Maribeth Stolzenburg

List of Publications by Year
in descending order

76 papers	2,957 citations	126708 33 h-index	168136 53 g-index
78 all docs	78 docs citations	78 times ranked	1025 citing authors

#	Article	IF	Citations
1	Electrical structure in thunderstorm convective regions: 3. Synthesis. Journal of Geophysical Research, 1998, 103, 14097-14108.	3.3	178
2	Electrical structure in thunderstorm convective regions: 1. Mesoscale convective systems. Journal of Geophysical Research, 1998, 103, 14059-14078.	3.3	154
3	Effects of charge and electrostatic potential on lightning propagation. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	152
4	Horizontal Distribution of Electrical and Meteorological Conditions across the Stratiform Region of a Mesoscale Convective System. Monthly Weather Review, 1994, 122, 1777-1797.	0.5	135
5	Initial results from simultaneous observation of X-rays and electric fields in a thunderstorm. Journal of Geophysical Research, 1996, 101, 29637-29640.	3.3	133
6	Observed electric fields associated with lightning initiation. Geophysical Research Letters, 2005, 32, .	1.5	105
7	Electrical structure in thunderstorm convective regions: 2. Isolated storms. Journal of Geophysical Research, 1998, 103, 14079-14096.	3.3	102
8	Observations of High Ground Flash Densities of Positive Lightning in Summertime Thunderstorms. Monthly Weather Review, 1994, 122, 1740-1750.	0.5	92
9	Electric field values observed near lightning flash initiations. Geophysical Research Letters, 2007, 34, .	1.5	86
10	Luminosity of initial breakdown in lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2918-2937.	1.2	82
11	X-ray pulses observed above a mesoscale convective system. Geophysical Research Letters, 1996, 23, 2915-2918.	1.5	81
12	Charge Structure and Dynamics in Thunderstorms. Space Science Reviews, 2008, 137, 355-372.	3.7	80
13	Electrical structure and updraft speeds in thunderstorms over the southern Great Plains. Journal of Geophysical Research, 1995, 100, 1001-1015.	3.3	79
14	Locating initial breakdown pulses using electric field change network. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7129-7141.	1.2	76
15	Initial breakdown pulses in intracloud lightning flashes and their relation to terrestrial gamma ray flashes. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,907.	1.2	61
16	Rocket and balloon observations of electric field in two thunderstorms. Journal of Geophysical Research, 1995, 100, 20815.	3.3	59
17	Electric field measurements above mesoscale convective systems. Journal of Geophysical Research, 1996, 101, 6979-6996.	3.3	54
18	A study of enhanced fair-weather electric fields occurring soon after sunrise. Journal of Geophysical Research, 1999, 104, 24455-24469.	3.3	52

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19	Voltages inside and just above thunderstorms. Journal of Geophysical Research, 2001, 106, 4757-4768.	3.3	50
20	On the percentage of lightning flashes that begin with initial breakdown pulses. Journal of Geophysical Research D: Atmospheres, 2014, 119, 445-460.	1.2	47
21	Precipitation charge and size measurements inside a New Mexico mountain thunderstorm. Journal of Geophysical Research, 1999, 104, 9643-9653.	3.3	46
22	Estimations of charge transferred and energy released by lightning flashes. Journal of Geophysical Research, 2009, 114, .	3.3	46
23	Horizontal lightning propagation, preliminary breakdown, and electric potential in New Mexico thunderstorms. Journal of Geophysical Research, 2008, 113, .	3.3	45
24	Positive charge in the stratiform cloud of a mesoscale convective system. Journal of Geophysical Research, 2001, 106, 1157-1163.	3.3	41
25	Electrical evolution during the decay stage of New Mexico thunderstorms. Journal of Geophysical Research, 2009, 114, .	3.3	41
26	On the calculation of electric fields and currents of mesoscale convective systems. Journal of Geophysical Research, 2004, 109, .	3.3	38
27	Leader observations during the initial breakdown stage of a lightning flash. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,198.	1.2	38
28	Testing models of thunderstorm charge distributions with Coulomb's law. Journal of Geophysical Research, 1994, 99, 25921.	3.3	37
29	A study of lightning flash initiation prior to the first initial breakdown pulse. Atmospheric Research, 2019, 217, 10-23.	1.8	37
30	Electromagnetic activity before initial breakdown pulses of lightning. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,558.	1.2	36
31	Electrical energy constraints on lightning. Journal of Geophysical Research, 2002, 107, ACL 1-1.	3.3	34
32	Estimates of cloud charge densities in thunderstorms. Journal of Geophysical Research, 1998, 103, 19769-19775.	3.3	33
33	Lightning-Initiation Locations as a Remote Sensing Tool of Large Thunderstorm Electric Field Vectors. Journal of Atmospheric and Oceanic Technology, 2005, 22, 1059-1068.	0.5	33
34	On the role of transient currents in the global electric circuit. Geophysical Research Letters, 2008, 35, .	1.5	33
35	Charged precipitation and electric field in two thunderstorms. Journal of Geophysical Research, 1998, 103, 19777-19790.	3.3	31
36	Detection of inâ€cloud lightning with VLF/LF and VHF networks for studies of the initial discharge phase. Geophysical Research Letters, 2008, 35, .	1.5	31

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37	Two simultaneous charge structures in thunderstorm convection. Journal of Geophysical Research, 2002, 107, ACL 5-1.	3.3	28
38	Modeling initial breakdown pulses of CG lightning flashes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9003-9019.	1.2	25
39	Observations of positive narrow bipolar pulses. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7128-7143.	1.2	25
40	Initial electrification to the first lightning flash in New Mexico thunderstorms. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,253.	1.2	24
41	The Mechanism of the Origin and Development of Lightning From Initiating Event to Initial Breakdown Pulses (v.2). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033191.	1.2	24
42	Initiation locations of lightning flashes relative to radar reflectivity in four small Florida thunderstorms. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6565-6591.	1.2	23
43	Serial soundings of electric field through a mesoscale convective system. Journal of Geophysical Research, 2001, 106, 12371-12380.	3.3	20
44	Strokes of upward illumination occurring within a few milliseconds after typical lightning return strokes. Journal of Geophysical Research, 2012, 117, .	3.3	20
45	Initial electric field changes of lightning flashes in two thunderstorms. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3718-3732.	1.2	20
46	Transient luminosity along negative stepped leaders in lightning. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3408-3435.	1.2	18
47	Electrostatic field changes and durations of narrow bipolar events. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,161.	1.2	18
48	Serial profiles of electrostatic potential in five New Mexico thunderstorms. Journal of Geophysical Research, 2008, 113, .	3.3	17
49	Steppedâ€toâ€dart leaders preceding lightning return strokes. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9845-9869.	1.2	16
50	Luminosity with intracloudâ€type lightning initial breakdown pulses and terrestrial gammaâ€ray flash candidates. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,919.	1.2	15
51	Characterizing three types of negative narrow bipolar events in thunderstorms. Atmospheric Research, 2019, 227, 263-279.	1.8	15
52	Initial Breakdown Pulses Accompanied by VHF Pulses During Negative Cloudâ€toâ€Ground Lightning Flashes. Geophysical Research Letters, 2019, 46, 5592-5600.	1.5	15
53	Competing and cutoff leaders before â€œupward illuminationâ€â€type lightning ground strokes. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7182-7198.	1.2	14
54	Characteristics of the Bipolar Pattern of Lightning Locations Observed in 1988 Thunderstorms. Bulletin of the American Meteorological Society, 1990, 71, 1331-1338.	1.7	13

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55	Branched dart leaders preceding lightning return strokes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4228-4252.	1.2	13
56	Modeling the electric structures of two thunderstorms and their contributions to the global circuit. Atmospheric Research, 2009, 91, 165-177.	1.8	12
57	Duration and extent of large electric fields in a thunderstorm anvil cloud after the last lightning. Journal of Geophysical Research, 2010, 115, .	3.3	12
58	Initial Breakdown Pulse Parameters in Intracloud and Cloudâ€toâ€Ground Lightning Flashes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2129-2140.	1.2	12
59	Electric field change and VHF waveforms of Positive Narrow Bipolar Events in Mississippi thunderstorms. Atmospheric Research, 2020, 243, 105000.	1.8	11
60	On the Transition From Initial Leader to Stepped Leader in Negative Cloudâ€toâ€Ground Lightning. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031765.	1.2	11
61	Electric Field and Charge Structure in Lightning-Producing Clouds. , 2009, , 57-82.		9
62	An <i>M</i> component with a concurrent dart leader traveling along different paths during a lightning flash. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,267.	1.2	9
63	Narrow bipolar pulse locations compared to thunderstorm radar echo structure. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,690.	1.2	8
64	Studying Sequences of Initial Breakdown Pulses in Cloudâ€toâ€Ground Lightning Flashes. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032104.	1.2	7
65	Charge Structure and Dynamics in Thunderstorms. Space Sciences Series of ISSI, 2008, , 355-372.	0.0	6
66	Groups of narrow bipolar events within thunderstorms. Atmospheric Research, 2021, 252, 105450.	1.8	6
67	Modeling stepped leaders using a timeâ€dependent multidipole model and highâ€speed video data. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2419-2436.	1.2	5
68	Ultra-high speed video observations of intracloud lightning flash initiation. Meteorology and Atmospheric Physics, 2021, 133, 1177-1202.	0.9	5
69	Electric field change measurements of a terrestrial gamma ray flash. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5259-5266.	1.2	4
70	Modeling Initial Breakdown Pulses of Lightning Flashes Using a Matrix Inversion Method. Radio Science, 2019, 54, 268-280.	0.8	4
71	Inception of subsequent stepped leaders in negative cloud-to-ground lightning. Meteorology and Atmospheric Physics, 2020, 132, 489-514.	0.9	4
72	Test of a GPS Radiosonde in Thunderstorm Electrical Environments. Journal of Atmospheric and Oceanic Technology, 1999, 16, 550-560.	0.5	3

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73	Transient currents in the global electric circuit due to cloud-to-ground and intracloud lightning. Atmospheric Research, 2009, 91, 178-183.	1.8	3
74	Length estimations of presumed upward connecting leaders in lightning flashes to flat water and flat ground. Atmospheric Research, 2018, 211, 85-94.	1.8	2
75	Luminosity with large amplitude pulses after the initial breakdown stage in intracloud lightning flashes. Atmospheric Research, 2022, 267, 105982.	1.8	2
76	Modeling initial breakdown pulses of intracloud lightning flashes. Atmospheric Research, 2021, 261, 105734.	1.8	1