Ulrich PÃ¶schl

List of Publications by Year
in descending order

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350 papers	43,516 citations	1990 101 h-index	3181 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. Carbon, 2005, 43, 1731-1742.	5.4	3,468
2	Atmospheric Aerosols: Composition, Transformation, Climate and Health Effects. Angewandte Chemie - International Edition, 2005, 44, 7520-7540.	7.2	1,835
3	Primary biological aerosol particles in the atmosphere: a review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 64, 15598.	0.8	988
4	Exploring the severe winter haze in Beijing: the impact of synoptic weather, regional transport and heterogeneous reactions. Atmospheric Chemistry and Physics, 2015, 15, 2969-2983.	1.9	843
5	Reactive nitrogen chemistry in aerosol water as a source of sulfate during haze events in China. Science Advances, 2016, 2, e1601530.	4.7	820
6	An amorphous solid state of biogenic secondary organic aerosol particles. Nature, 2010, 467, 824-827.	13.7	719
7	Atmospheric composition change â€“ global and regional air quality. Atmospheric Environment, 2009, 43, 5268-5350.	1.9	714
8	Contribution of cryptogamic covers to the global cycles of carbon and nitrogen. Nature Geoscience, 2012, 5, 459-462.	5.4	711
9	Bioaerosols in the Earth system: Climate, health, and ecosystem interactions. Atmospheric Research, 2016, 182, 346-376.	1.8	609
10	Glass transition and phase state of organic compounds: dependency on molecular properties and implications for secondary organic aerosols in the atmosphere. Physical Chemistry Chemical Physics, 2011, 13, 19238.	1.3	585
11	Cardiovascular disease burden from ambient air pollution in Europe reassessed using novel hazard ratio functions. European Heart Journal, 2019, 40, 1590-1596.	1.0	570
12	Gas uptake and chemical aging of semisolid organic aerosol particles. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11003-11008.	3.3	555
13	Rainforest Aerosols as Biogenic Nuclei of Clouds and Precipitation in the Amazon. Science, 2010, 329, 1513-1516.	6.0	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. Atmospheric Chemistry and Physics, 2008, 8, 1153-1179.	1.9	479
15	Bacteria in the global atmosphere â€“ Part 1: Review and synthesis of literature data for different ecosystems. Atmospheric Chemistry and Physics, 2009, 9, 9263-9280.	1.9	471
16	Multiphase Chemistry at the Atmosphereâ€“Biosphere Interface Influencing Climate and Public Health in the Anthropocene. Chemical Reviews, 2015, 115, 4440-4475.	23.0	468
17	Contribution of fungi to primary biogenic aerosols in the atmosphere: wet and dry discharged spores, carbohydrates, and inorganic ions. Atmospheric Chemistry and Physics, 2007, 7, 4569-4588.	1.9	456
18	Amorphous and crystalline aerosol particles interacting with water vapor: conceptual framework and experimental evidence for restructuring, phase transitions and kinetic limitations. Atmospheric Chemistry and Physics, 2009, 9, 9491-9522.	1.9	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. Atmospheric Chemistry and Physics, 2006, 6, 2017-2038.	1.9	447
20	Soil Nitrite as a Source of Atmospheric HONO and OH Radicals. Science, 2011, 333, 1616-1618.	6.0	431
21	Loss of life expectancy from air pollution compared to other risk factors: a worldwide perspective. Cardiovascular Research, 2020, 116, 1910-1917.	1.8	427
22	High diversity of fungi in air particulate matter. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12814-12819.	3.3	414
23	Aerosol Health Effects from Molecular to Global Scales. Environmental Science & Technology, 2017, 51, 13545-13567.	4.6	384
24	High concentrations of biological aerosol particles and ice nuclei during and after rain. Atmospheric Chemistry and Physics, 2013, 13, 6151-6164.	1.9	355
25	An overview of current issues in the uptake of atmospheric trace gases by aerosols and clouds. Atmospheric Chemistry and Physics, 2010, 10, 10561-10605.	1.9	352
26	Cloud condensation nuclei in pristine tropical rainforest air of Amazonia: size-resolved measurements and modeling of atmospheric aerosol composition and CCN activity. Atmospheric Chemistry and Physics, 2009, 9, 7551-7575.	1.9	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). Atmospheric Chemistry and Physics, 2009, 9, 7067-7080.	1.9	305
28	Dryland photoautotrophic soil surface communities endangered by global change. Nature Geoscience, 2018, 11, 185-189.	5.4	302
29	Interaction of Ozone and Water Vapor with Spark Discharge Soot Aerosol Particles Coated with Benzo[a]pyrene:Â O3and H2O Adsorption, Benzo[a]pyrene Degradation, and Atmospheric Implications. Journal of Physical Chemistry A, 2001, 105, 4029-4041.	1.1	300
30	Global distribution of particle phase state in atmospheric secondary organic aerosols. Nature Communications, 2017, 8, 15002.	5.8	295
31	Cloud condensation nuclei in polluted air and biomass burning smoke near the mega-city Guangzhou, China â€“ Part 1: Size-resolved measurements and implications for the modeling of aerosol particle hygroscopicity and CCN activity. Atmospheric Chemistry and Physics, 2010, 10, 3365-3383.	1.9	294
32	â€œWhat We Breathe Impacts Our Health: Improving Understanding of the Link between Air Pollution and Healthâ€• Environmental Science & Technology, 2016, 50, 4895-4904.	4.6	294
33	Substantial convection and precipitation enhancements by ultrafineaerosol particles. Science, 2018, 359, 411-418.	6.0	290
34	Bacteria in the global atmosphere â€“ Part 2: Modeling of emissions and transport between different ecosystems. Atmospheric Chemistry and Physics, 2009, 9, 9281-9297.	1.9	284
35	Sources and properties of Amazonian aerosol particles. Reviews of Geophysics, 2010, 48, .	9.0	283
36	Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin. Nature Geoscience, 2009, 2, 402-405.	5.4	282

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37	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	1.9	278
38	HONO Emissions from Soil Bacteria as a Major Source of Atmospheric Reactive Nitrogen. Science, 2013, 341, 1233-1235.	6.0	276
39	Autofluorescence of atmospheric bioaerosols â€“ fluorescent biomolecules and potential interferences. Atmospheric Measurement Techniques, 2012, 5, 37-71.	1.2	267
40	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions â€“ Part 1: General equations, parameters, and terminology. Atmospheric Chemistry and Physics, 2007, 7, 5989-6023.	1.9	262
41	Polycyclic Aromatic Hydrocarbons in Urban Air Particulate Matter:Â Decadal and Seasonal Trends, Chemical Degradation, and Sampling Artifacts. Environmental Science & Technology, 2003, 37, 2861-2868.	4.6	256
42	Face masks effectively limit the probability of SARS-CoV-2 transmission. Science, 2021, 372, 1439-1443.	6.0	240
43	Global distribution of the effective aerosol hygroscopicity parameter for CCN activation. Atmospheric Chemistry and Physics, 2010, 10, 5241-5255.	1.9	230
44	Chemical exposure-response relationship between air pollutants and reactive oxygen species in the human respiratory tract. Scientific Reports, 2016, 6, 32916.	1.6	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.	1.9	227
46	Ice nuclei in marine air: biogenic particles or dust?. Atmospheric Chemistry and Physics, 2013, 13, 245-267.	1.9	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.	4.2	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.	1.9	218
49	Arctic Ozone Loss Due to Denitrification. Science, 1999, 283, 2064-2069.	6.0	214
50	Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5). Atmospheric Chemistry and Physics, 2016, 16, 4785-4797.	1.9	213
51	Interaction of aerosol particles composed of protein and saltswith water vapor: hygroscopic growth and microstructural rearrangement. Atmospheric Chemistry and Physics, 2004, 4, 323-350.	1.9	212
52	Title is missing!. Journal of Atmospheric Chemistry, 2000, 37, 29-52.	1.4	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.	1.9	199
54	Ice nucleation by water-soluble macromolecules. Atmospheric Chemistry and Physics, 2015, 15, 4077-4091.	1.9	198

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55	Introduction: European Integrated Project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2009, 9, 2825-2841.	1.9	196
56	Global cloud condensation nuclei influenced by carbonaceous combustion aerosol. Atmospheric Chemistry and Physics, 2011, 11, 9067-9087.	1.9	194
57	Air Pollution and Climate Change Effects on Allergies in the Anthropocene: Abundance, Interaction, and Modification of Allergens and Adjuvants. Environmental Science & Technology, 2017, 51, 4119-4141.	4.6	193
58	Sensitivities in global scale modeling of isoprene. Atmospheric Chemistry and Physics, 2004, 4, 1-17.	1.9	190
59	Biogenic Potassium Salt Particles as Seeds for Secondary Organic Aerosol in the Amazon. Science, 2012, 337, 1075-1078.	6.0	188
60	Atmospheric polycyclic aromatic hydrocarbons observed over the North Pacific Ocean and the Arctic area: Spatial distribution and source identification. Atmospheric Environment, 2007, 41, 2061-2072.	1.9	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. Atmospheric Chemistry and Physics, 2012, 12, 11997-12019.	1.9	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. Journal of Geophysical Research, 2009, 114, .	3.3	186
63	Protein Nitration by Polluted Air. Environmental Science & Technology, 2005, 39, 1673-1678.	4.6	183
64	Ice-nucleating bacteria control the order and dynamics of interfacial water. Science Advances, 2016, 2, e1501630.	4.7	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. Atmospheric Chemistry and Physics, 2007, 7, 2855-2879.	1.9	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. Atmospheric Chemistry and Physics, 2010, 10, 3673-3691.	1.9	178
67	The Palaeoanthropocene â€“ The beginnings of anthropogenic environmental change. Anthropocene, 2013, 3, 83-88.	1.6	178
68	Seasonal cycle and temperature dependence of pinene oxidation products, dicarboxylic acids and nitrophenols in fine and coarse air particulate matter. Atmospheric Chemistry and Physics, 2010, 10, 7859-7873.	1.9	172
69	The role of long-lived reactive oxygen intermediates in the reaction of ozone with aerosol particles. Nature Chemistry, 2011, 3, 291-295.	6.6	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. Biogeosciences, 2007, 4, 1127-1141.	1.3	171
71	Mass spectral characterization of submicron biogenic organic particles in the Amazon Basin. Geophysical Research Letters, 2009, 36, .	1.5	171
72	An overview of the Amazonian Aerosol Characterization Experiment 2008 (AMAZE-08). Atmospheric Chemistry and Physics, 2010, 10, 11415-11438.	1.9	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. Atmospheric Chemistry and Physics, 2012, 12, 2777-2794.	1.9	170
74	Molecular corridors and parameterizations of volatility in the chemical evolution of organic aerosols. Atmospheric Chemistry and Physics, 2016, 16, 3327-3344.	1.9	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, Langmuirâ€“Hinshelwood, and Arrhenius parameters. Carbon, 2006, 44, 307-324.	5.4	161
76	Model Calculations of Aerosol Transmission and Infection Risk of COVID-19 in Indoor Environments. International Journal of Environmental Research and Public Health, 2020, 17, 8114.	1.2	158
77	Raman Microspectroscopic Analysis of Changes in the Chemical Structure and Reactivity of Soot in a Diesel Exhaust Aftertreatment Model System. Environmental Science & Technology, 2007, 41, 3702-3707.	4.6	156
78	Effects of reversible adsorption and Langmuirâ€“Hinshelwood surface reactions on gas uptake by atmospheric particles. Physical Chemistry Chemical Physics, 2003, 5, 351-356.	1.3	153
79	Hazardous components and health effects of atmospheric aerosol particles: reactive oxygen species, soot, polycyclic aromatic compounds and allergenic proteins. Free Radical Research, 2012, 46, 927-939.	1.5	153
80	Biological soil crusts accelerate the nitrogen cycle through large NO and HONO emissions in drylands. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15384-15389.	3.3	153
81	Biogeography in the air: fungal diversity over land and oceans. Biogeosciences, 2012, 9, 1125-1136.	1.3	152
82	Competition between water uptake and ice nucleation by glassy organic aerosol particles. Atmospheric Chemistry and Physics, 2014, 14, 12513-12531.	1.9	151
83	Severe Pollution in China Amplified by Atmospheric Moisture. Scientific Reports, 2017, 7, 15760.	1.6	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. Atmospheric Chemistry and Physics, 2008, 8, 5161-5186.	1.9	150
85	Cloud condensation nuclei (CCN) from fresh and aged air pollution in the megacity region of Beijing. Atmospheric Chemistry and Physics, 2011, 11, 11023-11039.	1.9	147
86	Cloud condensation nuclei in polluted air and biomass burning smoke near the mega-city Guangzhou, China â€“ Part 2: Size-resolved aerosol chemical composition, diurnal cycles, and externally mixed weakly CCN-active soot particles. Atmospheric Chemistry and Physics, 2011, 11, 2817-2836.	1.9	146
87	Title is missing!. Journal of Atmospheric Chemistry, 2001, 38, 133-166.	1.4	145
88	Pressure and Temperature Dependence of the Gas-Phase Reaction of SO3with H2O and the Heterogeneous Reaction of SO3with H2O/H2SO4Surfaces. Journal of Physical Chemistry A, 1997, 101, 10000-10011.	1.1	144
89	Atmospheric nucleation: highlights of the EUCAARI project and future directions. Atmospheric Chemistry and Physics, 2010, 10, 10829-10848.	1.9	144
90	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.	1.2	144

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91	Microbiology and atmospheric processes: chemical interactions of primary biological aerosols. Biogeosciences, 2008, 5, 1073-1084.	1.3	140
92	Enhanced organic mass fraction and decreased hygroscopicity of cloud condensation nuclei (CCN) during new particle formation events. Geophysical Research Letters, 2010, 37, .	1.5	138
93	Hydroxyl radicals from secondary organic aerosol decomposition in water. Atmospheric Chemistry and Physics, 2016, 16, 1761-1771.	1.9	138
94	Kinetic limitations in gas-particle reactions arising from slow diffusion in secondary organic aerosol. Faraday Discussions, 2013, 165, 391-406.	1.6	132
95	Size dependence of phase transitions in aerosol nanoparticles. Nature Communications, 2015, 6, 5923.	5.8	131
96	The Green Ocean Amazon Experiment (GoAmazon2014/5) Observes Pollution Affecting Gases, Aerosols, Clouds, and Rainfall over the Rain Forest. Bulletin of the American Meteorological Society, 2017, 98, 981-997.	1.7	128
97	Microstructure and oxidation behaviour of Euro IV diesel engine soot: a comparative study with synthetic model soot substances. Catalysis Today, 2004, 90, 127-132.	2.2	127
98	Ice nucleation activity in the widespread soil fungus <i>Mortierella alpina</i>. Biogeosciences, 2015, 12, 1057-1071.	1.3	127
99	ACRIDICONâ€“CHUVA Campaign: Studying Tropical Deep Convective Clouds and Precipitation over Amazonia Using the New German Research Aircraft HALO. Bulletin of the American Meteorological Society, 2016, 97, 1885-1908.	1.7	124
100	Raman Microspectroscopic Analysis of Size-Resolved Atmospheric Aerosol Particle Samples Collected with an ELPI: Soot, Humic-Like Substances, and Inorganic Compounds. Aerosol Science and Technology, 2007, 41, 655-671.	1.5	119
101	Ozone uptake on glassy, semi-solid and liquid organic matter and the role of reactive oxygen intermediates in atmospheric aerosol chemistry. Physical Chemistry Chemical Physics, 2016, 18, 12662-12674.	1.3	117
102	Hygroscopicity distribution concept for measurement data analysis and modeling of aerosol particle mixing state with regard to hygroscopic growth and CCN activation. Atmospheric Chemistry and Physics, 2010, 10, 7489-7503.	1.9	116
103	Multiphase buffer theory explains contrasts in atmospheric aerosol acidity. Science, 2020, 369, 1374-1377.	6.0	115
104	Nitration Enhances the Allergenic Potential of Proteins. International Archives of Allergy and Immunology, 2006, 141, 265-275.	0.9	114
105	High spatial and temporal resolution measurements of primary organics and their oxidation products over the tropical forests of Surinam. Atmospheric Environment, 2000, 34, 1161-1165.	1.9	111
106	Title is missing!. Journal of Atmospheric Chemistry, 2001, 38, 167-185.	1.4	111
107	The impact of rain on ice nuclei populations at a forested site in Colorado. Geophysical Research Letters, 2013, 40, 227-231.	1.5	110
108	Quantification of environmentally persistent free radicals and reactive oxygen species in atmospheric aerosol particles. Atmospheric Chemistry and Physics, 2016, 16, 13105-13119.	1.9	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. Atmospheric Chemistry and Physics, 2018, 18, 2853-2881.	1.9	108
110	Long-term observations of cloud condensation nuclei in the Amazon rain forest â€“ Part 1: Aerosol size distribution, hygroscopicity, and new model parametrizations for CCN prediction. Atmospheric Chemistry and Physics, 2016, 16, 15709-15740.	1.9	105
111	Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin. Atmospheric Chemistry and Physics, 2018, 18, 921-961.	1.9	105
112	Estimating global carbon uptake by lichens and bryophytes with a process-based model. Biogeosciences, 2013, 10, 6989-7033.	1.3	102
113	Estimating impacts of lichens and bryophytes on global biogeochemical cycles. Global Biogeochemical Cycles, 2014, 28, 71-85.	1.9	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. Journal of Physical Chemistry A, 2015, 119, 4533-4544.	1.1	101
115	Direct imaging of changes in aerosol particle viscosity upon hydration and chemical aging. Chemical Science, 2016, 7, 1357-1367.	3.7	101
116	Aerosol optical properties observed during Campaign of Air Quality Research in Beijing 2006 (CAREBeijingâ€2006): Characteristic differences between the inflow and outflow of Beijing city air. Journal of Geophysical Research, 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. Journal of Geophysical Research, 2009, 114, .	3.3	100
118	Temperature effect on phase state and reactivity controls atmospheric multiphase chemistry and transport of PAHs. Science Advances, 2018, 4, eaap7314.	4.7	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. Analytical and Bioanalytical Chemistry, 2004, 378, 725-736.	1.9	99
120	Kinetic double-layer model of aerosol surface chemistry and gas-particle interactions (K2-SURF): Degradation of polycyclic aromatic hydrocarbons exposed to O₃, NO₂, H₂O, OH and NO₃. Atmospheric Chemistry and Physics, 2009, 9, 9571-9586.	1.9	99
121	Thermophoretic deposition of soot aerosol particles under experimental conditions relevant for modern diesel engine exhaust gas systems. Journal of Aerosol Science, 2003, 34, 1009-1021.	1.8	98
122	Chemical ageing and transformation of diffusivity in semi-solid multi-component organic aerosol particles. Atmospheric Chemistry and Physics, 2011, 11, 7343-7354.	1.9	98
123	Effects of atmospheric conditions on ice nucleation activity of <i>Pseudomonas</i>. Atmospheric Chemistry and Physics, 2012, 12, 10667-10677.	1.9	98
124	Autofluorescence of atmospheric bioaerosols: spectral fingerprints and taxonomic trends of pollen. Atmospheric Measurement Techniques, 2013, 6, 3369-3392.	1.2	94
125	Nitrous oxide and methane emissions from cryptogamic covers. Global Change Biology, 2015, 21, 3889-3900.	4.2	94
126	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. Nature Geoscience, 2021, 14, 77-84.	5.4	94

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127	Chemists can help to solve the air-pollution health crisis. Nature, 2017, 551, 291-293.	13.7	93
128	Aerosol particle analysis: challenges and progress. Analytical and Bioanalytical Chemistry, 2003, 375, 30-32.	1.9	92
129	Mass Accommodation Coefficient of H2SO4Vapor on Aqueous Sulfuric Acid Surfaces and Gaseous Diffusion Coefficient of H2SO4in N2/H2O. Journal of Physical Chemistry A, 1998, 102, 10082-10089.	1.1	91
130	Satellite retrieval of cloud condensation nuclei concentrations by using clouds as CCN chambers. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5828-5834.	3.3	91
131	New Multiphase Chemical Processes Influencing Atmospheric Aerosols, Air Quality, and Climate in the Anthropocene. Accounts of Chemical Research, 2020, 53, 2034-2043.	7.6	90
132	Strong impact of wildfires on the abundance and aging of black carbon in the lowermost stratosphere. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11595-E11603.	3.3	89
133	Submicron particle mass concentrations and sources in the Amazonian wet season (AMAZE-08). Atmospheric Chemistry and Physics, 2015, 15, 3687-3701.	1.9	88
134	EUREC⁴A. Earth System Science Data, 2021, 13, 4067-4119.	3.7	88
135	Molecular corridors and kinetic regimes in the multiphase chemical evolution of secondary organic aerosol. Atmospheric Chemistry and Physics, 2014, 14, 8323-8341.	1.9	87
136	Cloud droplet activation of mixed organic-sulfate particles produced by the photooxidation of isoprene. Atmospheric Chemistry and Physics, 2010, 10, 3953-3964.	1.9	86
137	Seasonal cycles of fluorescent biological aerosol particles in boreal and semi-arid forests of Finland and Colorado. Atmospheric Chemistry and Physics, 2013, 13, 11987-12001.	1.9	85
138	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions â€“ Part 2: Exemplary practical applications and numerical simulations. Atmospheric Chemistry and Physics, 2007, 7, 6025-6045.	1.9	84
139	Size-resolved measurement of the mixing state of soot in the megacity Beijing, China: diurnal cycle, aging and parameterization. Atmospheric Chemistry and Physics, 2012, 12, 4477-4491.	1.9	81
140	Mass Accommodation of Water: Bridging the Gap Between Molecular Dynamics Simulations and Kinetic Condensation Models. Journal of Physical Chemistry A, 2013, 117, 410-420.	1.1	81
141	Microstructural rearrangement of sodium chloride condensation aerosol particles on interaction with water vapor. Journal of Aerosol Science, 2000, 31, 673-685.	1.8	80
142	Multiphase Chemical Kinetics of the Nitration of Aerosolized Protein by Ozone and Nitrogen Dioxide. Environmental Science & Technology, 2012, 46, 6672-6680.	4.6	80
143	Ambient measurements of biological aerosol particles near Killarney, Ireland: a comparison between real-time fluorescence and microscopy techniques. Atmospheric Chemistry and Physics, 2014, 14, 8055-8069.	1.9	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. Atmospheric Chemistry and Physics, 2015, 15, 5585-5598.	1.9	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. Atmospheric Measurement Techniques, 2013, 6, 81-90.	1.2	77
146	Kinetic regimes and limiting cases of gas uptake and heterogeneous reactions in atmospheric aerosols and clouds: a general classification scheme. Atmospheric Chemistry and Physics, 2013, 13, 6663-6686.	1.9	77
147	On the background photochemistry of tropospheric ozone. Tellus, Series A: Dynamic Meteorology and Oceanography, 1999, 51, 123-146.	0.8	74
148	Fluorescent bioaerosol particle, molecular tracer, and fungal spore concentrations during dry and rainy periods in a semi-arid forest. Atmospheric Chemistry and Physics, 2016, 16, 15165-15184.	1.9	73
149	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.	1.9	73
150	High potential for weathering and climate effects of non-vascular vegetation in the Late Ordovician. Nature Communications, 2016, 7, 12113.	5.8	72
151	Spatiotemporal variability and contribution of different aerosol types to the aerosol optical depth over the Eastern Mediterranean. Atmospheric Chemistry and Physics, 2016, 16, 13853-13884.	1.9	71
152	CCN activity and organic hygroscopicity of aerosols downwind of an urban region in central Amazonia: seasonal and diel variations and impact of anthropogenic emissions. Atmospheric Chemistry and Physics, 2017, 17, 11779-11801.	1.9	71
153	Anti-inflammatory effects of cinnamon extract and identification of active compounds influencing the TLR2 and TLR4 signaling pathways. Food and Function, 2018, 9, 5950-5964.	2.1	70
154	Daytime formation of nitrous acid at a coastal remote site in Cyprus indicating a common ground source of atmospheric HONO and NO. Atmospheric Chemistry and Physics, 2016, 16, 14475-14493.	1.9	69
155	Multi-Stage Open Peer Review: Scientific Evaluation Integrating the Strengths of Traditional Peer Review with the Virtues of Transparency and Self-Regulation. Frontiers in Computational Neuroscience, 2012, 6, 33.	1.2	67
156	Chemical kinetics of multiphase reactions between ozone and human skin lipids: Implications for indoor air quality and health effects. Indoor Air, 2017, 27, 816-828.	2.0	64
157	Long-term observations of cloud condensation nuclei over the Amazon rain forest â€“ Part 2: Variability and characteristics of biomass burning, long-range transport, and pristine rain forest aerosols. Atmospheric Chemistry and Physics, 2018, 18, 10289-10331.	1.9	64
158	Release of free amino acids upon oxidation of peptides and proteins by hydroxyl radicals. Analytical and Bioanalytical Chemistry, 2017, 409, 2411-2420.	1.9	62
159	Interactive journal concept for improved scientific publishing and quality assurance. Learned Publishing, 2004, 17, 105-113.	0.8	60
160	Mass-based hygroscopicity parameter interaction model and measurement of atmospheric aerosol water uptake. Atmospheric Chemistry and Physics, 2013, 13, 717-740.	1.9	60
161	Reactive Oxygen Species Formed by Secondary Organic Aerosols in Water and Surrogate Lung Fluid. Environmental Science & Technology, 2018, 52, 11642-11651.	4.6	59
162	Impact of biomass burning aerosols on radiation, clouds, and precipitation over the Amazon: relative importance of aerosolâ€“cloud and aerosolâ€“radiation interactions. Atmospheric Chemistry and Physics, 2020, 20, 13283-13301.	1.9	59

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163	A synthesis of cloud condensation nuclei counter (CCNC) measurements within the EUCAARI network. Atmospheric Chemistry and Physics, 2015, 15, 12211-12229.	1.9	58
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