Urs Baltensperger

List of Publications by Year
in descending order

217 papers	21,726 citations	16411 64 h-index	11581 135 g-index
225 all docs	225 docs citations	225 times ranked	11895 citing authors

#	Article	IF	Citations
1	High secondary aerosol contribution to particulate pollution during haze events in China. Nature, 2014, 514, 218-222.	13.7	3,582
2	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.	4.6	1,524
3	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. Nature, 2011, 476, 429-433.	13.7	1,114
4	Molecular understanding of sulphuric acidâ€“amine particle nucleation in the atmosphere. Nature, 2013, 502, 359-363.	13.7	774
5	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.	4.6	629
6	The role of low-volatility organic compounds in initial particle growth in the atmosphere. Nature, 2016, 533, 527-531.	13.7	540
7	Ion-induced nucleation of pure biogenic particles. Nature, 2016, 533, 521-526.	13.7	528
8	Identification of the Mass Spectral Signature of Organic Aerosols from Wood Burning Emissions. Environmental Science & Technology, 2007, 41, 5770-5777.	4.6	459
9	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. Science, 2014, 344, 717-721.	6.0	456
10	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.	3.3	403
11	Sources of particulate-matter air pollution and its oxidative potential in Europe. Nature, 2020, 587, 414-419.	13.7	352
12	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.	3.3	300
13	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.	1.9	300
14	Global atmospheric particle formation from CERN CLOUD measurements. Science, 2016, 354, 1119-1124.	6.0	289
15	Source Attribution of Submicron Organic Aerosols during Wintertime Inversions by Advanced Factor Analysis of Aerosol Mass Spectra. Environmental Science & Technology, 2008, 42, 214-220.	4.6	286
16	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.	1.9	272
17	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.	3.3	251
18	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.	3.3	208

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19	Causes and importance of new particle formation in the presentâ€day and preindustrial atmospheres. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8739-8760.	1.2	198
20	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.	4.6	191
21	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.	1.4	186
22	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. Nature, 2020, 581, 184-189.	13.7	169
23	Ultrahigh Mass Resolution and Accurate Mass Measurements as a Tool To Characterize Oligomers in Secondary Organic Aerosols. Analytical Chemistry, 2007, 79, 4074-4082.	3.2	168
24	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	4.7	164
25	Heterogeneous Reaction of NO2on Diesel Soot Particles. Environmental Science & Technology, 2001, 35, 2191-2199.	4.6	162
26	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.	1.2	142
27	Identification of significant precursor gases of secondary organic aerosols from residential wood combustion. Scientific Reports, 2016, 6, 27881.	1.6	141
28	Significance of Semivolatile Diesel Exhaust Organics for Secondary HONO Formation. Environmental Science & Technology, 2002, 36, 677-682.	4.6	135
29	Formation of highly oxygenated organic molecules from aromatic compounds. Atmospheric Chemistry and Physics, 2018, 18, 1909-1921.	1.9	133
30	Labile Peroxides in Secondary Organic Aerosol. CheM, 2016, 1, 603-616.	5.8	132
31	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.	4.6	129
32	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.	3.3	118
33	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	5.8	116
34	Effective Henryâ€™s Law Partitioning and the Salting Constant of Glyoxal in Aerosols Containing Sulfate. Environmental Science & Technology, 2013, 47, 4236-4244.	4.6	115
35	Growth and Structural Change of Combustion Aerosols at High Relative Humidity. Environmental Science & Technology, 1995, 29, 2982-2986.	4.6	112
36	Contribution of ship emissions to the concentration and deposition of air pollutants in Europe. Atmospheric Chemistry and Physics, 2016, 16, 1895-1906.	1.9	112

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37	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
38	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.	3.3	107
39	How do organic vapors contribute to new-particle formation?. Faraday Discussions, 2013, 165, 91.	1.6	105
40	Real-World Emission Factors of Fine and Ultrafine Aerosol Particles for Different Traffic Situations in Switzerland. Environmental Science & Technology, 2005, 39, 8341-8350.	4.6	101
41	Water uptake of clay and desert dust aerosol particles at sub- and supersaturated water vapor conditions. Physical Chemistry Chemical Physics, 2009, 11, 7804.	1.3	100
42	Real-Time Measurement of Oligomeric Species in Secondary Organic Aerosol with the Aerosol Time-of-Flight Mass Spectrometer. Analytical Chemistry, 2006, 78, 2130-2137.	3.2	99
43	Characterization of Gas-Phase Organics Using Proton Transfer Reaction Time-of-Flight Mass Spectrometry: Cooking Emissions. Environmental Science & Technology, 2016, 50, 1243-1250.	4.6	97
44	Frequent new particle formation over the high Arctic pack ice by enhanced iodine emissions. Nature Communications, 2020, 11, 4924.	5.8	96
45	Role of iodine oxoacids in atmospheric aerosol nucleation. Science, 2021, 371, 589-595.	6.0	94
46	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.	1.2	91
47	Inorganic Salt Interference on CO₂⁺ in Aerodyne AMS and ACSM Organic Aerosol Composition Studies. Environmental Science & Technology, 2016, 50, 10494-10503.	4.6	88
48	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.	1.8	87
49	Diurnal cycle of fossil and nonfossil carbon using radiocarbon analyses during CalNex. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6818-6835.	1.2	82
50	Aerosol partitioning between the interstitial and the condensed phase in mixedâ€phase clouds. Journal of Geophysical Research, 2007, 112, .	3.3	80
51	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.	1.9	79
52	Elemental composition of ambient aerosols measured with high temporal resolution using an online XRF spectrometer. Atmospheric Measurement Techniques, 2017, 10, 2061-2076.	1.2	79
53	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
54	Subarctic atmospheric aerosol composition: 3. Measured and modeled properties of cloud condensation nuclei. Journal of Geophysical Research, 2010, 115, .	3.3	78

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55	Hygroscopic properties of fresh and aged wood burning particles. Journal of Aerosol Science, 2013, 56, 15-29.	1.8	78
56	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.	1.9	78
57	Real-time measurement and source apportionment of elements in Delhi's atmosphere. Science of the Total Environment, 2020, 742, 140332.	3.9	78
58	High fractal-like dimension of diesel soot agglomerates. Journal of Aerosol Science, 1998, 29, 411-419.	1.8	77
59	Production of particulate brown carbon during atmospheric aging of residential wood-burning emissions. Atmospheric Chemistry and Physics, 2018, 18, 17843-17861.	1.9	77
60	AÂEuropean aerosol phenomenology â€“ 6: scattering properties of atmospheric aerosol particles from 28ÂACTRIS sites. Atmospheric Chemistry and Physics, 2018, 18, 7877-7911.	1.9	76
61	Organic aerosol source apportionment by offline-AMS over a full year in Marseille. Atmospheric Chemistry and Physics, 2017, 17, 8247-8268.	1.9	75
62	Toxicity of aged gasoline exhaust particles to normal and diseased airway epithelia. Scientific Reports, 2015, 5, 11801.	1.6	71
63	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.	1.2	71
64	Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of <i>Î±</i>-pinene. Atmospheric Chemistry and Physics, 2016, 16, 6495-6509.	1.9	71
65	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.	1.7	71
66	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.	1.2	69
67	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.	1.9	68
68	Evolution of the chemical fingerprint of biomass burning organic aerosol during aging. Atmospheric Chemistry and Physics, 2018, 18, 7607-7624.	1.9	67
69	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. Environmental Science & Technology, 2020, 54, 7911-7921.	4.6	66
70	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic. Atmospheric Chemistry and Physics, 2018, 18, 14037-14057.	1.9	65
71	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.	1.2	65
72	Trace Metals in Ambient Air:Â Hourly Size-Segregated Mass Concentrations Determined by Synchrotron-XRF. Environmental Science & Technology, 2005, 39, 5754-5762.	4.6	64

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73	Inversion of aerosol data from the epiphaniometer. Journal of Aerosol Science, 1991, 22, 417-428.	1.8	63
74	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.	0.8	61
75	Source Apportionment of Brown Carbon Absorption by Coupling Ultravioletâ€“Visible Spectroscopy with Aerosol Mass Spectrometry. Environmental Science and Technology Letters, 2018, 5, 302-308.	3.9	60
76	Chemical characterization of PM2.5 and source apportionment of organic aerosol in New Delhi, India. Science of the Total Environment, 2020, 745, 140924.	3.9	60
77	Aerosol single particle composition at the Jungfraujoch. Journal of Aerosol Science, 2005, 36, 123-145.	1.8	59
78	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.	1.3	59
79	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.	1.9	59
80	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.	1.9	58
81	Enhanced growth rate of atmospheric particles from sulfuric acid. Atmospheric Chemistry and Physics, 2020, 20, 7359-7372.	1.9	58
82	Size-Resolved Identification, Characterization, and Quantification of Primary Biological Organic Aerosol at a European Rural Site. Environmental Science & Technology, 2016, 50, 3425-3434.	4.6	57
83	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.	1.9	57
84	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.	1.9	57
85	Cellular Responses after Exposure of Lung Cell Cultures to Secondary Organic Aerosol Particles. Environmental Science & Technology, 2010, 44, 1424-1430.	4.6	56
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.	1.9	56
87	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.	0.9	55
88	Observation of viscosity transition in <i>Î±</i>-pinene secondary organic aerosol. Atmospheric Chemistry and Physics, 2016, 16, 4423-4438.	1.9	55
89	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.	1.5	54
90	Adaptation of Dry Nephelometer Measurements to Ambient Conditions at the Jungfraujoch. Environmental Science & Technology, 2005, 39, 2219-2228.	4.6	54

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91	Online gas and aerosol measurement of water soluble carboxylic acids in Zurich. Journal of Geophysical Research, 2006, 111, .	3.3	54
92	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.	1.9	54
93	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.	1.2	52
94	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.	4.6	51
95	Indoor terpene emissions from cooking with herbs and pepper and their secondary organic aerosol production potential. Scientific Reports, 2016, 6, 36623.	1.6	51
96	The role of ions in new particle formation in the CLOUD chamber. Atmospheric Chemistry and Physics, 2017, 17, 15181-15197.	1.9	50
97	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.	1.2	50
98	Molecular understanding of the suppression of new-particle formation by isoprene. Atmospheric Chemistry and Physics, 2020, 20, 11809-11821.	1.9	49
99	Volatility measurements of photochemically and nebulizer-generated organic aerosol particles. Journal of Aerosol Science, 2006, 37, 1025-1051.	1.8	47
100	Evaluation of European air quality modelled by CAMx including the volatility basis set scheme. Atmospheric Chemistry and Physics, 2016, 16, 10313-10332.	1.9	47
101	Collocated observations of cloud condensation nuclei, particle size distributions, and chemical composition. Scientific Data, 2017, 4, 170003.	2.4	44
102	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.	1.9	42
103	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.	1.9	40
104	Particle emissions from aircraft engines a survey of the European project PartEmis. Meteorologische Zeitschrift, 2005, 14, 465-476.	0.5	38
105	Using Proton Transfer Reaction Mass Spectrometry for Online Analysis of Secondary Organic Aerosols. Environmental Science & Technology, 2008, 42, 7347-7353.	4.6	38
106	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.	1.9	38
107	Characteristics and sources of hourly elements in PM10 and PM2.5 during wintertime in Beijing. Environmental Pollution, 2021, 278, 116865.	3.7	38
108	The driving factors of new particle formation and growth in the polluted boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 14275-14291.	1.9	38

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109	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.	1.8	37
110	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.	1.9	37
111	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.	1.9	37
112	Volatility of organic aerosol and its components in the megacity of Paris. Atmospheric Chemistry and Physics, 2016, 16, 2013-2023.	1.9	36
113	Effects of two different biogenic emission models on modelled ozone and aerosol concentrations in Europe. Atmospheric Chemistry and Physics, 2019, 19, 3747-3768.	1.9	36
114	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.	1.5	35
115	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.	1.9	35
116	Effect of Stove Technology and Combustion Conditions on Gas and Particulate Emissions from Residential Biomass Combustion. Environmental Science & Technology, 2019, 53, 2209-2219.	4.6	35
117	Subarctic atmospheric aerosol composition: 2. Hygroscopic growth properties. Journal of Geophysical Research, 2009, 114, .	3.3	34
118	Studying the vertical aerosol extinction coefficient by comparing in situ airborne data and elastic backscatter lidar. Atmospheric Chemistry and Physics, 2016, 16, 4539-4554.	1.9	33
119	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.	4.6	32
120	Urban increments of gaseous and aerosol pollutants and their sources using mobile aerosol mass spectrometry measurements. Atmospheric Chemistry and Physics, 2016, 16, 7117-7134.	1.9	31
121	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.	1.9	31
122	Predominance of secondary organic aerosol to particle-bound reactive oxygen species activity in fine ambient aerosol. Atmospheric Chemistry and Physics, 2019, 19, 14703-14720.	1.9	31
123	Brown Carbon in Primary and Aged Coal Combustion Emission. Environmental Science & Technology, 2021, 55, 5701-5710.	4.6	31
124	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.	1.9	31
125	Equal abundance of summertime natural and wintertime anthropogenic Arctic organic aerosols. Nature Geoscience, 2022, 15, 196-202.	5.4	31
126	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.	4.6	30

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127	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
128	Characterization of Gas-Phase Organics Using Proton Transfer Reaction Time-of-Flight Mass Spectrometry: Residential Coal Combustion. Environmental Science & Technology, 2018, 52, 2612-2617.	4.6	30
129	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.	3.9	30
130	In situ determination of atmospheric aerosol composition as a function of hygroscopic growth. Journal of Geophysical Research, 2008, 113, .	3.3	28
131	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.	1.3	28
132	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.	2.0	28
133	A global view on the effect of water uptake on aerosol particle light scattering. Scientific Data, 2019, 6, 157.	2.4	28
134	Structures and reactivity of peroxy radicals and dimeric products revealed by online tandem mass spectrometry. Nature Communications, 2021, 12, 300.	5.8	28
135	Low modeled ozone production suggests underestimation of precursor emissions (especially) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Chemistry and Physics, 2018, 18, 2175-2198.	1.9	27
136	Density and Fractal-like Dimension of Particles from a Laminar Diffusion Flame. Journal of Colloid and Interface Science, 1999, 217, 269-274.	5.0	26
137	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.	1.9	26
138	Overview: Integrative and Comprehensive Understanding on Polar Environments (iCUPE) â€“ concept and initial results. Atmospheric Chemistry and Physics, 2020, 20, 8551-8592.	1.9	26
139	Synergistic HNO3â€“H2SO4â€“NH3 upper tropospheric particle formation. Nature, 2022, 605, 483-489.	13.7	26
140	Sensitivities of inductively coupled plasma optical emission spectrometry for dry and wet aerosols. Analytical Chemistry, 1992, 64, 672-677.	3.2	25
141	Fast and precise measurement in the sub-20nm size range using a Scanning Mobility Particle Sizer. Journal of Aerosol Science, 2015, 87, 75-87.	1.8	25
142	Development, characterization and first deployment of an improved online reactive oxygen species analyzer. Atmospheric Measurement Techniques, 2018, 11, 65-80.	1.2	25
143	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.	1.9	25
144	Online Aerosol Chemical Characterization by Extractive Electrospray Ionizationâ€“Ultrahigh-Resolution Mass Spectrometry (EESI-Orbitrap). Environmental Science & Technology, 2020, 54, 3871-3880.	4.6	25

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145	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.	4.6	24
146	Chemical characterization of atmospheric ions at the high altitude research station Jungfraujoch (Switzerland). Atmospheric Chemistry and Physics, 2017, 17, 2613-2629.	1.9	24
147	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.	1.9	24
148	Large contribution to secondary organic aerosol from isoprene cloud chemistry. Science Advances, 2021, 7, .	4.7	24
149	Chemical analysis of atmospheric aerosols. Analytical and Bioanalytical Chemistry, 2008, 390, 277-280.	1.9	23
150	Secondary aerosols in Switzerland and northern Italy: Modeling and sensitivity studies for summer 2003. Journal of Geophysical Research, 2008, 113, .	3.3	22
151	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.	1.1	22
152	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.	1.9	22
153	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.	1.2	21
154	Characterization of non-refractory (NR) PM₁ and source apportionment of organic aerosol in KrakÃ³w, Poland. Atmospheric Chemistry and Physics, 2021, 21, 14893-14906.	1.9	21
155	Real-Time Detection of Aerosol Metals Using Online Extractive Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2020, 92, 1316-1325.	3.2	20
156	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.	3.9	20
157	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.	1.9	20
158	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.	1.9	20
159	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.	1.9	20
160	Aerosols in Clearer Focus. Science, 2010, 329, 1474-1475.	6.0	19
161	Sensitivity of ozone and aerosols to precursor emissions in Europe. International Journal of Environment and Pollution, 2012, 50, 451.	0.2	19
162	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.	1.9	19

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