Paul C Zieger

List of Publications by Year
in descending order

56 papers	2,838 citations	185998 28 h-index	189595 50 g-index
106 all docs	106 docs citations	106 times ranked	3490 citing authors

#	Article	IF	Citations
1	Sensitivity of the Single Particle Soot Photometer to different black carbon types. Atmospheric Measurement Techniques, 2012, 5, 1031-1043.	1.2	191
2	Effects of relative humidity on aerosol light scattering: results from different European sites. Atmospheric Chemistry and Physics, 2013, 13, 10609-10631.	1.9	184
3	Revising the hygroscopicity of inorganic sea salt particles. Nature Communications, 2017, 8, 15883.	5.8	173
4	Comparison of ambient aerosol extinction coefficients obtained from in-situ, MAX-DOAS and LIDAR measurements at Cabauw. Atmospheric Chemistry and Physics, 2011, 11, 2603-2624.	1.9	126
5	Effects of relative humidity on aerosol light scattering in the Arctic. Atmospheric Chemistry and Physics, 2010, 10, 3875-3890.	1.9	124
6	Aerosols in current and future Arctic climate. Nature Climate Change, 2021, 11, 95-105.	8.1	111
7	Effect of hygroscopic growth on the aerosol light-scattering coefficient: A review of measurements, techniques and error sources. Atmospheric Environment, 2016, 141, 494-507.	1.9	107
8	Frequent new particle formation over the high Arctic pack ice by enhanced iodine emissions. Nature Communications, 2020, 11, 4924.	5.8	96
9	Measured and predicted aerosol light scattering enhancement factors at the high alpine site Jungfraujoch. Atmospheric Chemistry and Physics, 2010, 10, 2319-2333.	1.9	92
10	Measurement of relative humidity dependent light scattering of aerosols. Atmospheric Measurement Techniques, 2010, 3, 39-50.	1.2	88
11	Ground-based and airborne in-situ measurements of the EyjafjallajÃ¶kull volcanic aerosol plume in Switzerland in spring 2010. Atmospheric Chemistry and Physics, 2011, 11, 10011-10030.	1.9	87
12	The Cabauw Intercomparison campaign for Nitrogen Dioxide measuring Instruments (CINDI): design, execution, and early results. Atmospheric Measurement Techniques, 2012, 5, 457-485.	1.2	83
13	LOAC: a small aerosol optical counter/sizer for ground-based and balloon measurements of the size distribution and nature of atmospheric particles â€“ Part 1: Principle of measurements and instrument evaluation. Atmospheric Measurement Techniques, 2016, 9, 1721-1742.	1.2	81
14	Evaluating the capabilities and uncertainties of droplet measurements for the fog droplet spectrometer (FM-100). Atmospheric Measurement Techniques, 2012, 5, 2237-2260.	1.2	75
15	An empirically derived inorganic sea spray source function incorporating sea surface temperature. Atmospheric Chemistry and Physics, 2015, 15, 11047-11066.	1.9	70
16	Differing Mechanisms of New Particle Formation at Two Arctic Sites. Geophysical Research Letters, 2021, 48, e2020GL091334.	1.5	70
17	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
18	Calcium enrichment in sea spray aerosol particles. Geophysical Research Letters, 2016, 43, 8277-8285.	1.5	62

#	ARTICLE	IF	CITATIONS
19	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
20	LOAC: a small aerosol optical counter/sizer for ground-based and balloon measurements of the size distribution and nature of atmospheric particles â€“ Part 2: First results from balloon and unmanned aerial vehicle flights. Atmospheric Measurement Techniques, 2016, 9, 3673-3686.	1.2	59
21	Multidecadal trend analysis of in situ aerosol radiative properties around the world. Atmospheric Chemistry and Physics, 2020, 20, 8867-8908.	1.9	58
22	Spatial variation of aerosol optical properties around the high-alpine site Jungfraujoch (3580 m a.s.l.). Atmospheric Chemistry and Physics, 2012, 12, 7231-7249.	1.9	55
23	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
24	Intercomparison of aerosol extinction profiles retrieved from MAX-DOAS measurements. Atmospheric Measurement Techniques, 2016, 9, 3205-3222.	1.2	53
25	Light scattering enhancement factors in the marine boundary layer (Mace Head, Ireland). Journal of Geophysical Research, 2010, 115, .	3.3	48
26	Interactions between the atmosphere, cryosphere, and ecosystems at northern high latitudes. Atmospheric Chemistry and Physics, 2019, 19, 2015-2061.	1.9	42
27	Investigation of the Planetary Boundary Layer in the Swiss Alps Using Remote Sensing and In Situ Measurements. Boundary-Layer Meteorology, 2014, 151, 317-334.	1.2	41
28	Low hygroscopic scattering enhancement of boreal aerosol and the implications for a columnar optical closure study. Atmospheric Chemistry and Physics, 2015, 15, 7247-7267.	1.9	32
29	Seasonal variation of aerosol water uptake and its impact on the direct radiative effect at Ny-Ã…lesund, Svalbard. Atmospheric Chemistry and Physics, 2014, 14, 7445-7460.	1.9	29
30	A global view on the effect of water uptake on aerosol particle light scattering. Scientific Data, 2019, 6, 157.	2.4	28
31	Tropical and Boreal Forest â€“ Atmosphere Interactions: A Review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 74, 24.	0.8	27
32	Atmospheric composition in the European Arctic and 30Âyears of the Zeppelin Observatory, Ny-Ã…lesund. Atmospheric Chemistry and Physics, 2022, 22, 3321-3369.	1.9	24
33	Highly Active Iceâ€Nucleating Particles at the Summer North Pole. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	22
34	Reconciling aerosol light extinction measurements from spaceborne lidar observations and in situ measurements in the Arctic. Atmospheric Chemistry and Physics, 2014, 14, 7869-7882.	1.9	20
35	The radiative impact of out-of-cloud aerosol hygroscopic growth during the summer monsoon in southern West Africa. Atmospheric Chemistry and Physics, 2019, 19, 1505-1520.	1.9	20
36	From a polar to a marine environment: has the changing Arctic led to a shift in aerosol light scattering properties?. Atmospheric Chemistry and Physics, 2020, 20, 13671-13686.	1.9	20

#	Article	IF	Citations
37	A global modelâ€“measurement evaluation of particle light scattering coefficients at elevated relative humidity. Atmospheric Chemistry and Physics, 2020, 20, 10231-10258.	1.9	19
38	Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic. Atmospheric Measurement Techniques, 2021, 14, 6723-6748.	1.2	19
39	Insights into the molecular composition of semi-volatile aerosols in the summertime central Arctic Ocean using FIGAERO-CIMS. Environmental Science Atmospheres, 2021, 1, 161-175.	0.9	18
40	New Insights Into the Composition and Origins of Ultrafine Aerosol in the Summertime High Arctic. Geophysical Research Letters, 2021, 48, e2021GL094395.	1.5	17
41	Dual-aureole and sun spectrometer system for airborne measurements of aerosol optical properties. Applied Optics, 2007, 46, 8542.	2.1	16
42	The white-light humidified optical particle spectrometer (WHOPS) â€“ a novel airborne system to characterize aerosol hygroscopicity. Atmospheric Measurement Techniques, 2015, 8, 921-939.	1.2	15
43	A long-term study of cloud residuals from low-level Arctic clouds. Atmospheric Chemistry and Physics, 2021, 21, 8933-8959.	1.9	15
44	The MILAN Campaign: Studying Diel Light Effects on the Airâ€“Sea Interface. Bulletin of the American Meteorological Society, 2020, 101, E146-E166.	1.7	14
45	Influence of Organic Acids on the Surface Composition of Sea Spray Aerosol. Journal of Physical Chemistry A, 2020, 124, 422-429.	1.1	12
46	Physical and Chemical Properties of Cloud Droplet Residuals and Aerosol Particles During the Arctic Ocean 2018 Expedition. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	12
47	Sea Spray Aerosol Chamber Study on Selective Transfer and Enrichment of Free and Combined Amino Acids. ACS Earth and Space Chemistry, 2021, 5, 1564-1574.	1.2	8
48	The development of a miniaturised balloon-borne cloud water sampler and its first deployment in the high Arctic. Tellus, Series B: Chemical and Physical Meteorology, 2021, 73, 1-12.	0.8	7
49	A global study of hygroscopicity-driven light-scattering enhancement in the context of other in situ aerosol optical properties. Atmospheric Chemistry and Physics, 2021, 21, 13031-13050.	1.9	7
50	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.	0.8	6
51	Composition, isotopic fingerprint and source attribution of nitrate deposition from rain and fog at a Sub-Arctic Mountain site in Central Sweden (Mt Ã…reskutan). Tellus, Series B: Chemical and Physical Meteorology, 2022, 71, 1559398.	0.8	6
52	Fostering multidisciplinary research on interactions between chemistry, biology, and physics within the coupled cryosphere-atmosphere system. Elementa, 2019, 7, .	1.1	6
53	Physical and chemical properties of aerosol particles and cloud residuals on Mt. Åreskutan in Central Sweden during summer 2014. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1776080.	0.8	5
54	Using correlations between observed equivalent black carbon and aerosol size distribution to derive size resolved BC mass concentration: a method applied on long-term observations performed at Zeppelin station, Ny-Ã…lesund, Svalbard. Tellus, Series B: Chemical and Physical Meteorology, 2021, 73, 1-17.	0.8	2

#	Article	IF	Citations
55	Modeling aerosol water uptake in the arctic based on the Î º-Kohler theory. , 2013, , .		0
56	The Milan Campaign: Studying the Sea Surface Microlayer. Bulletin of the American Meteorological Society, 2020, 101, 299-304.	1.7	0