Ulrich PÃ¶schl

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7856972/publications.pdf

Version: 2024-02-01

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	Primary biological aerosol particles in the atmosphere: a review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 64, 15598.	0.8	988
2	Water-driven microbial nitrogen transformations in biological soil crusts causing atmospheric nitrous acid and nitric oxide emissions. ISME Journal, 2022, 16, 1012-1024.	4.4	22
3	Tight Coupling of Surface and In-Plant Biochemistry and Convection Governs Key Fine Particulate Components over the Amazon Rainforest. ACS Earth and Space Chemistry, 2022, 6, 380-390.	1.2	11
4	Environmentally persistent free radicals in indoor particulate matter, dust, and on surfaces. Environmental Science Atmospheres, 2022, 2, 128-136.	0.9	3
5	Bioaerosols and atmospheric ice nuclei in a Mediterranean dryland: community changes related to rainfall. Biogeosciences, 2022, 19, 71-91.	1.3	8
6	Key Role of Equilibrium HONO Concentration over Soil in Quantifying Soilâ€“Atmosphere HONO Fluxes. Environmental Science & Technology, 2022, 56, 2204-2212.	4.6	8
7	Tropical and Boreal Forest â€“ Atmosphere Interactions: A Review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 74, 24.	0.8	27
8	Seasonality and reduced nitric oxide titration dominated ozone increase during COVID-19 lockdown in eastern China. Npj Climate and Atmospheric Science, 2022, 5, .	2.6	30
9	Occurrence and growth of sub-50â€‰nm aerosol particles in the Amazonian boundary layer. Atmospheric Chemistry and Physics, 2022, 22, 3469-3492.	1.9	16
10	Determination of the protein content of complex samples by aromatic amino acid analysis, liquid chromatography-UV absorbance, and colorimetry. Analytical and Bioanalytical Chemistry, 2022, 414, 4457-4470.	1.9	15
11	Overview: On the transport and transformation of pollutants in the outflow of major population centres â€“ observational data from the EMeRGe European intensive operational period in summer 2017. Atmospheric Chemistry and Physics, 2022, 22, 5877-5924.	1.9	16
12	Global cycling and climate effects of aeolian dust controlled by biological soil crusts. Nature Geoscience, 2022, 15, 458-463.	5.4	36
13	Satelliteâ€Based Detection of Secondary Droplet Activation in Convective Clouds. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	2
14	Emerging investigator series: deposited particles and human lung lining fluid are dynamic, chemically-complex reservoirs leading to thirdhand smoke emissions and exposure. Environmental Science Atmospheres, 2022, 2, 943-963.	0.9	1
15	Black carbon aerosol reductions during COVID-19 confinement quantified by aircraft measurements over Europe. Atmospheric Chemistry and Physics, 2022, 22, 8683-8699.	1.9	11
16	Highly oxygenated organic molecules with high unsaturation formed upon photochemical aging of soot. CheM, 2022, 8, 2688-2699.	5.8	10
17	Polycyclic aromatic hydrocarbons (PAHs) and their alkylated, nitrated and oxygenated derivatives in the atmosphere over the Mediterranean and Middle East seas. Atmospheric Chemistry and Physics, 2022, 22, 8739-8766.	1.9	16
18	Interfacial Water Ordering Is Insufficient to Explain Ice-Nucleating Protein Activity. Journal of Physical Chemistry Letters, 2021, 12, 218-223.	2.1	15

#	Article	IF	Citations
19	Mass accommodation and gasâ€“particle partitioning in secondary organic aerosols: dependence on diffusivity, volatility, particle-phase reactions, and penetration depth. Atmospheric Chemistry and Physics, 2021, 21, 1565-1580.	1.9	25
20	Specific Ionâ€“Protein Interactions Influence Bacterial Ice Nucleation. Chemistry - A European Journal, 2021, 27, 7402-7407.	1.7	20
21	Non-equilibrium interplay between gasâ€“particle partitioning and multiphase chemical reactions of semi-volatile compounds: mechanistic insights and practical implications for atmospheric modeling of polycyclic aromatic hydrocarbons. Atmospheric Chemistry and Physics, 2021, 21, 6175-6198.	1.9	10
22	Measurements from the RV <i>Ronald H. Brown</i> and related platforms as part of the Atlantic Tradewind Ocean-Atmosphere Mesoscale Interaction Campaign (ATOMIC). Earth System Science Data, 2021, 13, 1759-1790.	3.7	28
23	Water uptake of subpollen aerosol particles: hygroscopic growth, cloud condensation nuclei activation, and liquidâ€“liquid phase separation. Atmospheric Chemistry and Physics, 2021, 21, 6999-7022.	1.9	20
24	Face masks effectively limit the probability of SARS-CoV-2 transmission. Science, 2021, 372, 1439-1443.	6.0	240
25	Oligomerization and Nitration of the Grass Pollen Allergen Phl p 5 by Ozone, Nitrogen Dioxide, and Peroxynitrite: Reaction Products, Kinetics, and Health Effects. International Journal of Molecular Sciences, 2021, 22, 7616.	1.8	14
26	Aqueous-phase reactive species formed by fine particulate matter from remote forests and polluted urban air. Atmospheric Chemistry and Physics, 2021, 21, 10439-10455.	1.9	6
27	EUREC⁴A. Earth System Science Data, 2021, 13, 4067-4119.	3.7	88
28	Gas-Phase Reaction Kinetics of the Ortho and Ipso Adducts 1,2,4,5-Tetramethylbenzeneâ€“OH with O2. ACS Earth and Space Chemistry, 2021, 5, 2243-2251.	1.2	2
29	Aitken mode particles as CCN in aerosol- and updraft-sensitive regimes of cloud droplet formation. Atmospheric Chemistry and Physics, 2021, 21, 11723-11740.	1.9	15
30	Bioaerosols in the Amazon rain forest: temporal variations and vertical profiles of Eukarya, Bacteria, and Archaea. Biogeosciences, 2021, 18, 4873-4887.	1.3	12
31	Linear relationship between effective radius and precipitation water content near the top of convective clouds: measurement results from ACRIDICONâ€“CHUVA campaign. Atmospheric Chemistry and Physics, 2021, 21, 14079-14088.	1.9	4
32	Observed and simulated variability of droplet spectral dispersion in convective clouds over the Amazon. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035076.	1.2	4
33	Multiphase chemistry experiment in Fogs and Aerosols in the North China Plain (McFAN): integrated analysis and intensive winter campaign 2018. Faraday Discussions, 2021, 226, 207-222.	1.6	23
34	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. Nature Geoscience, 2021, 14, 77-84.	5.4	94
35	Chemical Characterization and Source Apportionment of Organic Aerosols in the Coastal City of Chennai, India: Impact of Marine Air Masses on Aerosol Chemical Composition and Potential for Secondary Organic Aerosol Formation. ACS Earth and Space Chemistry, 2021, 5, 3197-3209.	1.2	12
36	High-Resolution Fluorescence Spectra of Airborne Biogenic Secondary Organic Aerosols: Comparisons to Primary Biological Aerosol Particles and Implications for Single-Particle Measurements. Environmental Science & Technology, 2021, 55, 16747-16756.	4.6	7

#	Article	IF	Citations
37	Hydroxyl Radical Production by Air Pollutants in Epithelial Lining Fluid Governed by Interconversion and Scavenging of Reactive Oxygen Species. Environmental Science & Technology, 2021, 55, 14069-14079.	4.6	39
38	Membranes Are Decisive for Maximum Freezing Efficiency of Bacterial Ice Nucleators. Journal of Physical Chemistry Letters, 2021, 12, 10783-10787.	2.1	10
39	Aerosol-boundary-layer-monsoon interactions amplify semi-direct effect of biomass smoke on low cloud formation in Southeast Asia. Nature Communications, 2021, 12, 6416.	5.8	53
40	Calibration and evaluation of a broad supersaturation scanning (BS2) cloud condensation nuclei counter for rapid measurement of particle hygroscopicity and cloud condensation nuclei (CCN) activity. Atmospheric Measurement Techniques, 2021, 14, 6991-7005.	1.2	1
41	Ozonolysis of Oleic Acid Aerosol Revisited: Multiphase Chemical Kinetics and Reaction Mechanisms. ACS Earth and Space Chemistry, 2021, 5, 3313-3323.	1.2	25
42	Planetary Boundary Layer Height Modulates Aerosolâ€"Water Vapor Interactions During Winter in the Megacity of Delhi. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035681.	1.2	4
43	How weather events modify aerosol particle size distributions in the Amazon boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 18065-18086.	1.9	7
44	Formulation and Characterization of an Effervescent Hydrogen-Generating Tablet. Pharmaceuticals, 2021, 14, 1327.	1.7	5
45	Cloud droplet formation at the base of tropical convective clouds: closure between modeling and measurement results of ACRIDICONâ€"CHUVA. Atmospheric Chemistry and Physics, 2021, 21, 17513-17528.	1.9	3
46	Natural gas shortages during the â€œcoal-to-gasâ€•transition in China have caused a large redistribution of air pollution in winter 2017. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31018-31025.	3.3	56
47	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
48	Chemical modification of pro-inflammatory proteins by peroxynitrite increases activation of TLR4 and NF-Î²B: Implications for the health effects of air pollution and oxidative stress. Redox Biology, 2020, 37, 101581.	3.9	30
49	Modeling the Formation, Degradation, and Spatiotemporal Distribution of 2-Nitrofluoranthene and 2-Nitropyrene in the Global Atmosphere. Environmental Science & Technology, 2020, 54, 14224-14234.	4.6	17
50	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
51	Multiphase buffer theory explains contrasts in atmospheric aerosol acidity. Science, 2020, 369, 1374-1377.	6.0	115
52	Inhibition of Bacterial Ice Nucleators Is Not an Intrinsic Property of Antifreeze Proteins. Journal of Physical Chemistry B, 2020, 124, 4889-4895.	1.2	17
53	Aerosol measurement methods to quantify spore emissions from fungi and cryptogamic covers in the Amazon. Atmospheric Measurement Techniques, 2020, 13, 153-164.	1.2	14
54	Comparison of aircraft measurements during GoAmazon2014/5 and ACRIDICON-CHUVA. Atmospheric Measurement Techniques, 2020, 13, 661-684.	1.2	12

#	Article	IF	Citations
55	The challenge of simulating the sensitivity of the Amazonian cloud microstructure to cloud condensation nuclei number concentrations. Atmospheric Chemistry and Physics, 2020, 20, 1591-1605.	1.9	4
56	Electrostatic Interactions Control the Functionality of Bacterial Ice Nucleators. Journal of the American Chemical Society, 2020, 142, 6842-6846.	6.6	33
57	Influx of African biomass burning aerosol during the Amazonian dry season through layered transatlantic transport of black carbon-rich smoke. Atmospheric Chemistry and Physics, 2020, 20, 4757-4785.	1.9	40
58	Inappropriate evaluation of methodology and biases by P. Morfeld and T.C. Erren. Cardiovascular Research, 2020, 116, e102-e102.	1.8	3
59	Loss of life expectancy from air pollution compared to other risk factors: a worldwide perspective. Cardiovascular Research, 2020, 116, 1910-1917.	1.8	427
60	Air Pollution, Oxidative Stress, and Public Health in the Anthropocene. , 2020, , 79-92.		3
61	Aerosol pH and chemical regimes of sulfate formation in aerosol water during winter haze in the North China Plain. Atmospheric Chemistry and Physics, 2020, 20, 11729-11746.	1.9	47
62	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
63	MIMiX: a Multipurpose In situ Microreactor system for X-ray microspectroscopy to mimic atmospheric aerosol processing. Atmospheric Measurement Techniques, 2020, 13, 3717-3729.	1.2	5
64	Nano-hygroscopicity tandem differential mobility analyzer (nano-HTDMA) for investigating hygroscopic properties of sub-10â€‰nm aerosol nanoparticles. Atmospheric Measurement Techniques, 2020, 13, 5551-5567.	1.2	11
65	Multifactor colorimetric analysis on pH-indicator papers: an optimized approach for direct determination of ambient aerosol pH. Atmospheric Measurement Techniques, 2020, 13, 6053-6065.	1.2	16
66	Land cover and its transformation in the backward trajectory footprint region of the Amazon Tall Tower Observatory. Atmospheric Chemistry and Physics, 2019, 19, 8425-8470.	1.9	41
67	Relative importance of gas uptake on aerosol and ground surfaces characterized by equivalent uptake coefficients. Atmospheric Chemistry and Physics, 2019, 19, 10981-11011.	1.9	25
68	Second inflection point of water surface tension in the deeply supercooled regime revealed by entropy anomaly and surface structure using molecular dynamics simulations. Physical Chemistry Chemical Physics, 2019, 21, 3360-3369.	1.3	19
69	Radical Formation by Fine Particulate Matter Associated with Highly Oxygenated Molecules. Environmental Science & Technology, 2019, 53, 12506-12518.	4.6	45
70	Size-Resolved Single-Particle Fluorescence Spectrometer for Real-Time Analysis of Bioaerosols: Laboratory Evaluation and Atmospheric Measurements. Environmental Science & Technology, 2019, 53, 13257-13264.	4.6	14
71	Global NO and HONO emissions of biological soil crusts estimated by a process-based non-vascular vegetation model. Biogeosciences, 2019, 16, 2003-2031.	1.3	14
72	Nanoscale distribution of TLR4 on primary human macrophages stimulated with LPS and ATI. Nanoscale, 2019, 11, 9769-9779.	2.8	16

#	Article	IF	Citations
73	Soil HONO emissions at high moisture content are driven by microbial nitrate reduction to nitrite: tackling the HONO puzzle. ISME Journal, 2019, 13, 1688-1699.	4.4	57
74	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
75	Antioxidant activity of cerium dioxide nanoparticles and nanorods in scavenging hydroxyl radicals. RSC Advances, 2019, 9, 11077-11081.	1.7	48
76	Physicochemical uptake and release of volatile organic compounds by soil in coated-wall flow tube experiments with ambient air. Atmospheric Chemistry and Physics, 2019, 19, 2209-2232.	1.9	12
77	Spectral Intensity Bioaerosol Sensor (SIBS): an instrument for spectrally resolved fluorescence detection of single particles in real time. Atmospheric Measurement Techniques, 2019, 12, 1337-1363.	1.2	33
78	Macromolecular fungal ice nuclei in <i>Fusarium</i>: effects of physical and chemical processing. Biogeosciences, 2019, 16, 4647-4659.	1.3	42
79	Dryland photoautotrophic soil surface communities endangered by global change. Nature Geoscience, 2018, 11, 185-189.	5.4	302
80	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
81	Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin. Atmospheric Chemistry and Physics, 2018, 18, 921-961.	1.9	105
82	Substantial convection and precipitation enhancements by ultrafineaerosol particles. Science, 2018, 359, 411-418.	6.0	290
83	Technical note: Influence of surface roughness and local turbulence on coated-wall flow tube experiments for gas uptake andÂkineticÂstudies. Atmospheric Chemistry and Physics, 2018, 18, 2669-2686.	1.9	9
84	Comparing airborne and satellite retrievals of cloud optical thickness and particle effective radius using a spectral radiance ratio technique: two case studies for cirrus and deep convective clouds. Atmospheric Chemistry and Physics, 2018, 18, 4439-4462.	1.9	11
85	Emission of nitrous acid from soil and biological soil crusts represents an important source of HONO in the remote atmosphere in Cyprus. Atmospheric Chemistry and Physics, 2018, 18, 799-813.	1.9	52
86	Temperature effect on phase state and reactivity controls atmospheric multiphase chemistry and transport of PAHs. Science Advances, 2018, 4, eaap7314.	4.7	100
87	Twin-plate Ice Nucleation Assay (TINA) with infrared detection for high-throughput droplet freezing experiments with biological ice nuclei in laboratory and field samples. Atmospheric Measurement Techniques, 2018, 11, 6327-6337.	1.2	34
88	Aircraft-based observations of isoprene-epoxydiol-derived secondary organic aerosol (IEPOX-SOA) in the tropical upper troposphere over the Amazon region. Atmospheric Chemistry and Physics, 2018, 18, 14979-15001.	1.9	39
89	Molecular dynamics simulation of the surface tension of aqueous sodium chloride: from dilute to highly supersaturated solutions and molten salt. Atmospheric Chemistry and Physics, 2018, 18, 17077-17086.	1.9	32
90	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

#	Article	IF	Citations
91	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
92	Species Richness, rRNA Gene Abundance, and Seasonal Dynamics of Airborne Plant-Pathogenic Oomycetes. Frontiers in Microbiology, 2018, 9, 2673.	1.5	10
93	Reactive Oxygen Species Formed by Secondary Organic Aerosols in Water and Surrogate Lung Fluid. Environmental Science & Technology, 2018, 52, 11642-11651.	4.6	59
94	Screening of herbal extracts for TLR2- and TLR4-dependent anti-inflammatory effects. PLoS ONE, 2018, 13, e0203907.	1.1	48
95	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
96	Black and brown carbon over central Amazonia: long-term aerosol measurements at the ATTO site. Atmospheric Chemistry and Physics, 2018, 18, 12817-12843.	1.9	54
97	Overview: Precipitation characteristics and sensitivities to environmental conditions during GoAmazon2014/5 and ACRIDICON-CHUVA. Atmospheric Chemistry and Physics, 2018, 18, 6461-6482.	1.9	34
98	Community composition and seasonal changes of archaea in coarse and fine air particulate matter. Biogeosciences, 2018, 15, 4205-4214.	1.3	12
99	Nanomaterialâ€“microbe cross-talk: physicochemical principles and (patho)biological consequences. Chemical Society Reviews, 2018, 47, 5312-5337.	18.7	44
100	Long-term study on coarse mode aerosols in the Amazon rain forest with the frequent intrusion of Saharan dust plumes. Atmospheric Chemistry and Physics, 2018, 18, 10055-10088.	1.9	52
101	African volcanic emissions influencing atmospheric aerosols over the Amazon rain forest. Atmospheric Chemistry and Physics, 2018, 18, 10391-10405.	1.9	16
102	Nitration of Wheat Amylase Trypsin Inhibitors Increases Their Innate and Adaptive Immunostimulatory Potential in vitro. Frontiers in Immunology, 2018, 9, 3174.	2.2	24
103	Fresh water, marine and terrestrial cyanobacteria display distinct allergen characteristics. Science of the Total Environment, 2018, 612, 767-774.	3.9	19
104	Cloud droplet activation through oxidation of organic aerosol influenced by temperature and particle phase state. Geophysical Research Letters, 2017, 44, 1583-1591.	1.5	53
105	Reactive oxygen species formed in aqueous mixtures of secondary organic aerosols and mineral dust influencing cloud chemistry and public health in the Anthropocene. Faraday Discussions, 2017, 200, 251-270.	1.6	51
106	Atmospheric protein chemistry influenced by anthropogenic air pollutants: nitration and oligomerization upon exposure to ozone and nitrogen dioxide. Faraday Discussions, 2017, 200, 413-427.	1.6	37
107	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
108	Global distribution of particle phase state in atmospheric secondary organic aerosols. Nature Communications, 2017, 8, 15002.	5.8	295

#	Article	IF	Citations
109	The Global Aerosol Synthesis and Science Project (GASSP): Measurements and Modeling to Reduce Uncertainty. Bulletin of the American Meteorological Society, 2017, 98, 1857-1877.	1.7	52
110	Allergenic Asteraceae in air particulate matter: quantitative DNA analysis of mugwort and ragweed. Aerobiologia, 2017, 33, 493-506.	0.7	9
111	Simultaneous determination of nitrated and oligomerized proteins by size exclusion high-performance liquid chromatography coupled to photodiode array detection. Journal of Chromatography A, 2017, 1495, 76-82.	1.8	13
112	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
113	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
114	Severe Pollution in China Amplified by Atmospheric Moisture. Scientific Reports, 2017, 7, 15760.	1.6	151
115	Heterogeneous OH Oxidation, Shielding Effects, and Implications for the Atmospheric Fate of Terbuthylazine and Other Pesticides. Environmental Science & Technology, 2017, 51, 13749-13754.	4.6	24
116	Aerosol Health Effects from Molecular to Global Scales. Environmental Science & Technology, 2017, 51, 13545-13567.	4.6	384
117	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
118	Sensitivities of Amazonian clouds to aerosols and updraft speed. Atmospheric Chemistry and Physics, 2017, 17, 10037-10050.	1.9	37
119	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
120	Long-term measurements (2010â€“2014) of carbonaceous aerosol and carbon monoxide at the Zotino Tall Tower Observatory (ZOTTO) in central Siberia. Atmospheric Chemistry and Physics, 2017, 17, 14365-14392.	1.9	33
121	Vertical distribution of the particle phase in tropical deep convective clouds as derived from cloud-side reflected solar radiation measurements. Atmospheric Chemistry and Physics, 2017, 17, 9049-9066.	1.9	14
122	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
123	Light-induced protein nitration and degradation with HONOÂemission. Atmospheric Chemistry and Physics, 2017, 17, 11819-11833.	1.9	22
124	Regional modelling of polycyclic aromatic hydrocarbons: WRF-Chem-PAH model development and East Asia case studies. Atmospheric Chemistry and Physics, 2017, 17, 12253-12267.	1.9	3
125	Further evidence for CCN aerosol concentrations determining the height of warm rain and ice initiation in convective clouds over the Amazon basin. Atmospheric Chemistry and Physics, 2017, 17, 14433-14456.	1.9	58
126	Illustration of microphysical processes in Amazonian deep convective clouds in the gamma phase space: introduction and potential applications. Atmospheric Chemistry and Physics, 2017, 17, 14727-14746.	1.9	8

#	Article	IF	Citations
127	Comparing parameterized versus measured microphysical properties of tropical convective cloud bases during the ACRIDICONâ€“CHUVA campaign. Atmospheric Chemistry and Physics, 2017, 17, 7365-7386.	1.9	30
128	Technical note: Monte Carlo genetic algorithm (MCGA) for model analysis of multiphase chemical kinetics to determine transport and reaction rate coefficients using multiple experimental data sets. Atmospheric Chemistry and Physics, 2017, 17, 8021-8029.	1.9	33
129	Tandem configuration of differential mobility and centrifugal particle mass analysers for investigating aerosol hygroscopic properties. Atmospheric Measurement Techniques, 2017, 10, 1269-1280.	1.2	9
130	Perspectives on the Future of Ice Nucleation Research: Research Needs and Unanswered Questions Identified from Two International Workshops. Atmosphere, 2017, 8, 138.	1.0	56
131	Estimating global nitrous oxide emissions by lichens and bryophytes with a process-based productivity model. Biogeosciences, 2017, 14, 1593-1602.	1.3	23
132	Chemists can help to solve the air-pollution health crisis. Nature, 2017, 551, 291-293.	13.7	93
133	A broad supersaturation scanning (BS2) approach for rapid measurement of aerosol particle hygroscopicity and cloud condensation nuclei activity. Atmospheric Measurement Techniques, 2016, 9, 5183-5192.	1.2	2
134	Reactive nitrogen chemistry in aerosol water as a source of sulfate during haze events in China. Science Advances, 2016, 2, e1601530.	4.7	820
135	Organic Nitrate Contribution to New Particle Formation and Growth in Secondary Organic Aerosols from Î±-Pinene Ozonolysis. Environmental Science & Technology, 2016, 50, 6334-6342.	4.6	47
136	Aerosol Chemistry Resolved by Mass Spectrometry: Linking Field Measurements of Cloud Condensation Nuclei Activity to Organic Aerosol Composition. Environmental Science & Technology, 2016, 50, 10823-10832.	4.6	22
137	Bioaerosols in the Earth system: Climate, health, and ecosystem interactions. Atmospheric Research, 2016, 182, 346-376.	1.8	609
138	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
139	Metaproteomic analysis of atmospheric aerosol samples. Analytical and Bioanalytical Chemistry, 2016, 408, 6337-6348.	1.9	16
140	High potential for weathering and climate effects of non-vascular vegetation in the Late Ordovician. Nature Communications, 2016, 7, 12113.	5.8	72
141	Chemical exposure-response relationship between air pollutants and reactive oxygen species in the human respiratory tract. Scientific Reports, 2016, 6, 32916.	1.6	228
142	Ice-nucleating bacteria control the order and dynamics of interfacial water. Science Advances, 2016, 2, e1501630.	4.7	182
143	Sea salt emission, transport and influence on size-segregated nitrate simulation: a case study in northwestern Europe by WRF-Chem. Atmospheric Chemistry and Physics, 2016, 16, 12081-12097.	1.9	33
144	Hydroxyl radicals from secondary organic aerosol decomposition in water. Atmospheric Chemistry and Physics, 2016, 16, 1761-1771.	1.9	138

#	Article	IF	Citations
145	Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5). Atmospheric Chemistry and Physics, 2016, 16, 4785-4797.	1.9	213
146	Evaluation of the size segregation of elemental carbon (EC) emission in Europe: influence on the simulation of EC long-range transportation. Atmospheric Chemistry and Physics, 2016, 16, 1823-1835.	1.9	17
147	Uptake of gaseous formaldehyde by soil surfaces: a combination of adsorption/desorption equilibrium and chemical reactions. Atmospheric Chemistry and Physics, 2016, 16, 10299-10311.	1.9	26
148	Ambient measurement of fluorescent aerosol particles with a WIBS in the Yangtze River Delta of China: potential impacts of combustion-related aerosol particles. Atmospheric Chemistry and Physics, 2016, 16, 11337-11348.	1.9	32
149	The effect of viscosity and diffusion on the HO₂ uptake by sucrose and secondary organic aerosol particles. Atmospheric Chemistry and Physics, 2016, 16, 13035-13047.	1.9	29
150	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
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	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
153	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
154	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
155	Molecular corridors and parameterizations of volatility in the chemical evolution of organic aerosols. Atmospheric Chemistry and Physics, 2016, 16, 3327-3344.	1.9	170
156	Fluorescent biological aerosol particle measurements at a tropical high-altitude site in southern India during the southwest monsoon season. Atmospheric Chemistry and Physics, 2016, 16, 9805-9830.	1.9	33
157	The last frontier in open science: Will open peer review transform scientific and scholarly publishing?. Proceedings of the Association for Information Science and Technology, 2016, 53, 1-4.	0.3	1
158	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
159	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
160	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
161	Direct imaging of changes in aerosol particle viscosity upon hydration and chemical aging. Chemical Science, 2016, 7, 1357-1367.	3.7	101
162	Nitrous oxide and methane emissions from cryptogamic covers. Global Change Biology, 2015, 21, 3889-3900.	4.2	94

#	Article	IF	Citations
163	Comprehensive mapping and characteristic regimes of aerosol effects on the formation and evolution of pyro-convective clouds. Atmospheric Chemistry and Physics, 2015, 15, 10325-10348.	1.9	19
164	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
165	Submicron particle mass concentrations and sources in the Amazonian wet season (AMAZE-08). Atmospheric Chemistry and Physics, 2015, 15, 3687-3701.	1.9	88
166	Ice nucleation by water-soluble macromolecules. Atmospheric Chemistry and Physics, 2015, 15, 4077-4091.	1.9	198
167	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
168	Regional-scale simulations of fungal spore aerosols using an emission parameterization adapted to local measurements of fluorescent biological aerosol particles. Atmospheric Chemistry and Physics, 2015, 15, 6127-6146.	1.9	44
169	Chemical composition, microstructure, and hygroscopic properties of aerosol particles at the Zotino Tall Tower Observatory (ZOTTO), Siberia, during a summer campaign. Atmospheric Chemistry and Physics, 2015, 15, 8847-8869.	1.9	44
170	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
171	A synthesis of cloud condensation nuclei counter (CCNC) measurements within the EUCAARI network. Atmospheric Chemistry and Physics, 2015, 15, 12211-12229.	1.9	58
172	Quantitative DNA Analyses for Airborne Birch Pollen. PLoS ONE, 2015, 10, e0140949.	1.1	20
173	Ice nucleation activity in the widespread soil fungus <i>Mortierella alpina</i>. Biogeosciences, 2015, 12, 1057-1071.	1.3	127
174	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
175	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
176	Size dependence of phase transitions in aerosol nanoparticles. Nature Communications, 2015, 6, 5923.	5.8	131
177	Scanning supersaturation condensation particle counter applied as a nano-CCN counter for size-resolved analysis of the hygroscopicity and chemical composition of nanoparticles. Atmospheric Measurement Techniques, 2015, 8, 2161-2172.	1.2	20
178	Multiphase Chemistry at the Atmosphereâ€“Biosphere Interface Influencing Climate and Public Health in the Anthropocene. Chemical Reviews, 2015, 115, 4440-4475.	23.0	468
179	Radial Diffusion and Penetration of Gas Molecules and Aerosol Particles through Laminar Flow Reactors, Denuders, and Sampling Tubes. Analytical Chemistry, 2015, 87, 3746-3754.	3.2	36
180	Protein Cross-Linking and Oligomerization through Dityrosine Formation upon Exposure to Ozone. Environmental Science & Technology, 2015, 49, 10859-10866.	4.6	55

#	Article	IF	Citations
181	Diversity and seasonal dynamics of airborne archaea. Biogeosciences, 2014, 11, 6067-6079.	1.3	36
182	Assessment of cloud supersaturation by size-resolved aerosol particle and cloud condensation nuclei (CCN) measurements. Atmospheric Measurement Techniques, 2014, 7, 2615-2629.	1.2	23
183	Nitration of Protein Without Allergenic Potential Triggers Modulation of Antioxidant Response in Type II Pneumocytes. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2014, 77, 679-695.	1.1	3
184	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
185	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
186	Estimating impacts of lichens and bryophytes on global biogeochemical cycles. Global Biogeochemical Cycles, 2014, 28, 71-85.	1.9	102
187	Infrequent occurrence of new particle formation at a semi-rural location, Gadanki, in tropical Southern India. Atmospheric Environment, 2014, 94, 264-273.	1.9	26
188	Novel Tracer Method To Measure Isotopic Labeled Gas-Phase Nitrous Acid (HO¹⁵NO) in Biogeochemical Studies. Environmental Science & Technology, 2014, 48, 8021-8027.	4.6	19
189	Nitration of the Birch Pollen Allergen Bet v 1.0101: Efficiency and Site-Selectivity of Liquid and Gaseous Nitrating Agents. Journal of Proteome Research, 2014, 13, 1570-1577.	1.8	51
190	Competition between water uptake and ice nucleation by glassy organic aerosol particles. Atmospheric Chemistry and Physics, 2014, 14, 12513-12531.	1.9	151
191	Atmospheric black carbon and warming effects influenced by the source and absorption enhancement in central Europe. Atmospheric Chemistry and Physics, 2014, 14, 12683-12699.	1.9	31
192	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
193	Ice nucleation by fungal spores from the classes <i>Agaricomycetes</i>, <i>Ustilaginomycetes</i>, and <i>Eurotiomycetes</i>, and the effect on the atmospheric transport of these spores. Atmospheric Chemistry and Physics, 2014, 14, 8611-8630.	1.9	57
194	3-D model simulations of dynamical and microphysical interactions in pyroconvective clouds under idealized conditions. Atmospheric Chemistry and Physics, 2014, 14, 7573-7583.	1.9	20
195	HONO Emissions from Soil Bacteria as a Major Source of Atmospheric Reactive Nitrogen. Science, 2013, 341, 1233-1235.	6.0	276
196	Kinetic limitations in gas-particle reactions arising from slow diffusion in secondary organic aerosol. Faraday Discussions, 2013, 165, 391-406.	1.6	132
197	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
198	The Palaeoanthropocene â€“ The beginnings of anthropogenic environmental change. Anthropocene, 2013, 3, 83-88.	1.6	178

#	Article	IF	Citations
199	Determination of nitration degrees for the birch pollen allergen Bet v 1. Analytical and Bioanalytical Chemistry, 2013, 405, 8945-8949.	1.9	22
200	Size-resolved measurement of the mixing state of soot in the megacity Beijing, China: Diurnal cycle, aging and parameterization. , 2013, , .		0
201	Fungal diversity, biogeography, and new species of ice nucleating fungi in air. , 2013, , .		1
202	CHASER: An Innovative Satellite Mission Concept to Measure the Effects of Aerosols on Clouds and Climate. Bulletin of the American Meteorological Society, 2013, 94, 685-694.	1.7	15
203	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
204	Autofluorescence of atmospheric bioaerosols: spectral fingerprints and taxonomic trends of pollen. Atmospheric Measurement Techniques, 2013, 6, 3369-3392.	1.2	94
205	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
206	The impact of rain on ice nuclei populations at a forested site in Colorado. Geophysical Research Letters, 2013, 40, 227-231.	1.5	110
207	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
208	Mass-based hygroscopicity parameter interaction model and measurement of atmospheric aerosol water uptake. Atmospheric Chemistry and Physics, 2013, 13, 717-740.	1.9	60
209	Ice nuclei in marine air: biogenic particles or dust?. Atmospheric Chemistry and Physics, 2013, 13, 245-267.	1.9	226
210	High concentrations of biological aerosol particles and ice nuclei during and after rain. Atmospheric Chemistry and Physics, 2013, 13, 6151-6164.	1.9	355
211	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
212	Estimating global carbon uptake by lichens and bryophytes with a process-based model. Biogeosciences, 2013, 10, 6989-7033.	1.3	102
213	The Exchange of Soil Nitrite and Atmospheric HONO: A Missing Process in the Nitrogen Cycle and Atmospheric Chemistry. NATO Science for Peace and Security Series C: Environmental Security, 2013, , 93-99.	0.1	3
214	Autofluorescence of atmospheric bioaerosols â€“ fluorescent biomolecules and potential interferences. Atmospheric Measurement Techniques, 2012, 5, 37-71.	1.2	267
215	The scientific basis for a satellite mission to retrieve CCN concentrations and their impacts on convective clouds. Atmospheric Measurement Techniques, 2012, 5, 2039-2055.	1.2	39
216	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

#	Article	IF	Citations
217	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
218	Effects of atmospheric conditions on ice nucleation activity of <i>Pseudomonas</i>. Atmospheric Chemistry and Physics, 2012, 12, 10667-10677.	1.9	98
219	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
220	Multiphase Chemical Kinetics of the Nitration of Aerosolized Protein by Ozone and Nitrogen Dioxide. Environmental Science & Technology, 2012, 46, 6672-6680.	4.6	80
221	Multiphase Chemical Kinetics of NO₃ Radicals Reacting with Organic Aerosol Components from Biomass Burning. Environmental Science & Technology, 2012, 46, 6630-6636.	4.6	55
222	Biogenic Potassium Salt Particles as Seeds for Secondary Organic Aerosol in the Amazon. Science, 2012, 337, 1075-1078.	6.0	188
223	Standard States and Thermochemical Kinetics in Heterogeneous Atmospheric Chemistry. Journal of Physical Chemistry A, 2012, 116, 6312-6316.	1.1	18
224	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
225	Contribution of cryptogamic covers to the global cycles of carbon and nitrogen. Nature Geoscience, 2012, 5, 459-462.	5.4	711
226	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
227	Biogeography in the air: fungal diversity over land and oceans. Biogeosciences, 2012, 9, 1125-1136.	1.3	152
228	Gasâ€“particle interactions of tropospheric aerosols: Kinetic and thermodynamic perspectives of multiphase chemical reactions, amorphous organic substances, and the activation of cloud condensation nuclei. Atmospheric Research, 2011, 101, 562-573.	1.8	48
229	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
230	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
231	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
232	Global cloud condensation nuclei influenced by carbonaceous combustion aerosol. Atmospheric Chemistry and Physics, 2011, 11, 9067-9087.	1.9	194
233	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
234	Filter-based differential hygroscopicity analyzer of aerosol particles. Izvestiya - Atmospheric and Oceanic Physics, 2011, 47, 747-759.	0.2	13

#	Article	IF	Citations
235	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
236	Analysis of nitrated proteins and tryptic peptides by HPLC-chip-MS/MS: site-specific quantification, nitration degree, and reactivity of tyrosine residues. Analytical and Bioanalytical Chemistry, 2011, 399, 459-471.	1.9	53
237	Soil Nitrite as a Source of Atmospheric HONO and OH Radicals. Science, 2011, 333, 1616-1618.	6.0	431
238	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
239	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
240	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
241	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
242	Atmospheric nucleation: highlights of the EUCAARI project and future directions. Atmospheric Chemistry and Physics, 2010, 10, 10829-10848.	1.9	144
243	An overview of the Amazonian Aerosol Characterization Experiment 2008 (AMAZE-08). Atmospheric Chemistry and Physics, 2010, 10, 11415-11438.	1.9	170
244	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
245	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
246	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
247	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
248	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
249	Global distribution of the effective aerosol hygroscopicity parameter for CCN activation. Atmospheric Chemistry and Physics, 2010, 10, 5241-5255.	1.9	230
250	Quantification of nitrotyrosine in nitrated proteins. Analytical and Bioanalytical Chemistry, 2010, 397, 879-886.	1.9	52
251	An amorphous solid state of biogenic secondary organic aerosol particles. Nature, 2010, 467, 824-827.	13.7	719
252	Coupling aerosol surface and bulk chemistry with a kinetic double layer model (K2-SUB): oxidation of oleic acid by ozone. Atmospheric Chemistry and Physics, 2010, 10, 4537-4557.	1.9	43

#	Article	IF	Citations
253	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
254	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
255	Intercomparison of cloud condensation nuclei and hygroscopic fraction measurements: Coated soot particles investigated during the LACIS Experiment in November (LExNo). Journal of Geophysical Research, 2010, 115, .	3.3	34
256	Soluble mass, hygroscopic growth, and droplet activation of coated soot particles during LACIS Experiment in November (LExNo). Journal of Geophysical Research, 2010, 115, .	3.3	40
257	Examination of laboratoryâ€generated coated soot particles: An overview of the LACIS Experiment in November (LExNo) campaign. Journal of Geophysical Research, 2010, 115, .	3.3	25
258	Isotopic composition of H₂ from wood burning: Dependency on combustion efficiency, moisture content, and Î´D of local precipitation. Journal of Geophysical Research, 2010, 115, .	3.3	22
259	Spatial and temporal variations of aerosols around Beijing in summer 2006: 2. Local and column aerosol optical properties. Journal of Geophysical Research, 2010, 115, .	3.3	20
260	Rainforest Aerosols as Biogenic Nuclei of Clouds and Precipitation in the Amazon. Science, 2010, 329, 1513-1516.	6.0	541
261	Sources and properties of Amazonian aerosol particles. Reviews of Geophysics, 2010, 48, .	9.0	283
262	The Dynamic Shape Factor of Sodium Chloride Nanoparticles as Regulated by Drying Rate. Aerosol Science and Technology, 2010, 44, 939-953.	1.5	56
263	Nitration of the Egg-Allergen Ovalbumin Enhances Protein Allergenicity but Reduces the Risk for Oral Sensitization in a Murine Model of Food Allergy. PLoS ONE, 2010, 5, e14210.	1.1	39
264	Interactive Open Access Publishing and Peer Review: The Effectiveness and Perspectives of Transparency and Self-Regulation in Scientific Communication and Evaluation. LIBER Quarterly, 2010, 19, 293-314.	0.6	18
265	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
266	Atmospheric composition change â€“ global and regional air quality. Atmospheric Environment, 2009, 43, 5268-5350.	1.9	714
267	Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin. Nature Geoscience, 2009, 2, 402-405.	5.4	282
268	Mass spectral characterization of submicron biogenic organic particles in the Amazon Basin. Geophysical Research Letters, 2009, 36, .	1.5	171
269	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
270	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

#	Article	IF	Citations
271	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
272	Mixing state of nonvolatile aerosol particle fractions and comparison with light absorption in the polluted Beijing region. Journal of Geophysical Research, 2009, 114, .	3.3	43
273	Corrigendum to "Introduction: European Integrated Project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales" published in Atmos. Chem. Phys., 9, 2825â€“2841, 2009. Atmospheric Chemistry and Physics, 2009, 9, 3443-3444.	1.9	2
274	Temperature and humidity dependence of secondary organic aerosol yield from the ozonolysis of Î²-pinene. Atmospheric Chemistry and Physics, 2009, 9, 3583-3599.	1.9	57
275	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
276	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
277	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
278	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
279	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
280	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
281	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
282	Temporal and Spatial Variability of Clouds and Related Aerosols. , 2009, , 127-148.		2
283	Interactive Open Access Peer Review: The Atmospheric Chemistry and Physics Model. Against the Grain, 2009, 21, .	0.0	9
284	Analysis of large oxygenated and nitrated polycyclic aromatic hydrocarbons formed under simulated diesel engine exhaust conditions (by compound fingerprints with SPE/LC-API-MS). Analytical and Bioanalytical Chemistry, 2008, 391, 2599-2608.	1.9	15
285	Aerosol size distributions measured in urban, rural and high-alpine airÂwith an electrical low pressure impactor (ELPI). Atmospheric Environment, 2008, 42, 8502-8512.	1.9	33
286	Simulation of atmospheric mercury depletion events (AMDEs) during polar springtime using the MECCA box model. Atmospheric Chemistry and Physics, 2008, 8, 7165-7180.	1.9	42
287	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
288	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

#	Article	IF	Citations
289	Rural continental aerosol properties and processes observed during the Hohenpeissenberg Aerosol Characterization Experiment (HAZE2002). Atmospheric Chemistry and Physics, 2008, 8, 603-623.	1.9	49
290	Microbiology and atmospheric processes: chemical interactions of primary biological aerosols. Biogeosciences, 2008, 5, 1073-1084.	1.3	140
291	Interactive open access publishing and collaborative peer review for improved scientific communication and quality assurance. Information Services and Use, 2008, 28, 105-107.	0.1	19
292	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
293	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
294	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
295	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
296	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
297	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
298	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
299	Combined particle emission reduction and heat recovery from combustion exhaustâ€”A novel approach for small wood-fired appliances. Biomass and Bioenergy, 2007, 31, 512-521.	2.9	38
300	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
301	Nitration Enhances the Allergenic Potential of Proteins. International Archives of Allergy and Immunology, 2006, 141, 265-275.	0.9	114
302	Soot Particle Deposition Efficiency of Diesel PM-Catalyst Structures - The Influence of Structure Geometry and Transient Temperature Inhomogeneities. , 2006, , .		0
303	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
304	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
305	Raman microspectroscopy of soot and related carbonaceous materials: Spectral analysis and structural information. Carbon, 2005, 43, 1731-1742.	5.4	3,468
306	Protein Nitration by Polluted Air. Environmental Science & Technology, 2005, 39, 1673-1678.	4.6	183

#	Article	IF	Citations
307	Atmospheric Aerosols: Composition, Transformation, Climate and Health Effects. Angewandte Chemie - International Edition, 2005, 44, 7520-7540.	7.2	1,835
308	CONTINUOUS SOOT PARTICLE DEPOSITION AND OXIDATION IN NOVEL PARTICLE TRAPPING OXIDATION CATALYSTS. Journal of Aerosol Science, 2004, 35, S1185-S1186.	1.8	0
309	Interactive journal concept for improved scientific publishing and quality assurance. Learned Publishing, 2004, 17, 105-113.	0.8	60
310	Advances in the Development of Filterless Soot Deposition Systems for the Continuous Removal of Diesel Particulate Matter. Topics in Catalysis, 2004, 30/31, 247-250.	1.3	21
311	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
312	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
313	Comparison of nitrotyrosine antibodies and development of immunoassays for the detection of nitrated proteins. Analyst, The, 2004, 129, 589-596.	1.7	26
314	Generation, characterisation and oxidation of ultrafine hexabenzocoronene particles. Journal of Aerosol Science, 2004, 35, 173-202.	1.8	2
315	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
316	Sensitivities in global scale modeling of isoprene. Atmospheric Chemistry and Physics, 2004, 4, 1-17.	1.9	190
317	Miniature Pipe Bundle Heat Exchanger for Thermophoretic Deposition of Ultrafine Soot Aerosol Particles at High Flow Velocities. Aerosol Science and Technology, 2004, 38, 456-466.	1.5	34
318	Liquid- and Gas-Phase Nitration of Bovine Serum Albumin Studied by LCâ^'MS and LCâ^'MS/MS Using Monolithic Columns. Journal of Proteome Research, 2003, 2, 534-542.	1.8	37
319	Aerosol particle analysis: challenges and progress. Analytical and Bioanalytical Chemistry, 2003, 375, 30-32.	1.9	92
320	Flow Tube with Mobile Sampling Orifice: Compact Reaction System for Toxic and Corrosive Gases and Aerosols. Chemical Engineering and Technology, 2003, 26, 1051-1054.	0.9	0
321	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
322	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
323	Carbon mass determinations during the AIDA soot aerosol campaign 1999. Journal of Aerosol Science, 2003, 34, 1399-1420.	1.8	42
324	The diesel exhaust component pyrene induces expression of IL-8 but not of eotaxin. International Immunopharmacology, 2003, 3, 1371-1379.	1.7	35

#	Article	IF	Citations
325	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
326	Enzyme immunoassays for the investigation of protein nitration by air pollutants. Analyst, The, 2003, 128, 824-831.	1.7	56
327	Formation and Decomposition of Hazardous Chemical Components Contained in Atmospheric Aerosol Particles. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2002, 15, 203-212.	1.2	53
328	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
329	Phenyl-Modified Reversed-Phase Liquid Chromatography Coupled to Atmospheric Pressure Chemical Ionization Mass Spectrometry:Â A Universal Method for the Analysis of Partially Oxidized Aromatic Hydrocarbons. Analytical Chemistry, 2001, 73, 1634-1645.	3.2	55
330	Title is missing!. Journal of Atmospheric Chemistry, 2001, 38, 133-166.	1.4	145
331	Title is missing!. Journal of Atmospheric Chemistry, 2001, 38, 167-185.	1.4	111
332	Title is missing!. Journal of Atmospheric Chemistry, 2001, 38, 115-132.	1.4	53
333	The influence of the tropical rainforest on atmospheric CO and CO2 as measured by aircraft over Surinam, South America. Chemosphere, 2001, 3, 157-170.	1.2	14
334	HYGROSCOPIC GROWTH OF AEROSOL PARTICLES WITH COMPLEX CHEMICAL COMPOSITION. Journal of Aerosol Science, 2001, 32, 293-294.	1.8	0
335	Acetone and PAN in the upper troposphere: impact on ozone production from aircraft emissions. Atmospheric Environment, 2000, 34, 3931-3938.	1.9	28
336	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
337	Title is missing!. Journal of Atmospheric Chemistry, 2000, 37, 29-52.	1.4	204
338	Analysis of particle-bound semivolatile aromatic compounds in synthetic and real samples. Journal of Aerosol Science, 2000, 31, 350-351.	1.8	1
339	Microstructural rearrangement of sodium chloride condensation aerosol particles on interaction with water vapor. Journal of Aerosol Science, 2000, 31, 673-685.	1.8	80
340	On the background photochemistry of tropospheric ozone. Tellus, Series A: Dynamic Meteorology and Oceanography, 1999, 51, 123-146.	0.8	74
341	On the background photochemistry of tropospheric ozone. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 123-146.	0.8	36
342	In-source fragmentation of partially oxidized mono- and polycyclic aromatic hydrocarbons in atmospheric pressure chemical ionization mass spectrometry coupled to liquid chromatography. , 1999, 13, 2456-2468.		33

#	Article	IF	Citations
343	Arctic Ozone Loss Due to Denitrification. Science, 1999, 283, 2064-2069.	6.0	214
344	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
345	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
346	Synthesis and Spectroscopy of Halogenated Cyclopentasilanes. Organometallics, 1996, 15, 3238-3240.	1.1	5
347	Limitations of enzymatic acylation using oxime esters: Cosubstrate inhibition and the reversibility of the reaction. Biotechnology Letters, 1991, 13, 653-656.	1.1	18
348	Synthesis, Reactivity, and Spectroscopy of Phenylated Cyclotetrasilanes and Cyclopentasilanes. , 0, , 113-119.		0
349	New Strategies for Soot Emission Reduction of HD Vehicles. , 0, , .		4
350	CHASER: An Innovative Satellite Mission Concept to Measure the Effects of Aerosols on Clouds and Climate. Bulletin of the American Meteorological Society, 0, , 130117123745009.	1.7	3