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	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
2	Performance Evaluation of Inductive and Capacitive Couplers for Pulsed Current Injection. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 85-91.	2.2	0
3	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
4	Analytical Electromagnetic Field Coupling to Transmission Line Model Exploiting the Reciprocity Theorem. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	1
5	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
6	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
7	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
8	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
9	A modularized high-power ultra-wideband radiation system based on the space-synthesis method. Review of Scientific Instruments, 2022, 93, 044705.	1.3	3
10	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
11	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
12	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
13	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
14	Surge Compression for Improved Fault Location Accuracy in Full Transient-Based Methods. IEEE Sensors Journal, 2021, 21, 995-1008.	4.7	9
15	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
16	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
17	Modeling and Performance Evaluation of Inductive Couplers for Pulsed Current Injection. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 710-719.	2.2	9
18	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
19	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
20	A high-efficiency wideband coupler for nanosecond-level pulsed current injection. Review of Scientific Instruments, 2021, 92, 044701.	1.3	0
21	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
22	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
23	A compact narrow-width combined antenna for the radiation of the UWB electromagnetic pulses. Review of Scientific Instruments, 2021, 92, 074701.	1.3	2
24	A wideband picosecond pulsed electric fields (psPEF) exposure system for the nanoporation of biological cells. Bioelectrochemistry, 2021, 140, 107790.	4.6	7
25	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
26	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
27	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
28	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
29	Uncertainty Quantification of Geo-Magnetically Induced Currents in UHV Power Grid. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 258-265.	2.2	7
30	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
31	Statistical Inference of Serial Communication Errors Caused by Repetitive Electromagnetic Disturbances. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1160-1168.	2.2	10
32	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
33	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
34	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
35	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
36	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

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37	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
38	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
39	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
40	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
41	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
42	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
43	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
44	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
45	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
46	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
47	Equivalent Test Method of Low-frequency Strong Magnetic Field on Underground Space. , 2020, , .		1
48	Optimizing Antenna Orientation and Positioning in a Radiated Susceptibility Test for Matched Transmission Line System. , 2020, , .		1
49	Optimization of Horn Antenna Used for HEMP Simulator Based on Low Frequency Compensation and Current Distribution. , 2020, , .		1
50	A Time-domain Macromodel for High Frequency Electromagnetic Field Coupling to A Single Transmission Line. , 2020, , .		0
51	The Study on the Effect of HEMP on Ship System Based on CST. , 2020, , .		2
52	Machine Learning for the Uncertainty Quantification of Power Networks. IEEE Letters on EMC Practice and Applications, 2020, 2, 138-141.	1.1	3
53	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
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

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55	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
56	Traveling-Wave Marx Circuit for Generating Repetitive Sub-Nanosecond Pulses. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1271-1279.	2.2	18
57	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
58	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
59	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
60	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
61	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
62	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
63	Calculation of the Lightning Induced Response on Overhead Transmission Lines based on the Electric Field Representation Methods. , 2019, , .		0
64	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
65	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
66	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
67	On Nonuniform Transient Electromagnetic Field Coupling to Overhead Transmission Lines. IEEE Transactions on Antennas and Propagation, 2018, 66, 3087-3096.	5.1	11
68	On the virtual cathode oscillatorâ€™s energy optimization. AIP Advances, 2018, 8, 125210.	1.3	7
69	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
70	Farâ€field boundary estimation for the highâ€power UWB pulsed antennas. IET Microwaves, Antennas and Propagation, 2018, 12, 2199-2205.	1.4	4
71	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
72	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

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73	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
74	Parameter optimization for rise time of sub-nanosecond pulser based on avalanche transistors. , 2017, , .		4
75	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
76	One of ways to choose UWB pulse repetition rate for assessment of the electronic devices immunity. , 2017, , .		2
77	A kind of HEMP simulator based on low-frequency-compensated TEM horn antenna. , 2016, , .		2
78	JOR Iterative Method for the Modeling of MTLs Excited by EMP. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 536-539.	4.0	7
79	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
80	EMP effects statistical analysis based on incident waveform characteristics. , 2015, , .		1
81	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
82	Analyzation of EMP coupling to multi-conductor transmission lines based on the over-relaxation iterative methods. , 2015, , .		0
83	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
84	Analytic Iterative Solution of Electromagnetic Pulse Coupling to Multiconductor Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 451-466.	2.2	22
85	A brief introduction of Sumudu transform and comparison with other integral transforms. , 2012, , .		0
86	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