

Ulrich Pöschl

List of Publications by Year in descending order

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350
papers

43,516
citations

1994

101
h-index

3182

186
g-index

613
all docs

613
docs citations

613
times ranked

28333
citing authors

#	ARTICLE	IF	CITATIONS
1	Raman microspectroscopy of soot and related carbonaceous materials: Spectral analysis and structural information. <i>Carbon</i> , 2005, 43, 1731-1742.	10.3	3,468
2	Atmospheric Aerosols: Composition, Transformation, Climate and Health Effects. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7520-7540.	13.8	1,835
3	Primary biological aerosol particles in the atmosphere: a review. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 64, 15598.	1.6	988
4	Exploring the severe winter haze in Beijing: the impact of synoptic weather, regional transport and heterogeneous reactions. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 2969-2983.	4.9	843
5	Reactive nitrogen chemistry in aerosol water as a source of sulfate during haze events in China. <i>Science Advances</i> , 2016, 2, e1601530.	10.3	820
6	An amorphous solid state of biogenic secondary organic aerosol particles. <i>Nature</i> , 2010, 467, 824-827.	27.8	719
7	Atmospheric composition change – global and regional air quality. <i>Atmospheric Environment</i> , 2009, 43, 5268-5350.	4.1	714
8	Contribution of cryptogamic covers to the global cycles of carbon and nitrogen. <i>Nature Geoscience</i> , 2012, 5, 459-462.	12.9	711
9	Bioaerosols in the Earth system: Climate, health, and ecosystem interactions. <i>Atmospheric Research</i> , 2016, 182, 346-376.	4.1	609
10	Glass transition and phase state of organic compounds: dependency on molecular properties and implications for secondary organic aerosols in the atmosphere. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19238.	2.8	585
11	Cardiovascular disease burden from ambient air pollution in Europe reassessed using novel hazard ratio functions. <i>European Heart Journal</i> , 2019, 40, 1590-1596.	2.2	570
12	Gas uptake and chemical aging of semisolid organic aerosol particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11003-11008.	7.1	555
13	Rainforest Aerosols as Biogenic Nuclei of Clouds and Precipitation in the Amazon. <i>Science</i> , 2010, 329, 1513-1516.	12.6	541
14	Calibration and measurement uncertainties of a continuous-flow cloud condensation nuclei counter (DMT-CCNC): CCN activation of ammonium sulfate and sodium chloride aerosol particles in theory and experiment. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 1153-1179.	4.9	479
15	Bacteria in the global atmosphere – Part 1: Review and synthesis of literature data for different ecosystems. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9263-9280.	4.9	471
16	Multiphase Chemistry at the Atmosphere–Biosphere Interface Influencing Climate and Public Health in the Anthropocene. <i>Chemical Reviews</i> , 2015, 115, 4440-4475.	47.7	468
17	Contribution of fungi to primary biogenic aerosols in the atmosphere: wet and dry discharged spores, carbohydrates, and inorganic ions. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4569-4588.	4.9	456
18	Amorphous and crystalline aerosol particles interacting with water vapor: conceptual framework and experimental evidence for restructuring, phase transitions and kinetic limitations. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9491-9522.	4.9	454

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19	Critical assessment of the current state of scientific knowledge, terminology, and research needs concerning the role of organic aerosols in the atmosphere, climate, and global change. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 2017-2038.	4.9	447
20	Soil Nitrite as a Source of Atmospheric HONO and OH Radicals. <i>Science</i> , 2011, 333, 1616-1618.	12.6	431
21	Loss of life expectancy from air pollution compared to other risk factors: a worldwide perspective. <i>Cardiovascular Research</i> , 2020, 116, 1910-1917.	3.8	427
22	High diversity of fungi in air particulate matter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 12814-12819.	7.1	414
23	Aerosol Health Effects from Molecular to Global Scales. <i>Environmental Science & Technology</i> , 2017, 51, 13545-13567.	10.0	384
24	High concentrations of biological aerosol particles and ice nuclei during and after rain. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 6151-6164.	4.9	355
25	An overview of current issues in the uptake of atmospheric trace gases by aerosols and clouds. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10561-10605.	4.9	352
26	Cloud condensation nuclei in pristine tropical rainforest air of Amazonia: size-resolved measurements and modeling of atmospheric aerosol composition and CCN activity. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 7551-7575.	4.9	347
27	Aerosol- and updraft-limited regimes of cloud droplet formation: influence of particle number, size and hygroscopicity on the activation of cloud condensation nuclei (CCN). <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 7067-7080.	4.9	305
28	Dryland photoautotrophic soil surface communities endangered by global change. <i>Nature Geoscience</i> , 2018, 11, 185-189.	12.9	302
29	Interaction of Ozone and Water Vapor with Spark Discharge Soot Aerosol Particles Coated with Benzo[a]pyrene: O ₃ and H ₂ O Adsorption, Benzo[a]pyrene Degradation, and Atmospheric Implications. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4029-4041.	2.5	300
30	Global distribution of particle phase state in atmospheric secondary organic aerosols. <i>Nature Communications</i> , 2017, 8, 15002.	12.8	295
31	Cloud condensation nuclei in polluted air and biomass burning smoke near the mega-city Guangzhou, China – Part 1: Size-resolved measurements and implications for the modeling of aerosol particle hygroscopicity and CCN activity. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3365-3383.	4.9	294
32	“What We Breathe Impacts Our Health: Improving Understanding of the Link between Air Pollution and Health” <i>Environmental Science & Technology</i> , 2016, 50, 4895-4904.	10.0	294
33	Substantial convection and precipitation enhancements by ultrafine aerosol particles. <i>Science</i> , 2018, 359, 411-418.	12.6	290
34	Bacteria in the global atmosphere – Part 2: Modeling of emissions and transport between different ecosystems. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9281-9297.	4.9	284
35	Sources and properties of Amazonian aerosol particles. <i>Reviews of Geophysics</i> , 2010, 48, .	23.0	283
36	Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin. <i>Nature Geoscience</i> , 2009, 2, 402-405.	12.9	282

#	ARTICLE	IF	CITATIONS
37	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) – integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	4.9	278
38	HONO Emissions from Soil Bacteria as a Major Source of Atmospheric Reactive Nitrogen. Science, 2013, 341, 1233-1235.	12.6	276
39	Autofluorescence of atmospheric bioaerosols – fluorescent biomolecules and potential interferences. Atmospheric Measurement Techniques, 2012, 5, 37-71.	3.1	267
40	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions – Part 1: General equations, parameters, and terminology. Atmospheric Chemistry and Physics, 2007, 7, 5989-6023.	4.9	262
41	Polycyclic Aromatic Hydrocarbons in Urban Air Particulate Matter: A Decadal and Seasonal Trends, Chemical Degradation, and Sampling Artifacts. Environmental Science & Technology, 2003, 37, 2861-2868.	10.0	256
42	Face masks effectively limit the probability of SARS-CoV-2 transmission. Science, 2021, 372, 1439-1443.	12.6	240
43	Global distribution of the effective aerosol hygroscopicity parameter for CCN activation. Atmospheric Chemistry and Physics, 2010, 10, 5241-5255.	4.9	230
44	Chemical exposure-response relationship between air pollutants and reactive oxygen species in the human respiratory tract. Scientific Reports, 2016, 6, 32916.	3.3	228
45	Biomass burning aerosol emissions from vegetation fires: particle number and mass emission factors and size distributions. Atmospheric Chemistry and Physics, 2010, 10, 1427-1439.	4.9	227
46	Ice nuclei in marine air: biogenic particles or dust?. Atmospheric Chemistry and Physics, 2013, 13, 245-267.	4.9	226
47	Bioprecipitation: a feedback cycle linking Earth history, ecosystem dynamics and land use through biological ice nucleators in the atmosphere. Global Change Biology, 2014, 20, 341-351.	9.5	223
48	The Amazon Tall Tower Observatory (ATTO): overview of pilot measurements on ecosystem ecology, meteorology, trace gases, and aerosols. Atmospheric Chemistry and Physics, 2015, 15, 10723-10776.	4.9	218
49	Arctic Ozone Loss Due to Denitrification. Science, 1999, 283, 2064-2069.	12.6	214
50	Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5). Atmospheric Chemistry and Physics, 2016, 16, 4785-4797.	4.9	213
51	Interaction of aerosol particles composed of protein and salt with water vapor: hygroscopic growth and microstructural rearrangement. Atmospheric Chemistry and Physics, 2004, 4, 323-350.	4.9	212
52	Title is missing!. Journal of Atmospheric Chemistry, 2000, 37, 29-52.	3.2	204
53	Fluorescent biological aerosol particle concentrations and size distributions measured with an Ultraviolet Aerodynamic Particle Sizer (UV-APS) in Central Europe. Atmospheric Chemistry and Physics, 2010, 10, 3215-3233.	4.9	199
54	Ice nucleation by water-soluble macromolecules. Atmospheric Chemistry and Physics, 2015, 15, 4077-4091.	4.9	198

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55	Introduction: European Integrated Project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) – integrating aerosol research from nano to global scales. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 2825-2841.	4.9	196
56	Global cloud condensation nuclei influenced by carbonaceous combustion aerosol. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9067-9087.	4.9	194
57	Air Pollution and Climate Change Effects on Allergies in the Anthropocene: Abundance, Interaction, and Modification of Allergens and Adjuvants. <i>Environmental Science & Technology</i> , 2017, 51, 4119-4141.	10.0	193
58	Sensitivities in global scale modeling of isoprene. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1-17.	4.9	190
59	Biogenic Potassium Salt Particles as Seeds for Secondary Organic Aerosol in the Amazon. <i>Science</i> , 2012, 337, 1075-1078.	12.6	188
60	Atmospheric polycyclic aromatic hydrocarbons observed over the North Pacific Ocean and the Arctic area: Spatial distribution and source identification. <i>Atmospheric Environment</i> , 2007, 41, 2061-2072.	4.1	187
61	Size distributions and temporal variations of biological aerosol particles in the Amazon rainforest characterized by microscopy and real-time UV-APS fluorescence techniques during AMAZE-08. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11997-12019.	4.9	187
62	Rapid aerosol particle growth and increase of cloud condensation nucleus activity by secondary aerosol formation and condensation: A case study for regional air pollution in northeastern China. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	186
63	Protein Nitration by Polluted Air. <i>Environmental Science & Technology</i> , 2005, 39, 1673-1678.	10.0	183
64	Ice-nucleating bacteria control the order and dynamics of interfacial water. <i>Science Advances</i> , 2016, 2, e1501630.	10.3	182
65	Isoprene and monoterpene fluxes from Central Amazonian rainforest inferred from tower-based and airborne measurements, and implications on the atmospheric chemistry and the local carbon budget. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 2855-2879.	4.9	181
66	Kinetic multi-layer model of aerosol surface and bulk chemistry (KM-SUB): the influence of interfacial transport and bulk diffusion on the oxidation of oleic acid by ozone. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3673-3691.	4.9	178
67	The Palaeoanthropocene – The beginnings of anthropogenic environmental change. <i>Anthropocene</i> , 2013, 3, 83-88.	3.3	178
68	Seasonal cycle and temperature dependence of pinene oxidation products, dicarboxylic acids and nitrophenols in fine and coarse air particulate matter. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 7859-7873.	4.9	172
69	The role of long-lived reactive oxygen intermediates in the reaction of ozone with aerosol particles. <i>Nature Chemistry</i> , 2011, 3, 291-295.	13.6	172
70	Characterization of primary biogenic aerosol particles in urban, rural, and high-alpine air by DNA sequence and restriction fragment analysis of ribosomal RNA genes. <i>Biogeosciences</i> , 2007, 4, 1127-1141.	3.3	171
71	Mass spectral characterization of submicron biogenic organic particles in the Amazon Basin. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	171
72	An overview of the Amazonian Aerosol Characterization Experiment 2008 (AMAZE-08). <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 11415-11438.	4.9	170

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73	Kinetic multi-layer model of gas-particle interactions in aerosols and clouds (KM-GAP): linking condensation, evaporation and chemical reactions of organics, oxidants and water. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 2777-2794.	4.9	170
74	Molecular corridors and parameterizations of volatility in the chemical evolution of organic aerosols. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 3327-3344.	4.9	170
75	Comprehensive kinetic characterization of the oxidation and gasification of model and real diesel soot by nitrogen oxides and oxygen under engine exhaust conditions: Measurement, Langmuir-Hinshelwood, and Arrhenius parameters. <i>Carbon</i> , 2006, 44, 307-324.	10.3	161
76	Model Calculations of Aerosol Transmission and Infection Risk of COVID-19 in Indoor Environments. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 8114.	2.6	158
77	Raman Microspectroscopic Analysis of Changes in the Chemical Structure and Reactivity of Soot in a Diesel Exhaust Aftertreatment Model System. <i>Environmental Science & Technology</i> , 2007, 41, 3702-3707.	10.0	156
78	Effects of reversible adsorption and Langmuir-Hinshelwood surface reactions on gas uptake by atmospheric particles. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 351-356.	2.8	153
79	Hazardous components and health effects of atmospheric aerosol particles: reactive oxygen species, soot, polycyclic aromatic compounds and allergenic proteins. <i>Free Radical Research</i> , 2012, 46, 927-939.	3.3	153
80	Biological soil crusts accelerate the nitrogen cycle through large NO and HONO emissions in drylands. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15384-15389.	7.1	153
81	Biogeography in the air: fungal diversity over land and oceans. <i>Biogeosciences</i> , 2012, 9, 1125-1136.	3.3	152
82	Competition between water uptake and ice nucleation by glassy organic aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 12513-12531.	4.9	151
83	Severe Pollution in China Amplified by Atmospheric Moisture. <i>Scientific Reports</i> , 2017, 7, 15760.	3.3	151
84	Aerosol optical properties in a rural environment near the mega-city Guangzhou, China: implications for regional air pollution, radiative forcing and remote sensing. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 5161-5186.	4.9	150
85	Cloud condensation nuclei (CCN) from fresh and aged air pollution in the megacity region of Beijing. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 11023-11039.	4.9	147
86	Cloud condensation nuclei in polluted air and biomass burning smoke near the mega-city Guangzhou, China – Part 2: Size-resolved aerosol chemical composition, diurnal cycles, and externally mixed weakly CCN-active soot particles. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 2817-2836.	4.9	146
87	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 133-166.	3.2	145
88	Pressure and Temperature Dependence of the Gas-Phase Reaction of SO ₃ with H ₂ O and the Heterogeneous Reaction of SO ₃ with H ₂ O/H ₂ SO ₄ Surfaces. <i>Journal of Physical Chemistry A</i> , 1997, 101, 10000-10011.	2.5	144
89	Atmospheric nucleation: highlights of the EUCAARI project and future directions. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10829-10848.	4.9	144
90	Biological aerosol particles as a key determinant of ice nuclei populations in a forest ecosystem. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 10,100.	3.3	144

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91	Microbiology and atmospheric processes: chemical interactions of primary biological aerosols. <i>Biogeosciences</i> , 2008, 5, 1073-1084.	3.3	140
92	Enhanced organic mass fraction and decreased hygroscopicity of cloud condensation nuclei (CCN) during new particle formation events. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	138
93	Hydroxyl radicals from secondary organic aerosol decomposition in water. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1761-1771.	4.9	138
94	Kinetic limitations in gas-particle reactions arising from slow diffusion in secondary organic aerosol. <i>Faraday Discussions</i> , 2013, 165, 391-406.	3.2	132
95	Size dependence of phase transitions in aerosol nanoparticles. <i>Nature Communications</i> , 2015, 6, 5923.	12.8	131
96	The Green Ocean Amazon Experiment (GoAmazon2014/5) Observes Pollution Affecting Gases, Aerosols, Clouds, and Rainfall over the Rain Forest. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 981-997.	3.3	128
97	Microstructure and oxidation behaviour of Euro IV diesel engine soot: a comparative study with synthetic model soot substances. <i>Catalysis Today</i> , 2004, 90, 127-132.	4.4	127
98	Ice nucleation activity in the widespread soil fungus <i>Mortierella alpina</i> . <i>Biogeosciences</i> , 2015, 12, 1057-1071.	3.3	127
99	ACRIDICON“CHUVA Campaign: Studying Tropical Deep Convective Clouds and Precipitation over Amazonia Using the New German Research Aircraft HALO. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 1885-1908.	3.3	124
100	Raman Microspectroscopic Analysis of Size-Resolved Atmospheric Aerosol Particle Samples Collected with an ELPI: Soot, Humic-Like Substances, and Inorganic Compounds. <i>Aerosol Science and Technology</i> , 2007, 41, 655-671.	3.1	119
101	Ozone uptake on glassy, semi-solid and liquid organic matter and the role of reactive oxygen intermediates in atmospheric aerosol chemistry. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12662-12674.	2.8	117
102	Hygroscopicity distribution concept for measurement data analysis and modeling of aerosol particle mixing state with regard to hygroscopic growth and CCN activation. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 7489-7503.	4.9	116
103	Multiphase buffer theory explains contrasts in atmospheric aerosol acidity. <i>Science</i> , 2020, 369, 1374-1377.	12.6	115
104	Nitration Enhances the Allergenic Potential of Proteins. <i>International Archives of Allergy and Immunology</i> , 2006, 141, 265-275.	2.1	114
105	High spatial and temporal resolution measurements of primary organics and their oxidation products over the tropical forests of Surinam. <i>Atmospheric Environment</i> , 2000, 34, 1161-1165.	4.1	111
106	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 167-185.	3.2	111
107	The impact of rain on ice nuclei populations at a forested site in Colorado. <i>Geophysical Research Letters</i> , 2013, 40, 227-231.	4.0	110
108	Quantification of environmentally persistent free radicals and reactive oxygen species in atmospheric aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 13105-13119.	4.9	110

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109	Long-term cloud condensation nuclei number concentration, particle number size distribution and chemical composition measurements at regionally representative observatories. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2853-2881.	4.9	108
110	Long-term observations of cloud condensation nuclei in the Amazon rain forest – Part 1: Aerosol size distribution, hygroscopicity, and new model parametrizations for CCN prediction. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 15709-15740.	4.9	105
111	Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 921-961.	4.9	105
112	Estimating global carbon uptake by lichens and bryophytes with a process-based model. <i>Biogeosciences</i> , 2013, 10, 6989-7033.	3.3	102
113	Estimating impacts of lichens and bryophytes on global biogeochemical cycles. <i>Global Biogeochemical Cycles</i> , 2014, 28, 71-85.	4.9	102
114	Multiphase Chemical Kinetics of OH Radical Uptake by Molecular Organic Markers of Biomass Burning Aerosols: Humidity and Temperature Dependence, Surface Reaction, and Bulk Diffusion. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4533-4544.	2.5	101
115	Direct imaging of changes in aerosol particle viscosity upon hydration and chemical aging. <i>Chemical Science</i> , 2016, 7, 1357-1367.	7.4	101
116	Aerosol optical properties observed during Campaign of Air Quality Research in Beijing 2006 (CAREBeijing-2006): Characteristic differences between the inflow and outflow of Beijing city air. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	100
117	Influence of soot mixing state on aerosol light absorption and single scattering albedo during air mass aging at a polluted regional site in northeastern China. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	100
118	Temperature effect on phase state and reactivity controls atmospheric multiphase chemistry and transport of PAHs. <i>Science Advances</i> , 2018, 4, eaap7314.	10.3	100
119	Analysis of nitrated polycyclic aromatic hydrocarbons by liquid chromatography with fluorescence and mass spectrometry detection: air particulate matter, soot, and reaction product studies. <i>Analytical and Bioanalytical Chemistry</i> , 2004, 378, 725-736.	3.7	99
120	Kinetic double-layer model of aerosol surface chemistry and gas-particle interactions (K2-SURF): Degradation of polycyclic aromatic hydrocarbons exposed to O_3 , NO_2 , H_2O , OH and NO_3 . <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9571-9586.	4.9	99
121	Thermophoretic deposition of soot aerosol particles under experimental conditions relevant for modern diesel engine exhaust gas systems. <i>Journal of Aerosol Science</i> , 2003, 34, 1009-1021.	3.8	98
122	Chemical ageing and transformation of diffusivity in semi-solid multi-component organic aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 7343-7354.	4.9	98
123	Effects of atmospheric conditions on ice nucleation activity of <i>Pseudomonas</i> . <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 10667-10677.	4.9	98
124	Autofluorescence of atmospheric bioaerosols: spectral fingerprints and taxonomic trends of pollen. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 3369-3392.	3.1	94
125	Nitrous oxide and methane emissions from cryptogamic covers. <i>Global Change Biology</i> , 2015, 21, 3889-3900.	9.5	94
126	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. <i>Nature Geoscience</i> , 2021, 14, 77-84.	12.9	94

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127	Chemists can help to solve the air-pollution health crisis. <i>Nature</i> , 2017, 551, 291-293.	27.8	93
128	Aerosol particle analysis: challenges and progress. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 375, 30-32.	3.7	92
129	Mass Accommodation Coefficient of H ₂ SO ₄ Vapor on Aqueous Sulfuric Acid Surfaces and Gaseous Diffusion Coefficient of H ₂ SO ₄ in N ₂ /H ₂ O. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10082-10089.	2.5	91
130	Satellite retrieval of cloud condensation nuclei concentrations by using clouds as CCN chambers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5828-5834.	7.1	91
131	New Multiphase Chemical Processes Influencing Atmospheric Aerosols, Air Quality, and Climate in the Anthropocene. <i>Accounts of Chemical Research</i> , 2020, 53, 2034-2043.	15.6	90
132	Strong impact of wildfires on the abundance and aging of black carbon in the lowermost stratosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11595-E11603.	7.1	89
133	Submicron particle mass concentrations and sources in the Amazonian wet season (AMAZE-08). <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3687-3701.	4.9	88
134	EUREC<sup>4</sup>A. <i>Earth System Science Data</i> , 2021, 13, 4067-4119.	9.9	88
135	Molecular corridors and kinetic regimes in the multiphase chemical evolution of secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 8323-8341.	4.9	87
136	Cloud droplet activation of mixed organic-sulfate particles produced by the photooxidation of isoprene. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3953-3964.	4.9	86
137	Seasonal cycles of fluorescent biological aerosol particles in boreal and semi-arid forests of Finland and Colorado. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11987-12001.	4.9	85
138	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions â€œ Part 2: Exemplary practical applications and numerical simulations. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 6025-6045.	4.9	84
139	Size-resolved measurement of the mixing state of soot in the megacity Beijing, China: diurnal cycle, aging and parameterization. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 4477-4491.	4.9	81
140	Mass Accommodation of Water: Bridging the Gap Between Molecular Dynamics Simulations and Kinetic Condensation Models. <i>Journal of Physical Chemistry A</i> , 2013, 117, 410-420.	2.5	81
141	Microstructural rearrangement of sodium chloride condensation aerosol particles on interaction with water vapor. <i>Journal of Aerosol Science</i> , 2000, 31, 673-685.	3.8	80
142	Multiphase Chemical Kinetics of the Nitration of Aerosolized Protein by Ozone and Nitrogen Dioxide. <i>Environmental Science & Technology</i> , 2012, 46, 6672-6680.	10.0	80
143	Ambient measurements of biological aerosol particles near Killarney, Ireland: a comparison between real-time fluorescence and microscopy techniques. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 8055-8069.	4.9	79
144	Compilation and evaluation of gas phase diffusion coefficients of reactive trace gases in the atmosphere: Volume 2. Diffusivities of organic compounds, pressure-normalised mean free paths, and average Knudsen numbers for gas uptake calculations. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 5585-5598.	4.9	78

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145	Correction for a measurement artifact of the Multi-Angle Absorption Photometer (MAAP) at high black carbon mass concentration levels. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 81-90.	3.1	77
146	Kinetic regimes and limiting cases of gas uptake and heterogeneous reactions in atmospheric aerosols and clouds: a general classification scheme. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 6663-6686.	4.9	77
147	On the background photochemistry of tropospheric ozone. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1999, 51, 123-146.	1.7	74
148	Fluorescent bioaerosol particle, molecular tracer, and fungal spore concentrations during dry and rainy periods in a semi-arid forest. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 15165-15184.	4.9	73
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