

Alexei Kiselev

List of Publications by Year in descending order

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55
papers

2,605
citations

186265

28
h-index

214800

47
g-index

100
all docs

100
docs citations

100
times ranked

2256
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanism of ice nucleation in liquid water on alkali feldspars. <i>Faraday Discussions</i> , 2022, 235, 148-161.	3.2	3
2	High-resolution optical constants of crystalline ammonium nitrate for infrared remote sensing of the Asian Tropopause Aerosol Layer. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 1977-1991.	3.1	3
3	Thermal imaging of freezing drizzle droplets: pressure release events as a source of secondary ice particles. <i>Journals of the Atmospheric Sciences</i> , 2021, , .	1.7	5
4	Water uptake of subpollen aerosol particles: hygroscopic growth, cloud condensation nuclei activation, and liquid-liquid phase separation. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6999-7022.	4.9	20
5	Effect of chemically induced fracturing on the ice nucleation activity of alkali feldspar. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 11801-11814.	4.9	11
6	The Influence of Chemical and Mineral Compositions on the Parameterization of Immersion Freezing by Volcanic Ash Particles. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033356.	3.3	6
7	Anomalously High Proton Conduction of Interfacial Water. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3623-3628.	4.6	21
8	Secondary Ice Production upon Freezing of Freely Falling Drizzle Droplets. <i>Journals of the Atmospheric Sciences</i> , 2020, 77, 2959-2967.	1.7	34
9	The ice-nucleating activity of Arctic sea surface microlayer samples and marine algal cultures. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 11089-11117.	4.9	35
10	Heat and water vapor transfer in the wake of a falling ice sphere and its implication for secondary ice formation in clouds. <i>New Journal of Physics</i> , 2019, 21, 043043.	2.9	10
11	Enhanced ice nucleation activity of coal fly ash aerosol particles initiated by ice-filled pores. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 8783-8800.	4.9	29
12	Specifying the light-absorbing properties of aerosol particles in fresh snow samples, collected at the Environmental Research Station Schneefernerhaus (UFS), Zugspitze. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10829-10844.	4.9	10
13	A comprehensive characterization of ice nucleation by three different types of cellulose particles immersed in water. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 4823-4849.	4.9	48
14	Composition, Mixing State and Water Affinity of Meteoric Smoke Analogue Nanoparticles Produced in a Non-Thermal Microwave Plasma Source. <i>Zeitschrift Fur Physikalische Chemie</i> , 2018, 232, 635-648.	2.8	7
15	Initiation of secondary ice production in clouds. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1593-1610.	4.9	53
16	The Fifth International Workshop on Ice Nucleation phase 2 (FIN-02): laboratory intercomparison of ice nucleation measurements. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 6231-6257.	3.1	82
17	Secondary Ice Formation during Freezing of Levitated Droplets. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 2815-2826.	1.7	76
18	Investigation of Crystal Nucleation of Highly Supersaturated Aqueous KNO_3 Solution from Single Levitated Droplet Experiments. <i>Crystal Growth and Design</i> , 2018, 18, 4896-4905.	3.0	15

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19	Heterogeneous ice nucleation of α -pinene SOA particles before and after ice cloud processing. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 4924-4943.	3.3	30
20	Active sites in heterogeneous ice nucleation—the example of K-rich feldspars. <i>Science</i> , 2017, 355, 367-371.	12.6	231
21	Surface-charge-induced orientation of interfacial water suppresses heterogeneous ice nucleation on γ -alumina (0001). <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 7827-7837.	4.9	52
22	Laser vaporization of cirrus-like ice particles with secondary ice multiplication. <i>Science Advances</i> , 2016, 2, e1501912.	10.3	14
23	Temperature-dependent formation of NaCl dihydrate in levitated NaCl and sea salt aerosol particles. <i>Journal of Chemical Physics</i> , 2016, 145, 244503.	3.0	21
24	A comparative study of K-rich and Na/Ca-rich feldspar ice-nucleating particles in a nanoliter droplet freezing assay. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11477-11496.	4.9	97
25	Pre-activation of ice-nucleating particles by the pore condensation and freezing mechanism. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 2025-2042.	4.9	39
26	Observation of viscosity transition in α -pinene secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 4423-4438.	4.9	55
27	A comprehensive laboratory study on the immersion freezing behavior of illite NX particles: a comparison of 17 ice nucleation measurement techniques. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 2489-2518.	4.9	200
28	Intercomparing different devices for the investigation of ice nucleating particles using Snomax [®] as test substance. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1463-1485.	4.9	108
29	Ice nucleation by cellulose and its potential contribution to ice formation in clouds. <i>Nature Geoscience</i> , 2015, 8, 273-277.	12.9	105
30	Influence of surface morphology on the immersion mode ice nucleation efficiency of hematite particles. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 2315-2324.	4.9	65
31	Contact freezing efficiency of mineral dust aerosols studied in an electrodynamic balance: quantitative size and temperature dependence for illite particles. <i>Faraday Discussions</i> , 2013, 165, 383.	3.2	44
32	On the size dependence of contact freezing probability. , 2013, , .		0
33	Experimental quantification of contact freezing in an electrodynamic balance. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 2373-2382.	3.1	34
34	Application of linear polarized light for the discrimination of frozen and liquid droplets in ice nucleation experiments. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 1041-1052.	3.1	25
35	Hygroscopic growth and droplet activation of soot particles: uncoated, succinic or sulfuric acid coated. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 4525-4537.	4.9	57
36	On the role of surface charges for homogeneous freezing of supercooled water microdroplets. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9359.	2.8	36

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37	Experimental study of the role of physicochemical surface processing on the IN ability of mineral dust particles. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 11131-11144.	4.9	70
38	Ice nucleation properties of fine ash particles from the Eyjafjallajökull eruption in April 2010. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 12945-12958.	4.9	60
39	Homogeneous and heterogeneous ice nucleation at LACIS: operating principle and theoretical studies. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 1753-1767.	4.9	68
40	Heterogeneous freezing of droplets with immersed mineral dust particles – measurements and parameterization. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3601-3614.	4.9	138
41	The Influence of Algal Exudate on the Hygroscopicity of Sea Spray Particles. <i>Advances in Meteorology</i> , 2010, 2010, 1-11.	1.6	16
42	Intercomparison of cloud condensation nuclei and hygroscopic fraction measurements: Coated soot particles investigated during the LACIS Experiment in November (LExNo). <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	34
43	Soluble mass, hygroscopic growth, and droplet activation of coated soot particles during LACIS Experiment in November (LExNo). <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	40
44	Examination of laboratory-generated coated soot particles: An overview of the LACIS Experiment in November (LExNo) campaign. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	25
45	Morphological characterization of soot aerosol particles during LACIS Experiment in November (LExNo). <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	31
46	Influence of gas-to-particle partitioning on the hygroscopic and droplet activation behaviour of α -pinene secondary organic aerosol. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8091.	2.8	59
47	LACIS-measurements and parameterization of sea-salt particle hygroscopic growth and activation. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 579-590.	4.9	61
48	Hygroscopic growth and measured and modeled critical super-saturations of an atmospheric HULIS sample. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	89
49	Deliquescence and hygroscopic growth of succinic acid particles measured with LACIS. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	14
50	Mass accommodation coefficient of water: A combined computational fluid dynamics and experimental data analysis. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	21
51	Calibration of LACIS as a CCN detector and its use in measuring activation and hygroscopic growth of atmospheric aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 4519-4527.	4.9	21
52	White-light optical particle spectrometer for in situ measurements of condensational growth of aerosol particles. <i>Applied Optics</i> , 2005, 44, 4693.	2.1	30
53	Measured and modeled equilibrium sizes of NaCl and (NH ₄) ₂ SO ₄ particles at relative humidities up to 99.1%. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	35
54	DEVELOPMENT OF A SINGLE PARTICLE OPTICAL COUNTER FOR IN-SITU MEASUREMENTS OF AEROSOL PARTICLE CONDENSATIONAL GROWTH. <i>Journal of Aerosol Science</i> , 2004, 35, S907-S908.	3.8	0

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55	Laboratory Studies and Numerical Simulations of Cloud Droplet Formation under Realistic Supersaturation Conditions. <i>Journal of Atmospheric and Oceanic Technology</i> , 2004, 21, 876-887.	1.3	77