field Pulse. IEEE Transactions on Power Electronics, 2022, 37, 13332-13342.	7.9	4
56	Impedance Determination for High Voltage Air-Core Reactor Over Wide Frequency Range Based on Impulse Injection Technique. IEEE Transactions on Power Delivery, 2020, 35, 1909-1917.	4.3	3
57	Maximizing Radiated High-Power Electromagnetic Threat to Transmission Line System Under the Constraints of Bounded Bandwidth and Amplitude. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 840-847.	2.2	3
58	Machine Learning for the Uncertainty Quantification of Power Networks. IEEE Letters on EMC Practice and Applications, 2020, 2, 138-141.	1.1	3
59	Modeling the 10,000-Year Geomagnetic Disturbance Scenarios Based on Extreme Value Analysis. IEEE Letters on EMC Practice and Applications, 2020, 2, 156-160.	1.1	3
60	A modularized high-power ultra-wideband radiation system based on the space-synthesis method. Review of Scientific Instruments, 2022, 93, 044705.	1.3	3
61	A kind of HEMP simulator based on low-frequency-compensated TEM horn antenna. , 2016, , .		2
62	One of ways to choose UWB pulse repetition rate for assessment of the electronic devices immunity. , 2017, , .		2
63	Locating Transient Directional Sources in Free Space Based on the Electromagnetic Time Reversal Technique. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2036-2044.	2.2	2
64	A compact narrow-width combined antenna for the radiation of the UWB electromagnetic pulses. Review of Scientific Instruments, 2021, 92, 074701.	1.3	2
65	The Study on the Effect of HEMP on Ship System Based on CST. , 2020, , .		2
66	Numerical Analysis of Nonuniform Geoelectric Field Impacts on Geomagnetic Induction in Pipeline Networks. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 999-1009.	2.2	2
67	EMP effects statistical analysis based on incident waveform characteristics. , 2015, , .		1
68	A Spice-Compatible Macromodel for Field Coupling to Underground Transmission Lines Based on the Analog Behavioral Modeling. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2045-2054.	2.2	1
69	Development of a TEM-cell-integrated CO₂ incubator for cell-based transient electromagnetic field bioeffect study. Electromagnetic Biology and Medicine, 2020, 39, 290-297.	1.4	1
70	Role of the Pulse Repetition Rate when Assessing Electromagnetic Immunity of Electronic Devices. Journal of Electronic Testing: Theory and Applications (JETTA), 2020, 36, 671-676.	1.2	1
71	Effects of acute exposure to ultra-wideband pulsed electromagnetic fields on the liver and kidneys of mice. Electromagnetic Biology and Medicine, 2020, 39, 109-122.	1.4	1
72	Development of a type of differential switched oscillator system for the radiation of mesoband high-power electromagnetic pulses. Review of Scientific Instruments, 2021, 92, 014709.	1.3	1

#	Article	IF	Citations
73	Uncertainty Quantification of Self-Breakdown Switches in a Circuit Model Using Wienerâ€“Haar Expansion. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 27-32.	2.2	1
74	Analytical Electromagnetic Field Coupling to Transmission Line Model Exploiting the Reciprocity Theorem. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	1
75	Equivalent Test Method of Low-frequency Strong Magnetic Field on Underground Space. , 2020, , .		1
76	Optimizing Antenna Orientation and Positioning in a Radiated Susceptibility Test for Matched Transmission Line System. , 2020, , .		1
77	Optimization of Horn Antenna Used for HEMP Simulator Based on Low Frequency Compensation and Current Distribution. , 2020, , .		1
78	An Efficient Model of the Transmission Lines Excited by the External Nonuniform Transient Electromagnetic Field Using the MPM. IEEE Microwave and Wireless Components Letters, 2022, 32, 1147-1150.	3.2	1
79	A brief introduction of Sumudu transform and comparison with other integral transforms. , 2012, , .		0
80	Analyzation of EMP coupling to multi-conductor transmission lines based on the over-relaxation iterative methods. , 2015, , .		0
81	An Efficient Approach to Evaluate the Transient Response of Illuminated Overhead MTLs Terminated by a Nonlinear Load. IEEE Access, 2019, 7, 172374-172386.	4.2	0
82	Performance Evaluation of Inductive and Capacitive Couplers for Pulsed Current Injection. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 85-91.	2.2	0
83	A high-efficiency wideband coupler for nanosecond-level pulsed current injection. Review of Scientific Instruments, 2021, 92, 044701.	1.3	0
84	Calculation of the Lightning Induced Response on Overhead Transmission Lines based on the Electric Field Representation Methods. , 2019, , .		0
85	A Time-domain Macromodel for High Frequency Electromagnetic Field Coupling to A Single Transmission Line. , 2020, , .		0
86	A 1.35-kV/500-kHz Sub-Nanosecond Pulser With High Time Base Stability. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 1470-1479.	2.2	0