Allen L Robinson

List of Publications by Year
in descending order

222 papers	25,627 citations	8208 78 h-index	10129 145 g-index
273 all docs	273 docs citations	273 times ranked	13294 citing authors

#	Article	IF	Citations
1	Evolution of Organic Aerosols in the Atmosphere. Science, 2009, 326, 1525-1529.	6.0	3,374
2	Rethinking Organic Aerosols: Semivolatile Emissions and Photochemical Aging. Science, 2007, 315, 1259-1262.	6.0	1,679
3	Coupled Partitioning, Dilution, and Chemical Aging of Semivolatile Organics. Environmental Science & Technology, 2006, 40, 2635-2643.	4.6	1,301
4	A two-dimensional volatility basis set: 1. organic-aerosol mixing thermodynamics. Atmospheric Chemistry and Physics, 2011, 11, 3303-3318.	1.9	596
5	Assessment of methane emissions from the U.S. oil and gas supply chain. Science, 2018, 361, 186-188.	6.0	519
6	A two-dimensional volatility basis set â€“ Part 2: Diagnostics of organic-aerosol evolution. Atmospheric Chemistry and Physics, 2012, 12, 615-634.	1.9	491
7	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires 1: measurement and simulation of organic aerosol evolution. Atmospheric Chemistry and Physics, 2009, 9, 1263-1277.	1.9	439
8	Brownness of organics in aerosols from biomass burning linked to their black carbon content. Nature Geoscience, 2014, 7, 647-650.	5.4	407
9	Levoglucosan stability in biomass burning particles exposed to hydroxyl radicals. Geophysical Research Letters, 2010, 37, .	1.5	406
10	Atmospheric organic particulate matter: From smoke to secondary organic aerosol. Atmospheric Environment, 2009, 43, 94-106.	1.9	348
11	Review of Urban Secondary Organic Aerosol Formation from Gasoline and Diesel Motor Vehicle Emissions. Environmental Science & Technology, 2017, 51, 1074-1093.	4.6	348
12	Chemical and physical transformations of organic aerosol from the photo-oxidation of open biomass burning emissions in an environmental chamber. Atmospheric Chemistry and Physics, 2011, 11, 7669-7686.	1.9	329
13	A machine learning calibration model using random forests to improve sensor performance for lower-cost air quality monitoring. Atmospheric Measurement Techniques, 2018, 11, 291-313.	1.2	312
14	Effects of Dilution on Fine Particle Mass and Partitioning of Semivolatile Organics in Diesel Exhaust and Wood Smoke. Environmental Science & Technology, 2006, 40, 155-162.	4.6	304
15	Absorptivity of brown carbon in fresh and photo-chemically aged biomass-burning emissions. Atmospheric Chemistry and Physics, 2013, 13, 7683-7693.	1.9	297
16	Positive and Negative Artifacts in Particulate Organic Carbon Measurements with Denuded and Undenuded Sampler Configurations Special Issue ofAerosol Science and Technologyon Findings from the Fine Particulate Matter Supersites Program. Aerosol Science and Technology, 2004, 38, 27-48.	1.5	261
17	Estimating the Secondary Organic Aerosol Contribution to PM2.5Using the EC Tracer Method Special Issue ofAerosol Science and Technologyon Findings from the Fine Particulate Matter Supersites Program. Aerosol Science and Technology, 2004, 38, 140-155.	1.5	245
18	Intermediate-Volatility Organic Compounds: A Large Source of Secondary Organic Aerosol. Environmental Science & Technology, 2014, 48, 13743-13750.	4.6	221

#	Article	IF	Citations
19	Effects of gas particle partitioning and aging of primary emissions on urban and regional organic aerosol concentrations. Journal of Geophysical Research, 2008, 113, .	3.3	220
20	Reconciling divergent estimates of oil and gas methane emissions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15597-15602.	3.3	209
21	Gas- and particle-phase primary emissions from in-use, on-road gasoline and diesel vehicles. Atmospheric Environment, 2014, 88, 247-260.	1.9	201
22	Organic Aerosol Formation from Photochemical Oxidation of Diesel Exhaust in a Smog Chamber. Environmental Science & Technology, 2007, 41, 6969-6975.	4.6	200
23	Unspeciated organic emissions from combustion sources and their influence on the secondary organic aerosol budget in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10473-10478.	3.3	196
24	A volatility basis set model for summertime secondary organic aerosols over the eastern United States in 2006. Journal of Geophysical Research, 2012, 117, .	3.3	195
25	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires 2: analysis of aerosol mass spectrometer data. Atmospheric Chemistry and Physics, 2009, 9, 2227-2240.	1.9	193
26	Trace gas emissions from combustion of peat, crop residue, domestic biofuels, grasses, and other fuels: configuration and Fourier transform infrared (FTIR) component of the fourth Fire Lab at Missoula Experiment (FLAME-4). Atmospheric Chemistry and Physics, 2014, 14, 9727-9754.	1.9	188
27	Secondary Organic Aerosol Formation from High-NO_x Photo-Oxidation of Low Volatility Precursors: n-Alkanes. Environmental Science & Technology, 2010, 44, 2029-2034.	4.6	187
28	Comparison of Gasoline Direct-Injection (GDI) and Port Fuel Injection (PFI) Vehicle Emissions: Emission Certification Standards, Cold-Start, Secondary Organic Aerosol Formation Potential, and Potential Climate Impacts. Environmental Science & Technology, 2017, 51, 6542-6552.	4.6	184
29	Secondary Organic Aerosol Formation from Intermediate-Volatility Organic Compounds: Cyclic, Linear, and Branched Alkanes. Environmental Science & Technology, 2012, 46, 8773-8781.	4.6	178
30	Gasâ€particle partitioning of primary organic aerosol emissions: 3. Biomass burning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,327.	1.2	178
31	Intermediate Volatility Organic Compound Emissions from On-Road Diesel Vehicles: Chemical Composition, Emission Factors, and Estimated Secondary Organic Aerosol Production. Environmental Science & Technology, 2015, 49, 11516-11526.	4.6	172
32	Source Apportionment of Molecular Markers and Organic Aerosol. 3. Food Cooking Emissions. Environmental Science & Technology, 2006, 40, 7820-7827.	4.6	168
33	Intermediate Volatility Organic Compound Emissions from On-Road Gasoline Vehicles and Small Off-Road Gasoline Engines. Environmental Science & Technology, 2016, 50, 4554-4563.	4.6	167
34	Organic Aerosol Formation Downwind from the Deepwater Horizon Oil Spill. Science, 2011, 331, 1295-1299.	6.0	162
35	Mass size distributions and size resolved chemical composition of fine particulate matter at the Pittsburgh supersite. Atmospheric Environment, 2004, 38, 3127-3141.	1.9	159
36	Secondary organic aerosol formation exceeds primary particulate matter emissions for light-duty gasoline vehicles. Atmospheric Chemistry and Physics, 2014, 14, 4661-4678.	1.9	158

#	Article	IF	Citations
37	Secondary Organic Aerosol Formation from in-Use Motor Vehicle Emissions Using a Potential Aerosol Mass Reactor. Environmental Science & Technology, 2014, 48, 11235-11242.	4.6	154
38	Disparities in Air Pollution Exposure in the United States by Race/Ethnicity and Income, 1990â€“2010. Environmental Health Perspectives, 2021, 129, 127005.	2.8	154
39	Modeling Semivolatile Organic Aerosol Mass Emissions from Combustion Systems. Environmental Science & Technology, 2006, 40, 2671-2677.	4.6	145
40	Mortality Risk and Fine Particulate Air Pollution in a Large, Representative Cohort of U.S. Adults. Environmental Health Perspectives, 2019, 127, 77007.	2.8	144
41	Methane Emissions from the Natural Gas Transmission and Storage System in the United States. Environmental Science & Technology, 2015, 49, 9374-9383.	4.6	143
42	Fine particle emission factors from vehicles in a highway tunnel: Effects of fleet composition and season. Atmospheric Environment, 2006, 40, 287-298.	1.9	141
43	Sources of organic aerosol: Positive matrix factorization of molecular marker data and comparison of results from different source apportionment models. Atmospheric Environment, 2007, 41, 9353-9369.	1.9	141
44	Pilot-Scale Investigation of the Influence of Coalâ˜Biomass Cofiring on Ash Deposition. Energy & Fuels, 2002, 16, 343-355.	2.5	139
45	Effect of Peak Inert-Mode Temperature on Elemental Carbon Measured Using Thermal-Optical Analysis. Aerosol Science and Technology, 2006, 40, 763-780.	1.5	137
46	Gas-particle partitioning of primary organic aerosol emissions: (1) Gasoline vehicle exhaust. Atmospheric Environment, 2013, 77, 128-139.	1.9	136
47	Fine particle mass monitoring with low-cost sensors: Corrections and long-term performance evaluation. Aerosol Science and Technology, 2020, 54, 160-174.	1.5	136
48	Constraining the Volatility Distribution and Gas-Particle Partitioning of Combustion Aerosols Using Isothermal Dilution and Thermodenuder Measurements. Environmental Science & Technology, 2009, 43, 4750-4756.	4.6	135
49	Contribution of brown carbon and lensing to the direct radiative effect of carbonaceous aerosols from biomass and biofuel burning emissions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,285.	1.2	134
50	Measurements of Methane Emissions from Natural Gas Gathering Facilities and Processing Plants: Measurement Results. Environmental Science & Technology, 2015, 49, 3219-3227.	4.6	133
51	Constructing a Spatially Resolved Methane Emission Inventory for the Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8147-8157.	4.6	133
52	Gasoline cars produce more carbonaceous particulate matter than modern filter-equipped diesel cars. Scientific Reports, 2017, 7, 4926.	1.6	133
53	Source Apportionment of Molecular Markers and Organic Aerosol1. Polycyclic Aromatic Hydrocarbons and Methodology for Data Visualization. Environmental Science & Technology, 2006, 40, 7803-7810.	4.6	129
54	Methane Emissions from Natural Gas Compressor Stations in the Transmission and Storage Sector: Measurements and Comparisons with the EPA Greenhouse Gas Reporting Program Protocol. Environmental Science & Technology, 2015, 49, 3252-3261.	4.6	129

#	Article	IF	Citations
55	Methane Emissions from Conventional and Unconventional Natural Gas Production Sites in the Marcellus Shale Basin. Environmental Science & Technology, 2016, 50, 2099-2107.	4.6	127
56	Gas-Particle Partitioning of Primary Organic Aerosol Emissions: (2) Diesel Vehicles. Environmental Science & Technology, 2013, 47, 8288-8296.	4.6	126
57	Time Scales for Gas-Particle Partitioning Equilibration of Secondary Organic Aerosol Formed from Alpha-Pinene Ozonolysis. Environmental Science & Technology, 2013, 47, 5588-5594.	4.6	122
58	Updating the Conceptual Model for Fine Particle Mass Emissions from Combustion Systems Allen L. Robinson. Journal of the Air and Waste Management Association, 2010, 60, 1204-1222.	0.9	121
59	Secondary organic aerosol production from diesel vehicle exhaust: impact of aftertreatment, fuel chemistry and driving cycle. Atmospheric Chemistry and Physics, 2014, 14, 4643-4659.	1.9	119
60	Pittsburgh air quality study overview. Atmospheric Environment, 2004, 38, 3107-3125.	1.9	117
61	Cloud condensation nuclei activity of fresh primary and aged biomass burning aerosol. Atmospheric Chemistry and Physics, 2012, 12, 7285-7293.	1.9	115
62	Is the gasâ€particle partitioning in alphaâ€pinene secondary organic aerosol reversible?. Geophysical Research Letters, 2007, 34, .	1.5	111
63	Methane Emissions from United States Natural Gas Gathering and Processing. Environmental Science & Technology, 2015, 49, 10718-10727.	4.6	111
64	Quantifying the effect of organic aerosol aging and intermediate-volatility emissions on regional-scale aerosol pollution in China. Scientific Reports, 2016, 6, 28815.	1.6	110
65	Photochemical oxidation and changes in molecular composition of organic aerosol in the regional context. Journal of Geophysical Research, 2006, 111, .	3.3	109
66	Reducing secondary organic aerosol formation from gasoline vehicle exhaust. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6984-6989.	3.3	107
67	Evolving mass spectra of the oxidized component of organic aerosol: results from aerosol mass spectrometer analyses of aged diesel emissions. Atmospheric Chemistry and Physics, 2008, 8, 1139-1152.	1.9	106
68	Source Apportionment of Molecular Markers and Organic Aerosol. 2. Biomass Smoke. Environmental Science & Technology, 2006, 40, 7811-7819.	4.6	104
69	Local and Regional Secondary Organic Aerosol: Insights from a Year of Semi-Continuous Carbon Measurements at Pittsburgh. Aerosol Science and Technology, 2006, 40, 861-872.	1.5	104
70	Air pollutant emissions from the development, production, and processing of Marcellus Shale natural gas. Journal of the Air and Waste Management Association, 2014, 64, 19-37.	0.9	104
71	Intermediate-Volatility Organic Compounds: A Potential Source of Ambient Oxidized Organic Aerosol. Environmental Science & Technology, 2009, 43, 4744-4749.	4.6	103
72	Why do organic aerosols exist? Understanding aerosol lifetimes using the two-dimensional volatility basis set. Environmental Chemistry, 2013, 10, 151.	0.7	103

#	Article	IF	Citations
73	Effect of Large Aspect Ratio of Biomass Particles on Carbon Burnout in a Utility Boiler. Energy & Fuels, 2002, 16, 1523-1532.	2.5	102
74	Mass balance closure and the Federal Reference Method for PM2.5 in Pittsburgh, Pennsylvania. Atmospheric Environment, 2004, 38, 3305-3318.	1.9	98
75	Critical factors determining the variation in SOA yields from terpene ozonolysis: A combined experimental and computational study. Faraday Discussions, 2005, 130, 295.	1.6	97
76	Effects of Intraparticle Heat and Mass Transfer on Biomass Devolatilization:â€‰ Experimental Results and Model Predictions. Energy & Fuels, 2004, 18, 1021-1031.	2.5	91
77	Effective Rate Constants and Uptake Coefficients for the Reactions of Organic Molecular Markers (n-Alkanes, Hopanes, and Steranes) in Motor Oil and Diesel Primary Organic Aerosols with Hydroxyl Radicals. Environmental Science & Technology, 2009, 43, 8794-8800.	4.6	91
78	Constraining Particle Evolution from Wall Losses, Coagulation, and Condensation-Evaporation in Smog-Chamber Experiments: Optimal Estimation Based on Size Distribution Measurements. Aerosol Science and Technology, 2008, 42, 1001-1015.	1.5	90
79	A naming convention for atmospheric organic aerosol. Atmospheric Chemistry and Physics, 2014, 14, 5825-5839.	1.9	88
80	The influence of semi-volatile and reactive primary emissions on the abundance and properties of global organic aerosol. Atmospheric Chemistry and Physics, 2011, 11, 7727-7746.	1.9	86
81	Aerosol single scattering albedo dependence on biomass combustion efficiency: Laboratory and field studies. Geophysical Research Letters, 2014, 41, 742-748.	1.5	85
82	Sources of Atmospheric Carbonaceous Particulate Matter in Pittsburgh, Pennsylvania. Journal of the Air and Waste Management Association, 2002, 52, 732-741.	0.9	84
83	Major Source Categories for PM2.5in Pittsburgh using PMF and UNMIX. Aerosol Science and Technology, 2006, 40, 910-924.	1.5	84
84	Volatility of Organic Molecular Markers Used for Source Apportionment Analysis: Measurements and Implications for Atmospheric Lifetime. Environmental Science & Technology, 2012, 46, 12435-12444.	4.6	83
85	Emission factor ratios, SOA mass yields, and the impact of vehicular emissions on SOA formation. Atmospheric Chemistry and Physics, 2014, 14, 2383-2397.	1.9	83
86	Comprehensive organic emission profiles for gasoline, diesel, and gas-turbine engines including intermediate and semi-volatile organic compound emissions. Atmospheric Chemistry and Physics, 2018, 18, 17637-17654.	1.9	83
87	Methane Emissions from Natural Gas Production Sites in the United States: Data Synthesis and National Estimate. Environmental Science & Technology, 2018, 52, 12915-12925.	4.6	83
88	Contribution of motor vehicle emissions to organic carbon and fine particle mass in Pittsburgh, Pennsylvania: Effects of varying source profiles and seasonal trends in ambient marker concentrations. Atmospheric Environment, 2006, 40, 8002-8019.	1.9	82
89	Photo-Oxidation of Low-Volatility Organics Found in Motor Vehicle Emissions: Production and Chemical Evolution of Organic Aerosol Mass. Environmental Science & Technology, 2010, 44, 1638-1643.	4.6	82
90	Measurements of methane emissions from natural gas gathering facilities and processing plants: measurement methods. Atmospheric Measurement Techniques, 2015, 8, 2017-2035.	1.2	82

#	Article	IF	Citations
91	Assessment of Potential Carbon Dioxide Reductions Due to Biomassâ"Coal Cofiring in the United States. Environmental Science & Technology, 2003, 37, 5081-5089.	4.6	79
92	Insights into the primaryâ€"secondary and regionalâ€"local contributions to organic aerosol and PM2.5 mass in Pittsburgh, Pennsylvania. Atmospheric Environment, 2007, 41, 7414-7433.	1.9	75
93	Primary Gas- and Particle-Phase Emissions and Secondary Organic Aerosol Production from Gasoline and Diesel Off-Road Engines. Environmental Science & Technology, 2013, 47, 14137-14146.	4.6	75
94	Detailed Speciation of Intermediate Volatility and Semivolatile Organic Compound Emissions from Gasoline Vehicles: Effects of Cold-Starts and Implications for Secondary Organic Aerosol Formation. Environmental Science & Technology, 2019, 53, 1706-1714.	4.6	75
95	Secondary aerosol formation from photochemical aging of aircraft exhaust in a smog chamber. Atmospheric Chemistry and Physics, 2011, 11, 4135-4147.	1.9	74
96	Secondary Organic Aerosol Formation from Photo-Oxidation of Unburned Fuel: Experimental Results and Implications for Aerosol Formation from Combustion Emissions. Environmental Science & Technology, 2013, 47, 12886-12893.	4.6	73
97	Cancer mortality risk, fine particulate air pollution, and smoking in a large, representative cohort of US adults. Cancer Causes and Control, 2020, 31, 767-776.	0.8	73
98	Fine particle and organic vapor emissions from staged tests of an in-use aircraft engine. Atmospheric Environment, 2011, 45, 3603-3612.	1.9	71
99	Volatility and Aging of Atmospheric Organic Aerosol. Topics in Current Chemistry, 2012, 339, 97-143.	4.0	70
100	Secondary Organic Aerosol Production from Gasoline Vehicle Exhaust: Effects of Engine Technology, Cold Start, and Emission Certification Standard. Environmental Science & Technology, 2018, 52, 1253-1261.	4.6	70
101	Air qualityâ€"related health damages of food. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	70
102	Laboratory Measurements of the Heterogeneous Oxidation of Condensed-Phase Organic Molecular Makers for Motor Vehicle Exhaust. Environmental Science & Technology, 2008, 42, 7950-7956.	4.6	69
103	Production of Secondary Organic Aerosol During Aging of Biomass Burning Smoke From Fresh Fuels and Its Relationship to VOC Precursors. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3583-3606.	1.2	67
104	Fine particle emission profile for a large coke production facility based on highly time-resolved fence line measurements. Atmospheric Environment, 2005, 39, 6719-6733.	1.9	64
105	Reducing Mortality from Air Pollution in the United States by Targeting Specific Emission Sources. Environmental Science and Technology Letters, 2020, 7, 639-645.	3.9	64
106	Restaurant Impacts on Outdoor Air Quality: Elevated Organic Aerosol Mass from Restaurant Cooking with Neighborhood-Scale Plume Extents. Environmental Science & Technology, 2018, 52, 9285-9294.	4.6	61
107	Ambient measurements of metal-containing PM2.5 in an urban environment using laser-induced breakdown spectroscopy. Atmospheric Environment, 2004, 38, 3319-3328.	1.9	60
108	Design and Evaluation of a Portable Dilution Sampling System for Measuring Fine Particle Emissions. Aerosol Science and Technology, 2005, 39, 542-553.	1.5	58

#	Article	IF	Citations
109	Criteria pollutant impacts of volatile chemical products informed by near-field modelling. Nature Sustainability, 2021, 4, 129-137.	11.5	58
110	Local- and regional-scale racial and ethnic disparities in air pollution determined by long-term mobile monitoring. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	57
111	Characterizing the Spatial Variation of Air Pollutants and the Contributions of High Emitting Vehicles in Pittsburgh, PA. Environmental Science & Technology, 2014, 48, 14186-14194.	4.6	56
112	Fine Particulate Matter Exposure and Cancer Incidence: Analysis of SEER Cancer Registry Data from 1992â€“2016. Environmental Health Perspectives, 2020, 128, 107004.	2.8	55
113	Effects of Sampling Conditions on the Size Distribution of Fine Particulate Matter Emitted from a Pilot-Scale Pulverized-Coal Combustor. Energy & Fuels, 2002, 16, 302-310.	2.5	54
114	New particle formation and growth in biomass burning plumes: An important source of cloud condensation nuclei. Geophysical Research Letters, 2012, 39, .	1.5	54
115	Quantifying high-resolution spatial variations and local source impacts of urban ultrafine particle concentrations. Science of the Total Environment, 2019, 655, 473-481.	3.9	54
116	Chemical transport model simulations of organic aerosol in southern California: model evaluation and gasoline and diesel source contributions. Atmospheric Chemistry and Physics, 2017, 17, 4305-4318.	1.9	53
117	Impacts of Modifiable Factors on Ambient Air Pollution: A Case Study of COVID-19 Shutdowns. Environmental Science and Technology Letters, 2020, 7, 554-559.	3.9	53
118	Field measurements of solid-fuel cookstove emissions from uncontrolled cooking in China, Honduras, Uganda, and India. Atmospheric Environment, 2018, 190, 116-125.	1.9	52
119	Changes in criteria air pollution levels in the US before, during, and after Covid-19 stay-at-home orders: Evidence from regulatory monitors. Science of the Total Environment, 2021, 769, 144693.	3.9	52
120	Characterization of fine primary biogenic organic aerosol in an urban area in the northeastern United States. Atmospheric Environment, 2010, 44, 3952-3962.	1.9	51
121	Mixing and phase partitioning of primary and secondary organic aerosols. Geophysical Research Letters, 2009, 36, .	1.5	50
122	Primary to secondary organic aerosol: evolution of organic emissions from mobile combustion sources. Atmospheric Chemistry and Physics, 2014, 14, 5015-5036.	1.9	50
123	Time Resolved Measurements of Speciated Tailpipe Emissions from Motor Vehicles: Trends with Emission Control Technology, Cold Start Effects, and Speciation. Environmental Science & Technology, 2016, 50, 13592-13599.	4.6	50
124	Experimental Measurements of the Thermal Conductivity of Ash Deposits:â€‰ Part 2. Effects of Sintering and Deposit Microstructure. Energy & Fuels, 2001, 15, 75-84.	2.5	49
125	Determination of Volatility Distributions of Primary Organic Aerosol Emissions from Internal Combustion Engines Using Thermal Desorption Gas Chromatography Mass Spectrometry. Aerosol Science and Technology, 2012, 46, 1129-1139.	1.5	49
126	Spatially dense air pollutant sampling: Implications of spatial variability on the representativeness of stationary air pollutant monitors. Atmospheric Environment: X, 2019, 2, 100012.	0.8	48

#	Article	IF	Citations
127	Source contributions to primary organic aerosol: Comparison of the results of a source-resolved model and the chemical mass balance approach. Atmospheric Environment, 2007, 41, 3758-3776.	1.9	46
128	High-spatial-resolution mapping and source apportionment of aerosol composition in Oakland, California, using mobile aerosol mass spectrometry. Atmospheric Chemistry and Physics, 2018, 18, 16325-16344.	1.9	46
129	Spatial Variations of PM2.5During the Pittsburgh Air Quality Study. Aerosol Science and Technology, 2004, 38, 80-90.	1.5	45
130	Measurement report: Distinct emissions and volatility distribution of intermediate-volatility organic compounds from on-road Chinese gasoline vehicles: implication of high secondary organic aerosol formation potential. Atmospheric Chemistry and Physics, 2021, 21, 2569-2583.	1.9	45
131	Urban Oxidation Flow Reactor Measurements Reveal Significant Secondary Organic Aerosol Contributions from Volatile Emissions of Emerging Importance. Environmental Science & Technology, 2020, 54, 714-725.	4.6	44
132	Full-volatility emission framework corrects missing and underestimated secondary organic aerosol sources. One Earth, 2022, 5, 403-412.	3.6	44
133	Radon Entry into Buildings Driven by Atmospheric Pressure Fluctuations. Environmental Science & Technology, 1997, 31, 1742-1748.	4.6	42
134	Spatial Variability of Sources and Mixing State of Atmospheric Particles in a Metropolitan Area. Environmental Science & Technology, 2018, 52, 6807-6815.	4.6	42
135	Simulation of organic aerosol formation during the CalNex study: updated mobile emissions and secondary organic aerosol parameterization for intermediate-volatility organic compounds. Atmospheric Chemistry and Physics, 2020, 20, 4313-4332.	1.9	42
136	A dualâ€chamber method for quantifying the effects of atmospheric perturbations on secondary organic aerosol formation from biomass burning emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6043-6058.	1.2	41
137	Effects of variable wind speed and direction on radon transport from soil into buildings: model development and exploratory results. Atmospheric Environment, 1999, 33, 2157-2168.	1.9	40
138	Apportioning black carbon to sources using highly time-resolved ambient measurements of organic molecular markers in Pittsburgh. Atmospheric Environment, 2009, 43, 3941-3950.	1.9	40
139	Experimental Measurements of the Thermal Conductivity of Ash Deposits:â€‰ Part 1. Measurement Technique. Energy & Fuels, 2001, 15, 66-74.	2.5	38
140	Optical properties of black carbon in cookstove emissions coated with secondary organic aerosols: Measurements and modeling. Aerosol Science and Technology, 2016, 50, 1264-1276.	1.5	38
141	Temperature Dependence of Gasâ€“Particle Partitioning of Primary Organic Aerosol Emissions from a Small Diesel Engine. Aerosol Science and Technology, 2012, 46, 13-21.	1.5	37
142	Evaluating the impact of new observational constraints on P-S/IVOC emissions, multi-generation oxidation, and chamber wall losses on SOA modeling for Los Angeles, CA. Atmospheric Chemistry and Physics, 2017, 17, 9237-9259.	1.9	36
143	Understanding evolution of product composition and volatility distribution through in-situ GC Ã— GC analysis: a case study of longifolene ozonolysis. Atmospheric Chemistry and Physics, 2011, 11, 5335-5346.	1.9	35
144	Spatial decomposition analysis of NO2 and PM2.5 air pollution in the United States. Atmospheric Environment, 2020, 241, 117470.	1.9	35

#	Article	IF	Citations
145	Cumulative environmental and employment impacts of the shale gas boom. Nature Sustainability, 2019, 2, 1122-1131.	11.5	34
146	Interactions between coal and biomass when cofiring. Proceedings of the Combustion Institute, 1998, 27, 1351-1359.	0.3	33
147	Urban Ultrafine Particle Exposure Assessment with Land-Use Regression: Influence of Sampling Strategy. Environmental Science & Technology, 2019, 53, 7326-7336.	4.6	33
148	Reactivity of oleic acid in organic particles: changes in oxidant uptake and reaction stoichiometry with particle oxidation. Physical Chemistry Chemical Physics, 2009, 11, 7951.	1.3	31
149	Fuel Composition and Secondary Organic Aerosol Formation: Gas-Turbine Exhaust and Alternative Aviation Fuels. Environmental Science & Technology, 2012, 46, 8493-8501.	4.6	31
150	Estimates of non-traditional secondary organic aerosols from aircraft SVOC and IVOC emissions using CMAQ. Atmospheric Chemistry and Physics, 2015, 15, 6929-6942.	1.9	31
151	Optimizing Emissions Reductions from the U.S. Power Sector for Climate and Health Benefits. Environmental Science & Technology, 2020, 54, 7513-7523.	4.6	31
152	Scale Dependence of Soil Permeability to Air: Measurement Method and Field Investigation. Water Resources Research, 1996, 32, 547-560.	1.7	29
153	Laboratory measurements of the oxidation kinetics of organic aerosol mixtures using a relative rate constants approach. Journal of Geophysical Research, 2007, 112, .	3.3	29
154	Intra-city variability of PM exposure is driven by carbonaceous sources and correlated with land use variables. Environmental Science & Technology, 2018, 52, 11545-11554.	4.6	29
155	Reduced Ultrafine Particle Concentration in Urban Air: Changes in Nucleation and Anthropogenic Emissions. Environmental Science & Technology, 2018, 52, 6798-6806.	4.6	29
156	Land-Use Regression Modeling of Source-Resolved Fine Particulate Matter Components from Mobile Sampling. Environmental Science & Technology, 2019, 53, 8925-8937.	4.6	29
157	High-Spatial-Resolution Estimates of Ultrafine Particle Concentrations across the Continental United States. Environmental Science & Technology, 2021, 55, 10320-10331.	4.6	29
158	Modeling the formation and properties of traditional and non-traditional secondary organic aerosol: problem formulation and application to aircraft exhaust. Atmospheric Chemistry and Physics, 2012, 12, 9025-9040.	1.9	28
159	Spatial Variation in Ambient Air Toxics Concentrations and Health Risks between Industrial-Influenced, Urban, and Rural Sites. Journal of the Air and Waste Management Association, 2010, 60, 271-286.	0.9	27
160	Air pollution and mortality in a large, representative U.S. cohort: multiple-pollutant analyses, and spatial and temporal decompositions. Environmental Health, 2019, 18, 101.	1.7	27
161	Laboratory Measurements of the Heterogeneous Oxidation of Condensed-Phase Organic Molecular Makers for Meat Cooking Emissions. Environmental Science & Technology, 2008, 42, 5177-5182.	4.6	26
162	Soil-gas entry into houses driven by atmospheric pressure fluctuationsâ€"The influence of soil properties. Atmospheric Environment, 1997, 31, 1487-1495.	1.9	25

#	Article	IF	Citations
163	System-wide and Superemitter Policy Options for the Abatement of Methane Emissions from the U.S. Natural Gas System. Environmental Science & Technology, 2017, 51, 4772-4780.	4.6	25
164	Competitive oxidation in atmospheric aerosols: The case for relative kinetics. Geophysical Research Letters, 2005, 32, .	1.5	24
165	Quantification of the effects of molecular marker oxidation on source apportionment estimates for motor vehicles. Atmospheric Environment, 2011, 45, 3132-3140.	1.9	24
166	The Firepower Sweep Test: A novel approach to cookstove laboratory testing. Indoor Air, 2018, 28, 936-949.	2.0	23
167	Soil-gas entry into an experimental basement driven by atmospheric pressure fluctuationsâ€"Measurements, spectral analysis, and model comparison. Atmospheric Environment, 1997, 31, 1477-1485.	1.9	22
168	Evaluating the national air toxics assessment (NATA): Comparison of predicted and measured air toxics concentrations, risks, and sources in Pittsburgh, Pennsylvania. Atmospheric Environment, 2011, 45, 476-484.	1.9	22
169	Impact of natural gas development in the Marcellus and Utica shales on regional ozone and fine particulate matter levels. Atmospheric Environment, 2017, 155, 11-20.	1.9	22
170	The Influence of a Subslab Gravel Layer and Open Area on Soil-Gas and Radon Entry Into Two Experimental Basements. Health Physics, 1995, 69, 367-377.	0.3	21
171	Application of plume analysis to build land use regression models from mobile sampling to improve model transferability. Atmospheric Environment, 2016, 134, 51-60.	1.9	21
172	Spatial Correlation of Ultrafine Particle Number and Fine Particle Mass at Urban Scales: Implications for Health Assessment. Environmental Science & Technology, 2020, 54, 9295-9304.	4.6	21
173	Socio-economic disparities in exposure to urban restaurant emissions are larger than for traffic. Environmental Research Letters, 2020, 15, 114039.	2.2	21
174	Cardiopulmonary Mortality and Fine Particulate Air Pollution by Species and Source in a National U.S. Cohort. Environmental Science & Technology, 2022, 56, 7214-7223.	4.6	21
175	High time-resolved measurements of organic air toxics in different source regimes. Atmospheric Environment, 2009, 43, 6205-6217.	1.9	20
176	Organic Aerosol Speciation: Intercomparison of Thermal Desorption Aerosol GC/MS (TAG) and Filter-Based Techniques. Aerosol Science and Technology, 2010, 44, 141-151.	1.5	20
177	Testing secondary organic aerosol models using smog chamber data for complex precursor mixtures: influence of precursor volatility and molecular structure. Atmospheric Chemistry and Physics, 2014, 14, 5771-5780.	1.9	20
178	Size distribution of vehicle emitted primary particles measured in a traffic tunnel. Atmospheric Environment, 2018, 191, 9-18.	1.9	20
179	Identifying Priority Pollutant Sources: Apportioning Air Toxics Risks using Positive Matrix Factorization. Environmental Science & Technology, 2009, 43, 9439-9444.	4.6	18
180	Particulate Matter and Organic Vapor Emissions from a Helicopter Engine Operating on Petroleum and Fischerâ€"Tropsch Fuels. Energy & Fuels, 2012, 26, 4756-4766.	2.5	18

#	Article	IF	Citations
181	Fine Particulate Matter Air Pollution and Mortality Risk Among US Cancer Patients and Survivors. JNCI Cancer Spectrum, 2021, 5, pkab001.	1.4	18
182	Measurement and Simulation of Ash Deposit Microstructure. Energy & Fuels, 2003, 17, 1311-1323.	2.5	17
183	Effects of Dilution Sampling on Fine Particle Emissions from Pulverized Coal Combustion. Aerosol Science and Technology, 2004, 38, 574-587.	1.5	17
184	Quantifying uncertainties in pollutant mapping studies using the Monte Carlo method. Atmospheric Environment, 2014, 99, 333-340.	1.9	17
185	Using a network of lower-cost monitors to identify the influence of modifiable factors driving spatial patterns in fine particulate matter concentrations in an urban environment. Journal of Exposure Science and Environmental Epidemiology, 2020, 30, 949-961.	1.8	17
186	The food we eat, the air we breathe: a review of the fine particulate matter-induced air quality health impacts of the global food system. Environmental Research Letters, 2021, 16, 103004.	2.2	17
187	Application of the Pseudo-Deterministic Receptor Model to Resolve Power Plant Influences on Air Quality in Pittsburgh. Aerosol Science and Technology, 2006, 40, 883-897.	1.5	16
188	Correction Methods for Organic Carbon Artifacts When Using Quartz-Fiber Filters in Large Particulate Matter Monitoring Networks: The Regression Method and Other Options. Journal of the Air and Waste Management Association, 2011, 61, 696-710.	0.9	16
189	Moving beyond Fine Particle Mass: High-Spatial Resolution Exposure to Source-Resolved Atmospheric Particle Number and Chemical Mixing State. Environmental Health Perspectives, 2020, 128, 17009.	2.8	16
190	Improving Correlations between Land Use and Air Pollutant Concentrations Using Wavelet Analysis: Insights from a Low-cost Sensor Network. Aerosol and Air Quality Research, 2020, 20, 314-328.	0.9	16
191	Individual Particle Morphology and Acidity. Aerosol Science and Technology, 2008, 42, 224-232.	1.5	14
192	Measurements of NOxEmissions and In-Service Duty Cycle from a Towboat Operating on the Inland River System. Environmental Science & Technology, 2001, 35, 1343-1349.	4.6	13
193	Past, present, and future of ultrafine particle exposures in North America. Atmospheric Environment: X, 2021, 10, 100109.	0.8	13
194	Contribution of brown carbon and lensing to the direct radiative effect of carbonaceous aerosols from biomass and biofuel burning emissions. Journal of Geophysical Research D: Atmospheres, 2015, , n/a-n/a.	1.2	13
195	Evaluating the Effectiveness of Tutorial Dialogue Instruction in an Exploratory Learning Context. Lecture Notes in Computer Science, 2006, , 666-674.	1.0	13
196	RADON ENTRY INTO HOUSES. Health Physics, 1999, 77, 183-191.	0.3	12
197	Analyses of Turbulent Flow Fields and Aerosol Dynamics of Diesel Engine Exhaust Inside Two Dilution Sampling Tunnels Using the CTAG Model. Environmental Science & Technology, 2013, 47, 889-898.	4.6	12
198	The interplay between assumed morphology and the direct radiative effect of lightâ€absorbing organic aerosol. Geophysical Research Letters, 2016, 43, 8735-8743.	1.5	12

#	Article	IF	Citations
199	Possible malfunction in widely used methane sampler deserves attention but poses limited implications for supply chain emission estimates. Elementa, 2016, 4, .	1.1	11
200	Limited Secondary Organic Aerosol Production from Acyclic Oxygenated Volatile Chemical Products. Environmental Science & Technology, 2022, 56, 4806-4815.	4.6	11
201	Mass accommodation coefficients of fresh and aged biomass-burning emissions. Aerosol Science and Technology, 2018, 52, 300-309.	1.5	10
202	Quantifying the social equity state of an energy system: environmental and labor market equity of the shale gas boom in Appalachia. Environmental Research Letters, 2019, 14, 124072.	2.2	10
203	Estimating long-term pollution exposure effects through inverse probability weighting methods with Cox proportional hazards models. Environmental Epidemiology, 2020, 4, e085.	1.4	10
204	Aerosol Optical Properties and Climate Implications of Emissions from Traditional and Improved Cookstoves. Environmental Science & Technology, 2018, 52, 13647-13656.	4.6	9
205	Water-soluble iron emitted from vehicle exhaust is linked to primary speciated organic compounds. Atmospheric Chemistry and Physics, 2020, 20, 1849-1860.	1.9	9
206	Secondary organic aerosol production from pinanediol, a semi-volatile surrogate for first-generation oxidation products of monoterpenes. Atmospheric Chemistry and Physics, 2018, 18, 6171-6186.	1.9	8
207	Simulation of fresh and chemically-aged biomass burning organic aerosol. Atmospheric Environment, 2019, 196, 27-37.	1.9	8
208	in situ measurements of the thermal conductivity of ash deposits. Proceedings of the Combustion Institute, 1998, 27, 1727-1735.	0.3	7
209	Comparing regional stoveâ€usage patterns and using those patterns to model indoor air quality impacts. Indoor Air, 2020, 30, 521-533.	2.0	7
210	Direct measurements of soil-gas entry into an experimental basement driven by atmospheric pressure fluctuations. Geophysical Research Letters, 1995, 22, 1929-1932.	1.5	6
211	Computational Analysis of Particle Nucleation in Dilution Tunnels: Effects of Flow Configuration and Tunnel Geometry. Aerosol Science and Technology, 2014, 48, 638-648.	1.5	5
212	Where Did This Particle Come From? Sources of Particle Number and Mass for Human Exposure Estimates. Issues in Environmental Science and Technology, 2016, , 35-71.	0.4	5
213	Biomass burning organic aerosol from prescribed burning and other activities in the United States. Atmospheric Environment, 2020, 241, 117753.	1.9	4
214	CycleTalk: Toward a Dialogue Agent That Guides Design with an Articulate Simulator. Lecture Notes in Computer Science, 2004, , 401-411.	1.0	3
215	PM2.5 and ozone air pollution levels have not dropped consistently across the US following societal covid response. ISEE Conference Abstracts, 2020, 2020, .	0.0	3
216	Spatial Variation in Ambient Air Toxics Concentrations and Health Risks between Industrial-Influenced, Urban, and Rural Sites. Journal of the Air and Waste Management Association, 2010, 60, 1-4.	0.9	1

#	Article	IF	Citations
217	Corrigendum to "Secondary organic aerosol formation exceeds primary particulate matter emissions for light-duty gasoline vehicles" published in Atmos. Chem. Phys., 14, 4661â€“4678, 2014. Atmospheric Chemistry and Physics, 2015, 15, 19-20.	1.9	1
218	The relationship between black carbon and polycyclic aromatic hydrocarbon exposures and mortality in Allegheny County, Pennsylvania. Air Quality, Atmosphere and Health, 2020, 13, 893-908.	1.5	1
219	An Enhanced Sub-grid Scale Approach to Characterize Air Quality Impacts of Aircraft Emissions. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 327-332.	0.1	1
220	Integrating Spatiotemporal Variability and Modifiable Factors into Air Pollution Estimates. ISEE Conference Abstracts, 2018, 2018, .	0.0	1
221	Energetics to energy: Combustion and environmental considerations surrounding the reapplication of energetic materials as boiler fuels. Proceedings of the Combustion Institute, 1998, 27, 1317-1325.	0.3	0
222	A Novel Technique to Measure the Magnitude and Direction of Flow in a Tube. Journal of Fluids Engineering, Transactions of the ASME, 2000, 122, 186-188.	0.8	0