Rodney J Weber

List of Publications by Year
in descending order

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232 papers	28,089 citations	3515 90 h-index	7496 151 g-index
335 all docs	335 docs citations	335 times ranked	10629 citing authors

#	Article	IF	Citations
1	Secondary organic aerosol formation in cloud droplets and aqueous particles (aqSOA): a review of laboratory, field and model studies. Atmospheric Chemistry and Physics, 2011, 11, 11069-11102.	1.9	1,085
2	A large organic aerosol source in the free troposphere missing from current models. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	576
3	Effects of aging on organic aerosol from open biomass burning smoke in aircraft and laboratory studies. Atmospheric Chemistry and Physics, 2011, 11, 12049-12064.	1.9	520
4	A study of secondary organic aerosol formation in the anthropogenicâ€influenced southeastern United States. Journal of Geophysical Research, 2007, 112, .	3.3	517
5	Effects of anthropogenic emissions on aerosol formation from isoprene and monoterpenes in the southeastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 37-42.	3.3	496
6	Water-Soluble Organic Aerosol material and the light-absorption characteristics of aqueous extracts measured over the Southeastern United States. Atmospheric Chemistry and Physics, 2010, 10, 5965-5977.	1.9	459
7	Single-particle mass spectrometry of tropospheric aerosol particles. Journal of Geophysical Research, 2006, 111, .	3.3	442
8	Measurements of new particle formation and ultrafine particle growth rates at a clean continental site. Journal of Geophysical Research, 1997, 102, 4375-4385.	3.3	417
9	Fine-particle water and pH in the southeastern United States. Atmospheric Chemistry and Physics, 2015, 15, 5211-5228.	1.9	413
10	A Particle-into-Liquid Collector for Rapid Measurement of Aerosol Bulk Chemical Composition. Aerosol Science and Technology, 2001, 35, 718-727.	1.5	391
11	Refinements to the particle-into-liquid sampler (PILS) for ground and airborne measurements of water soluble aerosol composition. Atmospheric Environment, 2003, 37, 1243-1259.	1.9	359
12	MEASURED ATMOSPHERIC NEW PARTICLE FORMATION RATES: IMPLICATIONS FOR NUCLEATION MECHANISMS. Chemical Engineering Communications, 1996, 151, 53-64.	1.5	358
13	Variability in Nocturnal Nitrogen Oxide Processing and Its Role in Regional Air Quality. Science, 2006, 311, 67-70.	6.0	345
14	Sources, Composition and Absorption Ã…ngstrÃ¶m Exponent of Light-absorbing Organic Components in Aerosol Extracts from the Los Angeles Basin. Environmental Science & Technology, 2013, 47, 3685-3693.	4.6	344
15	Biomass burning contribution to Beijing aerosol. Atmospheric Chemistry and Physics, 2013, 13, 7765-7781.	1.9	343
16	ACE-ASIA: Regional Climatic and Atmospheric Chemical Effects of Asian Dust and Pollution. Bulletin of the American Meteorological Society, 2004, 85, 367-380.	1.7	330
17	High aerosol acidity despite declining atmospheric sulfate concentrations over the past 15 years. Nature Geoscience, 2016, 9, 282-285.	5.4	327
18	The acidity of atmospheric particles and clouds. Atmospheric Chemistry and Physics, 2020, 20, 4809-4888.	1.9	327

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19	Highly Acidic Ambient Particles, Soluble Metals, and Oxidative Potential: A Link between Sulfate and Aerosol Toxicity. Environmental Science & Technology, 2017, 51, 2611-2620.	4.6	323
20	Review of Acellular Assays of Ambient Particulate Matter Oxidative Potential: Methods and Relationships with Composition, Sources, and Health Effects. Environmental Science & Technology, 2019, 53, 4003-4019.	4.6	321
21	Evolution of brown carbon in wildfire plumes. Geophysical Research Letters, 2015, 42, 4623-4630.	1.5	284
22	Apportionment of Primary and Secondary Organic Aerosols in Southern California during the 2005 Study of Organic Aerosols in Riverside (SOAR-1). Environmental Science & Technology, 2008, 42, 7655-7662.	4.6	273
23	Highly functionalized organic nitrates in the southeast United States: Contribution to secondary organic aerosol and reactive nitrogen budgets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1516-1521.	3.3	269
24	Size-resolved measurements of brown carbon in water and methanol extracts and estimates of their contribution to ambient fine-particle light absorption. Atmospheric Chemistry and Physics, 2013, 13, 12389-12404.	1.9	268
25	Mass absorption efficiency of elemental carbon and water-soluble organic carbon in Beijing, China. Atmospheric Chemistry and Physics, 2011, 11, 11497-11510.	1.9	266
26	A critical evaluation of proxy methods used to estimate the acidity of atmospheric particles. Atmospheric Chemistry and Physics, 2015, 15, 2775-2790.	1.9	266
27	Contribution of Water-Soluble and Insoluble Components and Their Hydrophobic/Hydrophilic Subfractions to the Reactive Oxygen Species-Generating Potential of Fine Ambient Aerosols. Environmental Science & Technology, 2012, 46, 11384-11392.	4.6	261
28	Aerosol characterization over the southeastern United States using high-resolution aerosol mass spectrometry: spatial and seasonal variation of aerosol composition and sources with a focus on organic nitrates. Atmospheric Chemistry and Physics, 2015, 15, 7307-7336.	1.9	259
29	Organic Aerosols Associated with the Generation of Reactive Oxygen Species (ROS) by Water-Soluble PM_{2.5}. Environmental Science & Technology, 2015, 49, 4646-4656.	4.6	259
30	Reactive Oxygen Species Generation Linked to Sources of Atmospheric Particulate Matter and Cardiorespiratory Effects. Environmental Science & Technology, 2015, 49, 13605-13612.	4.6	258
31	Oxygenated and water-soluble organic aerosols in Tokyo. Journal of Geophysical Research, 2007, 112, .	3.3	256
32	New Particle Formation in the Remote Troposphere: A Comparison of Observations at Various Sites. Geophysical Research Letters, 1999, 26, 307-310.	1.5	240
33	Exploring the vertical profile of atmospheric organic aerosol: comparing 17 aircraft field campaigns with a global model. Atmospheric Chemistry and Physics, 2011, 11, 12673-12696.	1.9	240
34	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9233-9257.	1.2	231
35	Reactive oxygen species associated with water-soluble PM_{2.5} in the southeastern United States: spatiotemporal trends and source apportionment. Atmospheric Chemistry and Physics, 2014, 14, 12915-12930.	1.9	224
36	Oxidative potential of ambient water-soluble PM_{2.5} in the southeastern United States: contrasts in sources and health associations between ascorbic acid (AA) and dithiothreitol (DTT) assays. Atmospheric Chemistry and Physics, 2016, 16, 3865-3879.	1.9	223

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37	A method for on-line measurement of water-soluble organic carbon in ambient aerosol particles: Results from an urban site. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	220
38	Source apportionment of fine organic aerosol in Mexico City during the MILAGRO experiment 2006. Atmospheric Chemistry and Physics, 2008, 8, 1249-1259.	1.9	215
39	The characteristics of brown carbon aerosol during winter in Beijing. Atmospheric Environment, 2016, 127, 355-364.	1.9	213
40	Physical characterization of aerosol particles during nucleation events. Tellus, Series B: Chemical and Physical Meteorology, 2001, 53, 344-358.	0.8	212
41	Biomass burning dominates brown carbon absorption in the rural southeastern United States. Geophysical Research Letters, 2015, 42, 653-664.	1.5	212
42	Biomass burning impact on PM_{2.5} over the southeastern US during 2007: integrating chemically speciated FRM filter measurements, MODIS fire counts and PMF analysis. Atmospheric Chemistry and Physics, 2010, 10, 6839-6853.	1.9	209
43	Images reveal that atmospheric particles can undergo liquidâ€“liquid phase separations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13188-13193.	3.3	205
44	Light-absorbing soluble organic aerosol in Los Angeles and Atlanta: A contrast in secondary organic aerosol. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	190
45	Gasoline emissions dominate over diesel in formation of secondary organic aerosol mass. Geophysical Research Letters, 2012, 39, .	1.5	189
46	On the implications of aerosol liquid water and phase separation for organic aerosol mass. Atmospheric Chemistry and Physics, 2017, 17, 343-369.	1.9	189
47	Monoterpenes are the largest source of summertime organic aerosol in the southeastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2038-2043.	3.3	186
48	A study of new particle formation and growth involving biogenic and trace gas species measured during ACE 1. Journal of Geophysical Research, 1998, 103, 16385-16396.	3.3	184
49	CMAQ Model Performance Enhanced When In-Cloud Secondary Organic Aerosol is Included: Comparisons of Organic Carbon Predictions with Measurements. Environmental Science & Technology, 2008, 42, 8798-8802.	4.6	183
50	Time-resolved measurements of water-soluble organic carbon in Tokyo. Journal of Geophysical Research, 2006, 111, .	3.3	182
51	Characterization of an Aerodyne Aerosol Mass Spectrometer (AMS): Intercomparison with Other Aerosol Instruments. Aerosol Science and Technology, 2005, 39, 760-770.	1.5	179
52	Airborne measurements of carbonaceous aerosol soluble in water over northeastern United States: Method development and an investigation into water-soluble organic carbon sources. Journal of Geophysical Research, 2006, 111, .	3.3	179
53	Fine particle pH and the partitioning of nitric acid during winter in the northeastern United States. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,355.	1.2	176
54	Sources of particulate matter in the northeastern United States in summer: 1. Direct emissions and secondary formation of organic matter in urban plumes. Journal of Geophysical Research, 2008, 113, .	3.3	173

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55	Export efficiency of black carbon aerosol in continental outflow: Global implications. Journal of Geophysical Research, 2005, 110, .	3.3	171
56	Evolution of Asian aerosols during transpacific transport in INTEX-B. Atmospheric Chemistry and Physics, 2009, 9, 7257-7287.	1.9	170
57	Enhanced secondary organic aerosol formation due to water uptake by fine particles. Geophysical Research Letters, 2008, 35, .	1.5	169
58	Top-of-atmosphere radiative forcing affected by brown carbon in the upper troposphere. Nature Geoscience, 2017, 10, 486-489.	5.4	168
59	Fine particle pH and gasâ€“particle phase partitioning of inorganic species in Pasadena, California, during the 2010 CalNex campaign. Atmospheric Chemistry and Physics, 2017, 17, 5703-5719.	1.9	168
60	Source signatures of carbon monoxide and organic functional groups in Asian Pacific Regional Aerosol Characterization Experiment (ACE-Asia) submicron aerosol types. Journal of Geophysical Research, 2003, 108, .	3.3	159
61	A yearlong study of water-soluble organic carbon in Beijing II: Light absorption properties. Atmospheric Environment, 2014, 89, 235-241.	1.9	155
62	Changes in Light Absorptivity of Molecular Weight Separated Brown Carbon Due to Photolytic Aging. Environmental Science & Technology, 2017, 51, 8414-8421.	4.6	153
63	Characterization of Water-Soluble Organic Carbon in Urban Atmospheric Aerosols Using Solid-State13C NMR Spectroscopy. Environmental Science & Technology, 2006, 40, 666-672.	4.6	147
64	Intercomparison Study of the Size-Dependent Counting Efficiency of 26 Condensation Particle Counters. Aerosol Science and Technology, 1997, 27, 224-242.	1.5	145
65	Submicron aerosol composition at Trinidad Head, California, during ITCT 2K2: Its relationship with gas phase volatile organic carbon and assessment of instrument performance. Journal of Geophysical Research, 2004, 109, .	3.3	144
66	Gas/particle partitioning of water-soluble organic aerosol in Atlanta. Atmospheric Chemistry and Physics, 2009, 9, 3613-3628.	1.9	144
67	Synthesis of satellite (MODIS), aircraft (ICARTT), and surface (IMPROVE, EPAâ€AQS, AERONET) aerosol observations over eastern North America to improve MODIS aerosol retrievals and constrain surface aerosol concentrations and sources. Journal of Geophysical Research, 2010, 115, .	3.3	144
68	High levels of ammonia do not raise fine particle pH sufficiently to yield nitrogen oxide-dominated sulfate production. Scientific Reports, 2017, 7, 12109.	1.6	144
69	Particle water and pH in the eastern Mediterranean: source variability and implications for nutrient availability. Atmospheric Chemistry and Physics, 2016, 16, 4579-4591.	1.9	142
70	Spatial and Seasonal Trends in Biogenic Secondary Organic Aerosol Tracers and Water-Soluble Organic Carbon in the Southeastern United States. Environmental Science & Technology, 2008, 42, 5171-5176.	4.6	139
71	Investigation of molar volume and surfactant characteristics of water-soluble organic compounds in biomass burning aerosol. Atmospheric Chemistry and Physics, 2008, 8, 799-812.	1.9	136
72	Aerosol direct radiative effects over the northwest Atlantic, northwest Pacific, and North Indian Oceans: estimates based on in-situ chemical and optical measurements and chemical transport modeling. Atmospheric Chemistry and Physics, 2006, 6, 1657-1732.	1.9	135

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73	Chemical oxidative potential of secondary organic aerosol (SOA) generated from the photooxidation of biogenic and anthropogenic volatile organic compounds. Atmospheric Chemistry and Physics, 2017, 17, 839-853.	1.9	135
74	The 2005 Study of Organic Aerosols at Riverside (SOAR-1): instrumental intercomparisons and fine particle composition. Atmospheric Chemistry and Physics, 2011, 11, 12387-12420.	1.9	129
75	Nocturnal isoprene oxidation over the Northeast United States in summer and its impact on reactive nitrogen partitioning and secondary organic aerosol. Atmospheric Chemistry and Physics, 2009, 9, 3027-3042.	1.9	128
76	A semi-automated system for quantifying the oxidative potential of ambient particles in aqueous extracts using the dithiothreitol (DTT) assay: results from the Southeastern Center for Air Pollution and Epidemiology (SCAPE). Atmospheric Measurement Techniques, 2015, 8, 471-482.	1.2	128
77	A yearlong study of water-soluble organic carbon in Beijing I: Sources and its primary vs. secondary nature. Atmospheric Environment, 2014, 92, 514-521.	1.9	122
78	Atmospheric amines and ammonia measured with a chemical ionization mass spectrometer (CIMS). Atmospheric Chemistry and Physics, 2014, 14, 12181-12194.	1.9	121
79	Exploring the observational constraints on the simulation of brown carbon. Atmospheric Chemistry and Physics, 2018, 18, 635-653.	1.9	121
80	Revising the use of potassium (K) in the source apportionment of PM2.5. Atmospheric Pollution Research, 2013, 4, 14-21.	1.8	120
81	Effectiveness of ammonia reduction on control of fine particle nitrate. Atmospheric Chemistry and Physics, 2018, 18, 12241-12256.	1.9	120
82	Chemical feedbacks weaken the wintertime response of particulate sulfate and nitrate to emissions reductions over the eastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8110-8115.	3.3	118
83	Modeling and Characterization of a Particle-into-Liquid Sampler (PILS). Aerosol Science and Technology, 2006, 40, 396-409.	1.5	117
84	Analysis of CCN activity of Arctic aerosol and Canadian biomass burning during summer 2008. Atmospheric Chemistry and Physics, 2013, 13, 2735-2756.	1.9	117
85	Emission and chemistry of organic carbon in the gas and aerosol phase at a sub-urban site near Mexico City in March 2006 during the MILAGRO study. Atmospheric Chemistry and Physics, 2009, 9, 3425-3442.	1.9	114
86	Iron Solubility Related to Particle Sulfur Content in Source Emission and Ambient Fine Particles. Environmental Science & Technology, 2012, 46, 6637-6644.	4.6	113
87	Brown carbon in the continental troposphere. Geophysical Research Letters, 2014, 41, 2191-2195.	1.5	113
88	Concentrations and sources of organic carbon aerosols in the free troposphere over North America. Journal of Geophysical Research, 2006, 111, .	3.3	111
89	Fractionating ambient humic-like substances (HULIS) for their reactive oxygen species activity â€“ Assessing the importance of quinones and atmospheric aging. Atmospheric Environment, 2015, 120, 351-359.	1.9	110
90	Atmospheric evolution of molecular-weight-separated brown carbon from biomass burning. Atmospheric Chemistry and Physics, 2019, 19, 7319-7334.	1.9	107

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91	Comparison of chemical characteristics of 495 biomass burning plumes intercepted by the NASA DC-8 aircraft during the ARCTAS/CARB-2008 field campaign. Atmospheric Chemistry and Physics, 2011, 11, 13325-13337.	1.9	106
92	Assessing the impact of anthropogenic pollution on isoprene-derived secondary organic aerosol formation in PM_{2.5} collected from the Birmingham, Alabama, ground site during the 2013 Southern OxidantÂand Aerosol Study. Atmospheric Chemistry and Physics, 2016, 16, 4897-4914.	1.9	105
93	Heterogeneous N₂O₅ Uptake During Winter: Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of Current Parameterizations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4345-4372.	1.2	103
94	On the link between hygroscopicity, volatility, and oxidation state of ambient and water-soluble aerosols in the southeastern United States. Atmospheric Chemistry and Physics, 2015, 15, 8679-8694.	1.9	98
95	Assessment of the sensitivity of core / shell parameters derived using the single-particle soot photometer to density and refractive index. Atmospheric Measurement Techniques, 2015, 8, 1701-1718.	1.2	98
96	Brown carbon aerosol in the North American continental troposphere: sources, abundance, and radiative forcing. Atmospheric Chemistry and Physics, 2015, 15, 7841-7858.	1.9	96
97	Associations between Ambient Fine Particulate Oxidative Potential and Cardiorespiratory Emergency Department Visits. Environmental Health Perspectives, 2017, 125, 107008.	2.8	96
98	Characteristics and influence of biosmoke on the fine-particle ionic composition measured in Asian outflow during the Transport and Chemical Evolution Over the Pacific (TRACE-P) experiment. Journal of Geophysical Research, 2003, 108, .	3.3	95
99	Analysis of urban gas phase ammonia measurements from the 2002 Atlanta Aerosol Nucleation and Real-Time Characterization Experiment (ANARChE). Journal of Geophysical Research, 2006, 111, .	3.3	95
100	Ultrafine Aerosol Measurement Using a Condensation Nucleus Counter with Pulse Height Analysis. Aerosol Science and Technology, 1996, 25, 200-213.	1.5	94
101	Total observed organic carbon (TOOC) in the atmosphere: a synthesis of North American observations. Atmospheric Chemistry and Physics, 2008, 8, 2007-2025.	1.9	94
102	Agricultural fires in the southeastern U.S. during SEAC⁴RS: Emissions of trace gases and particles and evolution of ozone, reactive nitrogen, and organic aerosol. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7383-7414.	1.2	93
103	Characterization of particle emissions from consumer fused deposition modeling 3D printers. Aerosol Science and Technology, 2017, 51, 1275-1286.	1.5	93
104	Brown and black carbon in Beijing aerosol: Implications for the effects of brown coating on light absorption by black carbon. Science of the Total Environment, 2017, 599-600, 1047-1055.	3.9	92
105	Airborne cloud condensation nuclei measurements during the 2006 Texas Air Quality Study. Journal of Geophysical Research, 2011, 116, .	3.3	91
106	PM_{2.5} water-soluble elements in the southeastern United States: automated analytical method development, spatiotemporal distributions, source apportionment, and implications for heath studies. Atmospheric Chemistry and Physics, 2015, 15, 11667-11682.	1.9	91
107	Ambient Size Distributions and Lung Deposition of Aerosol Dithiothreitol-Measured Oxidative Potential: Contrast between Soluble and Insoluble Particles. Environmental Science & Technology, 2017, 51, 6802-6811.	4.6	91
108	Characterization of aerosol composition, aerosol acidity, and organic acid partitioning at an agriculturally intensive rural southeastern US site. Atmospheric Chemistry and Physics, 2018, 18, 11471-11491.	1.9	88

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109	Characterization of volatile organic compound emissions from consumer level material extrusion 3D printers. Building and Environment, 2019, 160, 106209.	3.0	88
110	On the volatility and production mechanisms of newly formed nitrate and water soluble organic aerosol in Mexico City. Atmospheric Chemistry and Physics, 2008, 8, 3761-3768.	1.9	87
111	Particle characteristics following cloud-modified transport from Asia to North America. Journal of Geophysical Research, 2004, 109, .	3.3	86
112	Measurements of enhanced H2SO4and 3-4 nm particles near a frontal cloud during the First Aerosol Characterization Experiment (ACE 1). Journal of Geophysical Research, 2001, 106, 24107-24117.	3.3	83
113	Diurnal cycle of fossil and nonfossil carbon using radiocarbon analyses during CalNex. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6818-6835.	1.2	82
114	Three-dimensional simulations of inorganic aerosol distributions in east Asia during spring 2001. Journal of Geophysical Research, 2004, 109, .	3.3	80
115	Investigation of cloud condensation nuclei properties and droplet growth kinetics of the waterâ€soluble aerosol fraction in Mexico City. Journal of Geophysical Research, 2010, 115, .	3.3	80
116	Spatial and seasonal variations of fine particle water-soluble organic carbon (WSOC) over the southeastern United States: implications for secondary organic aerosol formation. Atmospheric Chemistry and Physics, 2012, 12, 6593-6607.	1.9	80
117	Characterization of iron speciation in urban and rural single particles using XANES spectroscopy and micro X-ray fluorescence measurements: investigating the relationship between speciation and fractional iron solubility. Atmospheric Chemistry and Physics, 2012, 12, 745-756.	1.9	80
118	The characteristics of Beijing aerosol during two distinct episodes: Impacts of biomass burning and fireworks. Environmental Pollution, 2014, 185, 149-157.	3.7	80
119	Measurements of the H2SO4mass accommodation coefficient onto polydisperse aerosol. Journal of Geophysical Research, 1997, 102, 19021-19028.	3.3	78
120	Molecular-Size-Separated Brown Carbon Absorption for Biomass-Burning Aerosol at Multiple Field Sites. Environmental Science & Technology, 2017, 51, 3128-3137.	4.6	77
121	Chemical Characterization of Water-Soluble Organic Aerosol in Contrasting Rural and Urban Environments in the Southeastern United States. Environmental Science & Technology, 2017, 51, 78-88.	4.6	77
122	A relaxed eddy accumulation system for measuring vertical fluxes of nitrous acid. Atmospheric Measurement Techniques, 2011, 4, 2093-2103.	1.2	76
123	Trends in particle-phase liquid water during the Southern Oxidant and Aerosol Study. Atmospheric Chemistry and Physics, 2014, 14, 10911-10930.	1.9	75
124	Oxidative Potential of Particulate Matter and Generation of Reactive Oxygen Species in Epithelial Lining Fluid. Environmental Science & Technology, 2019, 53, 12784-12792.	4.6	73
125	Aerosol pH and liquid water content determine when particulate matter is sensitive to ammonia and nitrate availability. Atmospheric Chemistry and Physics, 2020, 20, 3249-3258.	1.9	72
126	Observations of glyoxal and formaldehyde as metrics for the anthropogenic impact on rural photochemistry. Atmospheric Chemistry and Physics, 2012, 12, 9529-9543.	1.9	71

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127	Sources and Secondary Production of Organic Aerosols in the Northeastern United States during WINTER. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7771-7796.	1.2	71
128	Chemical Composition and Toxicity of Particles Emitted from a Consumer-Level 3D Printer Using Various Materials. Environmental Science & Technology, 2019, 53, 12054-12061.	4.6	71
129	Spurious aerosol measurements when sampling from aircraft in the vicinity of clouds. Journal of Geophysical Research, 1998, 103, 28337-28346.	3.3	70
130	Chemical characterization of the ambient organic aerosol soluble in water: 1. Isolation of hydrophobic and hydrophilic fractions with a XAD-8 resin. Journal of Geophysical Research, 2006, 111, .	3.3	70
131	Intercomparison of an Aerosol Chemical Speciation Monitor (ACSM) with ambient fine aerosol measurements in downtown Atlanta, Georgia. Atmospheric Measurement Techniques, 2014, 7, 1929-1941.	1.2	70
132	Modeling the global radiative effect of brown carbon: a potentially larger heating source in the tropical free troposphere than black carbon. Atmospheric Chemistry and Physics, 2020, 20, 1901-1920.	1.9	70
133	Chemical characterization of waterâ€soluble organic carbon aerosols at a rural site in the Pearl River Delta, China, in the summer of 2006. Journal of Geophysical Research, 2009, 114, .	3.3	69
134	Diagnosis of Aged Prescribed Burning Plumes Impacting an Urban Area. Environmental Science & Technology, 2008, 42, 1438-1444.	4.6	68
135	Effects of Atmospheric Processing on the Oxidative Potential of Biomass Burning Organic Aerosols. Environmental Science & Technology, 2019, 53, 6747-6756.	4.6	68
136	A method for measuring total aerosol oxidative potential (OP) with the dithiothreitol (DTT) assay and comparisons between an urban and roadside site of water-soluble and total OP. Atmospheric Measurement Techniques, 2017, 10, 2821-2835.	1.2	67
137	Particle production near marine clouds: Sulfuric acid and predictions from classical binary nucleation. Geophysical Research Letters, 1999, 26, 2425-2428.	1.5	66
138	Heterogeneous formation of nitryl chloride and its role as a nocturnal NO_x reservoir species during CalNexâ€LA 2010. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,638.	1.2	65
139	Understanding nitrate formation in a world with less sulfate. Atmospheric Chemistry and Physics, 2018, 18, 12765-12775.	1.9	63
140	Characterization of water-insoluble oxidative potential of PM2.5 using the dithiothreitol assay. Atmospheric Environment, 2020, 224, 117327.	1.9	63
141	Global Measurements of Brown Carbon and Estimated Direct Radiative Effects. Geophysical Research Letters, 2020, 47, e2020GL088747.	1.5	61
142	Roadside, Urban, and Rural Comparison of Primary and Secondary Organic Molecular Markers in Ambient PM_{2.5}. Environmental Science & Technology, 2009, 43, 4287-4293.	4.6	58
143	Secondary organic aerosol formation from methacrolein photooxidation: roles of NOx level, relative humidity and aerosol acidity. Environmental Chemistry, 2012, 9, 247.	0.7	58
144	Investigation of secondary formation of formic acid: urban environment vs. oil and gas producing region. Atmospheric Chemistry and Physics, 2015, 15, 1975-1993.	1.9	57

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145	Investigating a Liquid-Based Method for Online Organic Carbon Detection in Atmospheric Particles. Aerosol Science and Technology, 2007, 41, 1117-1127.	1.5	56
146	Inversion of ultrafine condensation nucleus counter pulse height distributions to obtain nanoparticle (â^¼3â€“10nm) size distributions. Journal of Aerosol Science, 1998, 29, 601-615.	1.8	55
147	Chemical characterization of the ambient organic aerosol soluble in water: 2. Isolation of acid, neutral, and basic fractions by modified size-exclusion chromatography. Journal of Geophysical Research, 2006, 111, .	3.3	55
148	Investigating the sources and atmospheric processing of fine particles from Asia and the Northwestern United States measured during INTEX B. Atmospheric Chemistry and Physics, 2008, 8, 1835-1853.	1.9	54
149	Size distributions of 3â€“10 nm atmospheric particles: implications for nucleation mechanisms. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2000, 358, 2625-2642.	1.6	53
150	No evidence for acid-catalyzed secondary organic aerosol formation in power plant plumes over metropolitan Atlanta, Georgia. Geophysical Research Letters, 2007, 34, .	1.5	53
151	On the gasâ€particle partitioning of soluble organic aerosol in two urban atmospheres with contrasting emissions: 1. Bulk waterâ€soluble organic carbon. Journal of Geophysical Research, 2012, 117, .	3.3	53
152	The underappreciated role of nonvolatile cations in aerosol ammonium-sulfate molar ratios. Atmospheric Chemistry and Physics, 2018, 18, 17307-17323.	1.9	53
153	Estimating Acute Cardiovascular Effects of Ambient PM2.5 Metals. Environmental Health Perspectives, 2018, 126, 027007.	2.8	53
154	Fine-scale simulation of ammonium and nitrate over the South Coast Air Basin and San Joaquin Valley of California during CalNex-2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3600-3614.	1.2	51
155	New particle formation in anthropogenic plumes advecting from Asia observed during TRACE-P. Journal of Geophysical Research, 2003, 108, .	3.3	50
156	Enhanced formation of isopreneâ€derived organic aerosol in sulfurâ€rich power plant plumes during Southeast Nexus. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,137.	1.2	50
157	Fine aerosol bulk composition measured on WP-3D research aircraft in vicinity of the Northeastern United States â€“ results from NEAQS. Atmospheric Chemistry and Physics, 2007, 7, 3231-3247.	1.9	49
158	Water-soluble organic aerosol in the Los Angeles Basin and outflow regions: Airborne and ground measurements during the 2010 CalNex field campaign. Journal of Geophysical Research, 2011, 116, .	3.3	49
159	Mixing state and compositional effects on CCN activity and droplet growth kinetics of size-resolved CCN in an urban environment. Atmospheric Chemistry and Physics, 2012, 12, 10239-10255.	1.9	49
160	Nitrogen Oxides Emissions, Chemistry, Deposition, and Export Over the Northeast United States During the WINTER Aircraft Campaign. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,368.	1.2	49
161	Sources of particulate matter in the northeastern United States in summer: 2. Evolution of chemical and microphysical properties. Journal of Geophysical Research, 2008, 113, .	3.3	48
162	On the gasâ€particle partitioning of soluble organic aerosol in two urban atmospheres with contrasting emissions: 2. Gas and particle phase formic acid. Journal of Geophysical Research, 2012, 117, .	3.3	47

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163	Aerosol optical properties at Pasadena, CA during CalNex 2010. Atmospheric Environment, 2012, 55, 190-200.	1.9	47
164	Characterization and comparison of PM_{2.5} oxidative potential assessed by two acellular assays. Atmospheric Chemistry and Physics, 2020, 20, 5197-5210.	1.9	46
165	Fine particle size distributions at the Mauna Loa Observatory, Hawaii. Journal of Geophysical Research, 1996, 101, 14767-14775.	3.3	44
166	Filterable water-soluble organic nitrogen in fine particles over the southeastern USA during summer. Atmospheric Environment, 2011, 45, 6040-6047.	1.9	44
167	Development and testing of an online method to measure ambient fine particulate reactive oxygen species (ROS) based on the 2',7'-dichlorofluorescin (DCFH) assay. Atmospheric Measurement Techniques, 2013, 6, 1647-1658.	1.2	44
168	Oxidative potential of PM 2.5 during Atlanta rush hour: Measurements of in-vehicle dithiothreitol (DTT) activity. Atmospheric Environment, 2017, 165, 169-178.	1.9	44
169	Overview of the 1999 Atlanta Supersite Project. Journal of Geophysical Research, 2003, 108, .	3.3	43
170	Chemical characterization of secondary organic aerosol at a rural site in the southeastern US: insights from simultaneous high-resolution time-of-flight aerosol mass spectrometer (HR-ToF-AMS) and FIGAERO chemical ionization mass spectrometer (CIMS) measurements. Atmospheric Chemistry and Physics, 2020, 20, 8421-8440.	1.9	42
171	Characterization of soluble iron in urban aerosols using nearâ€real time data. Journal of Geophysical Research, 2010, 115, .	3.3	39
172	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. Bulletin of the American Meteorological Society, 2022, 103, E761-E790.	1.7	39
173	Linked Response of Aerosol Acidity and Ammonia to SO₂ and NO_x Emissions Reductions in the United States. Environmental Science & Technology, 2018, 52, 9861-9873.	4.6	38
174	Chemical and cellular oxidant production induced by naphthalene secondary organic aerosol (SOA): effect of redox-active metals and photochemical aging. Scientific Reports, 2017, 7, 15157.	1.6	37
175	Spatial distribution and size evolution of particles in Asian outflow: Significance of primary and secondary aerosols during ACE-Asia and TRACE-P. Journal of Geophysical Research, 2004, 109, .	3.3	34
176	Intercomparisons of airborne measurements of aerosol ionic chemical composition during TRACE-P and ACE-Asia. Journal of Geophysical Research, 2004, 109, .	3.3	34
177	Aerosol and Cloud Experiments in the Eastern North Atlantic (ACE-ENA). Bulletin of the American Meteorological Society, 2022, 103, E619-E641.	1.7	33
178	Effects of water-soluble organic carbon on aerosol pH. Atmospheric Chemistry and Physics, 2019, 19, 14607-14620.	1.9	32
179	ClNO₂ Yields From Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of the Current Parameterization. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,994.	1.2	31
180	Biomass Burning Markers and Residential Burning in the WINTER Aircraft Campaign. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1846-1861.	1.2	30

#	Article	IF	Citations
181	Low-Molecular-Weight Carboxylic Acids in the Southeastern U.S.: Formation, Partitioning, and Implications for Organic Aerosol Aging. Environmental Science & Technology, 2021, 55, 6688-6699.	4.6	30
182	Contribution of particulate brown carbon to light absorption in the rural and urban Southeast US. Atmospheric Environment, 2016, 136, 95-104.	1.9	29
183	Source apportionment of methane and nitrous oxide in California's San Joaquin Valley at CalNex 2010 via positive matrix factorization. Atmospheric Chemistry and Physics, 2015, 15, 12043-12063.	1.9	28
184	Aerosol acidity and liquid water content regulate the dry deposition of inorganic reactive nitrogen. Atmospheric Chemistry and Physics, 2021, 21, 6023-6033.	1.9	28
185	New Technique for Online Measurement of Water-Soluble Fe(II) in Atmospheric Aerosols. Environmental Science & Technology, 2009, 43, 2425-2430.	4.6	27
186	Modification of the TSI 3025 Condensation Particle Counter for Pulse Height Analysis. Aerosol Science and Technology, 1996, 25, 214-218.	1.5	26
187	Investigating particle emissions and aerosol dynamics from a consumer fused deposition modeling 3D printer with a lognormal moment aerosol model. Aerosol Science and Technology, 2018, 52, 1099-1111.	1.5	26
188	Estimating the toxicity of ambient fine aerosols using freshwater rotifer Brachionus calyciflorus (Rotifera: Monogononta). Environmental Pollution, 2013, 182, 379-384.	3.7	24
189	Source apportionment of organic carbon in Centreville, AL using organosulfates in organic tracer-based positive matrix factorization. Atmospheric Environment, 2018, 186, 74-88.	1.9	24
190	An Investigation into the Ionic Chemical Composition and Mixing State of Biomass Burning Particles Recorded During TRACE-P P3B Flight#10. Journal of Atmospheric Chemistry, 2005, 51, 43-64.	1.4	22
191	Particulate and gas sampling of prescribed fires in South Georgia, USA. Atmospheric Environment, 2013, 81, 125-135.	1.9	22
192	Characterization of Selenium in Ambient Aerosols and Primary Emission Sources. Environmental Science & Technology, 2014, 48, 8988-8994.	4.6	22
193	Sources of primary and secondary organic aerosol and their diurnal variations. Journal of Hazardous Materials, 2014, 264, 536-544.	6.5	22
194	White-light Detection for Nanoparticle Sizing with the TSI Ultrafine Condensation Particle Counter. Journal of Nanoparticle Research, 2000, 2, 85-90.	0.8	21
195	Wintertime Gasâ€Particle Partitioning and Speciation of Inorganic Chlorine in the Lower Troposphere Over the Northeast United States and Coastal Ocean. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,897.	1.2	21
196	Source impact modeling of spatiotemporal trends in PM2.5 oxidative potential across the eastern United States. Atmospheric Environment, 2018, 193, 158-167.	1.9	21
197	Characteristics and evolution of brown carbon in western United States wildfires. Atmospheric Chemistry and Physics, 2022, 22, 8009-8036.	1.9	21
198	Correlations between Water-Soluble Organic Aerosol and Water Vapor: A Synergistic Effect from Biogenic Emissions?. Environmental Science & Technology, 2008, 42, 9079-9085.	4.6	20

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199	Ambient PM_{2.5} and Health: Does PM_{2.5} Oxidative Potential Play a Role?. American Journal of Respiratory and Critical Care Medicine, 2016, 194, 530-531.	2.5	20
200	Near-road vehicle emissions air quality monitoring for exposure modeling. Atmospheric Environment, 2020, 224, 117318.	1.9	20
201	Hydrates in binary sulfuric acid-water vapor: Comparison of CIMS measurements with the Liquid-Drop Model. Geophysical Research Letters, 1998, 25, 3143-3146.	1.5	18
202	Contribution of particulate nitrate to airborne measurements of total reactive nitrogen. Journal of Geophysical Research, 2005, 110, .	3.3	18
203	First Continuous Measurement of Gaseous and Particulate Formic Acid in a Suburban Area of East China: Seasonality and Gasâ€“Particle Partitioning. ACS Earth and Space Chemistry, 2020, 4, 157-167.	1.2	18
204	Fine Particle Iron in Soils and Road Dust Is Modulated by Coal-Fired Power Plant Sulfur. Environmental Science & Technology, 2020, 54, 7088-7096.	4.6	17
205	Composition and oxidation state of sulfur in atmospheric particulate matter. Atmospheric Chemistry and Physics, 2016, 16, 13389-13398.	1.9	16
206	Real-time measurements of gas-phase organic acids using SF₆^{â˜} chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2018, 11, 5087-5104.	1.2	16
207	Evaluation of a New Aerosol Chemical Speciation Monitor (ACSM) System at an Urban Site in Atlanta, GA: The Use of Capture Vaporizer and PM_{2.5} Inlet. ACS Earth and Space Chemistry, 2021, 5, 2565-2576.	1.2	16
208	Ambient aerosol properties in the remote atmosphere from global-scale in situ measurements. Atmospheric Chemistry and Physics, 2021, 21, 15023-15063.	1.9	15
209	Influence of Ohio River valley emissions on fine particle sulfate measured from aircraft over large regions of the eastern United States and Canada during INTEX-NA. Journal of Geophysical Research, 2006, 111, .	3.3	14
210	Vertical profiles of trace gas and aerosol properties over the eastern North Atlantic: variations with season and synoptic condition. Atmospheric Chemistry and Physics, 2021, 21, 11079-11098.	1.9	14
211	The Oxidative Potential of Fine Particulate Matter and Biological Perturbations in Human Plasma and Saliva Metabolome. Environmental Science & Technology, 2022, 56, 7350-7361.	4.6	14
212	Source and Chemistry of Hydroxymethanesulfonate (HMS) in Fairbanks, Alaska. Environmental Science & Technology, 2022, 56, 7657-7667.	4.6	14
213	Relationship between Atmospheric Aerosol Mineral Surface Area and Iron Solubility. ACS Earth and Space Chemistry, 2019, 3, 2443-2451.	1.2	13
214	Carbonyl sulfide as an inverse tracer for biogenic organic carbon in gas and aerosol phases. Geophysical Research Letters, 2009, 36, .	1.5	11
215	Evaluating a multipollutant metric for use in characterizing traffic-related air pollution exposures within near-road environments. Environmental Research, 2020, 184, 109389.	3.7	10
216	Hydroxymethanesulfonate (HMS) Formation during Summertime Fog in an Arctic Oil Field. Environmental Science and Technology Letters, 2021, 8, 511-518.	3.9	9

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217	Assessment of online water-soluble brown carbon measuring systems for aircraft sampling. Atmospheric Measurement Techniques, 2021, 14, 6357-6378.	1.2	8
218	A three-dimensional regional modeling study of the impact of clouds on sulfate distributions during TRACE-P. Journal of Geophysical Research, 2004, 109, .	3.3	7
219	Real-Time, Online Automated System for Measurement of Water-Soluble Reactive Phosphate Ions in Atmospheric Particles. Analytical Chemistry, 2016, 88, 7163-7170.	3.2	7
220	A method for liquid spectrophotometric measurement of total and water-soluble iron and copper in ambient aerosols. Atmospheric Measurement Techniques, 2021, 14, 4707-4719.	1.2	6
221	Developing Multipollutant Exposure Indicators of Traffic Pollution: The Dorm Room Inhalation to Vehicle Emissions (DRIVE) Study. Research Report (health Effects Institute), 2018, , 3-75.	1.6	6
222	Potentially harmful aerosols concentrate in European urban centres. Nature, 2020, 587, 369-370.	13.7	5
223	Emissions, chemistry or bidirectional surface transfer? Gas phase formic acid dynamics in the atmosphere. Atmospheric Environment, 2022, 274, 118995.	1.9	5
224	Water soluble reactive phosphate (SRP) in atmospheric particles over East Mediterranean: The importance of dust and biomass burning events. Science of the Total Environment, 2022, 830, 154263.	3.9	4
225	Ultrafiltration to characterize PM2.5 water-soluble iron and its sources in an urban environment. Atmospheric Environment, 2022, 286, 119246.	1.9	4
226	Oxidative Properties of Ambient Particulate Matter - An Assessment of the Relative Contributions from Various Aerosol Components and Their Emission Sources. ACS Symposium Series, 2018, , 389-416.	0.5	3
227	Insights on Aerosol Oxidative Potential from Measurements of Particle Size Distributions. ACS Symposium Series, 2018, , 417-437.	0.5	2
228	Fine Aerosol Acidity and Water during Summer in the Eastern North Atlantic. Atmosphere, 2021, 12, 1040.	1.0	1
229	Source Impacts on and Cardiorespiratory Effects of Reactive Oxygen Species Generated by Water-Soluble PM2.5 Across the Eastern United States. Springer Proceedings in Complexity, 2018, , 503-508.	0.2	1
230	Hydrogen chloride (HCl) at ground sites during CalNex 2010 and insight into its thermodynamic properties. Journal of Geophysical Research D: Atmospheres, 2022, 127, 1-16.	1.2	1
231	A Tribute to Peter McMurry. Aerosol Science and Technology, 2018, 52, 1083-1084.	1.5	0
232	High Aerosol Acidity Despite Declining Atmospheric Sulfate Concentrations: Lessons from Observations and Implications for Models. Springer Proceedings in Complexity, 2018, , 171-176.	0.2	0