Lawrence Carey

List of Publications by Year
in descending order

52 papers	3,059 citations	201385 27 h-index	174990 52 g-index
57 all docs	57 docs citations	57 times ranked	2167 citing authors

#	Article	IF	Citations
1	The GOES-R Geostationary Lightning Mapper (GLM). Atmospheric Research, 2013, 125-126, 34-49.	1.8	342
2	The Relationship between Precipitation and Lightning in Tropical Island Convection: A C-Band Polarimetric Radar Study. Monthly Weather Review, 2000, 128, 2687-2710.	0.5	180
3	The Deep Convective Clouds and Chemistry (DC3) Field Campaign. Bulletin of the American Meteorological Society, 2015, 96, 1281-1309.	1.7	165
4	Lightning and Severe Weather: A Comparison between Total and Cloud-to-Ground Lightning Trends. Weather and Forecasting, 2011, 26, 744-755.	0.5	163
5	Electrical and multiparameter radar observations of a severe hailstorm. Journal of Geophysical Research, 1998, 103, 13979-14000.	3.3	151
6	Lightning location relative to storm structure in a leading-line, trailing-stratiform mesoscale convective system. Journal of Geophysical Research, 2005, 110, .	3.3	151
7	Radar observations of the kinematic, microphysical, and precipitation characteristics of two MCSs in TRMM LBA. Journal of Geophysical Research, 2002, 107, LBA 44-1.	3.3	143
8	Preliminary Development and Evaluation of Lightning Jump Algorithms for the Real-Time Detection of Severe Weather. Journal of Applied Meteorology and Climatology, 2009, 48, 2543-2563.	0.6	141
9	Environmental Control of Cloud-to-Ground Lightning Polarity in Severe Storms. Monthly Weather Review, 2007, 135, 1327-1353.	0.5	112
10	Correcting Propagation Effects in C-Band Polarimetric Radar Observations of Tropical Convection Using Differential Propagation Phase. Journal of Applied Meteorology and Climatology, 2000, 39, 1405-1433.	1.7	110
11	The Community Collaborative Rain, Hail, and Snow Network: Informal Education for Scientists and Citizens. Bulletin of the American Meteorological Society, 2005, 86, 1069-1078.	1.7	110
12	Meteorological Overview of the Devastating 27 April 2011 Tornado Outbreak. Bulletin of the American Meteorological Society, 2014, 95, 1041-1062.	1.7	83
13	The Relationship between Severe Storm Reports and Cloud-to-Ground Lightning Polarity in the Contiguous United States from 1989 to 1998. Monthly Weather Review, 2003, 131, 1211-1228.	0.5	81
14	Insight into the Kinematic and Microphysical Processes that Control Lightning Jumps. Weather and Forecasting, 2015, 30, 1591-1621.	0.5	72
15	Toward Completing the Raindrop Size Spectrum: Case Studies Involving 2D-Video Disdrometer, Droplet Spectrometer, and Polarimetric Radar Measurements. Journal of Applied Meteorology and Climatology, 2017, 56, 877-896.	0.6	67
16	Evolution of the total lightning structure in a leadingâ€line, trailingâ€stratiform mesoscale convective system over Houston, Texas. Journal of Geophysical Research, 2008, 113, .	3.3	57
17	Radar Nowcasting of Cloud-to-Ground Lightning over Houston, Texas. Weather and Forecasting, 2011, 26, 199-212.	0.5	56
18	Total Lightning Signatures of Thunderstorm Intensity over North Texas. Part I: Supercells. Monthly Weather Review, 2007, 135, 3281-3302.	0.5	54

#	Article	IF	Citations
19	Exploring Lightning Jump Characteristics. Weather and Forecasting, 2015, 30, 23-37.	0.5	52
20	Searching for Large Raindrops: A Global Summary of Two-Dimensional Video Disdrometer Observations. Journal of Applied Meteorology and Climatology, 2015, 54, 1069-1089.	0.6	51
21	Climatological analyses of LMA data with an openâ€source lightning flashâ€clustering algorithm. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8625-8648.	1.2	51
22	Radar and Lightning Observations of Deep Moist Convection across Northern Alabama during DC3: 21 May 2012. Monthly Weather Review, 2015, 143, 2774-2794.	0.5	50
23	Examining Deep Convective Cloud Evolution Using Total Lightning, WSR-88D, and GOES-14 Super Rapid Scan Datasets*. Weather and Forecasting, 2015, 30, 571-590.	0.5	50
24	Evolution of Cloud-to-Ground Lightning and Storm Structure in the Spencer, South Dakota, Tornadic Supercell of 30 May 1998. Monthly Weather Review, 2003, 131, 1811-1831.	0.5	49
25	Kinematic and Microphysical Significance of Lightning Jumps versus Nonjump Increases in Total Flash Rate. Weather and Forecasting, 2017, 32, 275-288.	0.5	45
26	A Storm Safari in Subtropical South America: Proyecto RELAMPAGO. Bulletin of the American Meteorological Society, 2021, 102, E1621-E1644.	1.7	42
27	A Comparison of Two Ground-Based Lightning Detection Networks against the Satellite-Based Lightning Imaging Sensor (LIS). Journal of Atmospheric and Oceanic Technology, 2014, 31, 2191-2205.	0.5	40
28	An Evaluation of Relationships between Radar-Inferred Kinematic and Microphysical Parameters and Lightning Flash Rates in Alabama Storms. Atmosphere, 2019, 10, 796.	1.0	30
29	Microphysical and Kinematic Processes Associated With Anomalous Charge Structures in Isolated Convection. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6505-6528.	1.2	29
30	Evolution of radar reflectivity and total lightning characteristics of the 21 April 2006 mesoscale convective system over Texas. Atmospheric Research, 2008, 89, 113-137.	1.8	25
31	Regional Comparison of GOES Cloud-Top Properties and Radar Characteristics in Advance of First-Flash Lightning Initiation. Monthly Weather Review, 2013, 141, 55-74.	0.5	25
32	Quality Control and Calibration of the Dual-Polarization Radar at Kwajalein, RMI. Journal of Atmospheric and Oceanic Technology, 2011, 28, 181-196.	0.5	24
33	Huntsville Alabama Marx Meter Array 2: Upgrade and Capability. Earth and Space Science, 2020, 7, e2020EA001111.	1.1	24
34	Lightning characteristics relative to radar, altitude and temperature for a multicell, MCS and supercell over northern Alabama. Atmospheric Research, 2017, 191, 128-140.	1.8	21
35	The RELAMPAGO Lightning Mapping Array: Overview and Initial Comparison with the Geostationary Lightning Mapper. Journal of Atmospheric and Oceanic Technology, 2020, 37, 1457-1475.	0.5	21
36	The kinematic and microphysical control of lightning rate, extent, and NO<i>_X</i> production. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7975-7989.	1.2	20

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37	Sensitivity of C-Band Polarimetric Radarâ€"Based Drop Size Estimates to Maximum Diameter. Journal of Applied Meteorology and Climatology, 2015, 54, 1352-1371.	0.6	18
38	Observed Response of the Raindrop Size Distribution to Changes in the Melting Layer. Atmosphere, 2018, 9, 319.	1.0	17
39	Effects of Scavenging, Entrainment, and Aqueous Chemistry on Peroxides and Formaldehyde in Deep Convective Outflow Over the Central and Southeast United States. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7594-7614.	1.2	15
40	Quantitative Differences between Lightning and Nonlightning Convective Rainfall Events as Observed with Polarimetric Radar and MSG Satellite Data. Monthly Weather Review, 2014, 142, 3651-3665.	0.5	14
41	Investigating the Relationship between Lightning and Mesocyclonic Rotation in Supercell Thunderstorms. Weather and Forecasting, 2017, 32, 2237-2259.	0.5	14
42	Radar Reflectivity and Altitude Distributions of Lightning as a Function of IC, CG, and HY Flashes: Implications for LNOx Production. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,796.	1.2	13
43	Characterizing Charge Structure in Central Argentina Thunderstorms During RELAMPAGO Utilizing a New Charge Layer Polarity Identification Method. Earth and Space Science, 2021, 8, e2021EA001803.	1.1	12
44	A Random Forest Method to Forecast Downbursts Based on Dual-Polarization Radar Signatures. Remote Sensing, 2019, 11, 826.	1.8	11
45	Observations of Anomalous Charge Structures in Supercell Thunderstorms in the Southeastern United States. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033012.	1.2	10
46	Why Flash Type Matters: A Statistical Analysis. Geophysical Research Letters, 2017, 44, 9505-9512.	1.5	9
47	Evaluation of deep convective transport in storms from different convective regimes during the DC3 field campaign using WRFâ€Chem with lightning data assimilation. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7140-7163.	1.2	9
48	Radar Reflectivity and Altitude Distributions of Lightning Flashes as a Function of Three Main Storm Types. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,814.	1.2	9
49	Examining Conditions Supporting the Development of Anomalous Charge Structures in Supercell Thunderstorms in the Southeastern United States. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034582.	1.2	9
50	Multiple Strokes Along the Same Channel to Ground in Positive Lightning Produced by a Supercell. Geophysical Research Letters, 2021, 48, e2021GL096714.	1.5	5
51	The Relation of Environmental Conditions With Charge Structure in Central Argentina Thunderstorms. Earth and Space Science, 2022, 9, .	1.1	5
52	C-band Dual-Polarization Radar Signatures of Wet Downbursts around Cape Canaveral, Florida. Weather and Forecasting, 2019, 34, 103-131.	0.5	2