Yijun Zhang

List of Publications by Year
in descending order

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77 papers	1,440 citations	331259 21 h-index	414034 32 g-index
77 all docs	77 docs citations	77 times ranked	664 citing authors

#	Article	IF	Citations
1	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
2	Performance Evaluation for a Lightning Location System Based on Observations of Artificially Triggered Lightning and Natural Lightning Flashes. Journal of Atmospheric and Oceanic Technology, 2012, 29, 1835-1844.	0.5	59
3	The possible charge structure of thunderstorm and lightning discharges in northeastern verge of Qinghaiâ€“Tibetan Plateau. Atmospheric Research, 2005, 76, 231-246.	1.8	57
4	Experiments of artificially triggered lightning and its application in Conghua, Guangdong, China. Atmospheric Research, 2014, 135-136, 330-343.	1.8	51
5	Two associated upward lightning flashes that produced opposite polarity electric field changes. Geophysical Research Letters, 2009, 36, .	1.5	48
6	Characteristics of unconnected upward leaders initiated from tall structures observed in Guangzhou. Journal of Geophysical Research, 2012, 117, .	3.3	48
7	Low-frequency E-field Detection Array (LFEDA)â€”Construction and preliminary results. Science China Earth Sciences, 2017, 60, 1896-1908.	2.3	48
8	Relationship between lightning activity and tropical cyclone intensity over the northwest Pacific. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4072-4089.	1.2	44
9	Experiment of artificially triggering lightning in China. Journal of Geophysical Research, 1994, 99, 10727.	3.3	42
10	Climatological Comparison of Small- and Large-Current Cloud-to-Ground Lightning Flashes over Southern China. Journal of Climate, 2016, 29, 2831-2848.	1.2	40
11	Lightning Distribution and Eyewall Outbreaks in Tropical Cyclones during Landfall. Monthly Weather Review, 2012, 140, 3573-3586.	0.5	39
12	Understanding the dynamical-microphysical-electrical processes associated with severe thunderstorms over the Beijing metropolitan region. Science China Earth Sciences, 2021, 64, 10-26.	2.3	35
13	A New Method of Threeâ€Dimensional Location for Lowâ€Frequency Electric Field Detection Array. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8792-8812.	1.2	30
14	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.	2.7	29
15	Characteristics of the initial stage and return stroke currents of rocketâ€triggered lightning flashes in southern China. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6431-6452.	1.2	27
16	Characteristics of return stroke currents of classical and altitude triggered lightning in GCOELD in China. Atmospheric Research, 2013, 129-130, 67-78.	1.8	26
17	Characteristics and correlation of return stroke, M component and continuing current for triggered lightning. Electric Power Systems Research, 2016, 139, 10-15.	2.1	26
18	Observations of the initial stage of a rocketâ€andâ€wireâ€triggered lightning discharge. Geophysical Research Letters, 2017, 44, 4332-4340.	1.5	26

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19	A comparison of the characteristics of total and cloud-to-ground lightning activities in hailstorms. Journal of Meteorological Research, 2013, 27, 282-293.	1.0	25
20	Spatialâ€“temporal characteristics of lightning flash size in a supercell storm. Atmospheric Research, 2017, 197, 201-210.	1.8	25
21	Charge structures and cloud-to-ground lightning discharges characteristics in two supercell thunderstorms. Science Bulletin, 2006, 51, 198-212.	1.7	22
22	Lightning climatology over the northwest Pacific region: An 11-year study using data from the World Wide Lightning Location Network. Atmospheric Research, 2018, 210, 41-57.	1.8	22
23	A Review of Atmospheric Electricity Research in China from 2011 to 2018. Advances in Atmospheric Sciences, 2019, 36, 994-1014.	1.9	22
24	Lightning activity and electrical structure in a thunderstorm that continued for more than 24h. Atmospheric Research, 2010, 97, 241-256.	1.8	21
25	Influence of the Ground Potential Rise on the Residual Voltage of Low-Voltage Surge Protective Devices due to Nearby Lightning Flashes. IEEE Transactions on Power Delivery, 2016, 31, 596-604.	2.9	21
26	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
27	Optical progression characteristics of an interesting natural downward bipolar lightning flash. Journal of Geophysical Research D: Atmospheres, 2015, 120, 708-715.	1.2	20
28	Three-dimensional propagation characteristics of the leaders in the attachment process of a downward negative lightning flash. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 23-30.	0.6	20
29	A Method of Threeâ€Dimensional Location for LFEDA Combining the Time of Arrival Method and the Time Reversal Technique. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6484-6500.	1.2	20
30	Analysis and comparison of initial breakdown pulses for positive cloud-to-ground flashes observed in Beijing and Guangzhou. Atmospheric Research, 2013, 129-130, 34-41.	1.8	19
31	Influence of the Canton Tower on the cloudâ€toâ€ground lightning in its vicinity. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5943-5954.	1.2	18
32	Properties of Negative Initial Leaders and Lightning Flash Size in a Cluster of Supercells. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,857.	1.2	18
33	Characteristics of Electromagnetic Signals During the Initial Stage of Negative Rocketâ€Triggered Lightning. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,625.	1.2	18
34	Attention-Based Dual-Source Spatiotemporal Neural Network for Lightning Forecast. IEEE Access, 2019, 7, 158296-158307.	2.6	18
35	Review of Chinese atmospheric science research over the past 70 years: Atmospheric physics and atmospheric environment. Science China Earth Sciences, 2019, 62, 1903-1945.	2.3	18
36	Polarity inverted intracloud discharges and electric charge structure of thunderstorm. Science Bulletin, 2002, 47, 1725-1729.	1.7	17

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37	Impact of the vertical velocity field on charging processes and charge separation in a simulated thunderstorm. Journal of Meteorological Research, 2015, 29, 328-343.	0.9	17
38	Simulation of the electrification of a tropical cyclone using the WRF-ARW model: An idealized case. Journal of Meteorological Research, 2014, 28, 453-468.	0.9	15
39	Characteristics of cloud-to-ground lightning strikes in the stratiform regions of mesoscale convective systems. Atmospheric Research, 2016, 178-179, 207-216.	1.8	15
40	Initial Leader Properties During the Preliminary Breakdown Processes of Lightning Flashes and Their Associations With Initiation Positions. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8025-8042.	1.2	15
41	FY-4A LMI Observed Lightning Activity in Super Typhoon Mangkhut (2018) in Comparison with WWLLN Data. Journal of Meteorological Research, 2020, 34, 336-352.	0.9	14
42	Spatial and temporal characteristics of VHF radiation source produced by lightning in supercell thunderstorms. Science Bulletin, 2004, 49, 624.	1.7	13
43	Advances in Lightning Monitoring and Location Technology Research in China. Remote Sensing, 2022, 14, 1293.	1.8	13
44	Experiments on lightning protection for automatic weather stations using artificially triggered lightning. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 313-321.	0.8	12
45	The role of dynamic transport in the formation of the inverted charge structure in a simulated hailstorm. Science China Earth Sciences, 2016, 59, 1414-1426.	2.3	12
46	Simultaneous optical and electrical observations of â€œchaoticâ€•leaders preceding subsequent return strokes. Atmospheric Research, 2016, 170, 131-139.	1.8	12
47	Evolution of the Charge Structure and Lightning Discharge Characteristics of a Qinghaiâ€Tibet Plateau Thunderstorm Dominated by Negative Cloudâ€toâ€Ground Flashes. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031129.	1.2	12
48	Inner-core lightning outbreaks and convective evolution in Super Typhoon Haiyan (2013). Atmospheric Research, 2019, 219, 123-139.	1.8	11
49	Measurements of Magnetic Pulse Bursts During Initial Continuous Current of Negative Rocketâ€Triggered Lightning. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11710-11721.	1.2	11
50	Preliminary breakdown, following lightning discharge processes and lower positive charge region. Atmospheric Research, 2015, 161-162, 52-56.	1.8	10
51	Characteristics of Lightning Flashes Associated With the Charge Layer Near the 0ÂÂ°C Isotherm in the Stratiform Region of Mesoscale onvective Systems. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9524-9541.	1.2	10
52	Characteristics of a multi-stroke â€œbolt from the blueâ€•lightning-type that caused a fatal disaster. Geomatics, Natural Hazards and Risk, 2019, 10, 1425-1442.	2.0	9
53	Fast and Fine Location of Total Lightning from Low Frequency Signals Based on Deep-Learning Encoding Features. Remote Sensing, 2021, 13, 2212.	1.8	9
54	Characterizing Radio Frequency Magnetic Radiation of Initial Upward Leader Stepping in Triggered Lightning With Interferometric Lightning Mapping. Geophysical Research Letters, 2020, 47, e2020GL089392.	1.5	9

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55	Radar Reflectivity of Lightning Flashes in Stratiform Regions of Mesoscale Convective Systems. Journal of Geophysical Research D: Atmospheres, 2019, 124, 14114-14132.	1.2	8
56	Semi-idealized modeling of lightning initiation related to vertical air motion and cloud microphysics. Journal of Meteorological Research, 2017, 31, 976-986.	0.9	7
57	Lightning Characteristics and Electric Charge Structure of a Hail-Producing Thunderstorm on the Eastern Qinghaiâ€“Tibetan Plateau. Atmosphere, 2018, 9, 295.	1.0	7
58	Numerical Simulation of the Formation of a Large Lower Positive Charge Center in a Tibetan Plateau Thunderstorm. Journal of Geophysical Research D: Atmospheres, 2019, 124, 9561-9593.	1.2	7
59	Transient Response of Surge Protective Devices During the Potentials Transferred Between Independent Grounding Grids. IEEE Transactions on Power Delivery, 2020, 35, 630-638.	2.9	7
60	Lightning and deep convective activities over the Tibetan Plateau. National Science Review, 2020, 7, 487-488.	4.6	7
61	Quantifying the contribution of tropical cyclones to lightning activity over the Northwest Pacific. Atmospheric Research, 2020, 239, 104906.	1.8	7
62	Application of Lightning Data Assimilation to Numerical Forecast of Super Typhoon Haiyan (2013). Journal of Meteorological Research, 2020, 34, 1052-1067.	0.9	6
63	Lightning activity and its associations with cloud structures in a rainstorm dominated by warm precipitation. Atmospheric Research, 2020, 246, 105120.	1.8	6
64	On the Transition From Precursors to the Initial Upward Positive Leader in Negative Rocketâ€Triggered Lightning. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033926.	1.2	6
65	Turbulence Characteristics of Thunderstorms Before the First Flash in Comparison to Nonâ€Thunderstorms. Geophysical Research Letters, 2021, 48, e2021GL094821.	1.5	6
66	Optical and electrical observations of an abnormal triggered lightning event with two upward propagations. Journal of Meteorological Research, 2012, 26, 529-540.	1.0	5
67	Characteristics of Two Ground Grid Potentials After a Triggered Lightning Stroke. IEEE Access, 2020, 8, 171001-171008.	2.6	5
68	Vertical reflectivity structures near lightning flashes in the stratiform regions of mesoscale convective systems. Atmospheric Research, 2020, 242, 104961.	1.8	4
69	Evolution Characteristics during Initial Stage of Triggered Lightning Based on Directly Measured Current. Atmosphere, 2020, 11, 658.	1.0	3
70	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.	2.7	3
71	Association of lightning occurrence with precipitation cloud column structure at a fixed position. Atmospheric Research, 2022, 267, 105989.	1.8	3
72	LightNet+: A dual-source lightning forecasting network with bi-direction spatiotemporal transformation. Applied Intelligence, 2022, 52, 11147-11159.	3.3	3

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73	Return-stroke current measurement at the Canton Tower and preliminary analysis results. Electric Power Systems Research, 2022, 206, 107798.	2.1	3
74	Thunderstorm Activity over the Qinghaiâ€“Tibet Plateau Indicated by the Combined Data of the FY-2E Geostationary Satellite and WWLLN. Remote Sensing, 2022, 14, 2855.	1.8	3
75	Characteristics of Negative Leader Propagation Area of Lightning Flashes Initiated in the Stratiform Regions of Mesoscale Convective Systems. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033336.	1.2	1
76	A study on the response characteristics of adjacent grounding grids under artificially triggered lightning strokes. Electric Power Systems Research, 2021, 197, 107304.	2.1	1
77	Characteristics of Regions with High-Density Initiation of Flashes in Mesoscale Convective Systems. Remote Sensing, 2022, 14, 1193.	1.8	1