Farhad Rachidi

List of Publications by Year
in descending order

396 papers	9,180 citations	53794 45 h-index	64796 79 g-index
404 all docs	404 docs citations	404 times ranked	2211 citing authors

#	Article	IF	Citations
1	Influence of a lossy ground on lightning-induced voltages on overhead lines. IEEE Transactions on Electromagnetic Compatibility, 1996, 38, 250-264.	2.2	361
2	Lightning-induced voltages on overhead lines. IEEE Transactions on Electromagnetic Compatibility, 1993, 35, 75-86.	2.2	309
3	Lightning return stroke current models with specified channelâ€base current: A review and comparison. Journal of Geophysical Research, 1990, 95, 20395-20408.	3.3	304
4	Current and electromagnetic field associated with lightning-return strokes to tall towers. IEEE Transactions on Electromagnetic Compatibility, 2001, 43, 356-367.	2.2	277
5	Formulation of the field-to-transmission line coupling equations in terms of magnetic excitation field. IEEE Transactions on Electromagnetic Compatibility, 1993, 35, 404-407.	2.2	230
6	Overview of Recent Progress in Lightning Research and Lightning Protection. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 428-442.	2.2	189
7	A Review of Field-to-Transmission Line Coupling Models With Special Emphasis to Lightning-Induced Voltages on Overhead Lines. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 898-911.	2.2	186
8	Transient analysis of multiconductor lines above a lossy ground. IEEE Transactions on Power Delivery, 1999, 14, 294-302.	4.3	168
9	A Review of Current Issues in Lightning Protection of New-Generation Wind-Turbine Blades. IEEE Transactions on Industrial Electronics, 2008, 55, 2489-2496.	7.9	161
10	An Efficient Method Based on the Electromagnetic Time Reversal to Locate Faults in Power Networks. IEEE Transactions on Power Delivery, 2013, 28, 1663-1673.	4.3	160
11	Mitigation of Lightning-Induced Overvoltages in Medium Voltage Distribution Lines by Means of Periodical Grounding of Shielding Wires and of Surge Arresters: Modeling and Experimental Validation. IEEE Transactions on Power Delivery, 2004, 19, 423-431.	4.3	157
12	On the Master, Uman, Lin, Standler and the Modified Transmission Line Lightning return stroke current models. Journal of Geophysical Research, 1990, 95, 20389-20393.	3.3	154
13	A Comparison of Frequency-Dependent Soil Models: Application to the Analysis of Grounding Systems. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 177-187.	2.2	145
14	Lightning Induced Disturbances in Buried Cablesâ€"Part I: Theory. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 498-508.	2.2	123
15	Electromagnetic field coupling to a line of finite length: theory and fast iterative solutions in frequency and time domains. IEEE Transactions on Electromagnetic Compatibility, 1995, 37, 509-518.	2.2	120
16	Effect of vertically extended strike object on the distribution of current along the lightning channel. Journal of Geophysical Research, 2002, 107, ACL 16-1-ACL 16-6.	3.3	117
17	Lightning Electromagnetic Field Coupling to Overhead Lines: Theory, Numerical Simulations, and Experimental Validation. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 532-547.	2.2	99
18	Lightning-induced voltages on complex distribution systems: models, advanced software tools and experimental validation. Journal of Electrostatics, 2004, 60, 163-174.	1.9	92

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19	External impedance and admittance of buried horizontal wires for transient studies using transmission line analysis. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 751-761.	2.9	91
20	Evaluation of Lightning Electromagnetic Fields and Their Induced Voltages on Overhead Lines Considering the Frequency Dependence of Soil Electrical Parameters. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 1210-1219.	2.2	86
21	Comparison of two coupling models for lightning-induced overvoltage calculations. IEEE Transactions on Power Delivery, 1995, 10, 330-339.	4.3	84
22	On the contribution of the electromagnetic field components in field-to-transmission line interaction. IEEE Transactions on Electromagnetic Compatibility, 1995, 37, 505-508.	2.2	79
23	Lightning Induced Disturbances in Buried Cablesâ€"Part II: Experiment and Model Validation. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 509-520.	2.2	78
24	Lightning return stroke current radiation in presence of a conducting ground: 2. Validity assessment of simplified approaches. Journal of Geophysical Research, 2008, 113, .	3.3	77
25	Far-Fieldâ€"Current Relationship Based on the TL Model for Lightning Return Strokes to Elevated Strike Objects. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 146-159.	2.2	76
26	Response of multiconductor power lines to nearby lightning return stroke electromagnetic fields. IEEE Transactions on Power Delivery, 1997, 12, 1404-1411.	4.3	69
27	On the influence of elevated strike objects on directly measured and indirectly estimated lightning currents. IEEE Transactions on Power Delivery, 1998, 13, 1543-1555.	4.3	66
28	Evaluation of Power System Lightning Performance, Part I: Model and Numerical Solution Using the PSCAD-EMTDC Platform. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 137-145.	2.2	66
29	Characterization of vertical electric fields 500 m and 30 m from triggered lightning. Journal of Geophysical Research, 1995, 100, 8863.	3.3	63
30	On the Choice Between Transmission Line Equations and Full-Wave Maxwell's Equations for Transient Analysis of Buried Wires. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 347-357.	2.2	63
31	Nowcasting lightning occurrence from commonly available meteorological parameters using machine learning techniques. Npj Climate and Atmospheric Science, 2019, 2, .	6.8	63
32	High-frequency electromagnetic field coupling to long terminated lines. IEEE Transactions on Electromagnetic Compatibility, 2001, 43, 117-129.	2.2	62
33	On the estimation of lightning peak currents from measured fields using lightning location systems. Journal of Electrostatics, 2004, 60, 121-129.	1.9	59
34	A system for the measurements of lightning currents at the SÃntis Tower. Electric Power Systems Research, 2012, 82, 34-43.	3.6	59
35	An Alternative Method for Locating Faults in Transmission Line Networks Based on Time Reversal. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1601-1612.	2.2	59
36	On the Location of Lightning Discharges Using Time Reversal of Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 149-158.	2.2	58

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37	An Algorithm for the Exact Evaluation of the Underground Lightning Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 401-411.	2.2	57
38	Statistical Distributions of Lightning Currents Associated With Upward Negative Flashes Based on the Data Collected at the SÃntis (EMC) Tower in 2010 and 2011. IEEE Transactions on Power Delivery, 2013, 28, 1804-1812.	4.3	56
39	On Lightning Electromagnetic Field Propagation Along an Irregular Terrain. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 161-171.	2.2	56
40	Nonuniform Transmission Tower Model for Lightning Transient Studies. IEEE Transactions on Power Delivery, 2004, 19, 490-496.	4.3	55
41	Validity of Simplified Approaches for the Evaluation of Lightning Electromagnetic Fields Above a Horizontally Stratified Ground. IEEE Transactions on Electromagnetic Compatibility, 2010, 52, 657-663.	2.2	54
42	Interaction of electromagnetic fields generated by lightning with overhead electrical networks. , 2003, , 425-478.		54
43	Determination of lightning currents from far electromagnetic fields. Journal of Geophysical Research, 1993, 98, 18315-18321.	3.3	52
44	Lightning Potential Index performances in multimicrophysical cloudâ€resolving simulations of a backâ€building mesoscale convective system: The Genoa 2014 event. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4238-4257.	3.3	48
45	Evaluation of Power System Lightning Performanceâ€"Part II: Application to an Overhead Distribution Network. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 146-153.	2.2	47
46	Interaction of electromagnetic fields generated by lightning with overhead electrical networks. , 2014, , 559-609.		47
47	A new expression for the ground transient resistance matrix elements of multiconductor overhead transmission lines. Electric Power Systems Research, 2003, 65, 41-46.	3.6	45
48	Influence of frequencyâ€dependent soil electrical parameters on the evaluation of lightning electromagnetic fields in air and underground. Journal of Geophysical Research, 2009, 114, .	3.3	45
49	On Tower Impedances for Transient Analysis. IEEE Transactions on Power Delivery, 2004, 19, 1238-1244.	4.3	44
50	A finite-difference time-domain approach for the evaluation of electromagnetic fields radiated by lightning strikes to tall structures. Journal of Electrostatics, 2008, 66, 504-513.	1.9	43
51	Assessment of the Influence of Losses on the Performance of the Electromagnetic Time Reversal Fault Location Method. IEEE Transactions on Power Delivery, 2017, 32, 2303-2312.	4.3	43
52	Generalized Form of Telegrapher's Equations for the Electromagnetic Field Coupling to Buried Wires of Finite Length. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 331-337.	2.2	42
53	Application of the time reversal of electromagnetic fields to locate lightning discharges. Atmospheric Research, 2012, 117, 78-85.	4.1	42
54	Time-Domain Analysis of Building Shielding Against Lightning Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 397-404.	2.2	42

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55	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
56	Electromagnetic Fields of a Lightning Return Stroke in Presence of a Stratified Ground. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 413-418.	2.2	41
57	Determination of reflection coefficients at the top and bottom of elevated strike objects struck by lightning. Journal of Geophysical Research, 2003, 108, .	3.3	40
58	Application of the Matrix Pencil Method to Rational Fitting of Frequency-Domain Responses. IEEE Transactions on Power Delivery, 2012, 27, 2399-2408.	4.3	40
59	Generalized Form of Telegrapher's Equations for the Electromagnetic Field Coupling to Finite-Length Lines Above a Lossy Ground. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 689-697.	2.2	39
60	Lightning electromagnetic radiation over a stratified conducting ground: 2. Validity of simplified approaches. Journal of Geophysical Research, 2011, 116, .	3.3	39
61	Analysis of Electromagnetic Fields Inside a Reinforced Concrete Building With Layered Reinforcing Bar due to Direct and Indirect Lightning Strikes Using the FDTD Method. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 405-417.	2.2	39
62	On return stroke currents and remote electromagnetic fields associated with lightning strikes to tall structures: 2. Experiment and model validation. Journal of Geophysical Research, 2007, 112, .	3.3	38
63	Time-Domain Implementation of Coorayâ€"Rubinstein Formula via Convolution Integral and Rational Approximation. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 755-763.	2.2	38
64	Voltages induced on overhead lines by dart leaders and subsequent return strokes in natural and rocket-triggered lightning. IEEE Transactions on Electromagnetic Compatibility, 1997, 39, 160-166.	2.2	37
65	Influence of corona on the voltages induced by nearby lightning on overhead distribution lines. IEEE Transactions on Power Delivery, 2000, 15, 1265-1273.	4.3	37
66	Evaluation of the performance characteristics of the European Lightning Detection Network EUCLID in the Alps region for upward negative flashes using direct measurements at the instrumented SÃntis Tower. Journal of Geophysical Research D: Atmospheres, 2016, 121, 595-606.	3.3	37
67	On the accuracy of approximate techniques for the evaluation of lightning electromagnetic fields along a mixed propagation path. Radio Science, 2011, 46, .	1.6	36
68	Use of the full-wave Finite Element Method for the numerical electromagnetic analysis of LEMP and its coupling to overhead lines. Electric Power Systems Research, 2013, 94, 24-29.	3.6	36
69	Lightning Electromagnetic Fields and Their Induced Currents on Buried Cables. Part II: The Effect of a Horizontally Stratified Ground. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1146-1154.	2.2	36
70	Evaluation of the Mitigation Effect of the Shield Wires on Lightning Induced Overvoltages in MV Distribution Systems Using Statistical Analysis. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1400-1408.	2.2	36
71	Lightning electromagnetic radiation over a stratified conducting ground: Formulation and numerical evaluation of the electromagnetic fields. Journal of Geophysical Research, 2011, 116, .	3.3	35
72	Partial Discharge Localization Using Time Reversal: Application to Power Transformers. Sensors, 2020, 20, 1419.	3.8	35

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73	On the Evaluation of Antenna-Mode Currents Along Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 693-700.	2.2	34
74	Positive lightning flashes recorded on the SÃntis tower from May 2010 to January 2012. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,879.	3.3	34
75	Application of the Cascaded Transmission Line Theory of Paul and McKnight to the Evaluation of NEXT and FEXT in Twisted Wire Pair Bundles. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 648-656.	2.2	33
76	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
77	Prony Series Representation for the Lightning Channel Base Current. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 308-315.	2.2	32
78	Location Accuracy Evaluation of ToAâ€Based Lightning Location Systems Over Mountainous Terrain. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,760.	3.3	32
79	On the Current Peak Estimates Provided by Lightning Detection Networks for Lightning Return Strokes to Tall Towers. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 453-458.	2.2	31
80	Fault location in multi-terminal HVDC networks based on Electromagnetic Time Reversal with limited time reversal window. , 2014, , .		31
81	A New Formulation of the Coorayâ€"Rubinstein Expression in Time Domain. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 391-396.	2.2	31
82	Impact of Frequency-Dependent Soil Models on Grounding System Performance for Direct and Indirect Lightning Strikes. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 134-144.	2.2	31
83	Indoor radiated emission associated with power line communication systems. , 0, , .		30
84	Radiated Fields From Lightning Strikes to Tall Structures: Effect of Upward-Connecting Leader and Reflections at the Return Stroke Wavefront. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 437-445.	2.2	30
85	CIGRE technical brochure on lightning parameters for engineering applications. , 2013, , .		30
86	Lightning Electromagnetic Fields and Their Induced Currents on Buried Cables. Part I: The Effect of an Oceanâ€"Land Mixed Propagation Path. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1137-1145.	2.2	30
87	Return stroke current profiles and electromagnetic fields associated with lightning strikes to tall towers: Comparison of engineering models. Journal of Electrostatics, 2007, 65, 316-321.	1.9	29
88	An antenna-theory approach for modeling inclined lightning return stroke channels. Electric Power Systems Research, 2006, 76, 945-952.	3.6	28
89	High-Frequency Electromagnetic Coupling to Multiconductor Transmission Lines of Finite Length. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1714-1723.	2.2	28
90	Graded-permittivity polymer nanocomposites as superior dielectrics. Composites Science and Technology, 2016, 129, 1-9.	7.8	28

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91	Mixed-Potential Integral Equation for Full-Wave Modeling of Grounding Systems Buried in a Lossy Multilayer Stratified Ground. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1505-1513.	2.2	28
92	On the Transmission-Line Approach for the Evaluation of LEMP Coupling to Multiconductor Lines. IEEE Transactions on Power Delivery, 2015, 30, 861-869.	4.3	27
93	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
94	Lightning Currents Flowing in the Soil and Entering a Test Power Distribution Line Via Its Grounding. IEEE Transactions on Power Delivery, 2009, 24, 1095-1103.	4.3	26
95	On the possible variation of the lightning striking distance as assumed in the IEC lightning protection standard as a function of structure height. Electric Power Systems Research, 2014, 113, 79-87.	3.6	26
96	The laser lightning rod project. EPJ Applied Physics, 2021, 93, 10504.	0.7	26
97	Evaluation of Lightning-Induced Currents on Cables Buried in a Lossy Dispersive Ground. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1522-1529.	2.2	25
98	Analysis of lightning electromagnetic field propagation in mountainous terrain and its effects on ToAâ€based lightning location systems. Journal of Geophysical Research D: Atmospheres, 2016, 121, 895-911.	3.3	25
99	Using electromagnetic time reversal to locate faults in transmission lines: Definition and application of the â€œMirrored Minimum Energyâ€• property. , 2017, , .		25
100	Transient Responses of Overhead Cables Due to Mode Transition in High Frequencies. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 785-794.	2.2	25
101	Application of a partial element equivalent circuit method to lightning surge analyses. Electric Power Systems Research, 2013, 94, 30-37.	3.6	24
102	A Technique for Calculating Voltages Induced on Twisted-Wire Pairs Using the FDTD Method. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 301-304.	2.2	24
103	Partial Discharge Localization Using Electromagnetic Time Reversal: A Performance Analysis. IEEE Access, 2020, 8, 147507-147515.	4.2	24
104	Electromagnetic field radiated by lightning to tall towers: Treatment of the discontinuity at the return stroke wave front. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	23
105	Lightning electromagnetic fields at very close distances associated with lightning strikes to the Gaisberg tower. Journal of Geophysical Research, 2010, 115, .	3.3	23
106	An Analysis of Current and Electric Field Pulses Associated With Upward Negative Lightning Flashes Initiated from the SÃntis Tower. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4045-4059.	3.3	23
107	An Effective EMTR-Based High-Impedance Fault Location Method for Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 268-276.	2.2	23
108	Localization of Electromagnetic Interference Sources Using a Time-Reversal Cavity. IEEE Transactions on Industrial Electronics, 2021, 68, 654-662.	7.9	23

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109	Lightning strikes to elevated structures: influence of grounding conditions on currents and electromagnetic fields. , 0, , .		22
110	On the Measurement and Calculation of Horizontal Electric Fields From Lightning. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 792-801.	2.2	22
111	On the use of electromagnetic time reversal to locate faults in series-compensated transmission lines. , 2013, , .		22
112	An automated FPGA real-time simulator for power electronics and power systems electromagnetic transient applications. Electric Power Systems Research, 2016, 141, 147-156.	3.6	22
113	Time reversal applied to fault location in power networks: Pilot test results and analyses. International Journal of Electrical Power and Energy Systems, 2020, 114, 105382.	5.5	22
114	Compensation of the Instrumental Decay in Measured Lightning Electric Field Waveforms. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 685-688.	2.2	21
115	Time-Domain Generalized Telegrapher's Equations for the Electromagnetic Field Coupling to Finite Length Wires Above a Lossy Ground. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 218-224.	2.2	21
116	On the proportion of upward flashes to lightning research towers. Atmospheric Research, 2013, 129-130, 110-116.	4.1	21
117	An analysis of the initiation of upward flashes from tall towers with particular reference to Gaisberg and SÃntis Towers. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 46-51.	1.6	21
118	On the mechanisms of differential-mode to common-mode conversion in the broadband over power line (BPL) frequency band. , 2006, , .		20
119	An Effective Approach for High-Frequency Electromagnetic Field-to-Line Coupling Analysis Based on Regularization Techniques. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 1289-1297.	2.2	20
120	On the Validity of Approximate Formulas for the Evaluation of the Lightning Electromagnetic Fields in the Presence of a Lossy Ground. IEEE Transactions on Electromagnetic Compatibility, 2012, , 1-9.	2.2	20
121	Lightning electromagnetic fields and their induced voltages on overhead lines: the effect of a non-flat lossy ground. , 2014, , .		20
122	Formulation of the Field-to-Transmission Line Coupling Equations in Terms of Scalar and Vector Potentials. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1586-1591.	2.2	20
123	Analysis of lightning-ionosphere interaction using simultaneous records of source current and 380Âkm distant electric field. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 159, 48-56.	1.6	20
124	An experimental field study of the grounding system response of tall wind turbines to impulse surges. Electric Power Systems Research, 2018, 160, 219-225.	3.6	20
125	Single-Sensor Source Localization Using Electromagnetic Time Reversal and Deep Transfer Learning: Application to Lightning. Scientific Reports, 2019, 9, 17372.	3.3	20
126	Effect of Nearby Buildings on Electromagnetic Fields from Lightning. Journal of Lightning Research, 2009, 1, 52-60.	0.3	20

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127	On the inversion of polarity of the electric field at very close range from a tower struck by lightning. Journal of Geophysical Research, 2007, 112, .	3.3	19
128	A new method to locate faults in power networks based on Electromagnetic Time Reversal. , 2012, , .		19
129	On the Mechanism of Current Pulse Propagation Along Conical Structures: Application to Tall Towers Struck by Lightning. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 332-342.	2.2	19
130	Fast initial continuous current pulses versus return stroke pulses in towerâ€initiated lightning. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6425-6434.	3.3	19
131	Some Developments of the Coorayâ€“Rubinstein Formula in the Time Domain. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1079-1085.	2.2	18
132	Locating lightning strikes and flashovers along overhead power transmission lines using electromagnetic time reversal. Electric Power Systems Research, 2018, 160, 282-291.	3.6	18
133	On the Stability of FDTD-Based Numerical Codes to Evaluate Lightning-Induced Overvoltages in Overhead Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 108-115.	2.2	17
134	A parallel implementation of nec for the analysis of large structures. IEEE Transactions on Electromagnetic Compatibility, 2003, 45, 177-188.	2.2	16
135	Determination of lightning currents from far electromagnetic fields: Effect of a strike object. Journal of Electrostatics, 2007, 65, 289-295.	1.9	16
136	Lightning-induced currents in buried coaxial cables: A frequency-domain approach and its validation using rocket-triggered lightning. Journal of Electrostatics, 2007, 65, 322-328.	1.9	16
137	Lightning Return Strokes to Tall Towers: Ability of Engineering and Electromagnetic Models to Reproduce Nearby Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 889-897.	2.2	16
138	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
139	Electromagnetic Time Reversal Similarity Characteristics and Its Application to Locating Faults in Power Networks. IEEE Transactions on Power Delivery, 2020, 35, 1735-1748.	4.3	16
140	An Acoustic Time Reversal Technique to Locate a Partial Discharge Source: Two-Dimensional Numerical Validation. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 2203-2205.	2.9	16
141	Mitigation of electromagnetic field radiated by PLC systems in indoor environment. International Journal of Communication Systems, 2003, 16, 417-426.	2.5	15
142	On Wire-Grid Representation of Solid Metallic Surfaces. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 192-195.	2.2	15
143	Frequency-domain analysis of ground electrodes buried in an ionized soil when subjected to surge currents: A MoMâ€“AOM approach. Electric Power Systems Research, 2011, 81, 290-296.	3.6	15
144	On the Electromagnetic Susceptibility of Hot Wire-Based Electroexplosive Devices to RF Sources. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 754-763.	2.2	15

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145	Are Standardized Lightning Current Waveforms Suitable for Aircraft and Wind Turbine Blades Made of Composite Materials?. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1320-1328.	2.2	15
146	Numerical and Experimental Validation of Electromagnetic Time Reversal for Geolocation of Lightning Strikes. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 2156-2163.	2.2	15
147	On return stroke currents and remote electromagnetic fields associated with lightning strikes to tall structures: 1. Computational models. Journal of Geophysical Research, 2007, 112, .	3.3	14
148	Tower and Path-Dependent Voltage Effects on the Measurement of Grounding Impedance for Lightning Studies. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 409-418.	2.2	14
149	Comparison of current characteristics of lightning strokes measured at the CN Tower and at other elevated objects. , 0, , .		13
150	On the Computation of underground Electromagnetic Fields Generated by Lightning: A Comparison between Different Approaches. , 2007, , .		13
151	Why do some lightning return stroke models not reproduce the farâ€field zero crossing?. Journal of Geophysical Research, 2009, 114, .	3.3	13
152	An Improved Formula for the Transfer Impedance of Two-Layer Braided Cable Shields. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 607-610.	2.2	13
153	Experimental Characterization of the Response of an Electrical and Communication Raceway to IEMI. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 494-505.	2.2	13
154	Extrapolation of a Truncated Spectrum With Hilbert Transform for Obtaining Causal Impulse Responses. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 454-460.	2.2	13
155	A New Solution for the Evaluation of the Horizontal Electric Fields From Lightning in Presence of a Finitely Conducting Ground. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 674-678.	2.2	13
156	Extension of the Unmatched-Media Time Reversal Method to Locate Soft Faults in Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1539-1545.	2.2	13
157	Electromagnetic Time Reversal Applied to Fault Location: On the Properties of Back-Injected Signals. , 2018, , .		13
158	Meteorological Aspects of Selfâ€Initiated Upward Lightning at the SÃntis Tower (Switzerland). Journal of Geophysical Research D: Atmospheres, 2019, 124, 14162-14183.	3.3	13
159	Calculation of the Grounding Resistance of Structures Located on Elevated Terrain. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1891-1895.	2.2	13
160	Modeling Compact Intracloud Discharge (CID) as a Streamer Burst. Atmosphere, 2020, 11, 549.	2.3	13
161	Energy balance comparison of sorghum and sunflower. Theoretical and Applied Climatology, 1993, 48, 29-39.	2.8	12
162	On the Relationship Between the Signature of Close Electric Field and the Equivalent Corona Current in Lightning Return Stroke Models. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 921-927.	2.2	12

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163	Analytical Expressions for Zero-Crossing Times in Lightning Return-Stroke Engineering Models. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 963-974.	2.2	12
164	A general purpose FPGA-based real-time simulator for power systems applications. , 2013, , .		12
165	From the Incoming Editor-in-Chief. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 2-2.	2.2	12
166	Characterization, Modeling, and Statistical Analysis of the Electromagnetic Response of Inert Improvised Explosive Devices. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 393-403.	2.2	12
167	The Influence of the Slope Angle of the Oceanâ€"Land Mixed Propagation Path on the Lightning Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1086-1095.	2.2	12
168	An Improved Approach for the Calculation of the Transient Ground Resistance Matrix of Multiconductor Lines. IEEE Transactions on Power Delivery, 2016, 31, 1142-1149.	4.3	12
169	Isolated vs. Interconnected Wind Turbine Grounding Systems: Effect on the Harmonic Grounding Impedance, Ground Potential Rise and Step Voltage. Electric Power Systems Research, 2019, 173, 230-239.	3.6	12
170	A New Engineering Model of Lightning M Component That Reproduces Its Electric Field Waveforms at Both Close and Far Distances. Journal of Geophysical Research D: Atmospheres, 2019, 124, 14008-14023.	3.3	12
171	Analysis of Transmission Lines With Arrester Termination, Considering the Frequency-Dependence of Grounding Systems. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 986-994.	2.2	11
172	Some characteristics of positive and bipolar lightning flashes recorded on the Säntis tower in 2010 and 2011. , 2012, , .		11
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