Urs Baltensperger

List of Publications by Year
in descending order

217 papers	21,726 citations	16451 64 h-index	11607 135 g-index
225 all docs	225 docs citations	225 times ranked	11895 citing authors

#	Article	IF	Citations
1	Source identification and characterization of organic nitrogen in atmospheric aerosols at a suburban site in China. Science of the Total Environment, 2022, 818, 151800.	8.0	3
2	Modelling the gasâ€“particle partitioning and water uptake of isoprene-derived secondary organic aerosol at high and low relative humidity. Atmospheric Chemistry and Physics, 2022, 22, 215-244.	4.9	8
3	Survival of newly formed particles in haze conditions. Environmental Science Atmospheres, 2022, 2, 491-499.	2.4	8
4	Equal abundance of summertime natural and wintertime anthropogenic Arctic organic aerosols. Nature Geoscience, 2022, 15, 196-202.	12.9	31
5	Synergistic HNO3â€“H2SO4â€“NH3 upper tropospheric particle formation. Nature, 2022, 605, 483-489.	27.8	26
6	High-frequency gaseous and particulate chemical characterization using extractive electrospray ionization mass spectrometry (Dual-Phase-EESI-TOF). Atmospheric Measurement Techniques, 2022, 15, 3747-3760.	3.1	7
7	Highly time-resolved chemical speciation and source apportionment of organic aerosol components in Delhi, India, using extractive electrospray ionization mass spectrometry. Atmospheric Chemistry and Physics, 2022, 22, 7739-7761.	4.9	11
8	Determination of the collision rate coefficient between charged iodic acid clusters and iodic acid using the appearance time method. Aerosol Science and Technology, 2021, 55, 231-242.	3.1	18
9	Molecular characterization of ultrafine particles using extractive electrospray time-of-flight mass spectrometry. Environmental Science Atmospheres, 2021, 1, 434-448.	2.4	10
10	Characteristics of wintertime VOCs in urban Beijing: Composition and source apportionment. Atmospheric Environment: X, 2021, 9, 100100.	1.4	9
11	Role of iodine oxoacids in atmospheric aerosol nucleation. Science, 2021, 371, 589-595.	12.6	94
12	Elucidating local pollution and site representativeness at the Jungfraujoch, Switzerland through parallel aerosol measurements at an adjacent mountain ridge. Environmental Research Communications, 2021, 3, 021001.	2.3	6
13	A new method for long-term source apportionment with time-dependent factor profiles and uncertainty assessment using SoFi Pro: application to 1 year of organic aerosol data. Atmospheric Measurement Techniques, 2021, 14, 923-943.	3.1	50
14	Influence of biomass burning vapor wall loss correction on modeling organic aerosols in Europe by CAMx v6.50. Geoscientific Model Development, 2021, 14, 1681-1697.	3.6	5
15	Large contribution to secondary organic aerosol from isoprene cloud chemistry. Science Advances, 2021, 7, .	10.3	24
16	Brown Carbon in Primary and Aged Coal Combustion Emission. Environmental Science & Technology, 2021, 55, 5701-5710.	10.0	31
17	Detection of trace metals in biogas using extractive electrospray ionization high-resolution mass spectrometry. Renewable Energy, 2021, 169, 780-787.	8.9	7
18	Photodegradation of Î±-Pinene Secondary Organic Aerosol Dominated by Moderately Oxidized Molecules. Environmental Science & Technology, 2021, 55, 6936-6943.	10.0	11

#	Article	IF	Citations
19	Characteristics and sources of hourly elements in PM10 and PM2.5 during wintertime in Beijing. Environmental Pollution, 2021, 278, 116865.	7.5	38
20	Quantification of solid fuel combustion and aqueous chemistry contributions to secondary organic aerosol during wintertime haze events in Beijing. Atmospheric Chemistry and Physics, 2021, 21, 9859-9886.	4.9	20
21	Source-specific light absorption by carbonaceous components in the complex aerosol matrix from yearly filter-based measurements. Atmospheric Chemistry and Physics, 2021, 21, 12809-12833.	4.9	15
22	Effects of aerosol size and coating thickness on the molecular detection using extractive electrospray ionization. Atmospheric Measurement Techniques, 2021, 14, 5913-5923.	3.1	7
23	A global study of hygroscopicity-driven light-scattering enhancement in the context of other in situ aerosol optical properties. Atmospheric Chemistry and Physics, 2021, 21, 13031-13050.	4.9	7
24	The driving factors of new particle formation and growth in the polluted boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 14275-14291.	4.9	38
25	Structures and reactivity of peroxy radicals and dimeric products revealed by online tandem mass spectrometry. Nature Communications, 2021, 12, 300.	12.8	28
26	Variability in the mass absorption cross section of black carbon (BC) aerosols is driven by BC internal mixing state at a central European background site (Melpitz, Germany) in winter. Atmospheric Chemistry and Physics, 2021, 21, 635-655.	4.9	20
27	Highly time-resolved measurements of element concentrations in PM₁₀ and PM_{2.5}: comparison of Delhi, Beijing, London, and Krakow. Atmospheric Chemistry and Physics, 2021, 21, 717-730.	4.9	19
28	Comparison of co-located refractory black carbon (rBC) and elemental carbon (EC) mass concentration measurements during field campaigns at several European sites. Atmospheric Measurement Techniques, 2021, 14, 1379-1403.	3.1	19
29	Lowâ€Volatility Vapors and New Particle Formation Over the Southern Ocean During the Antarctic Circumnavigation Expedition. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035126.	3.3	14
30	Photolytically induced changes in composition and volatility of biogenic secondary organic aerosol from nitrate radical oxidation during night-to-day transition. Atmospheric Chemistry and Physics, 2021, 21, 14907-14925.	4.9	14
31	Time-dependent source apportionment of submicron organic aerosol for a rural site in an alpine valley using a rolling positive matrix factorisation (PMF) window. Atmospheric Chemistry and Physics, 2021, 21, 15081-15101.	4.9	22
32	Characterization of non-refractory (NR) PM₁ and source apportionment of organic aerosol in KrakÃ³w, Poland. Atmospheric Chemistry and Physics, 2021, 21, 14893-14906.	4.9	21
33	Constraining the response factors of an extractive electrospray ionization mass spectrometer for near-molecular aerosol speciation. Atmospheric Measurement Techniques, 2021, 14, 6955-6972.	3.1	10
34	Seasonality of the particle number concentration and size distribution: a global analysis retrieved from the network of Global Atmosphere Watch (GAW) near-surface observatories. Atmospheric Chemistry and Physics, 2021, 21, 17185-17223.	4.9	31
35	Chemical composition of nanoparticles from <i>Î±</i>-pinene nucleation and the influence of isoprene and relative humidity at low temperature. Atmospheric Chemistry and Physics, 2021, 21, 17099-17114.	4.9	12
36	Real-Time Detection of Aerosol Metals Using Online Extractive Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2020, 92, 1316-1325.	6.5	20

#	Article	IF	Citations
37	Source apportionment of fine particulate matter in a Middle Eastern Metropolis, Tehran-Iran, using PMF with organic and inorganic markers. Science of the Total Environment, 2020, 705, 135330.	8.0	30
38	Black Carbon Aerosols in the Lower Free Troposphere are Heavily Coated in Summer but Largely Uncoated in Winter at Jungfraujoch in the Swiss Alps. Geophysical Research Letters, 2020, 47, e2020GL088011.	4.0	9
39	Chemical characterization of PM2.5 and source apportionment of organic aerosol in New Delhi, India. Science of the Total Environment, 2020, 745, 140924.	8.0	60
40	Sources of particulate-matter air pollution and its oxidative potential in Europe. Nature, 2020, 587, 414-419.	27.8	352
41	Frequent new particle formation over the high Arctic pack ice by enhanced iodine emissions. Nature Communications, 2020, 11, 4924.	12.8	96
42	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. Nature, 2020, 581, 184-189.	27.8	169
43	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. Environmental Science & Technology, 2020, 54, 7911-7921.	10.0	66
44	Online Aerosol Chemical Characterization by Extractive Electrospray Ionizationâ€“Ultrahigh-Resolution Mass Spectrometry (EESI-Orbitrap). Environmental Science & Technology, 2020, 54, 3871-3880.	10.0	25
45	Source apportionment of highly time-resolved elements during a firework episode from a rural freeway site in Switzerland. Atmospheric Chemistry and Physics, 2020, 20, 1657-1674.	4.9	37
46	Changes in ozone and PM2.5 in Europe during the period of 1990â€“2030: Role of reductions in land and ship emissions. Science of the Total Environment, 2020, 741, 140467.	8.0	20
47	Enhanced growth rate of atmospheric particles from sulfuric acid. Atmospheric Chemistry and Physics, 2020, 20, 7359-7372.	4.9	58
48	Real-time measurement and source apportionment of elements in Delhi's atmosphere. Science of the Total Environment, 2020, 742, 140332.	8.0	78
49	Comparing the lung cancer burden of ambient particulate matter using scenarios of air quality standards versus acceptable risk levels. International Journal of Public Health, 2020, 65, 139-148.	2.3	8
50	Automated alternating sampling of PM10 and PM2.5 with an online XRF spectrometer. Atmospheric Environment: X, 2020, 5, 100065.	1.4	11
51	Oxidative stress-induced inflammation in susceptible airways by anthropogenic aerosol. PLoS ONE, 2020, 15, e0233425.	2.5	19
52	A global modelâ€“measurement evaluation of particle light scattering coefficients at elevated relative humidity. Atmospheric Chemistry and Physics, 2020, 20, 10231-10258.	4.9	19
53	Molecular understanding of the suppression of new-particle formation by isoprene. Atmospheric Chemistry and Physics, 2020, 20, 11809-11821.	4.9	49
54	Role of ammonia in European air quality with changing land and ship emissions between 1990 and 2030. Atmospheric Chemistry and Physics, 2020, 20, 15665-15680.	4.9	15

#	Article	IF	Citations
55	Overview: Integrative and Comprehensive Understanding on Polar Environments (iCUPE) â€“ concept and initial results. Atmospheric Chemistry and Physics, 2020, 20, 8551-8592.	4.9	26
56	Molecular understanding of new-particle formation from <i>Î±</i>-pinene between â˜’50 and +25â€‰Â°C. Atmospheric Chemistry and Physics, 2020, 20, 9183-9207.	4.9	68
57	Source characterization of volatile organic compounds measured by proton-transfer-reaction time-of-flight mass spectrometers in Delhi, India. Atmospheric Chemistry and Physics, 2020, 20, 9753-9770.	4.9	42
58	A global analysis of climate-relevant aerosol properties retrieved from the network of Global Atmosphere Watch (GAW) near-surface observatories. Atmospheric Measurement Techniques, 2020, 13, 4353-4392.	3.1	65
59	Improved chloride quantification in quadrupole aerosol chemical speciation monitors (Q-ACSMs). Atmospheric Measurement Techniques, 2020, 13, 5293-5301.	3.1	9
60	A 1-year characterization of organic aerosol composition and sources using an extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF). Atmospheric Chemistry and Physics, 2020, 20, 7875-7893.	4.9	20
61	Development of a versatile source apportionment analysis based on positive matrix factorization: a case study of the seasonal variation of organic aerosol sources in Estonia. Atmospheric Chemistry and Physics, 2019, 19, 7279-7295.	4.9	19
62	Overview of the Antarctic Circumnavigation Expedition: Study of Preindustrial-like Aerosols and Their Climate Effects (ACE-SPACE). Bulletin of the American Meteorological Society, 2019, 100, 2260-2283.	3.3	71
63	An extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF) for online measurement of atmospheric aerosol particles. Atmospheric Measurement Techniques, 2019, 12, 4867-4886.	3.1	91
64	A Comprehensive Nontarget Analysis for the Molecular Reconstruction of Organic Aerosol Composition from Glacier Ice Cores. Environmental Science & Technology, 2019, 53, 12565-12575.	10.0	10
65	Quantification of the impact of cooking processes on indoor concentrations of volatile organic species and primary and secondary organic aerosols. Indoor Air, 2019, 29, 926-942.	4.3	28
66	A global view on the effect of water uptake on aerosol particle light scattering. Scientific Data, 2019, 6, 157.	5.3	28
67	Molecular Composition and Volatility of Nucleated Particles from Î±-Pinene Oxidation between â˜’50 Â°C and +25 Â°C. Environmental Science & Technology, 2019, 53, 12357-12365.	10.0	32
68	Organic aerosol source apportionment in Zurich using an extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF-MS) â€“ PartÂ2: Biomass burning influences in winter. Atmospheric Chemistry and Physics, 2019, 19, 8037-8062.	4.9	57
69	Cloud droplet activation properties and scavenged fraction of black carbon in liquid-phase clouds at the high-alpine research station Jungfraujoch (3580â€‰mâ€‰a.s.l.). Atmospheric Chemistry and Physics, 2019, 19, 3833-3855.	4.9	25
70	Impact of anthropogenic and biogenic sources on the seasonal variation in the molecular composition of urban organic aerosols: a field and laboratory study using ultra-high-resolution mass spectrometry. Atmospheric Chemistry and Physics, 2019, 19, 5973-5991.	4.9	40
71	Grand challenges for aerosol science and technology. Aerosol Science and Technology, 2019, 53, 731-734.	3.1	16
72	Effects of two different biogenic emission models on modelled ozone and aerosol concentrations in Europe. Atmospheric Chemistry and Physics, 2019, 19, 3747-3768.	4.9	36

#	Article	IF	Citations
73	Droplet activation behaviour of atmospheric black carbon particles in fog as a function of their size and mixing state. Atmospheric Chemistry and Physics, 2019, 19, 2183-2207.	4.9	17
74	Formation of Highly Oxygenated Organic Molecules from Î±-Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. ACS Earth and Space Chemistry, 2019, 3, 873-883.	2.7	52
75	Organic aerosol source apportionment in Zurich using an extractive electrospray ionization time-of-flight mass spectrometerÂ(EESI-TOF-MS) â€“ PartÂ1: Biogenic influences and dayâ€“night chemistry in summer. Atmospheric Chemistry and Physics, 2019, 19, 14825-14848.	4.9	38
76	Predominance of secondary organic aerosol to particle-bound reactive oxygen species activity in fine ambient aerosol. Atmospheric Chemistry and Physics, 2019, 19, 14703-14720.	4.9	31
77	Sources of organic aerosols in Europe: a modeling study using CAMx with modified volatility basis set scheme. Atmospheric Chemistry and Physics, 2019, 19, 15247-15270.	4.9	35
78	Secondary organic aerosol formation from smoldering and flaming combustion of biomass: a box model parametrization based on volatility basis set. Atmospheric Chemistry and Physics, 2019, 19, 11461-11484.	4.9	24
79	Effect of Stove Technology and Combustion Conditions on Gas and Particulate Emissions from Residential Biomass Combustion. Environmental Science & Technology, 2019, 53, 2209-2219.	10.0	35
80	Effect of Large-scale Biomass Burning on Aerosol Optical Properties at the GAW Regional Station Pha Din, Vietnam. Aerosol and Air Quality Research, 2019, 19, 1172-1187.	2.1	16
81	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.	4.9	108
82	Characterization of Gas-Phase Organics Using Proton Transfer Reaction Time-of-Flight Mass Spectrometry: Residential Coal Combustion. Environmental Science & Technology, 2018, 52, 2612-2617.	10.0	30
83	Formation of highly oxygenated organic molecules from aromatic compounds. Atmospheric Chemistry and Physics, 2018, 18, 1909-1921.	4.9	133
84	Insights into organic-aerosol sources via a novel laser-desorption/ionization mass spectrometry technique applied to one year of PM₁₀ samples from nine sites in central Europe. Atmospheric Chemistry and Physics, 2018, 18, 2155-2174.	4.9	7
85	Low modeled ozone production suggests underestimation of precursor emissions (especially) Tj ETQq1 1 0.784314 rgBT /Overlock 1 Chemistry and Physics, 2018, 18, 2175-2198.	4.9	27
86	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. Atmospheric Chemistry and Physics, 2018, 18, 65-79.	4.9	56
87	Particle-bound reactive oxygen species (PB-ROS) emissions and formation pathways in residential wood smoke under different combustion and aging conditions. Atmospheric Chemistry and Physics, 2018, 18, 6985-7000.	4.9	31
88	Identification of secondary aerosol precursors emitted by an aircraft turbofan. Atmospheric Chemistry and Physics, 2018, 18, 7379-7391.	4.9	14
89	AÂEuropean aerosol phenomenology â€“ 6: scattering properties of atmospheric aerosol particles from 28ÂACTRIS sites. Atmospheric Chemistry and Physics, 2018, 18, 7877-7911.	4.9	76
90	Production of particulate brown carbon during atmospheric aging of residential wood-burning emissions. Atmospheric Chemistry and Physics, 2018, 18, 17843-17861.	4.9	77

#	Article	IF	Citations
91	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	10.3	164
92	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic. Atmospheric Chemistry and Physics, 2018, 18, 14037-14057.	4.9	65
93	Mitigation of Secondary Organic Aerosol Formation from Log Wood Burning Emissions by Catalytic Removal of Aromatic Hydrocarbons. Environmental Science & Technology, 2018, 52, 13381-13390.	10.0	10
94	Advanced source apportionment of carbonaceous aerosols by coupling offline AMS and radiocarbon size-segregated measurements over a nearly 2-year period. Atmospheric Chemistry and Physics, 2018, 18, 6187-6206.	4.9	54
95	Solar â€œbrighteningâ€•impact on summer surface ozone between 1990 and 2010 in Europe â€“ a model sensitivity study of the influence of the aerosolâ€“radiation interactions. Atmospheric Chemistry and Physics, 2018, 18, 9741-9765.	4.9	6
96	Evolution of the chemical fingerprint of biomass burning organic aerosol during aging. Atmospheric Chemistry and Physics, 2018, 18, 7607-7624.	4.9	67
97	Gas-phase composition and secondary organic aerosol formation from standard and particle filter-retrofitted gasoline direct injection vehicles investigated in a batch and flow reactor. Atmospheric Chemistry and Physics, 2018, 18, 9929-9954.	4.9	57
98	Source Apportionment of Brown Carbon Absorption by Coupling Ultravioletâ€“Visible Spectroscopy with Aerosol Mass Spectrometry. Environmental Science and Technology Letters, 2018, 5, 302-308.	8.7	60
99	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9122-9127.	7.1	118
100	Development, characterization and first deployment of an improved online reactive oxygen species analyzer. Atmospheric Measurement Techniques, 2018, 11, 65-80.	3.1	25
101	Wood combustion particles induce adverse effects to normal and diseased airway epithelia. Environmental Sciences: Processes and Impacts, 2017, 19, 538-548.	3.5	14
102	Collocated observations of cloud condensation nuclei, particle size distributions, and chemical composition. Scientific Data, 2017, 4, 170003.	5.3	44
103	Characterization of Gas-Phase Organics Using Proton Transfer Reaction Time-of-Flight Mass Spectrometry: Aircraft Turbine Engines. Environmental Science & Technology, 2017, 51, 3621-3629.	10.0	6
104	Causes and importance of new particle formation in the presentâ€day and preindustrial atmospheres. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8739-8760.	3.3	198
105	Long-term chemical analysis and organic aerosol source apportionment at nine sites in central Europe: source identification and uncertainty assessment. Atmospheric Chemistry and Physics, 2017, 17, 13265-13282.	4.9	78
106	The role of ions in new particle formation in the CLOUD chamber. Atmospheric Chemistry and Physics, 2017, 17, 15181-15197.	4.9	50
107	Chemical characterization of atmospheric ions at the high altitude research station Jungfraujoch (Switzerland). Atmospheric Chemistry and Physics, 2017, 17, 2613-2629.	4.9	24
108	Characterization of gas-phase organics using proton transfer reaction time-of-flight mass spectrometry: fresh and aged residential wood combustion emissions. Atmospheric Chemistry and Physics, 2017, 17, 705-720.	4.9	79

#	Article	IF	Citations
109	Secondary inorganic aerosols in Europe: sources and the significant influence of biogenic VOC emissions, especially on ammonium nitrate. Atmospheric Chemistry and Physics, 2017, 17, 7757-7773.	4.9	26
110	Argon offline-AMS source apportionment of organic aerosol over yearly cycles for an urban, rural, and marine site in northern Europe. Atmospheric Chemistry and Physics, 2017, 17, 117-141.	4.9	59
111	Evaluation of the absorption Ã...ngstrÃ¶m exponents for traffic and wood burning in the Aethalometer-based source apportionment using radiocarbon measurements of ambient aerosol. Atmospheric Chemistry and Physics, 2017, 17, 4229-4249.	4.9	272
112	Assessing the influence of NO_{<i>x</i>} concentrations and relative humidity on secondary organic aerosol yields from <i>Î±</i>-pinene photo-oxidation through smog chamber experiments and modelling calculations. Atmospheric Chemistry and Physics, 2017, 17, 5035-5061.	4.9	37
113	Modelling winter organic aerosol at the European scale with CAMx: evaluation and source apportionment with a VBS parameterization based on novel wood burning smog chamber experiments. Atmospheric Chemistry and Physics, 2017, 17, 7653-7669.	4.9	58
114	Organic aerosol source apportionment by offline-AMS over a full year in Marseille. Atmospheric Chemistry and Physics, 2017, 17, 8247-8268.	4.9	75
115	Evaporation of sulfate aerosols at low relative humidity. Atmospheric Chemistry and Physics, 2017, 17, 8923-8938.	4.9	11
116	Elemental composition of ambient aerosols measured with high temporal resolution using an online XRF spectrometer. Atmospheric Measurement Techniques, 2017, 10, 2061-2076.	3.1	79
117	Constraining a hybrid volatility basis-set model for aging of wood-burning emissions using smog chamber experiments: a box-model study based on the VBS scheme of the CAMx model (v5.40). Geoscientific Model Development, 2017, 10, 2303-2320.	3.6	28
118	A Review of More than 20 Years of Aerosol Observation at the High Altitude Research Station Jungfraujoch, Switzerland (3580 m asl). Aerosol and Air Quality Research, 2016, 16, 764-788.	2.1	55
119	Spiers Memorial Lecture : Introductory lecture: chemistry in the urban atmosphere. Faraday Discussions, 2016, 189, 9-29.	3.2	6
120	Chemical complexity of the urban atmosphere and its consequences: general discussion. Faraday Discussions, 2016, 189, 137-167.	3.2	1
121	Numerical modelling strategies for the urban atmosphere: general discussion. Faraday Discussions, 2016, 189, 635-660.	3.2	0
122	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,377.	3.3	71
123	Labile Peroxides in Secondary Organic Aerosol. CheM, 2016, 1, 603-616.	11.7	132
124	Indoor terpene emissions from cooking with herbs and pepper and their secondary organic aerosol production potential. Scientific Reports, 2016, 6, 36623.	3.3	51
125	The role of low-volatility organic compounds in initial particle growth in the atmosphere. Nature, 2016, 533, 527-531.	27.8	540
126	Ion-induced nucleation of pure biogenic particles. Nature, 2016, 533, 521-526.	27.8	528

#	Article	IF	Citations
127	Dissociative Ionization Mechanism and Appearance Energies in Adipic Acid Revealed by Imaging Photoelectron Photoion Coincidence, Selective Deuteration, and Calculations. Journal of Physical Chemistry A, 2016, 120, 3397-3405.	2.5	22
128	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12053-12058.	7.1	107
129	Inorganic Salt Interference on CO₂⁺ in Aerodyne AMS and ACSM Organic Aerosol Composition Studies. Environmental Science & Technology, 2016, 50, 10494-10503.	10.0	88
130	Urban case studies: general discussion. Faraday Discussions, 2016, 189, 473-514.	3.2	1
131	Identification of significant precursor gases of secondary organic aerosols from residential wood combustion. Scientific Reports, 2016, 6, 27881.	3.3	141
132	Global atmospheric particle formation from CERN CLOUD measurements. Science, 2016, 354, 1119-1124.	12.6	289
133	Contribution of new particle formation to the total aerosol concentration at the highâ€altitude site Jungfraujoch (3580ÂmÂasl, Switzerland). Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,692.	3.3	21
134	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	12.8	116
135	Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of <i>Î±</i>-pinene. Atmospheric Chemistry and Physics, 2016, 16, 6495-6509.	4.9	71
136	Urban increments of gaseous and aerosol pollutants and their sources using mobile aerosol mass spectrometry measurements. Atmospheric Chemistry and Physics, 2016, 16, 7117-7134.	4.9	31
137	Vertical profiling of aerosol hygroscopic properties in the planetary boundary layer during the PEGASOS campaigns. Atmospheric Chemistry and Physics, 2016, 16, 7295-7315.	4.9	17
138	Evaluation of European air quality modelled by CAMx including the volatility basis set scheme. Atmospheric Chemistry and Physics, 2016, 16, 10313-10332.	4.9	47
139	Contribution of ship emissions to the concentration and deposition of air pollutants in Europe. Atmospheric Chemistry and Physics, 2016, 16, 1895-1906.	4.9	112
140	Volatility of organic aerosol and its components in the megacity of Paris. Atmospheric Chemistry and Physics, 2016, 16, 2013-2023.	4.9	36
141	New insights into PM_{2.5} chemical composition and sources in two major cities in China during extreme haze events using aerosol mass spectrometry. Atmospheric Chemistry and Physics, 2016, 16, 3207-3225.	4.9	300
142	Chemical and physical influences on aerosol activation in liquid clouds: a study based on observations from the Jungfraujoch, Switzerland. Atmospheric Chemistry and Physics, 2016, 16, 4043-4061.	4.9	14
143	Observation of viscosity transition in <i>Î±</i>-pinene secondary organic aerosol. Atmospheric Chemistry and Physics, 2016, 16, 4423-4438.	4.9	55
144	Studying the vertical aerosol extinction coefficient by comparing in situ airborne data and elastic backscatter lidar. Atmospheric Chemistry and Physics, 2016, 16, 4539-4554.	4.9	33

#	Article	IF	Citations
145	Characterization of Gas-Phase Organics Using Proton Transfer Reaction Time-of-Flight Mass Spectrometry: Cooking Emissions. Environmental Science & Technology, 2016, 50, 1243-1250.	10.0	97
146	Size-Resolved Identification, Characterization, and Quantification of Primary Biological Organic Aerosol at a European Rural Site. Environmental Science & Technology, 2016, 50, 3425-3434.	10.0	57
147	Non-linear photochemical pathways in laser-induced atmospheric aerosol formation. Scientific Reports, 2015, 5, 14978.	3.3	17
148	Analysis of longâ€term aerosol size distribution data from Jungfraujoch with emphasis on free tropospheric conditions, cloud influence, and air mass transport. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9459-9480.	3.3	69
149	Toxicity of aged gasoline exhaust particles to normal and diseased airway epithelia. Scientific Reports, 2015, 5, 11801.	3.3	71
150	Fast and precise measurement in the sub-20nm size range using a Scanning Mobility Particle Sizer. Journal of Aerosol Science, 2015, 87, 75-87.	3.8	25
151	Spatial Variation of Aerosol Chemical Composition and Organic Components Identified by Positive Matrix Factorization in the Barcelona Region. Environmental Science & Technology, 2015, 49, 10421-10430.	10.0	24
152	Influence of water uptake on the aerosol particle light scattering coefficients of the Central European aerosol. Tellus, Series B: Chemical and Physical Meteorology, 2014, 66, 22716.	1.6	61
153	Insight into Acidâ€“Base Nucleation Experiments by Comparison of the Chemical Composition of Positive, Negative, and Neutral Clusters. Environmental Science & Technology, 2014, 48, 13675-13684.	10.0	51
154	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. Science, 2014, 344, 717-721.	12.6	456
155	Neutral molecular cluster formation of sulfuric acidâ€“dimethylamine observed in real time under atmospheric conditions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15019-15024.	7.1	208
156	High secondary aerosol contribution to particulate pollution during haze events in China. Nature, 2014, 514, 218-222.	27.8	3,582
157	Diurnal cycle of fossil and nonfossil carbon using radiocarbon analyses during CalNex. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6818-6835.	3.3	82
158	Hygroscopic properties of fresh and aged wood burning particles. Journal of Aerosol Science, 2013, 56, 15-29.	3.8	78
159	Molecular understanding of sulphuric acidâ€“amine particle nucleation in the atmosphere. Nature, 2013, 502, 359-363.	27.8	774
160	How do organic vapors contribute to new-particle formation?. Faraday Discussions, 2013, 165, 91.	3.2	105
161	Effective Henryâ€™s Law Partitioning and the Salting Constant of Glyoxal in Aerosols Containing Sulfate. Environmental Science & Technology, 2013, 47, 4236-4244.	10.0	115
162	Particle nucleation events at the high Alpine station Jungfraujoch. , 2013, , .		0

#	Article	IF	Citations
163	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17223-17228.	7.1	300
164	Similarities in STXM-NEXAFS Spectra of Atmospheric Particles and Secondary Organic Aerosol Generated from Glyoxal, Î±-Pinene, Isoprene, 1,2,4-Trimethylbenzene, and d-Limonene. Aerosol Science and Technology, 2013, 47, 543-555.	3.1	6
165	Identification of marine and continental aerosol sources in Paris using high resolution aerosol mass spectrometry. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1950-1963.	3.3	142
166	Holzfeuerungen: eine bedeutende Quelle von Feinstaub in der Schweiz. Schweizerische Zeitschrift Fur Forstwesen, 2013, 164, 420-427.	0.1	0
167	Aging of biogenic secondary organic aerosol via gas-phase OH radical reactions. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13503-13508.	7.1	251
168	Sensitivity of ozone and aerosols to precursor emissions in Europe. International Journal of Environment and Pollution, 2012, 50, 451.	0.2	19
169	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. Nature, 2011, 476, 429-433.	27.8	1,114
170	Recent Developments in the Mass Spectrometry of Atmospheric Aerosols. European Journal of Mass Spectrometry, 2010, 16, 389-395.	1.0	10
171	Towards On-Line ¹⁴C Analysis of Carbonaceous Aerosol Fractions. Radiocarbon, 2010, 52, 761-768.	1.8	6
172	Evidence for the role of organics in aerosol particle formation under atmospheric conditions. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6646-6651.	7.1	403
173	Aerosols in Clearer Focus. Science, 2010, 329, 1474-1475.	12.6	19
174	Subarctic atmospheric aerosol composition: 3. Measured and modeled properties of cloud condensation nuclei. Journal of Geophysical Research, 2010, 115, .	3.3	78
175	Cellular Responses after Exposure of Lung Cell Cultures to Secondary Organic Aerosol Particles. Environmental Science & Technology, 2010, 44, 1424-1430.	10.0	56
176	The acid effect in the formation of 2-methyltetrols from the photooxidation of isoprene in the presence of NOx. Atmospheric Research, 2010, 98, 183-189.	4.1	37
177	Deposition Uniformity and Particle Size Distribution of Ambient Aerosol Collected with a Rotating Drum Impactor. Aerosol Science and Technology, 2009, 43, 891-901.	3.1	16
178	Determination of the Aerosol Yield of Isoprene in the Presence of an Organic Seed with Carbon Isotope Analysis. Environmental Science & Technology, 2009, 43, 6697-6702.	10.0	30
179	Real-World Emission Factors for Antimony and Other Brake Wear Related Trace Elements: Size-Segregated Values for Light and Heavy Duty Vehicles. Environmental Science & Technology, 2009, 43, 8072-8078.	10.0	129
180	Water uptake of clay and desert dust aerosol particles at sub- and supersaturated water vapor conditions. Physical Chemistry Chemical Physics, 2009, 11, 7804.	2.8	100

#	Article	IF	Citations
181	Influence of gas-to-particle partitioning on the hygroscopic and droplet activation behaviour of Î±-pinene secondary organic aerosol. Physical Chemistry Chemical Physics, 2009, 11, 8091.	2.8	59
182	Influence of particle chemical composition on the phase of cold clouds at a highâ€alpine site in Switzerland. Journal of Geophysical Research, 2009, 114, .	3.3	30
183	Subarctic atmospheric aerosol composition: 2. Hygroscopic growth properties. Journal of Geophysical Research, 2009, 114, .	3.3	34
184	Chemical analysis of atmospheric aerosols. Analytical and Bioanalytical Chemistry, 2008, 390, 277-280.	3.7	23
185	X-ray fluorescence spectrometry for high throughput analysis of atmospheric aerosol samples: The benefits of synchrotron X-rays. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 929-938.	2.9	35
186	Using Aerosol Light Absorption Measurements for the Quantitative Determination of Wood Burning and Traffic Emission Contributions to Particulate Matter. Environmental Science & Technology, 2008, 42, 3316-3323.	10.0	629
187	Secondary aerosols in Switzerland and northern Italy: Modeling and sensitivity studies for summer 2003. Journal of Geophysical Research, 2008, 113, .	3.3	22
188	In situ determination of atmospheric aerosol composition as a function of hygroscopic growth. Journal of Geophysical Research, 2008, 113, .	3.3	28
189	O/C and OM/OC Ratios of Primary, Secondary, and Ambient Organic Aerosols with High-Resolution Time-of-Flight Aerosol Mass Spectrometry. Environmental Science & Technology, 2008, 42, 4478-4485.	10.0	1,524
190	Source Attribution of Submicron Organic Aerosols during Wintertime Inversions by Advanced Factor Analysis of Aerosol Mass Spectra. Environmental Science & Technology, 2008, 42, 214-220.	10.0	286
191	Using Proton Transfer Reaction Mass Spectrometry for Online Analysis of Secondary Organic Aerosols. Environmental Science & Technology, 2008, 42, 7347-7353.	10.0	38
192	Ultrahigh Mass Resolution and Accurate Mass Measurements as a Tool To Characterize Oligomers in Secondary Organic Aerosols. Analytical Chemistry, 2007, 79, 4074-4082.	6.5	168
193	Identification of the Mass Spectral Signature of Organic Aerosols from Wood Burning Emissions. Environmental Science & Technology, 2007, 41, 5770-5777.	10.0	459
194	Aerosol partitioning between the interstitial and the condensed phase in mixedâ€phase clouds. Journal of Geophysical Research, 2007, 112, .	3.3	80
195	Real-Time Measurement of Oligomeric Species in Secondary Organic Aerosol with the Aerosol Time-of-Flight Mass Spectrometer. Analytical Chemistry, 2006, 78, 2130-2137.	6.5	99
196	Online gas and aerosol measurement of water soluble carboxylic acids in Zurich. Journal of Geophysical Research, 2006, 111, .	3.3	54
197	Volatility measurements of photochemically and nebulizer-generated organic aerosol particles. Journal of Aerosol Science, 2006, 37, 1025-1051.	3.8	47
198	Particle emissions from aircraft engines a survey of the European project PartEmis. Meteorologische Zeitschrift, 2005, 14, 465-476.	1.0	38

#	Article	IF	Citations
199	Time Resolved Infrared Spectroscopic Analysis of Aerosol Formed by Photo-Oxidation of 1,3,5-Trimethylbenzene and Î±-Pinene. Aerosol Science and Technology, 2005, 39, 822-830.	3.1	54
200	Secondary Organic Aerosol Formation by Irradiation of 1,3,5-Trimethylbenzeneâ^'NOxâ^'H2O in a New Reaction Chamber for Atmospheric Chemistry and Physics. Environmental Science & Technology, 2005, 39, 2668-2678.	10.0	191
201	Trace Metals in Ambient Air:Â Hourly Size-Segregated Mass Concentrations Determined by Synchrotron-XRF. Environmental Science & Technology, 2005, 39, 5754-5762.	10.0	64
202	Adaptation of Dry Nephelometer Measurements to Ambient Conditions at the Jungfraujoch. Environmental Science & Technology, 2005, 39, 2219-2228.	10.0	54
203	Real-World Emission Factors of Fine and Ultrafine Aerosol Particles for Different Traffic Situations in Switzerland. Environmental Science & Technology, 2005, 39, 8341-8350.	10.0	101
204	Aerosol single particle composition at the Jungfraujoch. Journal of Aerosol Science, 2005, 36, 123-145.	3.8	59
205	Effect of humidity on aerosol light absorption and its implications for extinction and the single scattering albedo illustrated for a site in the lower free troposphere. Journal of Aerosol Science, 2005, 36, 958-972.	3.8	87
206	Separate determination of PM‹SUB align=right›10 emission factors of road traffic for tailpipe emissions and emissions from abrasion and resuspension processes. International Journal of Environment and Pollution, 2004, 22, 312.	0.2	78
207	Significance of Semivolatile Diesel Exhaust Organics for Secondary HONO Formation. Environmental Science & Technology, 2002, 36, 677-682.	10.0	135
208	Heterogeneous Reaction of NO2on Diesel Soot Particles. Environmental Science & Technology, 2001, 35, 2191-2199.	10.0	162
209	Contribution of road traffic to ambient fine particle concentrations (PM‹SUB align=right›10) in Switzerland. International Journal of Vehicle Design, 2001, 27, 56.	0.3	12
210	Study on the Chemical Character of Water Soluble Organic Compounds in Fine Atmospheric Aerosol at the Jungfraujoch. Journal of Atmospheric Chemistry, 2001, 39, 235-259.	3.2	186
211	Characterization of Size-Fractionated Aerosol from the Jungfraujoch (3580 m asl) Using Total Reflection X-Ray Fluorescence (TXRF). International Journal of Environmental Analytical Chemistry, 2000, 76, 1-16.	3.3	17
212	Density and Fractal-like Dimension of Particles from a Laminar Diffusion Flame. Journal of Colloid and Interface Science, 1999, 217, 269-274.	9.4	26
213	High fractal-like dimension of diesel soot agglomerates. Journal of Aerosol Science, 1998, 29, 411-419.	3.8	77
214	Growth and Structural Change of Combustion Aerosols at High Relative Humidity. Environmental Science & Technology, 1995, 29, 2982-2986.	10.0	112
215	Sensitivities of inductively coupled plasma optical emission spectrometry for dry and wet aerosols. Analytical Chemistry, 1992, 64, 672-677.	6.5	25
216	Inversion of aerosol data from the epiphaniometer. Journal of Aerosol Science, 1991, 22, 417-428.	3.8	63

#	Article	IF	Citations
217	Aerosol Chemistry in Remote Locations. , 0, , 217-252.		0