Kaspar R Daellenbach

List of Publications by Year
in descending order

60 papers	6,714 citations	136950 32 h-index	123424 61 g-index
129 all docs	129 docs citations	129 times ranked	6458 citing authors

#	Article	IF	Citations
1	High secondary aerosol contribution to particulate pollution during haze events in China. Nature, 2014, 514, 218-222.	27.8	3,582
2	Sources of particulate-matter air pollution and its oxidative potential in Europe. Nature, 2020, 587, 414-419.	27.8	352
3	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
4	Fossil vs. non-fossil sources of fine carbonaceous aerosols in four Chinese cities during the extreme winter haze episode of 2013. Atmospheric Chemistry and Physics, 2015, 15, 1299-1312.	4.9	163
5	Gasoline cars produce more carbonaceous particulate matter than modern filter-equipped diesel cars. Scientific Reports, 2017, 7, 4926.	3.3	133
6	Labile Peroxides in Secondary Organic Aerosol. CheM, 2016, 1, 603-616.	11.7	132
7	Characterization and source apportionment of organic aerosol using offline aerosol mass spectrometry. Atmospheric Measurement Techniques, 2016, 9, 23-39.	3.1	110
8	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
9	Radiocarbon analysis of elemental and organic carbon in Switzerland during winter-smog episodes from 2008 to 2012 â€“ Part 1: Source apportionment and spatial variability. Atmospheric Chemistry and Physics, 2014, 14, 13551-13570.	4.9	89
10	Inorganic Salt Interference on CO₂⁺ in Aerodyne AMS and ACSM Organic Aerosol Composition Studies. Environmental Science & Technology, 2016, 50, 10494-10503.	10.0	88
11	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
12	Organic aerosol source apportionment by offline-AMS over a full year in Marseille. Atmospheric Chemistry and Physics, 2017, 17, 8247-8268.	4.9	75
13	Is reducing new particle formation a plausible solution to mitigate particulate air pollution in Beijing and other Chinese megacities?. Faraday Discussions, 2021, 226, 334-347.	3.2	74
14	Exploring the regional pollution characteristics and meteorological formation mechanism of PM2.5 in North China during 2013â€“2017. Environment International, 2020, 134, 105283.	10.0	73
15	Chemical composition, sources and secondary processes of aerosols in Baoji city of northwest China. Atmospheric Environment, 2017, 158, 128-137.	4.1	60
16	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
17	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
18	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

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19	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
20	Variation of size-segregated particle number concentrations in wintertime Beijing. Atmospheric Chemistry and Physics, 2020, 20, 1201-1216.	4.9	52
21	Indoor terpene emissions from cooking with herbs and pepper and their secondary organic aerosol production potential. Scientific Reports, 2016, 6, 36623.	3.3	51
22	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
23	Large contribution of fossil fuel derived secondary organic carbon to water soluble organic aerosols in winter haze in China. Atmospheric Chemistry and Physics, 2018, 18, 4005-4017.	4.9	49
24	Terpenes and their oxidation products in the French Landes forest: insights from Vocus PTR-TOF measurements. Atmospheric Chemistry and Physics, 2020, 20, 1941-1959.	4.9	46
25	Sources and sinks driving sulfuric acid concentrations in contrasting environments: implications on proxy calculations. Atmospheric Chemistry and Physics, 2020, 20, 11747-11766.	4.9	42
26	Effect of temperature on the formation of highly oxygenated organic molecules (HOMs) from alpha-pinene ozonolysis. Atmospheric Chemistry and Physics, 2019, 19, 7609-7625.	4.9	41
27	European aerosol phenomenology â^' 8: Harmonised source apportionment of organic aerosol using 22 Year-long ACSM/AMS datasets. Environment International, 2022, 166, 107325.	10.0	41
28	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
29	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
30	The promotion effect of nitrous acid on aerosol formation in wintertime in Beijing: the possible contribution of traffic-related emissions. Atmospheric Chemistry and Physics, 2020, 20, 13023-13040.	4.9	37
31	Size-segregated particle number and mass concentrations from different emission sources in urban Beijing. Atmospheric Chemistry and Physics, 2020, 20, 12721-12740.	4.9	36
32	Fossil and non-fossil source contributions to atmospheric carbonaceous aerosols during extreme spring grassland fires in Eastern Europe. Atmospheric Chemistry and Physics, 2016, 16, 5513-5529.	4.9	35
33	Unprecedented Ambient Sulfur Trioxide (SO₃) Detection: Possible Formation Mechanism and Atmospheric Implications. Environmental Science and Technology Letters, 2020, 7, 809-818.	8.7	34
34	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
35	Equal abundance of summertime natural and wintertime anthropogenic Arctic organic aerosols. Nature Geoscience, 2022, 15, 196-202.	12.9	31
36	Size-resolved particle number emissions in Beijing determined from measured particle size distributions. Atmospheric Chemistry and Physics, 2020, 20, 11329-11348.	4.9	28

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37	Long-term sub-micrometer aerosol chemical composition in the boreal forest: inter- and intra-annual variability. Atmospheric Chemistry and Physics, 2020, 20, 3151-3180.	4.9	26
38	A novel approach for simple statistical analysis of high-resolution mass spectra. Atmospheric Measurement Techniques, 2019, 12, 3761-3776.	3.1	24
39	A 3D study on the amplification of regional haze and particle growth by local emissions. Npj Climate and Atmospheric Science, 2021, 4, .	6.8	23
40	Amplified role of potential HONO sources in O₃ formation in North China Plain during autumn haze aggravating processes. Atmospheric Chemistry and Physics, 2022, 22, 3275-3302.	4.9	23
41	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
42	Evolution of organic carbon during COVID-19 lockdown period: Possible contribution of nocturnal chemistry. Science of the Total Environment, 2022, 808, 152191.	8.0	21
43	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
44	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
45	Oxidative stress-induced inflammation in susceptible airways by anthropogenic aerosol. PLoS ONE, 2020, 15, e0233425.	2.5	19
46	Formation of nighttime sulfuric acid from the ozonolysis of alkenes in Beijing. Atmospheric Chemistry and Physics, 2021, 21, 5499-5511.	4.9	17
47	An interlaboratory comparison of aerosol inorganic ion measurements by ion chromatography: implications for aerosol pH estimate. Atmospheric Measurement Techniques, 2020, 13, 6325-6341.	3.1	16
48	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
49	Eight years of sub-micrometre organic aerosol composition data from the boreal forest characterized using a machine-learning approach. Atmospheric Chemistry and Physics, 2021, 21, 10081-10109.	4.9	14
50	Constructing a data-driven receptor model for organic and inorganic aerosol â€“ a synthesis analysis of eight mass spectrometric data sets from a boreal forest site. Atmospheric Chemistry and Physics, 2019, 19, 3645-3672.	4.9	13
51	Atmospheric gaseous hydrochloric and hydrobromic acid in urban Beijing, China: detection, source identification and potential atmospheric impacts. Atmospheric Chemistry and Physics, 2021, 21, 11437-11452.	4.9	12
52	Chemical characteristics and sources of water-soluble organic aerosol in southwest suburb of Beijing. Journal of Environmental Sciences, 2020, 95, 99-110.	6.1	11
53	Insights into atmospheric oxidation processes by performing factor analyses on subranges of mass spectra. Atmospheric Chemistry and Physics, 2020, 20, 5945-5961.	4.9	11
54	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

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55	Rapid mass growth and enhanced light extinction of atmospheric aerosols during the heating season haze episodes in Beijing revealed by aerosolâ€“chemistryâ€“radiationâ€“boundary layer interaction. Atmospheric Chemistry and Physics, 2021, 21, 12173-12187.	4.9	10
56	Influence of organic aerosol molecular composition on particle absorptive properties in autumn Beijing. Atmospheric Chemistry and Physics, 2022, 22, 1251-1269.	4.9	8
57	Nontarget Screening Exhibits a Seasonal Cycle of PM_{2.5} Organic Aerosol Composition in Beijing. Environmental Science & Technology, 2022, 56, 7017-7028.	10.0	8
58	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
59	Influence of Aerosol Chemical Composition on Condensation Sink Efficiency and New Particle Formation in Beijing. Environmental Science and Technology Letters, 2022, 9, 375-382.	8.7	6
60	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