John Backman

List of Publications by Year
in descending order

38 papers	1,424 citations	361296 20 h-index	345118 36 g-index
68 all docs	68 docs citations	68 times ranked	2300 citing authors

#	Article	IF	Citations
1	Photochemical degradation affects the light absorption of water-soluble brown carbon in the South Asian outflow. Science Advances, 2019, 5, eaau8066.	4.7	123
2	Characteristics and source apportionment of black carbon in the Helsinki metropolitan area, Finland. Atmospheric Environment, 2018, 190, 87-98.	1.9	118
3	Aerosol size distribution seasonal characteristics measured in Tiksi, Russian Arctic. Atmospheric Chemistry and Physics, 2016, 16, 1271-1287.	1.9	97
4	Seasonality of aerosol optical properties in the Arctic. Atmospheric Chemistry and Physics, 2018, 18, 11599-11622.	1.9	80
5	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
6	Seasonal cycle, size dependencies, and source analyses of aerosol optical properties at the SMEAR II measurement station in HyytiÃlÃ, Finland. Atmospheric Chemistry and Physics, 2011, 11, 4445-4468.	1.9	72
7	On Aethalometer measurement uncertainties and an instrument correction factor for the Arctic. Atmospheric Measurement Techniques, 2017, 10, 5039-5062.	1.2	70
8	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
9	South African EUCAARI measurements: seasonal variation of trace gases and aerosol optical properties. Atmospheric Chemistry and Physics, 2012, 12, 1847-1864.	1.9	62
10	Multidecadal trend analysis of in situ aerosol radiative properties around the world. Atmospheric Chemistry and Physics, 2020, 20, 8867-8908.	1.9	58
11	On the diurnal cycle of urban aerosols, black carbon and the occurrence of new particle formation events in springtime SÃ£o Paulo, Brazil. Atmospheric Chemistry and Physics, 2012, 12, 11733-11751.	1.9	55
12	Long-term volatility measurements of submicron atmospheric aerosol in HyytiÃlÃ, Finland. Atmospheric Chemistry and Physics, 2012, 12, 10771-10786.	1.9	45
13	Changes in black carbon emissions over Europe due to COVID-19 lockdowns. Atmospheric Chemistry and Physics, 2021, 21, 2675-2692.	1.9	40
14	Variation of Absorption Ã…ngstrÃ¶m Exponent in Aerosols From Different Emission Sources. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034094.	1.2	37
15	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
16	The importance of the representation of air pollution emissions for the modeled distribution and radiative effects of black carbon in the Arctic. Atmospheric Chemistry and Physics, 2019, 19, 11159-11183.	1.9	30
17	Optical and geometrical aerosol particle properties over the United Arab Emirates. Atmospheric Chemistry and Physics, 2020, 20, 8909-8922.	1.9	29
18	Light-absorption of dust and elemental carbon in snow in the Indian Himalayas and the Finnish Arctic. Atmospheric Measurement Techniques, 2018, 11, 1403-1416.	1.2	27

#	Article	IF	Citations
19	Multi-year statistical and modeling analysis of submicrometer aerosol number size distributions at a rain forest site in Amazonia. Atmospheric Chemistry and Physics, 2018, 18, 10255-10274.	1.9	26
20	Ground-based observation of clusters and nucleation-mode particles in the Amazon. Atmospheric Chemistry and Physics, 2018, 18, 13245-13264.	1.9	26
21	Influence of biogenic emissions from boreal forests on aerosolâ€“cloud interactions. Nature Geoscience, 2022, 15, 42-47.	5.4	25
22	Primary sources control the variability of aerosol optical properties in the Antarctic Peninsula. Tellus, Series B: Chemical and Physical Meteorology, 2022, 70, 1414571.	0.8	23
23	Driving Factors of Aerosol Properties Over the Foothills of Central Himalayas Based on 8.5ÂYears Continuous Measurements. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,421.	1.2	20
24	Anthropogenic fine aerosols dominate the wintertime regime over the northern Indian Ocean. Tellus, Series B: Chemical and Physical Meteorology, 2022, 70, 1464871.	0.8	19
25	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
26	Differences in aerosol absorption Ã…ngstrÃ¶m exponents between correction algorithms for a particle soot absorption photometer measured on the South African Highveld. Atmospheric Measurement Techniques, 2014, 7, 4285-4298.	1.2	17
27	Prescribed burning of logging slash in the boreal forest of Finland: emissions and effects on meteorological quantities and soil properties. Atmospheric Chemistry and Physics, 2014, 14, 4473-4502.	1.9	17
28	Asian Emissions Explain Much of the Arctic Black Carbon Events. Geophysical Research Letters, 2021, 48, e2020GL091913.	1.5	16
29	In-situ observations of EyjafjallajÃ¶kull ash particles by hot-air balloon. Atmospheric Environment, 2012, 48, 104-112.	1.9	14
30	Carbon clusters in 50nm urban air aerosol particles quantified by laser desorptionâ€“ionization aerosol mass spectrometer. International Journal of Mass Spectrometry, 2014, 358, 17-24.	0.7	14
31	Impacts of volatilisation on light scattering and filter-based absorption measurements: a case study. Atmospheric Measurement Techniques, 2010, 3, 1205-1216.	1.2	13
32	Absorption instruments inter-comparison campaign at the Arctic Pallas station. Atmospheric Measurement Techniques, 2021, 14, 5397-5413.	1.2	12
33	Changes in aerosol size distributions over the Indian Ocean during different meteorological conditions. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1792756.	0.8	7
34	Aerosol particle characteristics measured in the United Arab Emirates and their response to mixing in the boundary layer. Atmospheric Chemistry and Physics, 2022, 22, 481-503.	1.9	5
35	Aerosol optical properties calculated from size distributions, filter samples and absorption photometer data at Dome C, Antarctica, and their relationships with seasonal cycles of sources. Atmospheric Chemistry and Physics, 2022, 22, 5033-5069.	1.9	3
36	Sensitivity analysis of the meteorological preprocessor MPP-FMI 3.0 using algorithmic differentiation. Geoscientific Model Development, 2017, 10, 3793-3803.	1.3	1

#	Article	IF	Citations
37	New aerosol particle formation in Amazonia. , 2013, , .		0
38	The Sensitivity of the Predictions of a Roadside Dispersion Model to Meteorological Variables: Evaluation Using Algorithmic Differentiation. Springer Proceedings in Complexity, 2018, , 89-94.	0.2	0