Andreas Petzold

List of Publications by Year
in descending order

176 papers	14,847 citations	26567 56 h-index	29081 104 g-index
247 all docs	247 docs citations	247 times ranked	9153 citing authors

#	Article	IF	Citations
1	The aerosol-climate model ECHAM5-HAM. Atmospheric Chemistry and Physics, 2005, 5, 1125-1156.	1.9	990
2	Recommendations for reporting "black carbon" measurements. Atmospheric Chemistry and Physics, 2013, 13, 8365-8379.	1.9	808
3	Atmospheric composition change â€“ global and regional air quality. Atmospheric Environment, 2009, 43, 5268-5350.	1.9	714
4	Transport impacts on atmosphere and climate: Aviation. Atmospheric Environment, 2010, 44, 4678-4734.	1.9	565
5	Multi-angle absorption photometryâ€”a new method for the measurement of aerosol light absorption and atmospheric black carbon. Journal of Aerosol Science, 2004, 35, 421-441.	1.8	542
6	Minimizing light absorption measurement artifacts of the Aethalometer: evaluation of five correction algorithms. Atmospheric Measurement Techniques, 2010, 3, 457-474.	1.2	409
7	Recent progress in understanding physical and chemical properties of African and Asian mineral dust. Atmospheric Chemistry and Physics, 2011, 11, 8231-8256.	1.9	367
8	Size distribution, mass concentration, chemical and mineralogical composition and derived optical parameters of the boundary layer aerosol at Tinfou, Morocco, during SAMUM 2006. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 32.	0.8	321
9	Characterization and intercomparison of aerosol absorption photometers: result of two intercomparison workshops. Atmospheric Measurement Techniques, 2011, 4, 245-268.	1.2	284
10	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	1.9	278
11	An Inter-Comparison of Instruments Measuring Black Carbon Content of Soot Particles. Aerosol Science and Technology, 2007, 41, 295-314.	1.5	276
12	Evaluation of Multiangle Absorption Photometry for Measuring Aerosol Light Absorption. Aerosol Science and Technology, 2005, 39, 40-51.	1.5	258
13	The Reno Aerosol Optics Study: An Evaluation of Aerosol Absorption Measurement Methods. Aerosol Science and Technology, 2005, 39, 1-16.	1.5	215
14	Aerosol classification by airborne high spectral resolution lidar observations. Atmospheric Chemistry and Physics, 2013, 13, 2487-2505.	1.9	209
15	Soot reference materials for instrument calibration and intercomparisons: a workshop summary with recommendations. Atmospheric Measurement Techniques, 2012, 5, 1869-1887.	1.2	197
16	The dependence of the specific attenuation cross-section on black carbon mass fraction and particle size. Atmospheric Environment, 1997, 31, 661-672.	1.9	189
17	Saharan Mineral Dust Experiments SAMUMâ€“1 and SAMUMâ€“2: what have we learned?. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 403.	0.8	187
18	Processes influencing ozone levels in Alaskan forest fire plumes during long-range transport over the North Atlantic. Journal of Geophysical Research, 2007, 112, .	3.3	182

#	Article	IF	Citations
19	Experimental studies on particle emissions from cruising ship, their characteristic properties, transformation and atmospheric lifetime in the marine boundary layer. Atmospheric Chemistry and Physics, 2008, 8, 2387-2403.	1.9	182
20	Airborne measurements of dust layer properties, particle size distribution and mixing state of Saharan dust during SAMUM 2006. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 96.	0.8	175
21	Saharan dust absorption and refractive index from aircraft-based observations during SAMUM 2006. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 118.	0.8	156
22	On the Transition of Contrails into Cirrus Clouds. Journals of the Atmospheric Sciences, 2000, 57, 464-480.	0.6	153
23	Intercomparison and evaluation of global aerosol microphysical properties among AeroCom models of a range of complexity. Atmospheric Chemistry and Physics, 2014, 14, 4679-4713.	1.9	148
24	Chemical composition of free tropospheric aerosol for PM1 and coarse mode at the high alpine site Jungfraujoch. Atmospheric Chemistry and Physics, 2008, 8, 407-423.	1.9	144
25	Atmospheric nucleation: highlights of the EUCAARI project and future directions. Atmospheric Chemistry and Physics, 2010, 10, 10829-10848.	1.9	144
26	Airborne instruments to measure atmospheric aerosol particles, clouds and radiation: A cook's tour of mature and emerging technology. Atmospheric Research, 2011, 102, 10-29.	1.8	139
27	Intercomparison of Thermal and Optical Measurement Methods for Elemental Carbon and Black Carbon at an Urban Location. Environmental Science & Technology, 2006, 40, 6377-6383.	4.6	126
28	Scavenging of black carbon in mixed phase clouds at the high alpine site Jungfraujoch. Atmospheric Chemistry and Physics, 2007, 7, 1797-1807.	1.9	123
29	Ultrafine particle size distributions measured in aircraft exhaust plumes. Journal of Geophysical Research, 2000, 105, 26555-26567.	3.3	122
30	Microphysical and optical properties of dust and tropical biomass burning aerosol layers in the Cape Verde regionâ€”an overview of the airborne in situ and lidar measurements during SAMUM-2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 589.	0.8	120
31	Global-scale atmosphere monitoring by in-service aircraft â€“ current achievements and future prospects of the European Research Infrastructure IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28452.	0.8	118
32	The ABC-Pyramid Atmospheric Research Observatory in Himalaya for aerosol, ozone and halocarbon measurements. Science of the Total Environment, 2008, 391, 252-261.	3.9	115
33	Particle sizing calibration with refractive index correction for light scattering optical particle counters and impacts upon PCASP and CDP data collected during the Fennec campaign. Atmospheric Measurement Techniques, 2012, 5, 1147-1163.	1.2	115
34	Aircraft observations of the upper tropospheric fine particle aerosol in the Northern and Southern Hemispheres at midlatitudes. Geophysical Research Letters, 2003, 30, n/a-n/a.	1.5	110
35	Single particle characterization of black carbon aerosols at a tropospheric alpine site in Switzerland. Atmospheric Chemistry and Physics, 2010, 10, 7389-7407.	1.9	109
36	Influence of fuel sulfur on the composition of aircraft exhaust plumes: The experiments SULFUR 1â€“7. Journal of Geophysical Research, 2002, 107, AAC 2-1.	3.3	108

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37	ML-CIRRUS: The Airborne Experiment on Natural Cirrus and Contrail Cirrus with the High-Altitude Long-Range Research Aircraft HALO. Bulletin of the American Meteorological Society, 2017, 98, 271-288.	1.7	107
38	Intercomparison of Measurement Techniques for Black or Elemental Carbon Under Urban Background Conditions in Wintertime: Influence of Biomass Combustion. Environmental Science & Technology, 2008, 42, 884-889.	4.6	104
39	Cirrus cloud microphysical and optical properties at southern and northern midlatitudes during the INCA experiment. Journal of Geophysical Research, 2004, 109, .	3.3	98
40	Atmospheric sub-3 nm particles at high altitudes. Atmospheric Chemistry and Physics, 2010, 10, 437-451.	1.9	95
41	Elemental composition and morphology of ice-crystal residual particles in cirrus clouds and contrails. Atmospheric Research, 1998, 49, 21-34.	1.8	94
42	The global impacts of COVID-19 lockdowns on urban air pollution. Elementa, 2021, 9, .	1.1	94
43	In situ observations and model calculations of black carbon emission by aircraft at cruise altitude. Journal of Geophysical Research, 1999, 104, 22171-22181.	3.3	93
44	In-situ observations of young contrails â€“ overview and selected results from the CONCERT campaign. Atmospheric Chemistry and Physics, 2010, 10, 9039-9056.	1.9	93
45	Physical Properties, Chemical Composition, and Cloud Forming Potential of Particulate Emissions from a Marine Diesel Engine at Various Load Conditions. Environmental Science & Technology, 2010, 44, 3800-3805.	4.6	92
46	Optical and microphysical properties of smoke over Cape Verde inferred from multiwavelength lidar measurements. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 677.	0.8	90
47	Measurement of Wavelength-Resolved Light Absorption by Aerosols Utilizing a UV-VIS Extinction Cell. Aerosol Science and Technology, 2005, 39, 249-260.	1.5	89
48	Atmospheric data over a solar cycle: no connection between galactic cosmic rays and new particle formation. Atmospheric Chemistry and Physics, 2010, 10, 1885-1898.	1.9	89
49	Optical closure for an aerosol column: Method, accuracy, and inferable properties applied to a biomass-burning aerosol and its radiative forcing. Journal of Geophysical Research, 2002, 107, LAC 12-1-LAC 12-15.	3.3	85
50	State of mixing, shape factor, number size distribution, and hygroscopic growth of the Saharan anthropogenic and mineral dust aerosol at Tinfou, Morocco. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 51.	0.8	85
51	Near-field measurements on contrail properties from fuels with different sulfur content. Journal of Geophysical Research, 1997, 102, 29867-29880.	3.3	82
52	Operation of Marine Diesel Engines on Biogenic Fuels: Modification of Emissions and Resulting Climate Effects. Environmental Science & Technology, 2011, 45, 10394-10400.	4.6	81
53	Dust mobilization and transport in the northern Sahara during SAMUM 2006 â€“ a meteorological overview. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 12.	0.8	79
54	Overview of the synoptic and pollution situation over Europe during the EUCAARI-LONGREX field campaign. Atmospheric Chemistry and Physics, 2011, 11, 1065-1082.	1.9	79

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55	Airborne measurements of NOx, tracer species, and small particles during the European Lightning Nitrogen Oxides Experiment. Journal of Geophysical Research, 2002, 107, ACH 5-1-ACH 5-24.	3.3	77
56	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.	1.9	77
57	Correction for a measurement artifact of the Multi-Angle Absorption Photometer (MAAP) at high black carbon mass concentration levels. Atmospheric Measurement Techniques, 2013, 6, 81-90.	1.2	77
58	Quantitative measurement of the microphysical and optical properties of cirrus clouds with four different in situ probes: Evidence of small ice crystals. Geophysical Research Letters, 2002, 29, XXX-XXX.	1.5	75
59	Properties of dust aerosol particles transported to Portugal from the Sahara desert. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 297.	0.8	75
60	Cirrus cloud occurrence as function of ambient relative humidity: a comparison of observations obtained during the INCA experiment. Atmospheric Chemistry and Physics, 2003, 3, 1807-1816.	1.9	74
61	Ultrafine aerosol particles in aircraft plumes: In situ observations. Geophysical Research Letters, 1998, 25, 2789-2792.	1.5	72
62	Spatial distribution and optical properties of Saharan dust observed by airborne high spectral resolution lidar during SAMUM 2006. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 131.	0.8	71
63	Diagnosing black carbon trends in large urban areas using carbon monoxide measurements. Journal of Geophysical Research, 2002, 107, ICC 4-1-ICC 4-9.	3.3	70
64	Extinction and optical depth of contrails. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	70
65	Jet Engine Exhaust Aerosol Characterization. Aerosol Science and Technology, 1998, 28, 62-76.	1.5	67
66	Aircraft measurements over Europe of an air pollution plume from Southeast Asia â€“ aerosol and chemical characterization. Atmospheric Chemistry and Physics, 2007, 7, 913-937.	1.9	67
67	Effective Radius of Ice Particles in Cirrus and Contrails. Journals of the Atmospheric Sciences, 2011, 68, 300-321.	0.6	67
68	Physicochemistry of aircraft-generated liquid aerosols, soot, and ice particles: 2. Comparison with observations and sensitivity studies. Journal of Geophysical Research, 1998, 103, 17129-17147.	3.3	66
69	Dependence of solar radiative forcing of forest fire aerosol on ageing and state of mixture. Atmospheric Chemistry and Physics, 2003, 3, 881-891.	1.9	65
70	Vertical variability of aerosol properties observed at a continental site during the Lindenberg Aerosol Characterization Experiment (LACE 98). Journal of Geophysical Research, 2002, 107, LAC 10-1-LAC 10-18.	3.3	61
71	Perturbation of the European free troposphere aerosol by North American forest fire plumes during the ICARTT-ITOP experiment in summer 2004. Atmospheric Chemistry and Physics, 2007, 7, 5105-5127.	1.9	61
72	MADE-in: a new aerosol microphysics submodel for global simulation of insoluble particles and their mixing state. Geoscientific Model Development, 2011, 4, 325-355.	1.3	61

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73	Instrumentation on commercial aircraft for monitoring the atmospheric composition on a global scale: the IAGOS system, technical overview of ozone and carbon monoxide measurements. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 27791.	0.8	61
74	Aerosol states in the free troposphere at northern midlatitudes. Journal of Geophysical Research, 2002, 107, LAC 8-1-LAC 8-8.	3.3	59
75	Mass spectrometry of refractory black carbon particles from six sources: carbon-cluster and oxygenated ions. Atmospheric Chemistry and Physics, 2014, 14, 2591-2603.	1.9	59
76	Photoacoustic soot sensor for in-situ black carbon monitoring. Applied Physics B: Lasers and Optics, 1996, 63, 191-197.	1.1	57
77	Properties of jet engine combustion particles during the PartEmis experiment: Hygroscopicity at subsaturated conditions. Geophysical Research Letters, 2003, 30, .	1.5	57
78	Desert dust aerosol air mass mapping in the western Sahara, using particle properties derived from space-based multi-angle imaging. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 239.	0.8	57
79	Evaluation of Methods for Measuring Particulate Matter Emissions from Gas Turbines. Environmental Science & Technology, 2011, 45, 3562-3568.	4.6	56
80	On the visibility of airborne volcanic ash and mineral dust from the pilotâ€™s perspective in flight. Physics and Chemistry of the Earth, 2012, 45-46, 87-102.	1.2	56
81	Method comparison study on soot-selective techniques. Mikrochimica Acta, 1995, 117, 215-237.	2.5	55
82	Carbonaceous aerosol in jet engine exhaust: emission characteristics and implications for heterogeneous chemical reactions. Atmospheric Environment, 1999, 33, 2689-2698.	1.9	54
83	Microphysical and optical properties of midlatitude cirrus clouds observed in the southern hemisphere during INCA. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2719-2748.	1.0	54
84	Climate Impact of Biofuels in Shipping: Global Model Studies of the Aerosol Indirect Effect. Environmental Science & Technology, 2011, 45, 3519-3525.	4.6	54
85	Aircraft type influence on contrail properties. Atmospheric Chemistry and Physics, 2013, 13, 11965-11984.	1.9	54
86	Characterization of long-term and seasonal variations of black carbon (BC) concentrations at Neumayer, Antarctica. Atmospheric Chemistry and Physics, 2013, 13, 1579-1590.	1.9	53
87	Mineral dust observed with AERONET Sun photometer, Raman lidar, and in situ instruments during SAMUM 2006: Shapeâ€independent particle properties. Journal of Geophysical Research, 2010, 115, .	3.3	49
88	Particle chemical properties in the vertical column based on aircraft observations in the vicinity of Cape Verde Islands. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 497.	0.8	49
89	Regional Saharan dust modelling during the SAMUM 2006 campaign. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 307.	0.8	48
90	Mixing of mineral dust with urban pollution aerosol over Dakar (Senegal): impact on dust physico-chemical and radiative properties. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 619.	0.8	48

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91	In-situ observations of aerosol particles remaining from evaporated cirrus crystals: Comparing clean and polluted air masses. Atmospheric Chemistry and Physics, 2003, 3, 1037-1049.	1.9	47
92	Regional modelling of Saharan dust and biomass-burning smoke: Part 1: Model description and evaluation. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 781.	0.8	47
93	Assessing Optical Properties and Refractive Index of Combustion Aerosol Particles Through Combined Experimental and Modeling Studies. Aerosol Science and Technology, 2015, 49, 340-350.	1.5	47
94	Uptake of reactive nitrogen on cirrus cloud particles during INCA. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	44
95	Technical Note: The single particle soot photometer fails to reliably detect PALAS soot nanoparticles. Atmospheric Measurement Techniques, 2012, 5, 3099-3107.	1.2	43
96	Global Civil Aviation Black Carbon Emissions. Environmental Science & Technology, 2013, 47, 130823150610008.	4.6	43
97	Inversion of data containing information on the aerosol particle size distribution using multiple instruments. Journal of Aerosol Science, 2005, 36, 1353-1372.	1.8	42
98	The evolution of microphysical and optical properties of an A380 contrail in the vortex phase. Atmospheric Chemistry and Physics, 2012, 12, 6629-6643.	1.9	42
99	Intercomparison of a Cavity Attenuated Phase Shift-based extinction monitor (CAPS PMex) with an integrating nephelometer and a filter-based absorption monitor. Atmospheric Measurement Techniques, 2013, 6, 1141-1151.	1.2	41
100	Measurement of ultrafine aerosol size distributions by a combination of diffusion screen separators and condensation particle counters. Journal of Aerosol Science, 2006, 37, 577-597.	1.8	40
101	Thin and subvisible cirrus and contrails in a subsaturated environment. Atmospheric Chemistry and Physics, 2011, 11, 5853-5865.	1.9	39
102	Thermodynamic correction of particle concentrations measured by underwing probes on fast-flying aircraft. Atmospheric Measurement Techniques, 2016, 9, 5135-5162.	1.2	39
103	Particle emissions from aircraft engines a survey of the European project PartEmis. Meteorologische Zeitschrift, 2005, 14, 465-476.	0.5	38
104	Mineral dust observed with AERONET Sun photometer, Raman lidar, and in situ instruments during SAMUM 2006: Shapeâ€dependent particle properties. Journal of Geophysical Research, 2010, 115, .	3.3	38
105	In situ studies on volatile jet exhaust particle emissions: Impact of fuel sulfur content and environmental conditions on nuclei mode aerosols. Journal of Geophysical Research, 2000, 105, 19941-19954.	3.3	37
106	Properties of jet engine combustion particles during the PartEmis experiment: Microphysics and Chemistry. Geophysical Research Letters, 2003, 30, .	1.5	37
107	Properties of jet engine combustion particles during the PartEmis experiment. Hygroscopic growth at supersaturated conditions. Geophysical Research Letters, 2003, 30, .	1.5	37
108	Novel design of a resonant photoacoustic spectrophone for elemental carbon mass monitoring. Applied Physics Letters, 1995, 66, 1285-1287.	1.5	34

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109	Airborne Lidar and in-situ Aerosol Observations of an Elevated Layer, Leeward of the European Alps and Apennines. Geophysical Research Letters, 2002, 29, 33-1-33-4.	1.5	30
110	Measurement and prediction of emissions of aerosols and gaseous precursors from gas turbine engines (PartEmis): an overview. Aerospace Science and Technology, 2004, 8, 131-143.	2.5	30
111	Aircraft-based operation of an aerosol mass spectrometer: Measurements of tropospheric aerosol composition. Journal of Aerosol Science, 2006, 37, 839-857.	1.8	30
112	Modeling the evolution of aerosol particles in a ship plume using PartMC-MOSAIC. Atmospheric Chemistry and Physics, 2014, 14, 5327-5347.	1.9	29
113	PARTICLE EMISSIONS FROM SHIP ENGINES. Journal of Aerosol Science, 2004, 35, S1095-S1096.	1.8	24
114	Aerosol-cirrus interactions: a number based phenomenon at all?. Atmospheric Chemistry and Physics, 2004, 4, 293-305.	1.9	24
115	Particle composition of a young condensation trail and of upper tropospheric aerosol. Geophysical Research Letters, 1998, 25, 2679-2682.	1.5	23
116	Vertical profiles of microphysical particle properties derived from inversion with two-dimensional regularization of multiwavelength Raman lidar data: experiment. Applied Optics, 2011, 50, 2069.	2.1	22
117	Airborne spectral radiation measurements to derive solar radiative forcing of Saharan dust mixed with biomass burning smoke particles. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 742.	0.8	22
118	Condensation nuclei (CN) and ultrafine CN in the free troposphere to 12 km: A case study over the Jungfraujoch High-Alpine Research Station. Geophysical Research Letters, 1999, 26, 2195-2198.	1.5	21
119	Quality assessment of MOZAIC and IAGOS capacitive hygrometers: insights from airborne field studies. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28320.	0.8	21
120	The IAGOS-CORE aerosol package: instrument design, operation and performance for continuous measurement aboard in-service aircraft. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28339.	0.8	21
121	Investigation of the specific attenuation cross-section of aerosols deposited on fiber filters with a polar photometer to determine black carbon. Journal of Aerosol Science, 1999, 30, 1153-1163.	1.8	19
122	Assessment of Cirrus Cloud Optical and Microphysical Data Reliability by Applying Statistical Procedures. Journal of Atmospheric and Oceanic Technology, 2005, 22, 409-420.	0.5	19
123	Ice-supersaturated air masses in the northern mid-latitudes from regular in situ observations by passenger aircraft: vertical distribution, seasonality and tropospheric fingerprint. Atmospheric Chemistry and Physics, 2020, 20, 8157-8179.	1.9	19
124	Aerosol-radiation interaction in the cloudless atmosphere during LACE 98 1. Measured and calculated broadband solar and spectral surface insolations. Journal of Geophysical Research, 2002, 107, LAC 6-1-LAC 6-20.	3.3	18
125	Evaluation of the MOZAIC Capacitive Hygrometer during the airborne field study CIRRUS-III. Atmospheric Measurement Techniques, 2015, 8, 1233-1243.	1.2	18
126	ENVRI-FAIR - Interoperable Environmental FAIR Data and Services for Society, Innovation and Research. , 2019, , .		17

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127	Upper tropospheric water vapour and its interaction with cirrus clouds as seen from IAGOS long-term routine in situ observations. Faraday Discussions, 2017, 200, 229-249.	1.6	16
128	Technical Note: Reanalysis of upper troposphere humidity data from the MOZAIC programme for the period 1994 to 2009. Atmospheric Chemistry and Physics, 2014, 14, 13241-13255.	1.9	15
129	THE CONDENSATION PARTICLE SIZE ANALYZER: A NEW INSTRUMENT FOR THE MEASUREMENT OF ULTRAFINE AEROSOL SIZE DISTRIBUTIONS. Journal of Aerosol Science, 2001, 32, 381-382.	1.8	15
130	The 2019 Raikoke volcanic eruption â€“ Part 2: Particle-phase dispersion and concurrent wildfire smoke emissions. Atmospheric Chemistry and Physics, 2022, 22, 2975-2997.	1.9	15
131	The IAGOS NO_{<i>x</i>} instrument â€“ design, operation and first results from deployment aboard passenger aircraft. Atmospheric Measurement Techniques, 2018, 11, 3737-3757.	1.2	14
132	Airborne observations of aerosol microphysical properties and particle ageing processes in the troposphere above Europe. Atmospheric Chemistry and Physics, 2012, 12, 11533-11554.	1.9	13
133	The first regular measurements of ozone, carbon monoxide and water vapour in the Pacific UTLS by IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28385.	0.8	13
134	Aerosol-radiation interaction in the cloudless atmosphere during LACE 98 2. Aerosol-induced solar irradiance changes determined from airborne pyranometer measurements and calculations. Journal of Geophysical Research, 2002, 107, LAC 12-1-LAC 12-15.	3.3	12
135	Volatile particles formation during PartEmis: a modelling study. Atmospheric Chemistry and Physics, 2004, 4, 439-447.	1.9	12
136	In situ temperature measurements in the upper troposphere and lowermost stratosphere from 2Âdecades of IAGOS long-term routine observation. Atmospheric Chemistry and Physics, 2017, 17, 12495-12508.	1.9	12
137	The effects of the COVID-19 lockdowns on the composition of the troposphere as seen by In-service Aircraft for a Global Observing System (IAGOS) at Frankfurt. Atmospheric Chemistry and Physics, 2021, 21, 16237-16256.	1.9	12
138	Reexamination of Black Carbon Mass Emission Indices of a Jet Engine. Aerosol Science and Technology, 1998, 29, 355-356.	1.5	11
139	Aerosols in the Atmosphere. Research Topics in Aerospace, 2012, , 37-53.	0.6	11
140	Thermal stability analysis of particles incorporated in cirrus crystals and of non-activated particles in between the cirrus crystals: comparing clean and polluted air masses. Atmospheric Chemistry and Physics, 2004, 4, 1343-1353.	1.9	10
141	<title>In-situ measurements on carbon aerosols with photoacoustic spectroscopy</title>. , 1993, 1716, 510.		9
142	Intercomparison study on soot-selective methods â€” field study results from several polluted areas in Germany. Journal of Aerosol Science, 1995, 26, S393-S394.	1.8	9
143	Characterization of the Miniaturized Inverted Flame Burner as a Combustion Source to Generate a Nanoparticle Calibration Aerosol. Emission Control Science and Technology, 2020, 6, 37-46.	0.8	9
144	Photoacoustic sensor for carbon aerosols. Sensors and Actuators B: Chemical, 1993, 14, 640-641.	4.0	8

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145	Generation of carbon aerosols by fragmentation of acetylene in a laser-induced plasma. Journal of Aerosol Science, 1994, 25, 265-275.	1.8	7
146	In situ observations of aerosol properties above ice saturation in the polar tropopause region. Journal of Geophysical Research, 2000, 105, 29387-29395.	3.3	7
147	Airborne survey of trace gases and aerosols over the Southern Baltic Sea: from clean marine boundary layer to shipping corridor effect. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1695349.	0.8	7
148	Airborne and laboratory studies of an IAGOS instrumentation package containing a modified CAPS particle extinction monitor. Aerosol Science and Technology, 2017, 51, 1240-1253.	1.5	6
149	Diesel exhaust particle size distribution measurements under dynamic conditions. Journal of Aerosol Science, 1995, 26, S659-S660.	1.8	5
150	Properties of jet engine combustion particles during the PartEmis experiment: Particle size spectra (d) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.5	4
151	Laboratory validation of a compact single-scattering albedo (SSA) monitor. Atmospheric Measurement Techniques, 2021, 14, 1635-1653.	1.2	4
152	State of mixing, shape factor, number size distribution, and hygroscopic growth of the Saharan anthropogenic and mineral dust aerosol at Tinfou, Morocco. Tellus, Series B: Chemical and Physical Meteorology, 2009, 61, .	0.8	4
153	Growth of upper tropospheric aerosols due to uptake of HNO₃. Atmospheric Chemistry and Physics, 2004, 4, 549-556.	1.9	3
154	AN IMPROVED AEROSOL ABSORPTION PHOTOMETER FOR THE DETERMINATION OF BLACK CARBON IN AMBIENT AEROSOL. Journal of Aerosol Science, 2001, 32, 37-38.	1.8	3
155	Relative errors in derived multi-wavelength intensive aerosol optical properties using cavity attenuated phase shift single-scattering albedo monitors, a nephelometer, and tricolour absorption photometer measurements. Atmospheric Measurement Techniques, 2022, 15, 3279-3296.	1.2	3
156	The photoacoustic soot sensor (pass) â€" Validation for airborne particulate carbon. Journal of Aerosol Science, 1995, 26, S759-S760.	1.8	2
157	Airborne lidar and aerosol studies over the adriatic sea: II. Aerosol volatility studies. Journal of Aerosol Science, 2000, 31, 586-587.	1.8	2
158	Towards Operational Research Infrastructures with FAIR Data and Services. Lecture Notes in Computer Science, 2020, , 360-372.	1.0	2
159	In Situ Measurement Methods for Atmospheric Aerosol Particles and Cloud Elements. Research Topics in Aerospace, 2012, , 297-315.	0.6	2
160	RESPONSE OF FILTER-BASED METHODS FOR MEASURING LIGHT ABSORPTION TO COMBUSTION AEROSOLS FROM DIFFERENT SOURCES. Journal of Aerosol Science, 2004, 35, S775-S776.	1.8	1
161	10 The ABC-Pyramid: a scientific laboratory at 5079 m a.s.l. for the study of atmospheric composition change and climate. Developments in Earth Surface Processes, 2007, 10, 67-75.	2.8	1
162	Atmospheric chemistry and the biosphere: general discussion. Faraday Discussions, 2017, 200, 195-228.	1.6	1

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163	Cloud-Aerosol-Radiation Interaction: Towards the EarthCARE Satellite Mission. Research Topics in Aerospace, 2012, , 829-842.	0.6	1
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