Allison Aiken

List of Publications by Year
in descending order

58 papers	14,330 citations	94433 37 h-index	138484 58 g-index
93 all docs	93 docs citations	93 times ranked	7057 citing authors

#	Article	IF	Citations
1	Evolution of Organic Aerosols in the Atmosphere. Science, 2009, 326, 1525-1529.	12.6	3,374
2	Field-Deployable, High-Resolution, Time-of-Flight Aerosol Mass Spectrometer. Analytical Chemistry, 2006, 78, 8281-8289.	6.5	1,968
3	O/C and OM/OC Ratios of Primary, Secondary, and Ambient Organic Aerosols with High-Resolution Time-of-Flight Aerosol Mass Spectrometry. Environmental Science & Technology, 2008, 42, 4478-4485.	10.0	1,524
4	Mexico City aerosol analysis during MILAGRO using high resolution aerosol mass spectrometry at the urban supersite (T0) â€“ Part 1: Fine particle composition and organic source apportionment. Atmospheric Chemistry and Physics, 2009, 9, 6633-6653.	4.9	525
5	Elemental Analysis of Organic Species with Electron Ionization High-Resolution Mass Spectrometry. Analytical Chemistry, 2007, 79, 8350-8358.	6.5	490
6	A simplified description of the evolution of organic aerosol composition in the atmosphere. Geophysical Research Letters, 2010, 37, .	4.0	412
7	Fast airborne aerosol size and chemistry measurements above Mexico City and Central Mexico during the MILAGRO campaign. Atmospheric Chemistry and Physics, 2008, 8, 4027-4048.	4.9	411
8	Brownness of organics in aerosols from biomass burning linked to their black carbon content. Nature Geoscience, 2014, 7, 647-650.	12.9	407
9	Characterization of Primary Organic Aerosol Emissions from Meat Cooking, Trash Burning, and Motor Vehicles with High-Resolution Aerosol Mass Spectrometry and Comparison with Ambient and Chamber Observations. Environmental Science & Technology, 2009, 43, 2443-2449.	10.0	365
10	Relating hygroscopicity and composition of organic aerosol particulate matter. Atmospheric Chemistry and Physics, 2011, 11, 1155-1165.	4.9	326
11	Investigation of the sources and processing of organic aerosol over the Central Mexican Plateau from aircraft measurements during MILAGRO. Atmospheric Chemistry and Physics, 2010, 10, 5257-5280.	4.9	325
12	Contribution of Nitrated Phenols to Wood Burning Brown Carbon Light Absorption in Detling, United Kingdom during Winter Time. Environmental Science & Technology, 2013, 47, 6316-6324.	10.0	304
13	Chemically-resolved aerosol volatility measurements from two megacity field studies. Atmospheric Chemistry and Physics, 2009, 9, 7161-7182.	4.9	289
14	Morphology and mixing state of individual freshly emitted wildfire carbonaceous particles. Nature Communications, 2013, 4, 2122.	12.8	278
15	Loading-dependent elemental composition of Î±-pinene SOA particles. Atmospheric Chemistry and Physics, 2009, 9, 771-782.	4.9	272
16	Enhanced light absorption by mixed source black and brown carbon particles in UK winter. Nature Communications, 2015, 6, 8435.	12.8	266
17	The importance of aerosol mixing state and size-resolved composition on CCN concentration and the variation of the importance with atmospheric aging of aerosols. Atmospheric Chemistry and Physics, 2010, 10, 7267-7283.	4.9	206
18	Design, Modeling, Optimization, and Experimental Tests of a Particle Beam Width Probe for the Aerodyne Aerosol Mass Spectrometer. Aerosol Science and Technology, 2005, 39, 1143-1163.	3.1	196

#	Article	IF	Citations
19	Mexico city aerosol analysis during MILAGRO using high resolution aerosol mass spectrometry at the urban supersite (T0) â€“ Part 2: Analysis of the biomass burning contribution and the non-fossil carbon fraction. Atmospheric Chemistry and Physics, 2010, 10, 5315-5341.	4.9	182
20	Evolution of Asian aerosols during transpacific transport in INTEX-B. Atmospheric Chemistry and Physics, 2009, 9, 7257-7287.	4.9	170
21	Evaluating simulated primary anthropogenic and biomass burning organic aerosols during MILAGRO: implications for assessing treatments of secondary organic aerosols. Atmospheric Chemistry and Physics, 2009, 9, 6191-6215.	4.9	138
22	The 2005 Study of Organic Aerosols at Riverside (SOAR-1): instrumental intercomparisons and fine particle composition. Atmospheric Chemistry and Physics, 2011, 11, 12387-12420.	4.9	129
23	The Green Ocean Amazon Experiment (GoAmazon2014/5) Observes Pollution Affecting Gases, Aerosols, Clouds, and Rainfall over the Rain Forest. Bulletin of the American Meteorological Society, 2017, 98, 981-997.	3.3	128
24	Deriving brown carbon from multiwavelength absorption measurements: method and application to AERONET and Aethalometer observations. Atmospheric Chemistry and Physics, 2016, 16, 12733-12752.	4.9	123
25	Modeling organic aerosols during MILAGRO: importance of biogenic secondary organic aerosols. Atmospheric Chemistry and Physics, 2009, 9, 6949-6981.	4.9	119
26	Meteorology, Air Quality, and Health in London: The ClearfLo Project. Bulletin of the American Meteorological Society, 2015, 96, 779-804.	3.3	105
27	Total observed organic carbon (TOOC) in the atmosphere: a synthesis of North American observations. Atmospheric Chemistry and Physics, 2008, 8, 2007-2025.	4.9	94
28	Aerosol single scattering albedo dependence on biomass combustion efficiency: Laboratory and field studies. Geophysical Research Letters, 2014, 41, 742-748.	4.0	85
29	Measurements of HNO₃ and N₂O₅ using ion drift-chemical ionization mass spectrometry during the MILAGRO/MCMA-2006 campaign. Atmospheric Chemistry and Physics, 2008, 8, 6823-6838.	4.9	83
30	Primary and secondary contributions to aerosol light scattering and absorption in Mexico City during the MILAGRO 2006 campaign. Atmospheric Chemistry and Physics, 2009, 9, 3721-3730.	4.9	83
31	The Ascension Island Boundary Layer in the Remote Southeast Atlantic is Often Smoky. Geophysical Research Letters, 2018, 45, 4456-4465.	4.0	77
32	Impact of palmitic acid coating on the water uptake and loss of ammonium sulfate particles. Atmospheric Chemistry and Physics, 2005, 5, 1951-1961.	4.9	71
33	Overview of the Manitou Experimental Forest Observatory: site description and selected science results from 2008 to 2013. Atmospheric Chemistry and Physics, 2014, 14, 6345-6367.	4.9	62
34	Reduction in Haze Formation Rate on Prebiotic Earth in the Presence of Hydrogen. Astrobiology, 2009, 9, 447-453.	3.0	52
35	Marine boundary layer aerosol in the eastern North Atlantic: seasonal variations and key controlling processes. Atmospheric Chemistry and Physics, 2018, 18, 17615-17635.	4.9	51
36	Determination of particulate lead using aerosol mass spectrometry: MILAGRO/MCMA-2006 observations. Atmospheric Chemistry and Physics, 2010, 10, 5371-5389.	4.9	48

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37	Ice nucleation activity of diesel soot particles at cirrus relevant temperature conditions: Effects of hydration, secondary organics coating, soot morphology, and coagulation. Geophysical Research Letters, 2016, 43, 3580-3588.	4.0	47
38	Extensive Soot Compaction by Cloud Processing from Laboratory and Field Observations. Scientific Reports, 2019, 9, 11824.	3.3	47
39	Three-dimensional factorization of size-resolved organic aerosol mass spectra from Mexico City. Atmospheric Measurement Techniques, 2012, 5, 195-224.	3.1	39
40	Morphology of diesel soot residuals from supercooled water droplets and ice crystals: implications for optical properties. Environmental Research Letters, 2015, 10, 114010.	5.2	35
41	Long-range transported North American wildfire aerosols observed in marine boundary layer of eastern North Atlantic. Environment International, 2020, 139, 105680.	10.0	35
42	Aerosol and Cloud Experiments in the Eastern North Atlantic (ACE-ENA). Bulletin of the American Meteorological Society, 2022, 103, E619-E641.	3.3	33
43	Wintertime aerosol chemical composition, volatility, and spatial variability in the greater London area. Atmospheric Chemistry and Physics, 2016, 16, 1139-1160.	4.9	32
44	High summertime aerosol organic functional group concentrations from marine and seabird sources at Ross Island, Antarctica, during AWARE. Atmospheric Chemistry and Physics, 2018, 18, 8571-8587.	4.9	31
45	Fractal-like Tar Ball Aggregates from Wildfire Smoke. Environmental Science and Technology Letters, 2018, 5, 360-365.	8.7	29
46	Mie Scattering Captures Observed Optical Properties of Ambient Biomass Burning Plumes Assuming Uniform Black, Brown, and Organic Carbon Mixtures. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11406-11427.	3.3	23
47	Optical Properties of Laboratory and Ambient Biomass Burning Aerosols: Elucidating Black, Brown, and Organic Carbon Components and Mixing Regimes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5088-5105.	3.3	21
48	Southwestern U.S. Biomass Burning Smoke Hygroscopicity: The Role of Plant Phenology, Chemical Composition, and Combustion Properties. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5416-5432.	3.3	19
49	Atmospheric Radiation Measurement (ARM) Aerosol Observing Systems (AOS) for Surface-Based In Situ Atmospheric Aerosol and Trace Gas Measurements. Journal of Atmospheric and Oceanic Technology, 2019, 36, 2429-2447.	1.3	19
50	Low hygroscopicity of ambient fresh carbonaceous aerosols from pyrotechnics smoke. Atmospheric Environment, 2018, 178, 101-108.	4.1	15
51	Optical and Chemical Analysis of Absorption Enhancement by Mixed Carbonaceous Aerosols in the 2019 Woodbury, AZ, Fire Plume. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032399.	3.3	13
52	Identifying a regional aerosol baseline in the eastern North Atlantic using collocated measurements and a mathematical algorithm to mask high-submicron-number-concentration aerosol events. Atmospheric Chemistry and Physics, 2020, 20, 7553-7573.	4.9	7
53	Quantification of online removal of refractory black carbon using laser-induced incandescence in the single particle soot photometer. Aerosol Science and Technology, 2016, 50, 679-692.	3.1	6
54	NO_x instrument intercomparison for laboratory biomass burning source studies and urban ambient measurements in Albuquerque, New Mexico. Journal of the Air and Waste Management Association, 2018, 68, 1175-1189.	1.9	6

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55	Optical properties and radiative forcing of fractal-like tar ball aggregates from biomass burning. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 230, 65-74.	2.3	6
56	Wildfire Smoke Demonstrates Significant and Predictable Black Carbon Light Absorption Enhancements. Geophysical Research Letters, 2022, 49, .	4.0	5
57	Mass Spectral Studies of Shocked Salts and Nitrocellulose Polymer Films. AIP Conference Proceedings, 2004, , .	0.4	4
58	Humidified single-scattering albedometer (H-CAPS-PM_{SSA}): Design, data analysis, and validation. Aerosol Science and Technology, 2021, 55, 749-768.	3.1	4