Paul Krehbiel

List of Publications by Year
in descending order

66 papers	5,724 citations	101535 36 h-index	110368 64 g-index
73 all docs	73 docs citations	73 times ranked	1474 citing authors

#	Article	IF	Citations
1	Radio Interferometer Observations and Analysis of an Energetic In-Cloud Pulse Based on Ensemble Empirical Mode Decomposition. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	3
2	Initiation of lightning flashes simultaneously observed from space and the ground: Narrow bipolar events. Atmospheric Research, 2022, 268, 105981.	4.1	9
3	Secondary Fast Breakdown in Narrow Bipolar Events. Geophysical Research Letters, 2022, 49, .	4.0	7
4	Application of Ensemble Empirical Mode Decomposition in Low-Frequency Lightning Electric Field Signal Analysis and Lightning Location. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 86-100.	6.3	29
5	Dartâ€Leader and Kâ€Leader Velocity From Initiation Site to Termination Timeâ€Resolved With 3D Interferometry. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034309.	3.3	20
6	3D Total Lightning Observation Network in Tokyo Metropolitan Area (Tokyo LMA). Journal of Disaster Research, 2021, 16, 778-785.	0.7	2
7	A Distinct Class of High Peakâ€Current Lightning Pulses Over Mountainous Terrain in Thunderstorms. Geophysical Research Letters, 2021, 48, e2021GL094153.	4.0	5
8	Timing Calibration and Windowing Technique Comparison for Lightning Mapping Arrays. Earth and Space Science, 2021, 8, e2020EA001523.	2.6	0
9	A New Method for Connecting the Radiation Sources of Lightning Discharge Extension Channels. Earth and Space Science, 2021, 8, e2021EA001713.	2.6	4
10	Electrostatic Conditions That Produce Fast Breakdown in Thunderstorms. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034829.	3.3	8
11	Radio Interferometer Observations of an Energetic inâ€Cloud Pulse Reveal Large Currents Generated by Relativistic Discharges. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032603.	3.3	29
12	Observations of the Origin of Downward Terrestrial Gammaâ€Ray Flashes. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031940.	3.3	39
13	Determining Electric Fields in Thunderclouds With the Radiotelescope LOFAR. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031433.	3.3	8
14	The Plasma Nature of Lightning Channels and the Resulting Nonlinear Resistance. Journal of Geophysical Research D: Atmospheres, 2019, 124, 9442-9463.	3.3	24
15	Griffiths and Phelps Lightning Initiation Model, Revisited. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8076-8094.	3.3	19
16	Understanding the Radio Spectrum of Thunderstorm Narrow Bipolar Events. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10134-10153.	3.3	32
17	Fast negative breakdown in thunderstorms. Nature Communications, 2019, 10, 1648.	12.8	68
18	SAETTA: high-resolution 3-D mapping of the total lightning activity in the Mediterranean Basin over Corsica, with a focus on a mesoscale convective system event. Atmospheric Measurement Techniques, 2019, 12, 5765-5790.	3.1	16

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19	Very High Frequency Radio Emissions Associated With the Production of Terrestrial Gammaâ€Ray Flashes. Geophysical Research Letters, 2018, 45, 2097-2105.	4.0	26
20	Leader Polarityâ€Reversal Feature and Charge Structure of Three Upward Bipolar Lightning Flashes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9430-9442.	3.3	14
21	Gamma Ray Showers Observed at Ground Level in Coincidence With Downward Lightning Leaders. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6864-6879.	3.3	58
22	Characteristics of Radio Emissions Associated With Terrestrial Gammaâ€Ray Flashes. Journal of Geophysical Research: Space Physics, 2018, 123, 5933-5948.	2.4	26
23	Corona discharges from a windmill and its lightning protection tower in winter thunderstorms. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4849-4865.	3.3	11
24	Expanding on the relationship between continuing current and inâ€cloud leader growth. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4150-4164.	3.3	11
25	Observations of the initial stage of a rocketâ€andâ€wireâ€triggered lightning discharge. Geophysical Research Letters, 2017, 44, 4332-4340.	4.0	26
26	Fast positive breakdown in lightning. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8135-8152.	3.3	21
27	Observations of narrow bipolar events reveal how lightning is initiated in thunderstorms. Nature Communications, 2016, 7, 10721.	12.8	182
28	Observations of two spriteâ€producing storms in Colorado. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9675-9695.	3.3	12
29	Ground detection of terrestrial gamma ray flashes from distant radio signals. Geophysical Research Letters, 2016, 43, 8728-8734.	4.0	41
30	An overview of the lightning and atmospheric electricity observations collected in southern France during the HYdrological cycle in Mediterranean EXperiment (HyMeX), Special Observation Period 1. Atmospheric Measurement Techniques, 2015, 8, 649-669.	3.1	35
31	Environmental controls on storm intensity and charge structure in multiple regions of the continental United States. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6575-6596.	3.3	83
32	Multiple baseline lightning interferometry - Improving the detection of low amplitude VHF sources. , 2014, , .		16
33	Data processing procedure using distribution of slopes of phase differences for broadband VHF interferometer. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6085-6104.	3.3	27
34	Continuous broadband digital interferometry of lightning using a generalized cross-correlation algorithm. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3134-3165.	3.3	131
35	Rocket-and-wire triggered lightning in 2012 tropical storm Debby in the absence of natural lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,158-13,174.	3.3	19
36	Coordinated observations of sprites and inâ€cloud lightning flash structure. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6607-6632.	3.3	73

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37	VHF lightning mapping observations of a triggered lightning flash. Geophysical Research Letters, 2012, 39, .	4.0	61
38	Geometrical and electrical characteristics of the initial stage in Florida triggered lightning. Geophysical Research Letters, 2012, 39, .	4.0	23
39	Lightning development associated with two negative gigantic jets. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	44
40	Lightning leader stepping, K changes, and other observations near an intracloud flash. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	44
41	Modeling of thundercloud screening charges: Implications for blue and gigantic jets. Journal of Geophysical Research, 2010, 115, .	3.3	67
42	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
43	Lightning initiation in the anvils of two supercell storms. Geophysical Research Letters, 2009, 36, .	4.0	58
44	Upward electrical discharges fromÂthunderstorms. Nature Geoscience, 2008, 1, 233-237.	12.9	255
45	TELEX The Thunderstorm Electrification and Lightning Experiment. Bulletin of the American Meteorological Society, 2008, 89, 997-1014.	3.3	174
46	Evolving Complex Electrical Structures of the STEPS 25 June 2000 Multicell Storm. Monthly Weather Review, 2008, 136, 741-756.	1.4	45
47	Threeâ€dimensional fractal modeling of intracloud lightning discharge in a New Mexico thunderstorm and comparison with lightning mapping observations. Journal of Geophysical Research, 2007, 112, .	3.3	73
48	Inverted-polarity electrical structures in thunderstorms in the Severe Thunderstorm Electrification and Precipitation Study (STEPS). Atmospheric Research, 2005, 76, 247-271.	4.1	174
49	Observed electric fields associated with lightning initiation. Geophysical Research Letters, 2005, 32, .	4.0	105
50	Initial leader velocities during intracloud lightning: Possible evidence for a runaway breakdown effect. Journal of Geophysical Research, 2005, 110, .	3.3	50
51	The Severe Thunderstorm Electrification and Precipitation Study. Bulletin of the American Meteorological Society, 2004, 85, 1107-1126.	3.3	175
52	Accuracy of the Lightning Mapping Array. Journal of Geophysical Research, 2004, 109, .	3.3	361
53	Observations of VHF source powers radiated by lightning. Geophysical Research Letters, 2001, 28, 143-146.	4.0	178
54	Detection of daytime sprites via a unique sprite ELF signature. Geophysical Research Letters, 2000, 27, 871-874.	4.0	52

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55	Comparison of ground-based 3-dimensional lightning mapping observations with satellite-based LIS observations in Oklahoma. Geophysical Research Letters, 2000, 27, 1703-1706.	4.0	127
56	GPS-based mapping system reveals lightning inside storms. Eos, 2000, 81, 21.	0.1	187
57	A distinct class of isolated intracloud lightning discharges and their associated radio emissions. Journal of Geophysical Research, 1999, 104, 4189-4212.	3.3	208
58	High speed video of initial sprite development. Geophysical Research Letters, 1999, 26, 3201-3204.	4.0	144
59	A GPS-based three-dimensional lightning mapping system: Initial observations in central New Mexico. Geophysical Research Letters, 1999, 26, 3573-3576.	4.0	581
60	The spatial and temporal development of intracloud lightning. Journal of Geophysical Research, 1996, 101, 26641-26668.	3.3	297
61	Radio interferometric observations of cloud-to-ground lightning phenomena in Florida. Journal of Geophysical Research, 1995, 100, 2749.	3.3	229
62	Correlated high-speed video and radio interferometric observations of a cloud-to-ground lightning flash. Journal of Geophysical Research, 1995, 100, 25731.	3.3	71
63	Observations of lightning phenomena using radio interferometry. Journal of Geophysical Research, 1994, 99, 13059.	3.3	147
64	Interferometric observations of a single stroke cloudâ€toâ€ground flash. Geophysical Research Letters, 1989, 16, 1169-1172.	4.0	46
65	The electrical structure of the hokuriku winter thunderstorms. Journal of Geophysical Research, 1982, 87, 1207-1215.	3.3	267
66	An analysis of the charge structure of lightning discharges to ground. Journal of Geophysical Research, 1979, 84, 2432-2456.	3.3	332