Paul DeMott

List of Publications by Year
in descending order

228 papers	21,300 citations	8181 76 h-index	12946 131 g-index
317 all docs	317 docs citations	317 times ranked	8773 citing authors

#	Article	IF	Citations
1	Studies on the Competition Between Homogeneous and Heterogeneous Ice Nucleation in Cirrus Formation. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	15
2	A numerical framework for simulating the atmospheric variability of supermicron marine biogenic ice nucleating particles. Atmospheric Chemistry and Physics, 2022, 22, 847-859.	4.9	9
3	The Sea Spray Chemistry and Particle Evolution study (SeaSCAPE): overview and experimental methods. Environmental Sciences: Processes and Impacts, 2022, 24, 290-315.	3.5	11
4	The COMBLE Campaign: A Study of Marine Boundary Layer Clouds in Arctic Cold-Air Outbreaks. Bulletin of the American Meteorological Society, 2022, 103, E1371-E1389.	3.3	17
5	Discrimination between individual dust and bioparticles using aerosol time-of-flight mass spectrometry. Aerosol Science and Technology, 2022, 56, 592-608.	3.1	6
6	Iceâ€Nucleating Particles That Impact Clouds and Climate: Observational and Modeling Research Needs. Reviews of Geophysics, 2022, 60, .	23.0	29
7	Modeling impacts of ice-nucleating particles from marine aerosols on mixed-phase orographic clouds during 2015 ACAPEX field campaign. Atmospheric Chemistry and Physics, 2022, 22, 6749-6771.	4.9	4
8	Annual cycle observations of aerosols capable of ice formation in central Arctic clouds. Nature Communications, 2022, 13, .	12.8	19
9	Pragmatic protocols for working cleanly when measuring ice nucleating particles. Atmospheric Research, 2021, 250, 105419.	4.1	13
10	Organic composition of three different size ranges of aerosol particles over the Southern Ocean. Aerosol Science and Technology, 2021, 55, 268-288.	3.1	13
11	Importance of Supermicron Ice Nucleating Particles in Nascent Sea Spray. Geophysical Research Letters, 2021, 48, e2020GL089633.	4.0	29
12	Cloudâ€Nucleating Particles Over the Southern Ocean in a Changing Climate. Earth's Future, 2021, 9, e2020EF001673.	6.3	33
13	Challenging and Improving the Simulation of Midâ€Level Mixedâ€Phase Clouds Over the Highâ€Latitude Southern Ocean. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033490.	3.3	20
14	Empirical formulation for multiple groups of primary biological ice nucleating particles from field observations over Amazonia. Journals of the Atmospheric Sciences, 2021, , .	1.7	5
15	Observations of Clouds, Aerosols, Precipitation, and Surface Radiation over the Southern Ocean: An Overview of CAPRICORN, MARCUS, MICRE, and SOCRATES. Bulletin of the American Meteorological Society, 2021, 102, E894-E928.	3.3	103
16	Emissions of Trace Organic Gases From Western U.S. Wildfires Based on WEâ€CAN Aircraft Measurements. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033838.	3.3	54
17	Evaluating the potential for Haloarchaea to serve as ice nucleating particles. Biogeosciences, 2021, 18, 3751-3762.	3.3	9
18	Cultivable halotolerant ice-nucleating bacteria and fungi in coastal precipitation. Atmospheric Chemistry and Physics, 2021, 21, 9031-9045.	4.9	6

#	Article	IF	Citations
19	Aerosolâ€“Ice Formation Closure: A Southern Great Plains Field Campaign. Bulletin of the American Meteorological Society, 2021, 102, E1952-E1971.	3.3	20
20	Southern Ocean cloud and aerosol data: a compilation of measurements from the 2018 Southern Ocean Ross Sea Marine Ecosystems and Environment voyage. Earth System Science Data, 2021, 13, 3115-3153.	9.9	16
21	Ice in Southern Ocean Clouds With Cloud Top Temperatures Exceeding âˆ'5Â°C. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034574.	3.3	5
22	Ice Nucleating Activity and Residual Particle Morphology of Bulk Seawater and Sea Surface Microlayer. ACS Earth and Space Chemistry, 2021, 5, 1916-1928.	2.7	12
23	Exposure to Particulate Matter and Estimation of Volatile Organic Compounds across Wildland Firefighter Job Tasks. Environmental Science & Technology, 2021, 55, 11795-11804.	10.0	9
24	Is Ice Formation by Sea Spray Particles at Cirrus Temperatures Controlled by Crystalline Salts?. ACS Earth and Space Chemistry, 2021, 5, 2196-2211.	2.7	8
25	Utilizing a Storm-Generating Hotspot to Study Convective Cloud Transitions: The CACTI Experiment. Bulletin of the American Meteorological Society, 2021, 102, E1597-E1620.	3.3	30
26	Biomass Burning Smoke and Its Influence on Clouds Over the Western U. S.. Geophysical Research Letters, 2021, 48, e2021GL094224.	4.0	13
27	Visualization of the seasonal shift of a variety of airborne pollens in western Tokyo. Science of the Total Environment, 2021, 788, 147623.	8.0	13
28	Observations of Ice Nucleating Particles in the Free Troposphere From Western US Wildfires. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033752.	3.3	24
29	Machine Learning Uncovers Aerosol Size Information From Chemistry and Meteorology to Quantify Potential Cloudâ€Forming Particles. Geophysical Research Letters, 2021, 48, .	4.0	7
30	Development of Heterogeneous Ice Nucleation Rate Coefficient Parameterizations From Ambient Measurements. Geophysical Research Letters, 2021, 48, e2021GL095359.	4.0	8
31	Observations and Modeling of Rime Splintering in Southern Ocean Cumuli. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035479.	3.3	9
32	Ice Nucleating Particle Connections to Regional Argentinian Land Surface Emissions and Weather During the Cloud, Aerosol, and Complex Terrain Interactions Experiment. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035186.	3.3	13
33	Bioaerosol field measurements: Challenges and perspectives in outdoor studies. Aerosol Science and Technology, 2020, 54, 520-546.	3.1	81
34	High ice concentration observed in tropical maritime stratiform mixed-phase clouds with top temperatures warmer than âˆ'8â€¯Â°C. Atmospheric Research, 2020, 233, 104719.	4.1	17
35	The Labile Nature of Ice Nucleation by Arizona Test Dust. ACS Earth and Space Chemistry, 2020, 4, 133-141.	2.7	30
36	Structure of an Atmospheric River Over Australia and the Southern Ocean: II. Microphysical Evolution. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032514.	3.3	14

#	Article	IF	Citations
37	Ejection of Dust From the Ocean as a Potential Source of Marine Ice Nucleating Particles. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033073.	3.3	17
38	A biogenic secondary organic aerosol source of cirrus ice nucleating particles. Nature Communications, 2020, 11, 4834.	12.8	45
39	Relating Structure and Ice Nucleation of Mixed Surfactant Systems Relevant to Sea Spray Aerosol. Journal of Physical Chemistry A, 2020, 124, 8806-8821.	2.5	15
40	The contribution of black carbon to global ice nucleating particle concentrations relevant to mixed-phase clouds. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22705-22711.	7.1	43
41	Airborne bacteria confirm the pristine nature of the Southern Ocean boundary layer. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13275-13282.	7.1	48
42	Organic Enrichment, Physical Phase State, and Surface Tension Depression of Nascent Coreâ€"Shell Sea Spray Aerosols during Two Phytoplankton Blooms. ACS Earth and Space Chemistry, 2020, 4, 650-660.	2.7	29
43	Thawing permafrost: an overlooked source of seeds for Arctic cloud formation. Environmental Research Letters, 2020, 15, 084022.	5.2	33
44	Ship-based measurements of ice nuclei concentrations over the Arctic, Atlantic, Pacific and Southern oceans. Atmospheric Chemistry and Physics, 2020, 20, 15191-15206.	4.9	40
45	Best practices for precipitation sample storage for offline studies of ice nucleation in marine and coastal environments. Atmospheric Measurement Techniques, 2020, 13, 6473-6486.	3.1	16
46	A new method for operating a continuous-flow diffusion chamber to investigate immersion freezing: assessment and performance study. Atmospheric Measurement Techniques, 2020, 13, 6631-6643.	3.1	5
47	Ice Nucleating Particles Carried From Below a Phytoplankton Bloom to the Arctic Atmosphere. Geophysical Research Letters, 2019, 46, 8572-8581.	4.0	58
48	Seasonal Changes of Airborne Bacterial Communities Over Tokyo and Influence of Local Meteorology. Frontiers in Microbiology, 2019, 10, 1572.	3.5	67
49	Measurements of Ice Nucleating Particles in Beijing, China. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8065-8075.	3.3	31
50	Numerical Representations of Marine Iceâ€Nucleating Particles in Remote Marine Environments Evaluated Against Observations. Geophysical Research Letters, 2019, 46, 7838-7847.	4.0	36
51	Direct Online Mass Spectrometry Measurements of Ice Nucleating Particles at a California Coastal Site. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12157-12172.	3.3	21
52	Progress and Challenges in Quantifying Wildfire Smoke Emissions, Their Properties, Transport, and Atmospheric Impacts. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13005-13025.	3.3	37
53	Characteristics of Ice Nucleating Particles in and Around California Winter Storms. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11530-11551.	3.3	17
54	A comprehensive characterization of ice nucleation by three different types of cellulose particles immersed in water. Atmospheric Chemistry and Physics, 2019, 19, 4823-4849.	4.9	48

#	Article	IF	Citations
55	Heterogeneous ice nucleation properties of natural desert dust particles coated with a surrogate of secondary organic aerosol. Atmospheric Chemistry and Physics, 2019, 19, 5091-5110.	4.9	40
56	Classification of aerosol population type and cloud condensation nuclei properties in a coastal California littoral environment using an unsupervised cluster model. Atmospheric Chemistry and Physics, 2019, 19, 6931-6947.	4.9	4
57	Glacially sourced dust as a potentially significant source of ice nucleating particles. Nature Geoscience, 2019, 12, 253-258.	12.9	101
58	Ice nucleation by particles containing long-chain fatty acids of relevance to freezing by sea spray aerosols. Environmental Sciences: Processes and Impacts, 2018, 20, 1559-1569.	3.5	37
59	The Fifth International Workshop on Ice Nucleation phase 2 (FIN-02): laboratory intercomparison of ice nucleation measurements. Atmospheric Measurement Techniques, 2018, 11, 6231-6257.	3.1	82
60	Agricultural harvesting emissions of ice-nucleating particles. Atmospheric Chemistry and Physics, 2018, 18, 13755-13771.	4.9	53
61	Use of the Single Particle Soot Photometer (SP2) as a pre-filter for ice nucleation measurements: effect of particle mixing state and determination of SP2 conditions to fully vaporize refractory black carbon. Atmospheric Measurement Techniques, 2018, 11, 3007-3020.	3.1	5
62	Abundance of Biological Ice Nucleating Particles in the Mississippi and Its Major Tributaries. Atmosphere, 2018, 9, 307.	2.3	17
63	Observations of Ice Nucleating Particles Over Southern Ocean Waters. Geophysical Research Letters, 2018, 45, 11,989.	4.0	110
64	A Mesocosm Double Feature: Insights into the Chemical Makeup of Marine Ice Nucleating Particles. Journals of the Atmospheric Sciences, 2018, 75, 2405-2423.	1.7	67
65	Background Freeâ€Tropospheric Ice Nucleating Particle Concentrations at Mixedâ€Phase Cloud Conditions. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,506.	3.3	24
66	Marine and Terrestrial Organic Iceâ€Nucleating Particles in Pristine Marine to Continentally Influenced Northeast Atlantic Air Masses. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6196-6212.	3.3	98
67	Ice Nucleation Efficiency of Hydroxylated Organic Surfaces Is Controlled by Their Structural Fluctuations and Mismatch to Ice. Journal of the American Chemical Society, 2017, 139, 3052-3064.	13.7	132
68	The Microphysical Roles of Lower-Tropospheric versus Midtropospheric Aerosol Particles in Mature-Stage MCS Precipitation. Journals of the Atmospheric Sciences, 2017, 74, 3657-3678.	1.7	34
69	A Dynamic Link between Ice Nucleating Particles Released in Nascent Sea Spray Aerosol and Oceanic Biological Activity during Two Mesocosm Experiments. Journals of the Atmospheric Sciences, 2017, 74, 151-166.	1.7	93
70	Comparative measurements of ambient atmospheric concentrations of ice nucleating particles using multiple immersion freezing methods and a continuous flow diffusion chamber. Atmospheric Chemistry and Physics, 2017, 17, 11227-11245.	4.9	73
71	Contribution of feldspar and marine organic aerosols to global ice nucleating particle concentrations. Atmospheric Chemistry and Physics, 2017, 17, 3637-3658.	4.9	144
72	Effects of cloud condensation nuclei and ice nucleating particles on precipitation processes and supercooled liquid in mixed-phase orographic clouds. Atmospheric Chemistry and Physics, 2017, 17, 1017-1035.	4.9	71

#	Article	IF	Citations
73	Transport of pollution to a remote coastal site during gap flow from California's interior: impacts on aerosol composition, clouds, and radiative balance. Atmospheric Chemistry and Physics, 2017, 17, 1491-1509.	4.9	20
74	Using depolarization to quantify ice nucleating particle concentrations: a new method. Atmospheric Measurement Techniques, 2017, 10, 4639-4657.	3.1	7
75	Automation and heat transfer characterization of immersion mode spectroscopy for analysis of ice nucleating particles. Atmospheric Measurement Techniques, 2017, 10, 2613-2626.	3.1	20
76	A Multisensor Investigation of Rime Splintering in Tropical Maritime Cumuli. Journals of the Atmospheric Sciences, 2016, 73, 2547-2564.	1.7	43
77	Improving our fundamental understanding of the role of aerosolâ^'cloud interactions in the climate system. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5781-5790.	7.1	479
78	Rapidly evolving ultrafine and fine mode biomass smoke physical properties: Comparing laboratory and field results. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5750-5768.	3.3	27
79	Iceâ€nucleating particle emissions from biomass combustion and the potential importance of soot aerosol. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5888-5903.	3.3	42
80	Aerosol effects on the anvil characteristics of mesoscale convective systems. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,880.	3.3	26
81	Abundance of fluorescent biological aerosol particles at temperatures conducive to the formation of mixed-phase and cirrus clouds. Atmospheric Chemistry and Physics, 2016, 16, 8205-8225.	4.9	50
82	Size-resolved measurements of ice-nucleating particles at six locations in North America and one in Europe. Atmospheric Chemistry and Physics, 2016, 16, 1637-1651.	4.9	113
83	Sources of organic ice nucleating particles in soils. Atmospheric Chemistry and Physics, 2016, 16, 7195-7211.	4.9	137
84	Iceâ€nucleating particle emissions from photochemically aged diesel and biodiesel exhaust. Geophysical Research Letters, 2016, 43, 5524-5531.	4.0	45
85	Quantification of online removal of refractory black carbon using laser-induced incandescence in the single particle soot photometer. Aerosol Science and Technology, 2016, 50, 679-692.	3.1	6
86	Sea spray aerosol as a unique source of ice nucleating particles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5797-5803.	7.1	323
87	CalWater Field Studies Designed to Quantify the Roles of Atmospheric Rivers and Aerosols in Modulating U.S. West Coast Precipitation in a Changing Climate. Bulletin of the American Meteorological Society, 2016, 97, 1209-1228.	3.3	87
88	Technical Note: A proposal for ice nucleation terminology. Atmospheric Chemistry and Physics, 2015, 15, 10263-10270.	4.9	338
89	A comprehensive laboratory study on the immersion freezing behavior of illite NX particles: a comparison of 17 ice nucleation measurement techniques. Atmospheric Chemistry and Physics, 2015, 15, 2489-2518.	4.9	200
90	Integrating laboratory and field data to quantify the immersion freezing ice nucleation activity of mineral dust particles. Atmospheric Chemistry and Physics, 2015, 15, 393-409.	4.9	315

#	Article	IF	Citations
91	The micro-orifice uniform deposit impactorâ€"droplet freezing technique (MOUDI-DFT) for measuring concentrations of ice nucleating particles as a function of size: improvements and initial validation. Atmospheric Measurement Techniques, 2015, 8, 2449-2462.	3.1	50
92	Microbial Control of Sea Spray Aerosol Composition: A Tale of Two Blooms. ACS Central Science, 2015, 1, 124-131.	11.3	172
93	A New Method to Determine the Number Concentrations of Refractory Black Carbon Ice Nucleating Particles. Aerosol Science and Technology, 2014, 48, 1264-1275.	3.1	14
94	Measurement of Ice Nucleation-Active Bacteria on Plants and in Precipitation by Quantitative PCR. Applied and Environmental Microbiology, 2014, 80, 1256-1267.	3.1	126
95	Response of FSSP-100 and PVM-100A to Small Ice Crystals. Journal of Atmospheric and Oceanic Technology, 2014, 31, 2145-2155.	1.3	4
96	Chemical properties of insoluble precipitation residue particles. Journal of Aerosol Science, 2014, 76, 13-27.	3.8	31
97	Characteristics of atmospheric ice nucleating particles associated with biomass burning in the US: Prescribed burns and wildfires. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10458-10470.	3.3	73
98	Corrigendum to Aerosol impacts on California winter clouds and precipitation during CalWater 2011: local pollution versus long-range transported dust published in Atmos. Chem. Phys., 14, 81â€"101, 2014. Atmospheric Chemistry and Physics, 2014, 14, 3063-3064.	4.9	4
99	Kaolinite particles as ice nuclei: learning from the use of different kaolinite samples and different coatings. Atmospheric Chemistry and Physics, 2014, 14, 5529-5546.	4.9	120
100	Size-resolved aerosol composition and its link to hygroscopicity at a forested site in Colorado. Atmospheric Chemistry and Physics, 2014, 14, 2657-2667.	4.9	62
101	Overview of the Manitou Experimental Forest Observatory: site description and selected science results from 2008 to 2013. Atmospheric Chemistry and Physics, 2014, 14, 6345-6367.	4.9	62
102	Aerosol impacts on California winter clouds and precipitation during CalWater 2011: local pollution versus long-range transported dust. Atmospheric Chemistry and Physics, 2014, 14, 81-101.	4.9	101
103	Organic matter matters for ice nuclei of agricultural soil origin. Atmospheric Chemistry and Physics, 2014, 14, 8521-8531.	4.9	117
104	Trace gas emissions from combustion of peat, crop residue, domestic biofuels, grasses, and other fuels: configuration and Fourier transform infrared (FTIR) component of the fourth Fire Lab at Missoula Experiment (FLAME-4). Atmospheric Chemistry and Physics, 2014, 14, 9727-9754.	4.9	188
105	Aerosol single scattering albedo dependence on biomass combustion efficiency: Laboratory and field studies. Geophysical Research Letters, 2014, 41, 742-748.	4.0	85
106	Dust and Biological Aerosols from the Sahara and Asia Influence Precipitation in the Western U.S.. Science, 2013, 339, 1572-1578.	12.6	482
107	Investigation of ice nucleation properties of mineral and soil particles. , 2013, , .		0
108	Biological ice nuclei and the impact of rain on ice nuclei populations. , 2013, , .		2

#	Article	IF	Citations
109	Observations of ice nuclei associated with biomass burning. , 2013, , .		0
110	Evaluating the properties of sea spray aerosols produced in the laboratory: Comparisons with controlled breaking waves. , 2013, , .		0
111	The importance of organic aerosol to CCN concentrations and characteristics at a forested site in Colorado. , 2013, , .		0
112	Hunting the snark: Identifying the organic ice nuclei in soils. , 2013, , .		1
113	Laboratory measurements of ice nuclei concentrations from ocean water spray. , 2013, , .		2
114	Improvements to an Empirical Parameterization of Heterogeneous Ice Nucleation and Its Comparison with Observations. Journals of the Atmospheric Sciences, 2013, 70, 378-409.	1.7	127
115	Biological aerosol particles as a key determinant of ice nuclei populations in a forest ecosystem. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,100.	3.3	144
116	Bringing the ocean into the laboratory to probe the chemical complexity of sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7550-7555.	7.1	439
117	The impact of rain on ice nuclei populations at a forested site in Colorado. Geophysical Research Letters, 2013, 40, 227-231.	4.0	110
118	High concentrations of biological aerosol particles and ice nuclei during and after rain. Atmospheric Chemistry and Physics, 2013, 13, 6151-6164.	4.9	355
119	The common occurrence of highly supercooled drizzle and rain near the coastal regions of the western United States. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9819-9833.	3.3	30
120	A Particle-Surface-Area-Based Parameterization of Immersion Freezing on Desert Dust Particles. Journals of the Atmospheric Sciences, 2012, 69, 3077-3092.	1.7	338
121	Ice in Clouds Experimentâ€"Layer Clouds. Part II: Testing Characteristics of Heterogeneous Ice Formation in Lee Wave Clouds. Journals of the Atmospheric Sciences, 2012, 69, 1066-1079.	1.7	61
122	Biomass burning as a potential source for atmospheric ice nuclei: Western wildfires and prescribed burns. Geophysical Research Letters, 2012, 39, .	4.0	49
123	An annual cycle of sizeâ€resolved aerosol hygroscopicity at a forested site in Colorado. Journal of Geophysical Research, 2012, 117, .	3.3	65
124	Impacts of chemical reactivity on ice nucleation of kaolinite particles: A case study of levoglucosan and sulfuric acid. Geophysical Research Letters, 2012, 39, .	4.0	46
125	Biogenic ice nuclei in boundary layer air over two U.S. High Plains agricultural regions. Journal of Geophysical Research, 2012, 117, .	3.3	79
126	Airborne instruments to measure atmospheric aerosol particles, clouds and radiation: A cook's tour of mature and emerging technology. Atmospheric Research, 2011, 102, 10-29.	4.1	139

#	Article	IF	Citations
127	Experimental study of the role of physicochemical surface processing on the IN ability of mineral dust particles. Atmospheric Chemistry and Physics, 2011, 11, 11131-11144.	4.9	70
128	Corrigendum to "Experimental study of the role of physicochemical surface processing on the IN ability of mineral dust particles" published in Atmos. Chem. Phys., 11, 11131â€“11144, 2011. Atmospheric Chemistry and Physics, 2011, 11, 11919-11919.	4.9	4
129	Observations of ice nuclei and heterogeneous freezing in a Western Pacific extratropical storm. Atmospheric Chemistry and Physics, 2011, 11, 6229-6243.	4.9	19
130	Results from the University of Toronto continuous flow diffusion chamber at ICIS 2007: instrument intercomparison and ice onsets for different aerosol types. Atmospheric Chemistry and Physics, 2011, 11, 31-41.	4.9	72
131	Corrigendum to "Laboratory investigations of the impact of mineral dust aerosol on cold cloud formation" published in Atmos. Chem. Phys., 10, 11955â€“11968, 2010. Atmospheric Chemistry and Physics, 2011, 11, 4025-4025.	4.9	3
132	Manchester Ice Nucleus Counter (MINC) measurements from the 2007 International workshop on Comparing Ice nucleation Measuring Systems (ICIS-2007). Atmospheric Chemistry and Physics, 2011, 11, 53-65.	4.9	21
133	Surface modification of mineral dust particles by sulphuric acid processing: implications for ice nucleation abilities. Atmospheric Chemistry and Physics, 2011, 11, 7839-7858.	4.9	60
134	Flight-based chemical characterization of biomass burning aerosols within two prescribed burn smoke plumes. Atmospheric Chemistry and Physics, 2011, 11, 12549-12565.	4.9	154
135	Resurgence in Ice Nuclei Measurement Research. Bulletin of the American Meteorological Society, 2011, 92, 1623-1635.	3.3	199
136	Contrail Microphysics. Bulletin of the American Meteorological Society, 2010, 91, 465-472.	3.3	62
137	Irreversible loss of ice nucleation active sites in mineral dust particles caused by sulphuric acid condensation. Atmospheric Chemistry and Physics, 2010, 10, 11471-11487.	4.9	175
138	Laboratory investigations of the impact of mineral dust aerosol on cold cloud formation. Atmospheric Chemistry and Physics, 2010, 10, 11955-11968.	4.9	98
139	New Directions: Need for defining the numbers and sources of biological aerosols acting as ice nuclei. Atmospheric Environment, 2010, 44, 1944-1945.	4.1	96
140	Predicting global atmospheric ice nuclei distributions and their impacts on climate. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11217-11222.	7.1	945
141	In Situ Chemical Characterization of Aged Biomass-Burning Aerosols Impacting Cold Wave Clouds. Journals of the Atmospheric Sciences, 2010, 67, 2451-2468.	1.7	48
142	Ice Initiation by Aerosol Particles: Measured and Predicted Ice Nuclei Concentrations versus Measured Ice Crystal Concentrations in an Orographic Wave Cloud. Journals of the Atmospheric Sciences, 2010, 67, 2417-2436.	1.7	96
143	Relationships of Biomass-Burning Aerosols to Ice in Orographic Wave Clouds. Journals of the Atmospheric Sciences, 2010, 67, 2437-2450.	1.7	54
144	Observations of ice nucleation by ambient aerosol in the homogeneous freezing regime. Geophysical Research Letters, 2010, 37, .	4.0	15

#	Article	IF	Citations
145	Observation of playa salts as nuclei in orographic wave clouds. Journal of Geophysical Research, 2010, 115, .	3.3	55
146	Chemical processing does not always impair heterogeneous ice nucleation of mineral dust particles. Geophysical Research Letters, 2010, 37, .	4.0	102
147	In situ detection of biological particles in cloud ice-crystals. Nature Geoscience, 2009, 2, 398-401.	12.9	406
148	Ice nuclei characteristics from M-PACE and their relation to ice formation in clouds. Tellus, Series B: Chemical and Physical Meteorology, 2009, 61, 436-448.	1.6	114
149	Hygroscopicity and cloud droplet activation of mineral dust aerosol. Geophysical Research Letters, 2009, 36, .	4.0	159
150	Correction to â€œAfrican dust aerosols as atmospheric ice nucleiâ€• Geophysical Research Letters, 2009, 36, .	4.0	19
151	Ice nucleation behavior of biomass combustion particles at cirrus temperatures. Journal of Geophysical Research, 2009, 114, .	3.3	68
152	Cloud condensation nucleation activity of biomass burning aerosol. Journal of Geophysical Research, 2009, 114, .	3.3	213
153	Cloud condensation nuclei and ice nucleation activity of hydrophobic and hydrophilic soot particles. Physical Chemistry Chemical Physics, 2009, 11, 7906.	2.8	165
154	An overview of aircraft observations from the Pacific Dust Experiment campaign. Journal of Geophysical Research, 2009, 114, .	3.3	109
155	A comparison of heterogeneous ice nucleation parameterizations using a parcel model framework. Journal of Geophysical Research, 2009, 114, .	3.3	83
156	Ice nuclei emissions from biomass burning. Journal of Geophysical Research, 2009, 114, .	3.3	125
157	Heterogeneous ice nucleation measurements of secondary organic aerosol generated from ozonolysis of alkenes. Geophysical Research Letters, 2009, 36, .	4.0	43
158	Saharan dust particles nucleate droplets in eastern Atlantic clouds. Geophysical Research Letters, 2009, 36, .	4.0	174
159	Classifying atmospheric ice crystals by spatial light scattering. Optics Letters, 2008, 33, 1545.	3.3	58
160	Water interaction with hydrophobic and hydrophilic soot particles. Physical Chemistry Chemical Physics, 2008, 10, 2332.	2.8	83
161	Single-parameter estimates of aerosol water content. Environmental Research Letters, 2008, 3, 035002.	5.2	97
162	An Empirical Parameterization of Heterogeneous Ice Nucleation for Multiple Chemical Species of Aerosol. Journals of the Atmospheric Sciences, 2008, 65, 2757-2783.	1.7	325

#	Article	IF	Citations
163	The Mixed-Phase Arctic Cloud Experiment. Bulletin of the American Meteorological Society, 2007, 88, 205-222.	3.3	283
164	Insights into the role of soot aerosols in cirrus cloud formation. Atmospheric Chemistry and Physics, 2007, 7, 4203-4227.	4.9	144
165	Can Ice-Nucleating Aerosols Affect Arctic Seasonal Climate?. Bulletin of the American Meteorological Society, 2007, 88, 541-550.	3.3	202
166	On Measuring the Critical Diameter of Cloud Condensation Nuclei Using Mobility Selected Aerosol. Aerosol Science and Technology, 2007, 41, 907-913.	3.1	74
167	Measurements of heterogeneous ice nuclei in the western United States in springtime and their relation to aerosol characteristics. Journal of Geophysical Research, 2007, 112, .	3.3	159
168	Examinations of ice formation processes in Florida cumuli using ice nuclei measurements of anvil ice crystal particle residues. Journal of Geophysical Research, 2007, 112, .	3.3	34
169	Cloud droplet activation of secondary organic aerosol. Journal of Geophysical Research, 2007, 112, .	3.3	196
170	Potential impact of Owens (dry) Lake dust on warm and cold cloud formation. Journal of Geophysical Research, 2007, 112, .	3.3	68
171	Ice properties of singleâ€layer stratocumulus during the Mixedâ€Phase Arctic Cloud Experiment: 2. Model results. Journal of Geophysical Research, 2007, 112, .	3.3	165
172	Microbiology and atmospheric processes: the role of biological particles in cloud physics. Biogeosciences, 2007, 4, 1059-1071.	3.3	345
173	Progress and Issues in Quantifying Ice Nucleation Involving Atmospheric Aerosols. , 2007, , 405-417.		6
174	An Examination of a Continuous Flow Diffusion Chamber's Performance: Implications for Field Measurements of Ice Nuclei. , 2007, , 450-454.		0
175	Deliquescence-controlled activation of organic aerosols. Geophysical Research Letters, 2006, 33, .	4.0	29
176	Chemical aging and the hydrophobic-to-hydrophilic conversion of carbonaceous aerosol. Geophysical Research Letters, 2006, 33, .	4.0	137
177	Water activity and activation diameters from hygroscopicity data - Part II: Application to organic species. Atmospheric Chemistry and Physics, 2006, 6, 795-809.	4.9	111
178	Cloud droplet activation of polymerized organic aerosol. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 196-205.	1.6	49
179	Particle analysis by laser mass spectrometry (PALMS) studies of ice nuclei and other low number density particles. International Journal of Mass Spectrometry, 2006, 258, 21-29.	1.5	59
180	Impacts of Nucleating Aerosol on Florida Storms. Part I: Mesoscale Simulations. Journals of the Atmospheric Sciences, 2006, 63, 1752-1775.	1.7	329

#	Article	IF	Citations
181	Ice nucleation by surrogates for atmospheric mineral dust and mineral dust/sulfate particles at cirrus temperatures. Atmospheric Chemistry and Physics, 2005, 5, 2617-2634.	4.9	265
182	Water activity and activation diameters from hygroscopicity data - Part I: Theory and application to inorganic salts. Atmospheric Chemistry and Physics, 2005, 5, 1357-1370.	4.9	207
183	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
184	Nucleation in synoptically forced cirrostratus. Journal of Geophysical Research, 2005, 110, .	3.3	28
185	Water uptake by particles containing humic materials and mixtures of humic materials with ammonium sulfate. Atmospheric Environment, 2004, 38, 1859-1868.	4.1	134
186	Observations of organic species and atmospheric ice formation. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	84
187	Water uptake of internally mixed particles containing ammonium sulfate and dicarboxylic acids. Atmospheric Environment, 2003, 37, 4243-4251.	4.1	190
188	Saharan dust storms and indirect aerosol effects on clouds: CRYSTAL-FACE results. Geophysical Research Letters, 2003, 30, .	4.0	323
189	African dust aerosols as atmospheric ice nuclei. Geophysical Research Letters, 2003, 30, .	4.0	659
190	A Method for Single Particle Mass Spectrometry of Ice Nuclei. Aerosol Science and Technology, 2003, 37, 460-470.	3.1	59
191	Measurements of the concentration and composition of nuclei for cirrus formation. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14655-14660.	7.1	505
192	Cirrus Parcel Model Comparison Project. Phase 1: The Critical Components to Simulate Cirrus Initiation Explicitly. Journals of the Atmospheric Sciences, 2002, 59, 2305-2329.	1.7	91
193	Laboratory Studies of Cirrus Cloud Processes. , 2002, , .		37
194	The Effects of Low Molecular Weight Dicarboxylic Acids on Cloud Formation. Journal of Physical Chemistry A, 2001, 105, 11240-11248.	2.5	258
195	Airborne measurements of tropospheric ice-nucleating aerosol particles in the Arctic spring. Journal of Geophysical Research, 2001, 106, 15053-15063.	3.3	115
196	A Continuous-Flow Diffusion Chamber for Airborne Measurements of Ice Nuclei. Journal of Atmospheric and Oceanic Technology, 2001, 18, 725-741.	1.3	152
197	Ice Formation by Sulfate and Sulfuric Acid Aerosol Particles under Upper-Tropospheric Conditions. Journals of the Atmospheric Sciences, 2000, 57, 3752-3766.	1.7	79
198	The Lakeâ€"Induced Convection Experiment and the Snowband Dynamics Project. Bulletin of the American Meteorological Society, 2000, 81, 519-542.	3.3	54

#	Article	IF	Citations
199	Laboratory studies of ice nucleation by aerosol particles in upper tropospheric conditions. AIP Conference Proceedings, 2000, , .	0.4	3
200	Measurements of ice nuclei at high supersaturations. AIP Conference Proceedings, 2000, , .	0.4	0
201	Design and Characterization of a Fluidized Bed Aerosol Generator: A Source for Dry, Submicrometer Aerosol. Aerosol Science and Technology, 2000, 32, 465-481.	3.1	22
202	Ice formation by black carbon particles. Geophysical Research Letters, 1999, 26, 2429-2432.	4.0	177
203	Isolating and identifying atmospheric ice-nucleating aerosols: a new technique. Atmospheric Research, 1998, 46, 263-278.	4.1	21
204	Measurements of wave-cloud microphysical properties with two new aircraft probes. Geophysical Research Letters, 1998, 25, 1117-1120.	4.0	21
205	Measurements of ice nucleating aerosols during SUCCESS. Geophysical Research Letters, 1998, 25, 1383-1386.	4.0	130
206	The role of heterogeneous freezing nucleation in upper tropospheric clouds: Inferences from SUCCESS. Geophysical Research Letters, 1998, 25, 1387-1390.	4.0	89
207	Single particle analyses of ice nucleating aerosols in the upper troposphere and lower stratosphere. Geophysical Research Letters, 1998, 25, 1391-1394.	4.0	156
208	Cloud Activation Characteristics of Airborne<i>Erwinia carotovora</i>Cells. Journal of Applied Meteorology and Climatology, 1998, 37, 1293-1300.	1.7	36
209	The susceptibility of ice formation in upper tropospheric clouds to insoluble aerosol components. Journal of Geophysical Research, 1997, 102, 19575-19584.	3.3	169
210	Isolating and identifying atmospheric ice-nucleating aerosols. , 1996, , 373-376.		0
211	Studies of homogeneous and heterogeneous ice formation by aerosols in upper tropospheric cloud conditions. , 1996, , 876-879.		0
212	A Comparison of Seeded and Nonseeded Orographic Cloud Simulations with an Explicit Cloud Model. Journal of Applied Meteorology and Climatology, 1995, 34, 834-846.	1.7	22
213	Quantitative descriptions of ice formation mechanisms of silver iodide-type aerosols. Atmospheric Research, 1995, 38, 63-99.	4.1	103
214	Concerning primary ice nuclei concentrations and water supersaturations in the atmosphere. Atmospheric Research, 1994, 33, 151-168.	4.1	11
215	Initiation of ice: comparison of numerical model results with observations of ice development in a cumulus cloud. Atmospheric Research, 1994, 32, 13-30.	4.1	8
216	Parameterization and Impact of Ice initiation Processes Relevant to Numerical Model Simulations of Cirrus Clouds. Journals of the Atmospheric Sciences, 1994, 51, 77-90.	1.7	141

#	Article	IF	Citations
217	New Primary Ice-Nucleation Parameterizations in an Explicit Cloud Model. Journal of Applied Meteorology and Climatology, 1992, 31, 708-721.	1.7	698
218	Advances in Laboratory Cloud Physics 1987â€"1990. Reviews of Geophysics, 1991, 29, 80-87.	23.0	5
219	Comments on â€œThe Persistence of Seeding Effects in a Winter Orographic Cloud Seeded with Silver Iodide Burned in Acetoneâ€. Journal of Applied Meteorology and Climatology, 1991, 30, 1376-1380.	1.7	1
220	An Exploratory Study of Ice Nucleation by Soot Aerosols. Journal of Applied Meteorology and Climatology, 1990, 29, 1072-1079.	1.7	143
221	Freezing Nucleation Rates of Dilute Solution Droplets Measured between âˆ'30Â° and âˆ'40Â°C in Laboratory Simulations of Natural Clouds. Journals of the Atmospheric Sciences, 1990, 47, 1056-1064.	1.7	124
222	The chemical fractionation of atmospheric aerosol as a result of snow crystal formation and growth. Journal of Atmospheric Chemistry, 1988, 7, 213-239.	3.2	73
223	Comparisons of cloud chamber and cloud model simulations of ice nucleation by silver iodide. , 1988, , 674-677.		0
224	HYDROMETEOROLOGICAL SIGNIFICANCE OF RIME ICE DEPOSITS IN THE COLORADO ROCKIES. Journal of the American Water Resources Association, 1983, 19, 619-624.	2.4	22
225	An Application of Chemical Kinetic Theory and Methodology to Characterize the Ice Nucleating Properties of Aerosols Used for Weather Modification. Journal of Climate and Applied Meteorology, 1983, 22, 1190-1203.	1.0	49
226	Experimental Studies of Nucleation by Dry Ice. Journal of Applied Meteorology, 1982, 21, 1567-1570.	1.1	9
227	Chapter 7. Secondary Ice Production - current state of the science and recommendations for the future. Meteorological Monographs, 0, , .	5.0	116
228	Preâ€activation of ice nucleating particles in deposition nucleation mode: Evidence from measurement using a static vacuum water vapor diffusion chamber in Xinjiang, China. Geophysical Research Letters, 0, , .	4.0	1