Vladimir A Rakov

List of Publications by Year
in descending order

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351 papers	14,096 citations	17405 63 h-index	42291 92 g-index
369 all docs	369 docs citations	369 times ranked	2550 citing authors

#	Article	IF	Citations
1	Review and evaluation of lightning return stroke models including some aspects of their application. IEEE Transactions on Electromagnetic Compatibility, 1998, 40, 403-426.	1.4	453
2	The lightning striking distanceâ€"Revisited. Journal of Electrostatics, 2007, 65, 296-306.	1.0	192
3	Overview of Recent Progress in Lightning Research and Lightning Protection. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 428-442.	1.4	189
4	Parameters of triggeredâ€lightning flashes in Florida and Alabama. Journal of Geophysical Research, 1993, 98, 22887-22902.	3.3	183
5	New insights into lightning processes gained from triggered-lightning experiments in Florida and Alabama. Journal of Geophysical Research, 1998, 103, 14117-14130.	3.3	171
6	X-ray bursts associated with leader steps in cloud-to-ground lightning. Geophysical Research Letters, 2005, 32, .	1.5	168
7	Energetic Radiation Produced During Rocket-Triggered Lightning. Science, 2003, 299, 694-697.	6.0	157
8	Distribution of charge along the lightning channel: Relation to remote electric and magnetic fields and to return-stroke models. Journal of Geophysical Research, 1997, 102, 6987-7006.	3.3	150
9	Transient response of a tall object to lightning. IEEE Transactions on Electromagnetic Compatibility, 2001, 43, 654-661.	1.4	150
10	Voltages Induced on an Overhead Wire by Lightning Strikes to a Nearby Tall Grounded Object. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 212-224.	1.4	125
11	Lightning Induced Disturbances in Buried Cablesâ€"Part I: Theory. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 498-508.	1.4	123
12	A ground level gamma-ray burst observed in association with rocket-triggered lightning. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	122
13	The interaction of lightning with airborne vehicles. Progress in Aerospace Sciences, 2003, 39, 61-81.	6.3	121
14	A Review of Positive and Bipolar Lightning Discharges. Bulletin of the American Meteorological Society, 2003, 84, 767-776.	1.7	121
15	Observed leader and return-stroke propagation characteristics in the bottom 400 m of a rocket-triggered lightning channel. Journal of Geophysical Research, 1999, 104, 14369-14376.	3.3	117
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	Some properties of negative cloudâ€toâ€ground lightning flashes versus stroke order. Journal of Geophysical Research, 1990, 95, 5447-5453.	3.3	115
18	Initial stage in lightning initiated from tall objects and in rocket-triggered lightning. Journal of Geophysical Research, 2005, 110, .	3.3	115

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19	Review of lightning properties from electric field and TV observations. Journal of Geophysical Research, 1994, 99, 10745.	3.3	113
20	An evaluation of the performance characteristics of the U.S. National Lightning Detection Network in Florida using rocket-triggered lightning. Journal of Geophysical Research, 2005, 110, .	3.3	113
21	Characterization of the initial stage of negative rocket-triggered lightning. Journal of Geophysical Research, 1999, 104, 4213-4222.	3.3	111
22	A new lightning return stroke model based on antenna theory. Journal of Geophysical Research, 2000, 105, 29693-29702.	3.3	107
23	Leader properties determined with triggered lightning techniques. Journal of Geophysical Research, 1998, 103, 14109-14115.	3.3	105
24	Some inferences on the propagation mechanisms of dart leaders and return strokes. Journal of Geophysical Research, 1998, 103, 1879-1887.	3.3	104
25	On the transmission line model for lightning return stroke representation. Geophysical Research Letters, 2003, 30, .	1.5	104
26	On the use of lumped sources in lightning return stroke models. Journal of Geophysical Research, 2005, 110, .	3.3	102
27	Some inferences on the role of lower positive charge region in facilitating different types of lightning. Geophysical Research Letters, 2009, 36, .	1.5	100
28	Lightning Electromagnetic Field Coupling to Overhead Lines: Theory, Numerical Simulations, and Experimental Validation. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 532-547.	1.4	99
29	Attachment process in rocket-triggered lightning strokes. Journal of Geophysical Research, 1999, 104, 2143-2150.	3.3	97
30	Measurements of x-ray emission from rocket-triggered lightning. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	95
31	Analysis of Lightning-Radiated Electromagnetic Fields in the Vicinity of Lossy Ground. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 131-145.	1.4	94
32	Initialâ€stage pulses in upward lightning: Leader/return stroke versus Mâ€component mode of charge transfer to ground. Geophysical Research Letters, 2008, 35, .	1.5	93
33	A study of Xâ€ray emission from laboratory sparks in air at atmospheric pressure. Journal of Geophysical Research, 2008, 113, .	3.3	92
34	Positive lightning: An overview, new observations, and inferences. Journal of Geophysical Research, 2012, 117, .	3.3	92
35	M-component mode of charge transfer to ground in lightning discharges. Journal of Geophysical Research, 2001, 106, 22817-22831.	3.3	91
36	Lightning subsequentâ€stroke electric field peak greater than the first stroke peak and multiple ground terminations. Journal of Geophysical Research, 1992, 97, 7503-7509.	3.3	90

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37	Observations of stepping mechanisms in a rocketâ€andâ€wire triggered lightning flash. Journal of Geophysical Research, 2010, 115, .	3.3	89
38	Analysis of Lightning-Induced Voltages on Overhead Lines Using a 2-D FDTD Method and Agrawal Coupling Model. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 651-659.	1.4	88
39	Properties of M components from currents measured at triggered lightning channel base. Journal of Geophysical Research, 1995, 100, 25711.	3.3	87
40	On the Mechanism of Attenuation of Current Waves Propagating Along a Vertical Perfectly Conducting Wire Above Ground: Application to Lightning. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 521-532.	1.4	86
41	A study of the lightning channel corona sheath. Journal of Geophysical Research, 2006, 111, .	3.3	86
42	On phenomenology of compact intracloud lightning discharges. Journal of Geophysical Research, 2010, 115, .	3.3	86
43	Pulse trains that are characteristic of preliminary breakdown in cloudâ€toâ€ground lightning but are not followed by return stroke pulses. Journal of Geophysical Research, 2008, 113, .	3.3	83
44	A review of ten years of triggered-lightning experiments at Camp Blanding, Florida. Atmospheric Research, 2005, 76, 503-517.	1.8	82
45	Electromagnetic models of the lightning return stroke. Journal of Geophysical Research, 2007, 112, .	3.3	82
46	Lightning electromagnetic environment in the presence of a tall grounded strike object. Journal of Geophysical Research, 2005, 110, .	3.3	81
47	Lightning Induced Disturbances in Buried Cablesâ€"Part II: Experiment and Model Validation. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 509-520.	1.4	78
48	Long continuing current in negative lightning ground flashes. Journal of Geophysical Research, 1990, 95, 5455-5470.	3.3	77
49	Mechanism of the lightning M component. Journal of Geophysical Research, 1995, 100, 25701.	3.3	76
50	Evaluation of U.S. National Lightning Detection Network performance characteristics using rocket-triggered lightning data acquired in 2004â€"2009. Journal of Geophysical Research, 2011, 116, .	3.3	75
51	New measurements of lightning electric fields in Florida: Waveform characteristics, interaction with the ionosphere, and peak current estimates. Journal of Geophysical Research, 2012, 117, .	3.3	75
52	Observed dart leader speed in natural and triggered lightning. Journal of Geophysical Research, 1992, 97, 9951-9957.	3.3	74
53	Electric fields near triggered lightning channels measured with Pockels sensors. Journal of Geophysical Research, 2002, 107, ACL 2-1.	3.3	74
54	X rays from 80â€cm long sparks in air. Geophysical Research Letters, 2008, 35, .	1.5	74

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55	Lightning attachment process involving connection of the downward negative leader to the lateral surface of the upward connecting leader. Geophysical Research Letters, 2013, 40, 5531-5535.	1.5	72
56	Current Waveforms for Lightning Simulation. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 880-888.	1.4	71
57	Application of the antenna theory model to a tall tower struck by lightning. Journal of Geophysical Research, 2003, 108, .	3.3	68
58	Microsecond-scale electric field pulses in cloud lightning discharges. Journal of Geophysical Research, 1994, 99, 14353.	3.3	67
59	Direct lightning strikes to the lightning protective system of a residential building: triggered-lightning experiments. IEEE Transactions on Power Delivery, 2002, 17, 575-586.	2.9	67
60	Analysis of microsecond- and submicrosecond-scale electric field pulses produced by cloud and ground lightning discharges. Atmospheric Research, 2009, 91, 316-325.	1.8	66
61	Lightning characteristics based on data from the Austrian lightning locating system. IEEE Transactions on Electromagnetic Compatibility, 1998, 40, 452-464.	1.4	64
62	On different approaches to calculating lightning electric fields. Journal of Geophysical Research, 2001, 106, 14191-14205.	3.3	64
63	The Physics of Lightning. Surveys in Geophysics, 2013, 34, 701-729.	2.1	64
64	Characterization of vertical electric fields 500 m and 30 m from triggered lightning. Journal of Geophysical Research, 1995, 100, 8863.	3.3	63
65	A comparison of channel-base currents and optical signals for rocket-triggered lightning strokes. Atmospheric Research, 2005, 76, 412-422.	1.8	63
66	Electromagnetic Fields at the Top of a Tall Building Associated With Nearby Lightning Return Strokes. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 632-643.	1.4	63
67	Characterization of returnâ€stroke currents in rocketâ€triggered lightning. Journal of Geophysical Research, 2009, 114, .	3.3	63
68	Applications of the FDTD Method to Lightning Electromagnetic Pulse and Surge Simulations. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1506-1521.	1.4	63
69	Electric field pulses in K and M changes of lightning ground flashes. Journal of Geophysical Research, 1992, 97, 9935-9950.	3.3	62
70	Burst of pulses in lightning electromagnetic radiation: observations and implications for lightning test standards. IEEE Transactions on Electromagnetic Compatibility, 1996, 38, 156-164.	1.4	62
71	Threeâ€dimensional imaging of upward positive leaders in triggered lightning using VHF broadband digital interferometers. Geophysical Research Letters, 2010, 37, .	1.5	62
72	Compact intracloud lightning discharges: 1. Mechanism of electromagnetic radiation and modeling. Journal of Geophysical Research, 2010, 115, .	3.3	62

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73	A CRITICAL REVIEW OF NONCONVENTIONAL APPROACHES TO LIGHTNING PROTECTION. Bulletin of the American Meteorological Society, 2002, 83, 1809-1820.	1.7	61
74	Waveforms of first and subsequent leaders in negative lightning flashes. Journal of Geophysical Research, 1990, 95, 16561-16577.	3.3	60
75	Electromagnetic Methods of Lightning Detection. Surveys in Geophysics, 2013, 34, 731-753.	2.1	60
76	Performance characteristics of the NLDN for return strokes and pulses superimposed on steady currents, based on rocketâ€triggered lightning data acquired in Florida in 2004â€“2012. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3825-3856.	1.2	60
77	On the estimation of lightning peak currents from measured fields using lightning location systems. Journal of Electrostatics, 2004, 60, 121-129.	1.0	59
78	A terrestrial gamma-ray flash recorded at the Lightning Observatory in Gainesville, Florida. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 86-93.	0.6	59
79	Evaluation of ENTLN Performance Characteristics Based on the Ground Truth Natural and Rocketâ€Triggered Lightning Data Acquired in Florida. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9858-9866.	1.2	59
80	High-speed video observations of the fine structure of a natural negative stepped leader at close distance. Atmospheric Research, 2016, 178-179, 260-267.	1.8	58
81	On the empirical formula of Willett et al. relating lightning returnâ€stroke peak current and peak electric field. Journal of Geophysical Research, 1992, 97, 11527-11533.	3.3	56
82	Are lightning M components capable of initiating sprites and sprite halos?. Journal of Geophysical Research, 2007, 112, .	3.3	56
83	Return-Stroke Multiplicity of Negative Cloud-to-Ground Lightning Flashes. Journal of Applied Meteorology and Climatology, 2003, 42, 1455-1462.	1.7	55
84	Applications of Electromagnetic Models of the Lightning Return Stroke. IEEE Transactions on Power Delivery, 2008, 23, 800-811.	2.9	55
85	A New Tool for Calculation of Lightning-Induced Voltages in Power Systemsâ€”Part I: Development of Circuit Model. IEEE Transactions on Power Delivery, 2015, 30, 326-333.	2.9	55
86	On the Interpretation of Ground Reflections Observed in Small-Scale Experiments Simulating Lightning Strikes to Towers. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 533-542.	1.4	54
87	K and M changes in close lightning ground flashes in Florida. Journal of Geophysical Research, 1990, 95, 18631-18640.	3.3	52
88	Triggered-lightning properties inferred from measured currents and very close electric fields. Atmospheric Research, 2005, 76, 355-376.	1.8	52
89	Abrupt Elongation (Stepping) of Negative and Positive Leaders Culminating in an Intense Corona Streamer Burst: Observations in Long Sparks and Implications for Lightning. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5360-5375.	1.2	50
90	The close lightning electromagnetic environment: Dart-leader electric field change versus distance. Journal of Geophysical Research, 2001, 106, 14909-14917.	3.3	49

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91	Observed one-dimensional return stroke propagation speeds in the bottom 170 m of a rocket-triggered lightning channel. Geophysical Research Letters, 2004, 31, .	1.5	49
92	On the NOx production by laboratory electrical discharges and lightning. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1877-1889.	0.6	49
93	National Athletic Trainers' Association Position Statement: Lightning Safety for Athletics and Recreation. Journal of Athletic Training, 2013, 48, 258-270.	0.9	49
94	Statistical characteristics of the electric and magnetic fields and their time derivatives 15 m and 30 m from triggered lightning. Journal of Geophysical Research, 2003, 108, .	3.3	46
95	RF and Xâ€ray source locations during the lightning attachment process. Journal of Geophysical Research, 2010, 115, .	3.3	46
96	Cutoff and reestablishment of current in rocket-triggered lightning. Journal of Geophysical Research, 2003, 108, .	3.3	45
97	Time derivative of the electric field 10, 14, and 30 m from triggered lightning strokes. Journal of Geophysical Research, 2000, 105, 15577-15595.	3.3	44
98	A Simplified Model of Corona Discharge on Overhead Wire for FDTD Computations. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 585-593.	1.4	44
99	Origin of lightning electric field signatures showing two return-stroke waveforms separated in time by a millisecond or less. Journal of Geophysical Research, 1994, 99, 8157.	3.3	43
100	EMTP modeling of a triggered-lightning strike to the phase conductor of an overhead distribution line. IEEE Transactions on Power Delivery, 2000, 15, 1175-1181.	2.9	43
101	Correlated time derivatives of current, electric field intensity, and magnetic flux density for triggered lightning at 15 m. Journal of Geophysical Research, 2002, 107, ACL 1-1.	3.3	43
102	Electric Field Pulse Trains Occurring Prior to the First Stroke in Negative Cloud-to-Ground Lightning. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 147-150.	1.4	43
103	Triggered Lightning Testing of an Airport Runway Lighting System. IEEE Transactions on Electromagnetic Compatibility, 2004, 46, 96-101.	1.4	41
104	Insights into the ground attachment process of natural lightning gained from an unusual triggeredâ€lightning stroke. Journal of Geophysical Research, 2007, 112, .	3.3	41
105	Lightning strikes to tall objects: Currents inferred from far electromagnetic fields versus directly measured currents. Geophysical Research Letters, 2007, 34, .	1.5	41
106	Direct Lightning Strikes to Test Power Distribution Linesâ€”Part I: Experiment and Overall Results. IEEE Transactions on Power Delivery, 2007, 22, 2236-2244.	2.9	41
107	Lightning attachment processes of an â€œanomalousâ€•triggered lightning discharge. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1524-1533.	1.2	40
108	Types of lightning discharges that abruptly terminate enhanced fluxes of energetic radiation and particles observed at ground level. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7582-7599.	1.2	39

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109	Distribution of Currents in the Lightning Protective System of a Residential Buildingâ€"Part I: Triggered-Lightning Experiments. IEEE Transactions on Power Delivery, 2008, 23, 2439-2446.	2.9	38
110	Influence of strike object grounding on close lightning electric fields. Journal of Geophysical Research, 2008, 113, .	3.3	38
111	Lightning Observatory in Gainesville (LOG), Florida: A review of recent results. Electric Power Systems Research, 2014, 113, 95-103.	2.1	38
112	Luminosity characteristics of lightning M components. Journal of Geophysical Research, 1995, 100, 25695.	3.3	37
113	Luminosity characteristics of dart leaders and return strokes in natural lightning. Journal of Geophysical Research, 1997, 102, 22025-22032.	3.3	37
114	Electric and Magnetic Fields Predicted by Different Electromagnetic Models of the Lightning Return Stroke Versus Measured Fields. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 479-487.	1.4	37
115	A study of different modes of charge transfer to ground in upward lightning. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 125-126, 38-49.	0.6	37
116	Analytical Formulations for Lightning-Induced Voltage Calculations. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 109-123.	1.4	36
117	A study of National Lightning Detection Network responses to natural lightning based on ground truth data acquired at LOG with emphasis on cloud discharge activity. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,651.	1.2	36
118	Initiation and propagation of cloud-to-ground lightning observed with a high-speed video camera. Scientific Reports, 2016, 6, 39521.	1.6	36
119	Measurement of the division of lightning return stroke current among the multiple arresters and grounds of a power distribution line. IEEE Transactions on Power Delivery, 2003, 18, 1203-1208.	2.9	35
120	First versus subsequent returnâ€stroke current and field peaks in negative cloudâ€toâ€ground lightning discharges. Journal of Geophysical Research, 2008, 113, .	3.3	35
121	Advanced numerical model of lightning development: Application to studying the role of LPCR in determining lightning type. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6416-6430.	1.2	35
122	On estimation of the effective height of towers on mountaintops in lightning incidence studies. Journal of Electrostatics, 2010, 68, 415-418.	1.0	34
123	Positive lightning flashes recorded on the SÃntis tower from May 2010 to January 2012. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,879.	1.2	34
124	Estimation of input energy in rocket-triggered lightning. Geophysical Research Letters, 2006, 33, .	1.5	33
125	The initial stage processes of rocketâ€andâ€wire triggered lightning as observed by VHF interferometry. Journal of Geophysical Research, 2012, 117, .	3.3	33
126	A study of the ground-attachment process in natural lightning with emphasis on its breakthrough phase. Scientific Reports, 2017, 7, 15761.	1.6	33

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127	3-D FDTD Computation of Lightning-Induced Voltages on an Overhead Two-Wire Distribution Line. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 1161-1168.	1.4	32
128	An Analytical Approach to Calculation of Lightning Induced Voltages on Overhead Lines in Case of Lossy Groundâ€"Part I: Model Development. IEEE Transactions on Power Delivery, 2013, 28, 1213-1223.	2.9	32
129	Characterization of negative cloud-to-ground lightning in Florida. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 8-15.	0.6	32
130	On Representation of Lightning Return Stroke as a Lossy Monopole Antenna With Inductive Loading. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 118-127.	1.4	31
131	On remote measurements of lightning return stroke peak currents. Atmospheric Research, 2014, 135-136, 306-313.	1.8	31
132	Compact intracloud lightning discharges: 2. Estimation of electrical parameters. Journal of Geophysical Research, 2010, 115, .	3.3	30
133	FDTD Simulation of Lightning Surges on Overhead Wires in the Presence of Corona Discharge. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 1234-1243.	1.4	30
134	CIGRE technical brochure on lightning parameters for engineering applications. , 2013, , .		30
135	Evaluation of the GLD360 performance characteristics using rocketâ€andâ€wire triggered lightning data. Geophysical Research Letters, 2014, 41, 3636-3642.	1.5	30
136	Numerical Simulation of Stepping and Branching Processes in Negative Lightning Leaders. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031360.	1.2	30
137	Treatment of retardation effects in calculating the radiated electromagnetic fields from the lightning discharge. Journal of Geophysical Research, 1998, 103, 9003-9013.	3.3	29
138	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.	1.0	29
139	A study of Xâ€ray emissions from thunderstorms with emphasis on subsequent strokes in natural lightning. Journal of Geophysical Research, 2012, 117, .	3.3	29
140	Performance characteristics of the ENTLN evaluated using rocket-triggered lightning data. Electric Power Systems Research, 2015, 118, 15-28.	2.1	29
141	Test of the transmission line model and the traveling current source model with triggered lightning return strokes at very close range. Journal of Geophysical Research, 2003, 108, .	3.3	28
142	A model to represent negative and positive lightning first strokes with connecting leaders. Journal of Electrostatics, 2004, 60, 97-109.	1.0	28
143	Determination of the electric field intensity and space charge density versus height prior to triggered lightning. Journal of Geophysical Research, 2011, 116, .	3.3	28
144	Observation of a new class of electric discharges within artificial clouds of charged water droplets and its implication for lightning initiation within thunderclouds. Geophysical Research Letters, 2015, 42, 8165-8171.	1.5	28

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145	A New Tool for Calculation of Lightning-Induced Voltages in Power Systemsâ€"Part II: Validation Study. IEEE Transactions on Power Delivery, 2015, 30, 334-341.	2.9	28
146	The breakthrough phase of lightning attachment process: From collision of opposite-polarity streamers to hot-channel connection. Electric Power Systems Research, 2019, 173, 122-134.	2.1	27
147	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.	2.9	26
148	FDTD Simulation of Insulator Voltages at a Lightning-Struck Tower Considering Ground-Wire Corona. IEEE Transactions on Power Delivery, 2013, 28, 1635-1642.	2.9	26
149	Measurements ofNOXproduced by rocket-triggered lightning. Geophysical Research Letters, 2007, 34, .	1.5	25
150	Direct Lightning Strikes to Test Power Distribution Linesâ€"Part II: Measured and Modeled Current Division Among Multiple Arresters and Grounds. IEEE Transactions on Power Delivery, 2007, 22, 2245-2253.	2.9	25
151	Characteristics of the optical pulses associated with a downward branched stepped leader. Journal of Geophysical Research, 2008, 113, .	3.3	25
152	A negative cloud-to-ground flash showing a number of new and rarely observed features. Geophysical Research Letters, 2014, 41, 6523-6529.	1.5	25
153	When does the lightning attachment process actually begin?. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6922-6936.	1.2	25
154	Two basic leader connection scenarios observed in negative lightning attachment process. High Voltage, 2016, 1, 11-17.	2.7	25
155	On the upper and lower limits of peak current of first return strokes in negative lightning flashes. Atmospheric Research, 2012, 117, 12-17.	1.8	24
156	Observations of the connection of positive and negative leaders in meterâ€scale electric discharges generated by clouds of negatively charged water droplets. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9756-9766.	1.2	24
157	On the mechanism of X-ray production by dart leaders of lightning flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 848-855.	0.6	23
158	FDTD Computation of Lightning-Induced Voltages on Multiconductor Lines With Surge Arresters and Pole Transformers. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 442-447.	1.4	23
159	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.	1.2	23
160	Compact intracloud discharges: New classification of field waveforms and identification by lightning locating systems. Electric Power Systems Research, 2019, 173, 251-262.	2.1	23
161	Ratio of leader to return stroke electric field change for first and subsequent lightning strokes. Journal of Geophysical Research, 1990, 95, 16579-16587.	3.3	22
162	Oxide reduction during triggered-lightning fulgurite formation. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 423-428.	0.6	22

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163	Electric and magnetic fields and field derivatives from lightning stepped leaders and first return strokes measured at distances from 100 to 1000 m. Journal of Geophysical Research, 2008, 113, .	3.3	22
164	Measured electric and magnetic fields from an unusual cloudâ€toâ€ground lightning flash containing two positive strokes followed by four negative strokes. Journal of Geophysical Research, 2009, 114, .	3.3	22
165	Engineering Lightning Return Stroke Models Incorporating Current Reflection From Ground and Finitely Conducting Ground Effects. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 773-781.	1.4	22
166	Characteristics of the initial rising portion of near and far lightning return stroke electric field waveforms. Atmospheric Research, 2012, 117, 71-77.	1.8	22
167	Calculation of Voltages Induced on Overhead Conductors by Nonvertical Lightning Channels. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 860-870.	1.4	22
168	Observations of compact intracloud lightning discharges in the northernmost region (51Â°N) of China. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4458-4465.	1.2	22
169	Parameters of Electric Field Waveforms Produced by Positive Lightning Return Strokes. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 932-939.	1.4	22
170	A unified engineering model of the first stroke in downward negative lightning. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2188-2204.	1.2	22
171	Lightning Discharge and Fundamentals of Lightning Protection. Journal of Lightning Research, 2012, 4, 3-11.	0.3	22
172	Return stroke peak current versus charge transfer in rocketâ€triggered lightning. Journal of Geophysical Research, 2010, 115, .	3.3	21
173	Remote Measurements of Currents in Cloud Lightning Discharges. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 407-413.	1.4	21
174	Compensation of the Instrumental Decay in Measured Lightning Electric Field Waveforms. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 685-688.	1.4	21
175	A study of changes in apparent ionospheric reflection height within individual lightning flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 66-79.	0.6	21
176	Synchronized Twoâ€Station Optical and Electric Field Observations of Multiple Upward Lightning Flashes Triggered by a 310â€kA +CG Flash. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1050-1063.	1.2	21
177	A triggered lightning flash containing both negative and positive strokes. Geophysical Research Letters, 2004, 31, .	1.5	20
178	Equivalency of Lightning Return-Stroke Models Employing Lumped and Distributed Current Sources. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 123-132.	1.4	20
179	Distribution of Currents in the Lightning Protective System of a Residential Buildingâ€”Part II: Numerical Modeling. IEEE Transactions on Power Delivery, 2008, 23, 2447-2455.	2.9	20
180	New Insights Into Lightning Return-Stroke Models With Specified Longitudinal Current Distribution. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 471-478.	1.4	20

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181	Transient current pulses in rocketâ€extended wires used to trigger lightning. Journal of Geophysical Research, 2012, 117, .	3.3	20
182	Review of recent developments in lightning channel corona sheath research. Atmospheric Research, 2013, 129-130, 117-122.	1.8	20
183	FDTD Simulations of Corona Effect on Lightning-Induced Voltages. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 168-176.	1.4	20
184	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.	0.6	20
185	A Low-Cost System for Measuring Lightning Electric Field Waveforms, its Calibration and Application to Remote Measurements of Currents. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 414-422.	1.4	20
186	A Machineâ€Learning Approach to Classify Cloudâ€toâ€Ground and Intracloud Lightning. Geophysical Research Letters, 2021, 48, .	1.5	20
187	Lightning electric field intensity at high altitudes: Inferences for production of elves. Journal of Geophysical Research, 2003, 108, .	3.3	19
188	Experimental Study of Lightning-Induced Currents in a Buried Loop Conductor and a Grounded Vertical Conductor. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 110-117.	1.4	19
189	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.	1.4	19
190	A Study of Preliminary Breakdown and Return Stroke Processes in High-Intensity Negative Lightning Discharges. Atmosphere, 2016, 7, 130.	1.0	19
191	Fast initial continuous current pulses versus return stroke pulses in towerâ€initiated lightning. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6425-6434.	1.2	19
192	Performance of MOV arresters during very close, direct lightning strikes to a power distribution system. IEEE Transactions on Power Delivery, 1999, 14, 411-418.	2.9	18
193	Leader/return-stroke-like processes in the initial stage of rocket-triggered lightning. Journal of Geophysical Research, 2006, 111, .	3.3	18
194	On the electric field at the tip of dart leaders in lightning flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1397-1404.	0.6	18
195	Characteristics of Currents in Upward Lightning Flashes Initiated From the Gaisberg Tower. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 705-718.	1.4	18
196	Close electric field signatures of dart leader/return stroke sequences in rocket-triggered lightning showing residual fields. Journal of Geophysical Research, 2005, 110, .	3.3	17
197	Influences of the Presence of a Tall Grounded Strike Object and an Upward Connecting Leader on Lightning Currents and Electromagnetic Fields. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 886-892.	1.4	17
198	Electromagnetic Pulses Produced by Bouncing-Wave-Type Lightning Discharges. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 466-470.	1.4	17

#	Article	IF	Citations
199	Calculation of Current Distribution in the Lightning Protective System of a Residential House. IEEE Transactions on Magnetics, 2014, 50, 225-228.	1.2	17
200	Current Impulses in the Lightning Protection System of a Test House in Poland. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 425-433.	1.4	17
201	Exact and Approximate Analytical Solutions for Lightning-Induced Voltage Calculations. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1850-1856.	1.4	17
202	Comment on â€œReturn stroke transmission line model for stroke speed near and equal that of lightâ€™ by R. Thottappillil, J. Schoene, and M. A. Uman. Geophysical Research Letters, 2002, 29, 7-1-7-3.	1.5	16
203	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.	1.0	16
204	An Improved Model for Prediction of the Dynamics of Lightning Channel Corona Sheath. , 2009, , .		16
205	Some Inferences From Radial Electric Fields Measured Inside the Lightning-Channel Corona Sheath. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 390-394.	1.4	16
206	An Analytical Method for Estimation of Lightning Performance of Transmission Lines Based on a Leader Progression Model. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1530-1539.	1.4	16
207	Lightning electromagnetic fields and induced voltages: Influence of channel tortuosity. , 2011, , .		15
208	Positive Lightning Peak Currents Reported by the U.S. National Lightning Detection Network. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 404-412.	1.4	14
209	FDTD simulation of LEMP propagation over lossy ground: Influence of distance, ground conductivity, and source parameters. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8043-8051.	1.2	14
210	Initial breakdown and fast leaders in lightning discharges producing longâ€lasting disturbances of the lower ionosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 5794-5804.	0.8	14
211	A Modeling Study of Narrow Electric Field Signatures Produced by Lightning Strikes to Tall Towers. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,260.	1.2	14
212	Lightning parameters for engineering applications (keynote speech). , 2010, , .		13
213	Measured close lightning leader-step electric fieldâ€“derivative waveforms. Journal of Geophysical Research, 2011, 116, .	3.3	13
214	Simulation of corona at lightning-triggering wire: Current, charge transfer, and the field-reduction effect. Journal of Geophysical Research, 2011, 116, .	3.3	13
215	Simultaneous observations of electric field changes, wideband magnetic field pulses, and VHF emissions associated with K processes in lightning discharges. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2699-2710.	1.2	13
216	Highâ€Speed Video Observations of Natural Lightning Attachment Process With Framing Rates up to Half a Million Frames per Second. Geophysical Research Letters, 2019, 46, 12580-12587.	1.5	13

#	Article	IF	Citations
217	Experimental Investigation of the Streamer Zone of Longâ€Spark Positive Leader Using Highâ€Speed Photography and Microwave Probing. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031826.	1.2	13
218	Analysis of Location Errors of the U.S. National Lightning Detection Network Using Lightning Strikes to Towers. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032530.	1.2	13
219	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.	1.4	12
220	Infrared images of bidirectional leaders produced by the cloud of charged water droplets. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,728-10,735.	1.2	12
221	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.	1.2	12
222	High-Speed Optical Imaging of Lightning and Sparks: Some Recent Results. IEEJ Transactions on Power and Energy, 2018, 138, 321-326.	0.1	12
223	Some characteristics of positive and bipolar lightning flashes recorded on the Säntis tower in 2010 and 2011. , 2012, , .		11
224	An Analytical Approach to Calculation of Lightning Induced Voltages on Overhead Lines in Case of Lossy Groundâ€”Part II: Comparison With Other Models. IEEE Transactions on Power Delivery, 2013, 28, 1224-1230.	2.9	11
225	Lightning-Induced Voltages in the Presence of Nearby Buildings: FDTD Simulation Versus Small-Scale Experiment. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1601-1607.	1.4	11
226	Bipolar lightning flashes observed at the SÃntis Tower: Do we need to modify the traditional classification?. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,117.	1.2	11
227	FDTD Modeling of LEMP Propagation in the Earthâ€Ionosphere Waveguide With Emphasis on Realistic Representation of Lightning Source. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,918.	1.2	11
228	Evolution of an Upward Negative Lightning Flash Triggered by a Distant +CG From a 257â€mâ€Tall Tower, Including Initiation of Subsequent Strokes. Geophysical Research Letters, 2019, 46, 7015-7023.	1.5	11
229	Formation of decimeter-scale, long-lived elevated ionic conductivity regions in thunderclouds. Npj Climate and Atmospheric Science, 2019, 2, .	2.6	11
230	Electromagnetic Coupling of Lightning to Power Lines: Transmission-Line Approximation versus Full-Wave Solution. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 421-428.	1.4	10
231	Numerical simulations of compact intracloud discharges as the Relativistic Runaway Electron Avalancheâ€Extensive Air Shower process. Journal of Geophysical Research: Space Physics, 2014, 119, 479-489.	0.8	10
232	Approximate expressions for lightning electromagnetic fields at near and far ranges: Influence of returnâ€stroke speed. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2855-2880.	1.2	10
233	FDTD simulation of direct lightning strike to a phase conductor: Influence of corona on transient voltages at the tower. Electric Power Systems Research, 2015, 123, 128-136.	2.1	10
234	A subsequent positive stroke developing in the channel of preceding negative stroke and containing bipolar continuing current. Geophysical Research Letters, 2016, 43, 9948-9955.	1.5	10

#	Article	IF	Citations
235	FDTD simulation of back-flashover at the transmission-line tower struck by lightning considering ground-wire corona and operating voltages. Electric Power Systems Research, 2018, 159, 17-23.	2.1	10
236	3â€D Finite Difference Time Domain Simulation of Lightning Strikes to the 634â€m Tokyo Skytree. Geophysical Research Letters, 2018, 45, 9267-9274.	1.5	10
237	A study of the context in which compact intracloud discharges occur. Scientific Reports, 2019, 9, 12218.	1.6	10
238	On a Possible Mechanism of Reactivation of Decayed Branches of Negative Stepped Leaders. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033305.	1.2	10
239	Groundâ€Based Observation of a TGF Occurring Between Opposite Polarity Strokes of a Bipolar Cloudâ€toâ€Ground Lightning Flash. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	10
240	High-speed optical studies of the long sparks in very transient stages. , 2007, , .		9
241	Expressions for far electric fields produced at an arbitrary altitude by lightning return strokes. Journal of Geophysical Research, 2007, 112, .	3.3	9
242	Responses of Airport Runway Lighting System to Direct Lightning Strikes: Comparisons of TLM Predictions With Experimental Data. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 660-668.	1.4	9
243	Unusual lightning electric field waveforms observed in Kathmandu, Nepal, and Uppsala, Sweden. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 164, 172-184.	0.6	9
244	Highâ€Speed Video Observations of Recoil Leaders Producing and Not Producing Return Strokes in a Cantonâ€Tower Upward Flash. Geophysical Research Letters, 2019, 46, 8546-8553.	1.5	9
245	An Advanced Model of Lightning Mâ€Component. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2296-2317.	1.2	9
246	From decimeter-scale elevated ionic conductivity regions in the cloud to lightning initiation. Scientific Reports, 2021, 11, 18016.	1.6	9
247	Characterization of far electric field waveforms produced by rocket-triggered lightning. , 2014, , .		8
248	Modeling of different charge transfer modes in upward flashes constrained by simultaneously measured currents and fields. , 2018, , .		8
249	Upgrading a Low-Cost System for Measuring Lightning Electric Field Waveforms. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 595-598.	1.4	8
250	On the Role of Reduced Air Density Along the Lightning Leader Path to Ground in Increasing Xâ€Ray Production Relative to Normal Atmospheric Conditions. Geophysical Research Letters, 2019, 46, 9252-9260.	1.5	8
251	Observations of X-rays from Laboratory Sparks in Air at Atmospheric Pressure under Negative Switching Impulse Voltages. Atmosphere, 2019, 10, 169.	1.0	8
252	A Positive Cloudâ€toâ€Ground Flash Caused by a Sequence of Bidirectional Leaders that Served to Form a Groundâ€Reaching Branch of a Preâ€Existing Horizontal Channel. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033653.	1.2	8

#	Article	IF	Citations
253	Rocket-Triggered Lightning Experiments at Camp Blanding, Florida. , 1999, , .		7
254	<title>Initiation of lightning in thunderclouds</title>. , 2006, , .		7
255	Interaction between grounding systems and nearby lightning for the calculation of overvoltages in overhead distribution lines. , 2011, , .		7
256	Electric discharges produced by clouds of charged water droplets in the presence of moving conducting object. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 135, 36-41.	0.6	7
257	Estimation of ionospheric reflection heights using CG and IC lightning electric field waveforms. , 2017, , .		7
258	Statistical Distributions of Lightning Peak Currents: Why Do They Appear to Be Lognormal?. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5070-5089.	1.2	7
259	A Study of a Large Bipolar Lightning Event Observed at the SÃntis Tower. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 796-806.	1.4	7
260	PEEC simulation of lightning over-voltage surge with corona discharges on the over head wires. Electric Power Systems Research, 2020, 180, 106118.	2.1	7
261	Characterization of Lightning Electric Field Waveforms Using a Large Database: 2. Analysis and Results. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1989-1997.	1.4	7
262	Present Understanding of the Lightning Return Stroke. , 2009, , 1-21.		6
263	Calibration of the ENTLN against rocket-triggered lightning data. , 2013, , .		6
264	Experimental investigation and modeling of surge currents in lightning protection system. , 2014, , .		6
265	Analysis of a bipolar upward lightning flash based on simultaneous records of currents and 380-km distant electric fields. Electric Power Systems Research, 2019, 174, 105845.	2.1	6
266	Characteristics of different charge transfer modes in upward flashes inferred from simultaneously measured currents and fields. High Voltage, 2020, 5, 30-37.	2.7	6
267	Evidence and Inferred Mechanism of Collisions of Downward Steppedâ€Leader Branches in Negative Lightning. Geophysical Research Letters, 2021, 48, e2021GL093295.	1.5	6
268	Characterization of Lightning Electric Field Waveforms Using a Large Database: 1. Methodology. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1155-1162.	1.4	6
269	Highâ€Speed Video Observations of Needles in a Positive Cloudâ€toâ€Ground Lightning Flash. Geophysical Research Letters, 2022, 49, .	1.5	6
270	High-speed optical studies of long spark (Istra, Russia) and triggered lightning (Camp Blanding,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62		5

#	Article	IF	Citations
271	Measurement of lightning-induced currents in an experimental coaxial buried cable. , 0, , .		5
272	A simplified physical model of negative leader in long sparks. Electric Power Systems Research, 2019, 176, 105955.	2.1	5
273	Electromagnetic Fields Associated With the Mâ€Component Mode of Charge Transfer. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6791-6809.	1.2	5
274	Multiple Strokes Along the Same Channel to Ground in Positive Lightning Produced by a Supercell. Geophysical Research Letters, 2021, 48, e2021GL096714.	1.5	5
275	Artificial initiation (triggering) of lightning by ground-based activity. , 2003, , 265-307.		4
276	Features of application of image converter cameras for research on lightning and discharges in long air gaps. , 2005, , .		4
277	Current waveforms associated with positive flashes recorded on the säntis tower in summer 2010. , 2011, , .		4
278	Lightning parameters for engineering applications — An update on CIGRE WG C4.407 activities. , 2011, , .		4
279	FDTD computation of lightning surges on overhead wires in the presence of corona discharge. , 2011, , .		4
280	Attachment process in subsequent strokes and residual channel luminosity between strokes of natural lightning. Journal of Geophysical Research D: Atmospheres, 2015, 120, 12,248.	1.2	4
281	An FDTD Study of Errors in Magnetic Direction Finding of Lightning Due to the Presence of Conducting Structure Near the Field Measuring Station. Atmosphere, 2016, 7, 92.	1.0	4
282	Triggered Lightning. , 2009, , 23-56.		4
283	An Experimental Study of the Breakthroughâ€Phase and Returnâ€Stroke Processes in Long Sparks. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	4
284	Comments on "On the concepts used in return stroke models applied in engineering practice. IEEE Transactions on Electromagnetic Compatibility, 2003, 45, 567.	1.4	3
285	Comment on â€œRadio frequency radiation beam pattern of lightning return strokes: A revisit to theoretical analysisâ€•by Xuan-Min Shao, Abram R. Jacobson, and T. Joseph Fitzgerald. Journal of Geophysical Research, 2005, 110, .	3.3	3
286	FDTD calculation of lightning-induced voltages on an overhead two-wire distribution line. , 2010, , .		3
287	A transmission-line-type model for lightning return strokes with branches. Electric Power Systems Research, 2015, 118, 3-7.	2.1	3
288	Simulation of the propagation of lightning electromagnetic pulses in the Earthâ€“ionosphere waveguide using the fdtd method in the 2â€Ð spherical coordinate system. IEEJ Transactions on Electrical and Electronic Engineering, 2020, 15, 335-339.	0.8	3

#	Article	IF	Citations
289	On Possible Influence of Corona Discharge on the Propagation Speed of Lightning Surges Along a Tall Grounded Object. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 172-180.	1.4	3
290	FDTD Simulations of LEMP Propagation in the Earth-Ionosphere Waveguide Using Different Lightning Models. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1107-1117.	1.4	3
291	Comparison of ionospheric reflection heights for LEMPs produced by lightning return strokes of different polarity. Journal of Atmospheric and Solar-Terrestrial Physics, 2020, 211, 105426.	0.6	3
292	Small Shelters and Safety from Lightning. , 0, , .		2
293	Test of Russian K004M and K008 image converter cameras when recording trigger lightning in Florida. , 2007, , .		2
294	Test of Russian K004M image converter camera when recording natural lightning in Florida. , 2007, , .		2
295	Electromagnetic models of lightning. , 2008, , .		2
296	Electric and Magnetic Fields Predicted by Lightning Return Stroke Electromagnetic Models. , 2009, , .		2
297	High frequency earthing impedance measurements at Camp Blanding, Florida. , 2010, , .		2
298	Modeling of LEMP propagation in the lossy atmosphere. , 2018, , .		2
299	Lightning, the Science. Lecture Notes in Electrical Engineering, 2021, , 1-36.	0.3	2
300	First Documented Downward Positive Cloudâ€toâ€Ground Lightning Initiated by an Upward Negative Lightning. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034566.	1.2	2
301	Comparison of Far Electric Field Waveforms Produced by Rocket-Triggered Lightning Strokes and Subsequent Strokes in Natural Lightning. , 2021, , .		2
302	Surges Superimposed on Continuing Currents in Lightning Discharges. , 2001, , .		1
303	Lightning-induced currents in a buried loop conductor and a grounded vertical conductor. , 2007, , .		1
304	A new formulation for lightning return-stroke models of engineering type. , 2007, , .		1
305	Electric fields at the top of tall building associated with nearby lightning return strokes. , 2007, , .		1
306	Characterization of Electric Field Pulses Produced by Cloud and Ground Lightning Discharges. , 2007, , .		1

#	Article	IF	Citations
307	Development of the Long Sparks near the Junction Point and Ground. , 2008, , .		1
308	An experimental study of electric field pulses produced by cloud and ground lightning discharges. , 2008, , .		1
309	Lightning discharges producing very strong radiation in both VLF-LF and HF-VHF ranges. , 2009, , .		1
310	Characteristics of the initial rising portion of near and far lightning return stroke electric field waveforms. , 2010, , .		1
311	Electrical structure of the lightning-channel corona sheath. , 2010, , .		1
312	Measurements of radiation field signatures of rocket-triggered lightning. , 2010, , .		1
313	On the origin of two types of current pulses observed during the initial stage of upward lightning. , 2011, , .		1
314	High frequency earthing impedance measurements at Camp Blanding, Florida. Electric Power Systems Research, 2012, 85, 50-58.	2.1	1
315	Characterization of negative cloud-to-ground lightning in Florida: Revisited. , 2014, , .		1
316	Measurement of preliminary breakdown pulse trains in cloud-to-ground lightning using lightning locating systems. , 2014, , .		1
317	Rocket-and-wire triggered lightning experiments: A review and update. , 2014, , .		1
318	Corona effect on insulator voltages for a direct lightning strike to a phase conductor. , 2014, , .		1
319	FDTD computations of lightning-induced voltages in the presence of nearby buildings. , 2015, , .		1
320	New high-speed video observations of natural lightning at the Lightning Observatory in Gainesville, Florida. , 2015, , .		1
321	Properties of the downward negative lightning discharge to ground. , 2016, , 52-114.		1
322	Calculation of lightning electromagnetic fields. , 2016, , 115-126.		1
323	FDTD simulation of back-flashover at the transmission-line tower struck by lightning considering ground-wire corona. , 2016, , .		1
324	High-frequency grounding impedance measurements at test site in Huta Poreby, Poland. , 2016, , .		1

#	Article	IF	Citations
325	2D FDTD simulation of LEMP propagation considering the presence of conducting atmosphere. , 2016, , .		1
326	Electric discharges produced by artificially charged clouds: Influence of rapidly moving conductive object. , 2016, , .		1
327	Statistical Analysis of Lightning-Induced Voltages in the Case of Lossy Ground. , 2019, , .		1
328	Two Possible Scenarios for the Formation of Category 1 Bipolar Lightning Flashes. , 2019, , .		1
329	A Comparison Between Analytical Solutions for Lightning-Induced Voltages Calculation. Elektronika Ir Elektrotechnika, 2014, 20, .	0.4	1
330	Measuring the probability distribution of the absolute maxima of excursions of random processes. Measurement Techniques, 1983, 26, 341-343.	0.2	0
331	Close Lightning Electromagnetic Environment for Aircraft Testing. , 2001, , .		0
332	Guest Editorial Special Issue on Lightning. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 426-427.	1.4	0
333	Characterization of positive cloud-to-ground Lightning Discharges. , 2010, , .		0
334	Fine structure of electric field waveforms recorded at near and far distances from the lightning channel. , 2010, , .		0
335	Modeling of corona discharge on a transmission line conductor struck by lightning for FDTD calculations. , 2010, , .		0
336	FDTD simulation of field-reduction effect at ground due to corona at lightning-triggering wire. , 2011, , .		0
337	Upward lightning discharges: An update. , 2011, , .		0
338	A review of recent lightning corona sheath dynamics research. , 2011, , .		0
339	Influence of return stroke speed and leader line charge density on lightning corona sheath dynamics. , 2011, , .		0
340	Lightning surges on an overhead wire in the presence of corona: FDTD simulation of Wagner et al.'s experiment. , 2012, , .		0
341	Bursts of fast pulses in positive lightning current waveforms recorded on the säntis tower. , 2013, , .		0
342	Correction to "An analytical approach to calculation of lightning induced voltages on overhead lines in case of lossy ground - Part I: Model development" [Apr 13 1213-1223]. IEEE Transactions on Power Delivery, 2013, 28, 2536-2536.	2.9	0

#	Article	IF	Citations
343	Properties of lightning associated with long recovery early VLF events. , 2014, , .		0
344	FDTD analysis of lightning electromagnetic pulses considering topography and presence of grounded strike object. , 2014, , .		0
345	A new tool for lightning induced voltage calculations: CiLIV. , 2014, , .		0
346	An unusual two-stroke negative cloud-to-ground flash showing profuse branching and corona-like formations. , 2014, , .		0
347	A new class of electric discharges in clouds of negatively charged water droplets. , 2016, , .		0
348	A subsequent positive stroke developing in the channel of preceding negative stroke and containing bipolar continuing current. , 2016, , .		0
349	Simultaneous records of current and 380-km distant electric field of a bipolar lightning flash. , 2017, , .		0
350	Application of a Simplified Corona Discharge Model to a Lightning Surge Simulation with the PEEC Method. , 2018, , .		0
351	Polarity of Upward Lightning based on Currents Measured at the Gaisberg Tower. , 2019, , .		0