Aaron Bansemer

List of Publications by Year
in descending order

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57 papers	3,013 citations	147801 31 h-index	168389 53 g-index
64 all docs	64 docs citations	64 times ranked	2119 citing authors

#	Article	IF	Citations
1	Observations and Parameterizations of Particle Size Distributions in Deep Tropical Cirrus and Stratiform Precipitating Clouds: Results from In Situ Observations in TRMM Field Campaigns. Journals of the Atmospheric Sciences, 2002, 59, 3457-3491.	1.7	277
2	A General Approach for Deriving the Properties of Cirrus and Stratiform Ice Cloud Particles. Journals of the Atmospheric Sciences, 2002, 59, 3-29.	1.7	178
3	Improvements in Shortwave Bulk Scattering and Absorption Models for the Remote Sensing of Ice Clouds. Journal of Applied Meteorology and Climatology, 2011, 50, 1037-1056.	1.5	175
4	Effective Ice Particle Densities Derived from Aircraft Data. Journals of the Atmospheric Sciences, 2004, 61, 982-1003.	1.7	171
5	Ice Cloud Particle Size Distributions and Pressure-Dependent Terminal Velocities from In Situ Observations at Temperatures from 0Â° to â˜86Â°C. Journals of the Atmospheric Sciences, 2013, 70, 4123-4154.	1.7	171
6	Snow Size Distribution Parameterization for Midlatitude and Tropical Ice Clouds. Journals of the Atmospheric Sciences, 2007, 64, 4346-4365.	1.7	162
7	Improved Representation of Ice Particle Masses Based on Observations in Natural Clouds. Journals of the Atmospheric Sciences, 2010, 67, 3303-3318.	1.7	128
8	Ice cloud single-scattering property models with the full phase matrix at wavelengths from 0.2 to 100Âµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 123-139.	2.3	126
9	Homogeneous Ice Nucleation in Subtropical and Tropical Convection and Its Influence on Cirrus Anvil Microphysics. Journals of the Atmospheric Sciences, 2005, 62, 41-64.	1.7	103
10	Microphysical Observations of Tropical Clouds. Journal of Applied Meteorology and Climatology, 2002, 41, 97-117.	1.7	98
11	Microphysics of Maritime Tropical Convective Updrafts at Temperatures from â˜20Â° to â˜60Â°. Journals of the Atmospheric Sciences, 2009, 66, 3530-3562.	1.7	88
12	Refinements to Ice Particle Mass Dimensional and Terminal Velocity Relationships for Ice Clouds. Part I: Temperature Dependence. Journals of the Atmospheric Sciences, 2007, 64, 1047-1067.	1.7	75
13	Polarimetric radar and aircraft observations of saggy bright bands during MC3E. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3584-3607.	3.3	56
14	Processing of Ice Cloud In Situ Data Collected by Bulk Water, Scattering, and Imaging Probes: Fundamentals, Uncertainties, and Efforts toward Consistency. Meteorological Monographs, 2017, 58, 11.1-11.33.	5.0	56
15	Idealized Simulations of a Squall Line from the MC3E Field Campaign Applying Three Bin Microphysics Schemes: Dynamic and Thermodynamic Structure. Monthly Weather Review, 2017, 145, 4789-4812.	1.4	55
16	The Characterization of Ice Cloud Properties from Doppler Radar Measurements. Journal of Applied Meteorology and Climatology, 2007, 46, 1682-1698.	1.5	54
17	Secondary Ice Production by Fragmentation of Freezing Drops: Formulation and Theory. Journals of the Atmospheric Sciences, 2018, 75, 3031-3070.	1.7	52
18	Anvil glaciation in a deep cumulus updraught over Florida simulated with the Explicit Microphysics Model. I: Impact of various nucleation processes. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2019-2046.	2.7	51

#	ARTICLE	IF	CITATIONS
19	Determination of the Combined Ventilation Factor and Capacitance for Ice Crystal Aggregates from Airborne Observations in a Tropical Anvil Cloud. Journals of the Atmospheric Sciences, 2008, 65, 376-391.	1.7	49
20	The Microphysics of Stratiform Precipitation During OLYMPEX: Compatibility Between Tripleâ€Frequency Radar and Airborne In Situ Observations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8764-8792.	3.3	46
21	Understanding Utah Winter Storms: The Intermountain Precipitation Experiment. Bulletin of the American Meteorological Society, 2002, 83, 189-210.	3.3	45
22	Exponential Size Distributions for Snow. Journals of the Atmospheric Sciences, 2008, 65, 4017-4031.	1.7	43
23	Observations of Ice Microphysics through the Melting Layer. Journals of the Atmospheric Sciences, 2015, 72, 2902-2928.	1.7	43
24	Effective Radius of Ice Cloud Particle Populations Derived from Aircraft Probes. Journal of Atmospheric and Oceanic Technology, 2006, 23, 361-380.	1.3	42
25	Ice Multiplication by Breakup in Iceâ€"Ice Collisions. Part II: Numerical Simulations. Journals of the Atmospheric Sciences, 2017, 74, 2789-2811.	1.7	42
26	Formation and Spread of Aircraft-Induced Holes in Clouds. Science, 2011, 333, 77-81.	12.6	40
27	Insights into riming and aggregation processes as revealed by aircraft, radar, and disdrometer observations for a 27 April 2011 widespread precipitation event. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5846-5863.	3.3	40
28	A Study of Cirrus Ice Particle Size Distribution Using TC4 Observations. Journals of the Atmospheric Sciences, 2010, 67, 195-216.	1.7	39
29	The Microwave Radiative Properties of Falling Snow Derived from Nonspherical Ice Particle Models. Part II: Initial Testing Using Radar, Radiometer and In Situ Observations. Journal of Applied Meteorology and Climatology, 2016, 55, 709-722.	1.5	35
30	Contributions of the Liquid and Ice Phases to Global Surface Precipitation: Observations and Global Climate Modeling. Journals of the Atmospheric Sciences, 2020, 77, 2629-2648.	1.7	34
31	Ice Microphysics Observations in Hurricane Humberto: Comparison with Non-Hurricane-Generated Ice Cloud Layers. Journals of the Atmospheric Sciences, 2006, 63, 288-308.	1.7	32
32	Understanding the Relationships between Lightning, Cloud Microphysics, and Airborne Radar-Derived Storm Structure during Hurricane Karl (2010). Monthly Weather Review, 2014, 142, 590-605.	1.4	32
33	Comparison of ice cloud properties simulated by the Community Atmosphere Model (CAM5) with in-situ observations. Atmospheric Chemistry and Physics, 2014, 14, 10103-10118.	4.9	29
34	Toward Improving Ice Water Content and Snow-Rate Retrievals from Radars. Part II: Results from Three Wavelength Radarâ€"Collocated In Situ Measurements and CloudSatâ€"GPMâ€"TRMM Radar Data. Journal of Applied Meteorology and Climatology, 2018, 57, 365-389.	1.5	29
35	Quasi-Spherical Ice in Convective Clouds. Journals of the Atmospheric Sciences, 2016, 73, 3885-3910.	1.7	28
36	Ice particles in the upper anvil regions of midlatitude continental thunderstorms: the case for frozen-drop aggregates. Atmospheric Chemistry and Physics, 2014, 14, 1973-1985.	4.9	27

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37	Electrification in Mesoscale Updrafts of Deep Stratiform and Anvil Clouds in Florida. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1021-1049.	3.3	26
38	A Parameterization of Sticking Efficiency for Collisions of Snow and Graupel with Ice Crystals: Theory and Comparison with Observations*. Journals of the Atmospheric Sciences, 2015, 72, 4885-4902.	1.7	25
39	Effective ice particle densities for cold anvil cirrus. Geophysical Research Letters, 2004, 31, .	4.0	20
40	TRMM Common Microphysics Products: A Tool for Evaluating Spaceborne Precipitation Retrieval Algorithms. Journal of Applied Meteorology and Climatology, 2004, 43, 1598-1618.	1.7	20
41	Nonparametric Methodology to Estimate Precipitating Ice from Multiple-Frequency Radar Reflectivity Observations. Journal of Applied Meteorology and Climatology, 2018, 57, 2605-2622.	1.5	19
42	Difficulties in Early Ice Detection with the Small Ice Detector-2 HIAPER (SID-2H) in Maritime Cumuli. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1263-1275.	1.3	17
43	Evidence of nitric acid uptake in warm cirrus anvil clouds during the NASA TC4 campaign. Journal of Geophysical Research, 2010, 115, .	3.3	16
44	The 94â€GHz radar dim band: Relevance to ice cloud properties and CloudSat. Geophysical Research Letters, 2008, 35, .	4.0	15
45	Distributions of ice supersaturation and ice crystals from airborne observations in relation to upper tropospheric dynamical boundaries. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5101-5121.	3.3	15
46	Revisiting particle sizing using greyscale optical array probes: evaluation using laboratory experiments and synthetic data. Atmospheric Measurement Techniques, 2019, 12, 3067-3079.	3.1	11
47	Dynamical conditions of ice supersaturation and ice nucleation in convective systems: A comparative analysis between in situ aircraft observations and WRF simulations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2844-2866.	3.3	9
48	Aerosol indirect effects on glaciated clouds. Part I: Model description. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1958-1969.	2.7	8
49	An assessment of the radiative effects of ice supersaturation based on in situ observations. Geophysical Research Letters, 2016, 43, 11,039.	4.0	8
50	The Microphysical Properties of Small Ice Particles Measured by the Small Ice Detector-3 Probe during the MACPEX Field Campaign. Journals of the Atmospheric Sciences, 2016, 73, 4775-4791.	1.7	8
51	Survival of Snow in the Melting Layer: Relative Humidity Influence. Journals of the Atmospheric Sciences, 2021, , .	1.7	8
52	On the Covariability of Cloud and Rain Water as a Function of Length Scale. Journals of the Atmospheric Sciences, 2019, 76, 2295-2308.	1.7	7
53	Scientific Products From the First Radar in a CubeSat (RainCube): Deconvolution, Cross-Validation, and Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-20.	6.3	7
54	New Empirical Formulation for the Sublimational Breakup of Graupel and Dendritic Snow. Journals of the Atmospheric Sciences, 2022, 79, 317-336.	1.7	6

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55	Comparison of GOESâ€retrieved and in situ measurements of deep convective anvil cloud microphysical properties during the Tropical Composition, Cloud and Climate Coupling Experiment (TC⁴). Journal of Geophysical Research, 2010, 115, .	3.3	5
56	Impact of Massâ€"Size Parameterizations of Frozen Hydrometeors on Microphysical Retrievals: Evaluation by Matching Radar to In Situ Observations from GCPEx and OLYMPEx. Journal of Atmospheric and Oceanic Technology, 2020, 37, 993-1012.	1.3	5
57	Determination of the Ice Particle Size Distributions Using Observations as the Integrated Constraints. Journals of the Atmospheric Sciences, 2018, 75, 787-804.	1.7	2