Martin Gysel

List of Publications by Citations

172 papers	10,253 citations	53 h-index	99 g-index
231 ext. papers	11,823 ext. citations	6.2 avg, IF	5.56 L-index

#	Paper	IF	Citations
172	The effect of physical and chemical aerosol properties on warm cloud droplet activation. *Atmospheric Chemistry and Physics*, **2006**, 6, 2593-2649	6.8	571
171	Mobility particle size spectrometers: harmonization of technical standards and data structure to facilitate high quality long-term observations of atmospheric particle number size distributions. *Atmospheric Measurement Techniques*, **2012**, 5, 657-685	4	531
170	Chemical characterisation of PM2.5, PM10 and coarse particles at urban, near-city and rural sites in Switzerland. *Atmospheric Environment*, **2005**, 39, 637-651	5.3	469
169	The role of low-volatility organic compounds in initial particle growth in the atmosphere. *Nature*, **2016**, 533, 527-31	50.4	388
168	Hygroscopic properties of submicrometer atmospheric aerosol particles measured with H-TDMA instruments in various environments review. *Tellus, Series B: Chemical and Physical Meteorology*, **2008**, 60, 432-469	3.3	333
167	Relating hygroscopicity and composition of organic aerosol particulate matter. *Atmospheric Chemistry and Physics*, **2011**, 11, 1155-1165	6.8	268
166	New particle formation in the free troposphere: A question of chemistry and timing. *Science*, **2016**, 352, 1109-12	33.3	264
165	A study of wood burning and traffic aerosols in an Alpine valley using a multi-wavelength Aethalometer. *Atmospheric Environment*, **2008**, 42, 101-112	5.3	259
164	Inversion of tandem differential mobility analyser (TDMA) measurements. *Journal of Aerosol Science*, **2009**, 40, 134-151	4.3	221
163	Secondary organic aerosols from anthropogenic and biogenic precursors. *Faraday Discussions*, **2005**, 130, 265-78; discussion 363-86, 519-24	3.6	218
162	Hygroscopic properties of water-soluble matter and humic-like organics in atmospheric fine aerosol. *Atmospheric Chemistry and Physics*, **2004**, 4, 35-50	6.8	212
161	Closure study between chemical composition and hygroscopic growth of aerosol particles during TORCH2. *Atmospheric Chemistry and Physics*, **2007**, 7, 6131-6144	6.8	206
160	EUCAARI ion spectrometer measurements at 12 European sites analysis of new particle formation events. *Atmospheric Chemistry and Physics*, **2010**, 10, 7907-7927	6.8	204
159	A mass spectrometric study of secondary organic aerosols formed from the photooxidation of anthropogenic and biogenic precursors in a reaction chamber. *Atmospheric Chemistry and Physics*, **2006**, 6, 5279-5293	6.8	202
158	Hygroscopicity of aerosol particles at low temperatures. 2. Theoretical and experimental hygroscopic properties of laboratory generated aerosols. *Environmental Science & Technology*, **2002**, 36, 63-8	10.3	182
157	Hygroscopic growth and water uptake kinetics of two-phase aerosol particles consisting of ammonium sulfate, adipic and humic acid mixtures. *Journal of Aerosol Science*, **2007**, 38, 157-171	4.3	172
156	Evaluation of the absorption gstr h 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	6.8	171

155	Soot reference materials for instrument calibration and intercomparisons: a workshop summary with recommendations. *Atmospheric Measurement Techniques*, **2012**, 5, 1869-1887	4	162
154	Coating of soot and (NH4)2SO4 particles by ozonolysis products of □pinene. *Journal of Aerosol Science*, **2003**, 34, 1297-1321	4.3	161
153	Recent increase in black carbon concentrations from a Mt. Everest ice core spanning 1860□2000 AD. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	157
152	Sensitivity of the Single Particle Soot Photometer to different black carbon types. *Atmospheric Measurement Techniques*, **2012**, 5, 1031-1043	4	154
151	Impact of aftertreatment devices on primary emissions and secondary organic aerosol formation potential from in-use diesel vehicles: results from smog chamber experiments. *Atmospheric Chemistry and Physics*, **2010**, 10, 11545-11563	6.8	152
150	Black carbon physical properties and mixing state in the European megacity Paris. *Atmospheric Chemistry and Physics*, **2013**, 13, 5831-5856	6.8	138
149	Cloud forming potential of secondary organic aerosol under near atmospheric conditions. *Geophysical Research Letters*, **2008**, 35,	4.9	131
148	Effective density of Aquadag and fullerene soot black carbon reference materials used for SP2 calibration. *Atmospheric Measurement Techniques*, **2011**, 4, 2851-2858	4	128
147	A combined particle trap/HTDMA hygroscopicity study of mixed inorganic/organic aerosol particles. *Atmospheric Chemistry and Physics*, **2008**, 8, 5589-5601	6.8	126
146	Single Particle Soot Photometer intercomparison at the AIDA chamber. *Atmospheric Measurement Techniques*, **2012**, 5, 3077-3097	4	125
145	Changes of hygroscopicity and morphology during ageing of diesel soot. *Environmental Research Letters*, **2011**, 6, 034026	6.2	121
144	Seasonal and elevational variations of black carbon and dust in snow and ice in the Solu-Khumbu, Nepal and estimated radiative forcings. *Atmospheric Chemistry and Physics*, **2014**, 14, 8089-8103	6.8	120
143	Revising the hygroscopicity of inorganic sea salt particles. *Nature Communications*, **2017**, 8, 15883	17.4	116
142	Hygroscopicity of aerosol particles at low temperatures. 1. New low-temperature H-TDMA instrument: setup and first applications. *Environmental Science & Technology*, **2002**, 36, 55-62	10.3	112
141	Intercomparison study of six HTDMAs: results and recommendations. *Atmospheric Measurement Techniques*, **2009**, 2, 363-378	4	104
140	Effects of relative humidity on aerosol light scattering in the Arctic. *Atmospheric Chemistry and Physics*, **2010**, 10, 3875-3890	6.8	102
139	Volatility and hygroscopicity of aging secondary organic aerosol in a smog chamber. *Atmospheric Chemistry and Physics*, **2011**, 11, 11477-11496	6.8	100
138	Analysis of the hygroscopic and volatile properties of ammonium sulphate seeded and unseeded SOA particles. *Atmospheric Chemistry and Physics*, **2009**, 9, 721-732	6.8	97

137	A European aerosol phenomenology-5: Climatology of black carbon optical properties at 9 regional background sites across Europe. *Atmospheric Environment*, **2016**, 145, 346-364	5.3	94
136	The Pagami Creek smoke plume after long-range transport to the upper troposphere over Europe aerosol properties and black carbon mixing state. *Atmospheric Chemistry and Physics*, **2014**, 14, 6111-6137	6.8	90
135	Water uptake of clay and desert dust aerosol particles at sub- and supersaturated water vapor conditions. *Physical Chemistry Chemical Physics*, **2009**, 11, 7804-9	3.6	90
134	Single particle characterization of black carbon aerosols at a tropospheric alpine site in Switzerland. *Atmospheric Chemistry and Physics*, **2010**, 10, 7389-7407	6.8	89
133	Hygroscopicity of the submicrometer aerosol at the high-alpine site Jungfraujoch, 3580 m a.s.l., Switzerland. *Atmospheric Chemistry and Physics*, **2008**, 8, 5715-5729	6.8	84
132	Measured and modelled cloud condensation nuclei number concentration at the high alpine site Jungfraujoch. *Atmospheric Chemistry and Physics*, **2010**, 10, 7891-7906	6.8	80
131	Ground-based and airborne in-situ measurements of the Eyjafjallaj kull volcanic aerosol plume in Switzerland in spring 2010. *Atmospheric Chemistry and Physics*, **2011**, 11, 10011-10030	6.8	75
130	Measured and predicted aerosol light scattering enhancement factors at the high alpine site Jungfraujoch. *Atmospheric Chemistry and Physics*, **2010**, 10, 2319-2333	6.8	74
129	Trace Metals in Soot and PM from Heavy-Fuel-Oil Combustion in a Marine Engine. *Environmental Science & Technology*, **2018**, 52, 6714-6722	10.3	69
128	Subarctic atmospheric aerosol composition: 3. Measured and modeled properties of cloud condensation nuclei. *Journal of Geophysical Research*, **2010**, 115,		67
127	Hygroscopic properties of fresh and aged wood burning particles. *Journal of Aerosol Science*, **2013**, 56, 15-29	4.3	66
126	On the effects of organic matter and sulphur-containing compounds on the CCN activation of combustion particles. *Atmospheric Chemistry and Physics*, **2005**, 5, 3187-3203	6.8	66
125	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	6.8	62
124	Analysis of long-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	4.4	58
123	A modified hygroscopic tandem DMA and a data retrieval method based on optimal estimation. *Journal of Aerosol Science*, **2005**, 36, 846-865	4.3	58
122	A 17 month climatology of the cloud condensation nuclei number concentration at the high alpine site Jungfraujoch. *Journal of Geophysical Research*, **2011**, 116,		56
121	Clouds and aerosols in Puerto Rico a new evaluation. *Atmospheric Chemistry and Physics*, **2008**, 8, 1293-1309	6.8	56
120	Widening the gap between measurement and modelling of secondary organic aerosol properties?. *Atmospheric Chemistry and Physics*, **2010**, 10, 2577-2593	6.8	54

119	Optimized method for black carbon analysis in ice and snow using the Single Particle Soot Photometer. *Atmospheric Measurement Techniques*, **2014**, 7, 2667-2681	4	53
118	Influence of gas-to-particle partitioning on the hygroscopic and droplet activation behaviour of alpha-pinene secondary organic aerosol. *Physical Chemistry Chemical Physics*, **2009**, 11, 8091-7	3.6	53
117	Mass spectrometry of refractory black carbon particles from six sources: carbon-cluster and oxygenated ions. *Atmospheric Chemistry and Physics*, **2014**, 14, 2591-2603	6.8	51
116	Relating cloud condensation nuclei activity and oxidation level of □pinene secondary organic aerosols. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		51
115	13-month climatology of the aerosol hygroscopicity at the free tropospheric site Jungfraujoch (3580 m a.s.l.). *Atmospheric Chemistry and Physics*, **2010**, 10, 10717-10732	6.8	50
114	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	4.6	49
113	Properties of jet engine combustion particles during the PartEmis experiment: Hygroscopicity at subsaturated conditions. *Geophysical Research Letters*, **2003**, 30,	4.9	48
112	A□European aerosol phenomenology □6: scattering properties of atmospheric aerosol particles from 28□ACTRIS sites. *Atmospheric Chemistry and Physics*, **2018**, 18, 7877-7911	6.8	46
111	Production of particulate brown carbon during atmospheric aging of residential wood-burning emissions. *Atmospheric Chemistry and Physics*, **2018**, 18, 17843-17861	6.8	46
110	Fourteen months of on-line measurements of the non-refractory submicron aerosol at the Jungfraujoch (3580 m a.s.l.) □hemical composition, origins and organic aerosol sources. *Atmospheric Chemistry and Physics*, **2015**, 15, 11373-11398	6.8	45
109	. *Tellus, Series B: Chemical and Physical Meteorology*, **2008**, 60,	3.3	45
108	Infrared-absorbing carbonaceous tar can dominate light absorption by marine-engine exhaust. *Npj Climate and Atmospheric Science*, **2019**, 2,	8	44
107	The influence of small aerosol particles on the properties of water and ice clouds. *Faraday Discussions*, **2008**, 137, 205-22; discussion 297-318	3.6	40
106	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic. *Atmospheric Chemistry and Physics*, **2018**, 18, 14037-14057	6.8	40
105	Investigation of the effective peak supersaturation for liquid-phase clouds at the high-alpine site Jungfraujoch, Switzerland (3580 m a.s.l.). *Atmospheric Chemistry and Physics*, **2014**, 14, 1123-1139	6.8	39
104	Brown and Black Carbon Emitted by a Marine Engine Operated on Heavy Fuel Oil and Distillate Fuels: Optical Properties, Size Distributions, and Emission Factors. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 6175-6195	4.4	38
103	Technical Note: The single particle soot photometer fails to reliably detect PALAS soot nanoparticles. *Atmospheric Measurement Techniques*, **2012**, 5, 3099-3107	4	37
102	Size-dependent particle activation properties in fog during the ParisFog 2012/13 field campaign. *Atmospheric Chemistry and Physics*, **2014**, 14, 10517-10533	6.8	36

101	Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. *Atmospheric Chemistry and Physics*, **2016**, 16, 1693-1712	6.8	35
100	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	6.1	35
99	A synthesis of cloud condensation nuclei counter (CCNC) measurements within the EUCAARI network. *Atmospheric Chemistry and Physics*, **2015**, 15, 12211-12229	6.8	35
98	Hygroscopic mixing state of urban aerosol derived from size-resolved cloud condensation nuclei measurements during the MEGAPOLI campaign in Paris. *Atmospheric Chemistry and Physics*, **2013**, 13, 6431-6446	6.8	35
97	Properties of jet engine combustion particles during the PartEmis experiment: Microphysics and Chemistry. *Geophysical Research Letters*, **2003**, 30,	4.9	35
96	Properties of jet engine combustion particles during the PartEmis experiment. Hygroscopic growth at supersaturated conditions. *Geophysical Research Letters*, **2003**, 30,	4.9	33
95	Seasonal and diurnal characteristics of water soluble inorganic compounds in the gas and aerosol phase in the Zurich area. *Atmospheric Chemistry and Physics*, **2006**, 6, 1895-1904	6.8	32
94	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	4	32
93	Evaluation of global simulations of aerosol particle and cloud condensation nuclei number, with implications for cloud droplet formation. *Atmospheric Chemistry and Physics*, **2019**, 19, 8591-8617	6.8	31
92	Subarctic atmospheric aerosol composition: 2. Hygroscopic growth properties. *Journal of Geophysical Research*, **2009**, 114,		31
91	Particle emissions from aircraft engines a survey of the European project PartEmis. *Meteorologische Zeitschrift*, **2005**, 14, 465-476	3.1	31
90	Multidecadal trend analysis of in situ aerosol radiative properties around the world. *Atmospheric Chemistry and Physics*, **2020**, 20, 8867-8908	6.8	30
89	Collocated observations of cloud condensation nuclei, particle size distributions, and chemical composition. *Scientific Data*, **2017**, 4, 170003	8.2	27
88	In situ determination of atmospheric aerosol composition as a function of hygroscopic growth. *Journal of Geophysical Research*, **2008**, 113,		27
87	Evolution of particle composition in CLOUD nucleation experiments. *Atmospheric Chemistry and Physics*, **2013**, 13, 5587-5600	6.8	25
86	CCN activity and volatility of β-caryophyllene secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2013**, 13, 2283-2297	6.8	23
85	Particle mobility size spectrometers: harmonization of technical standards and data structure to facilitate high quality long-term observations of atmospheric particle number size distributions **2010**,		23
84	Studying the vertical aerosol extinction coefficient by comparing in situ airborne data and elastic backscatter lidar. *Atmospheric Chemistry and Physics*, **2016**, 16, 4539-4554	6.8	22

83	Ice residual properties in mixed-phase clouds at the high-alpine Jungfraujoch site. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 12343-12362	4.4	19
82	Fast and precise measurement in the sub-20 nm size range using a Scanning Mobility Particle Sizer. *Journal of Aerosol Science*, **2015**, 87, 75-87	4.3	18
81	The Ice Selective Inlet: a novel technique for exclusive extraction of pristine ice crystals in mixed-phase clouds. *Atmospheric Measurement Techniques*, **2015**, 8, 3087-3106	4	16
80	Cloud droplet activation properties and scavenged fraction of black carbon in liquid-phase clouds at the high-alpine research station Jungfraujoch (3580 m a.s.l.). *Atmospheric Chemistry and Physics*, **2019**, 19, 3833-3855	6.8	15
79	Predicting hygroscopic growth using single particle chemical composition estimates. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 9567-9577	4.4	15
78	Contribution of new particle formation to the total aerosol concentration at the high-altitude site Jungfraujoch (3580 m asl, Switzerland). *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 11,692-11,711	4.4	14
77	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	6.8	13
76	The white-light humidified optical particle spectrometer (WHOPS) – a novel airborne system to characterize aerosol hygroscopicity. *Atmospheric Measurement Techniques*, **2015**, 8, 921-939	4	13
75	Detection of tar brown carbon with a single particle soot photometer (SP2). *Atmospheric Chemistry and Physics*, **2019**, 19, 15673-15690	6.8	13
74	Vertical profiling of aerosol hygroscopic properties in the planetary boundary layer during the PEGASOS campaigns. *Atmospheric Chemistry and Physics*, **2016**, 16, 7295-7315	6.8	11
73	The value of remote marine aerosol measurements for constraining radiative forcing uncertainty. *Atmospheric Chemistry and Physics*, **2020**, 20, 10063-10072	6.8	11
72	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	6.8	10
71	Optimized method for black carbon analysis in ice and snow using the Single Particle Soot Photometer **2014**,		9
70	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	4.6	9
69	Brown Carbon in Primary and Aged Coal Combustion Emission. *Environmental Science & Technology*, **2021**, 55, 5701-5710	10.3	9
68	Field evaluation of a Portable Fine Particle Concentrator (PFPC) for ice nucleating particle measurements. *Aerosol Science and Technology*, **2019**, 53, 1067-1078	3.4	8
67	Single Particle Soot Photometer intercomparison at the AIDA chamber **2012**,		8
66	Soot Reference Materials for instrument calibration and intercomparisons: a workshop summary with recommendations **2012**,		8

65	Seasonal and elevational variations of black carbon and dust in snow and ice in the Solu-Khumbu, Nepal and estimated radiative forcings		8
64	Detailed characterization of the CAPS single-scattering albedo monitor (CAPS PMssa) as a field-deployable instrument for measuring aerosol light absorption with the extinction-minus-scattering method. *Atmospheric Measurement Techniques*, **2021**, 14, 819-851	4	8
63	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	6.8	7
62	Ground-based and airborne in-situ measurements of the Eyjafjallajkull volcanic aerosol plume in Switzerland in spring 2010		7
61	Volatility and hygroscopicity of aging secondary organic aerosol in a smog chamber		6
60	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	4	6
59	Intercomparison study of six HTDMAs: results and general recommendations for HTDMA operation		6
58	Evaluation of the absorption ngstrm exponents for traffic and wood burning in the Aethalometer based source apportionment using radiocarbon measurements of ambient aerosol **2016**,		6
57	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	6.8	6
56	Chemical composition and source analysis of carbonaceous aerosol particles at a mountaintop site in central Sweden. *Tellus, Series B: Chemical and Physical Meteorology*, **2017**, 69, 1353387	3.3	5
55	Sensitivity of the Single Particle Soot Photometer to different black carbon types **2012**,		5
54	Size-resolved and integral measurements of cloud condensation nuclei (CCN) at the high-alpine site Jungfraujoch		5
53	Hygroscopicity of the submicrometer aerosol at the high-alpine site Jungfraujoch, 3580 m a.s.l., Switzerland		5
52	Coated soot particles with tunable, well-controlled properties generated in the laboratory with a miniCAST BC and a micro smog chamber. *Journal of Aerosol Science*, **2021**, 157, 105820	4.3	5
51	Multidecadal trend analysis of aerosol radiative properties at a global scale		4
50	Relating hygroscopicity and composition of organic aerosol particulate matter		4
49	Vertical profiling of aerosol hygroscopic properties in the planetary boundary layer during the PEGASOS campaigns		4
48	Closure between measured and modelled particle hygroscopic growth during TORCH2 implies ammonium nitrate artefact in the HTDMA measurements		4

47	Analysis of the hygroscopic and volatile properties of ammonium sulphate seeded and un-seeded SOA particles		4
46	HYGROSCOPICITY OF AEROSOL PARTICLES AT LOW TEMPERATURES. *Journal of Aerosol Science*, **2001**, 32, 977-978	4.3	4
45	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	4.9	4
44	Optical and morphological properties of soot particles generated by the miniCAST 5201 BC generator. *Aerosol Science and Technology*,1-25	3.4	4
43	Aerosol absorption profiling from the synergy of lidar and sun-photometry: the ACTRIS-2 campaigns in Germany, Greece and Cyprus. *EPJ Web of Conferences*, **2018**, 176, 08005	0.3	4
42	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	6.8	4
41	The Ice Selective Inlet: a novel technique for exclusive extraction of pristine ice crystals in mixed-phase clouds **2014**,		3
40	The white-light humidified optical particle spectrometer (WHOPS) – a novel airborne system to characterize aerosol hygroscopicity **2014**,		3
39	Properties of jet engine combustion particles during the PartEmis experiment: Particle size spectra (d > 15 nm) and volatility. *Geophysical Research Letters*, **2004**, 31,	4.9	3
38	Effects of relative humidity on aerosol light scattering in the Arctic		3
37	Measured and modelled cloud condensation nuclei concentration at the high alpine site Jungfraujoch		3
36	Using global reanalysis data to quantify and correct airflow distortion bias in shipborne wind speed measurements. *Atmospheric Measurement Techniques*, **2020**, 13, 3487-3506	4	3
35	Comparison of collocated rBC and EC mass concentration measurements during field campaigns at several European sites		3
34	A first evaluation of multiple automatic pollen monitors run in parallel. *Aerobiologia*,1	2.4	3
33	Low-Volatility Vapors and New Particle Formation Over the Southern Ocean During the Antarctic Circumnavigation Expedition. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD035126	4.4	3
32	Long-term trends of black carbon and particle number concentration in the lower free troposphere in Central Europe. *Environmental Sciences Europe*, **2021**, 33,	5	3
31	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	3.1	3
30	Production of particulate brown carbon during atmospheric aging of wood-burning emissions **2018**,		3

29	Low number concentration of ice nucleating particles in an aged smoke plume. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 1991-1994	6.4	2
28	Technical Note: The single particle soot photometer fails to detect PALAS soot nanoparticles **2012**,		2
27	Hygroscopic properties of water-soluble matter and humic-like organics in atmospheric fine aerosol **2003**,		2
26	Modelling the gas–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	6.8	2
25	Sources and nature of ice-nucleating particles in the free troposphere at Jungfraujoch in winter 2017. *Atmospheric Chemistry and Physics*, **2021**, 21, 16925-16953	6.8	2
24	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		2
23	Single particle characterization of black carbon aerosols at a tropospheric alpine site in Switzerland		2
22	The Pagami Creek smoke plume after long-range transport to the upper troposphere over Europe – aerosol properties and black carbon mixing state		2
21	Size-dependent particle activation properties in fog during the ParisFog 2012/13 field campaign		2
20	Clouds and aerosols in Puerto Rico – a new evaluation		2
19	Measured and predicted aerosol light scattering enhancement factors at the high alpine site Jungfraujoch		2
18	A global analysis of climate-relevant aerosol properties retrieved from the network of GAW near-surface observatories		2
17	Investigation of the effective peak supersaturation for liquid-phase clouds at the high-alpine site Jungfraujoch, Switzerland (3580 m a.s.l.)		2
16	Sources, Occurrence and Characteristics of Fluorescent Biological Aerosol Particles Measured Over the Pristine Southern Ocean. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD034811	4.4	2
15	Sea State and Boundary Layer Stability Limit Sea Spray Aerosol Lifetime over the Southern Ocean		2
14	Assessment of real-time bioaerosol particle counters using reference chamber experiments. *Atmospheric Measurement Techniques*, **2021**, 14, 7693-7706	4	2
13	A European aerosol phenomenology-6: Scattering properties of atmospheric aerosol particles from 28 ACTRIS sites **2017**,		1
12	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic **2018**,		1

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11	Measurement report: Comparison of airborne, in situ measured, lidar-based, and modeled aerosol optical properties in the central European background – identifying sources of deviations. *Atmospheric Chemistry and Physics*, **2021**, 21, 16745-16773	6.8	1
10	13-month climatology of the aerosol hygroscopicity at the free tropospheric site Jungfraujoch (3580 m a.s.l.)		1
9	Evolution of particle composition in CLOUD nucleation experiments		1
8	Hygroscopic mixing state of urban aerosol derived from size-resolved cloud condensation nuclei measurements during the MEGAPOLI campaign in Paris		1
7	Chemical and physical influences on aerosol activation in liquid clouds: an empirical study based on observations from the Jungfraujoch, Switzerland		1
6	A combined particle trap/HTDMA hygroscopicity study of mixed inorganic/organic aerosol particles		1
5	Black carbon physical properties and mixing state in the European megacity Paris		1
4	The SALTENA experiment: Comprehensive observations of aerosol sources, formation and processes in the South American Andes. *Bulletin of the American Meteorological Society*, **2021**, 1-46	6.1	1
3	Closure Between Chemical Composition and Hygroscopic Growth of Aerosol Particles During TORCH2 **2007**, 731-735		1
2	The contribution of Saharan dust to the ice-nucleating particle concentrations at the High Altitude Station Jungfraujoch (3580 m a.s.l.), Switzerland. *Atmospheric Chemistry and Physics*, **2021**, 21, 18029-18053	6.8	1
1	Retrieval of aerosol properties from in situ, multi-angle light scattering measurements using invertible neural networks. *Journal of Aerosol Science*, **2022**, 163, 105977	4.3	0