Matthew M Coggon

List of Publications by Year
in descending order

62	4,057	87888 38	123424 61
papers	citations	h-index	g-index

70	70	70	3467
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Proton-Transfer-Reaction Mass Spectrometry: Applications in Atmospheric Sciences. Chemical Reviews, 2017, 117, 13187-13229.	47.7	282
2	Non-methane organic gas emissions from biomass burning: identification, quantification, and emission factors from PTR-ToF during the FIREX 2016 laboratory experiment. Atmospheric Chemistry and Physics, 2018, 18, 3299-3319.	4.9	233
3	Organic aerosol formation from the reactive uptake of isoprene epoxydiols (IEPOX) onto non-acidified inorganic seeds. Atmospheric Chemistry and Physics, 2014, 14, 3497-3510.	4.9	201
4	Secondary organic aerosol formation from biomass burning intermediates: phenol and methoxyphenols. Atmospheric Chemistry and Physics, 2013, 13, 8019-8043.	4.9	181
5	Atmospheric fates of Criegee intermediates in the ozonolysis of isoprene. Physical Chemistry Chemical Physics, 2016, 18, 10241-10254.	2.8	179
6	Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. Environmental Science & Technology, 2015, 49, 10330-10339.	10.0	172
7	Vapor wall deposition in Teflon chambers. Atmospheric Chemistry and Physics, 2015, 15, 4197-4214.	4.9	125
8	Volatile chemical product emissions enhance ozone and modulate urban chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	103
9	High- and low-temperature pyrolysis profiles describe volatile organic compound emissions from western US wildfire fuels. Atmospheric Chemistry and Physics, 2018, 18, 9263-9281.	4.9	102
10	Calculation of the sensitivity of proton-transfer-reaction mass spectrometry (PTR-MS) for organic trace gases using molecular properties. International Journal of Mass Spectrometry, 2017, 421, 71-94.	1.5	101
11	Secondary organic aerosol yields of 12-carbon alkanes. Atmospheric Chemistry and Physics, 2014, 14, 1423-1439.	4.9	100
12	OH chemistry of non-methane organic gases (NMOGs) emitted from laboratory and ambient biomass burning smoke: evaluating the influence of furans and oxygenated aromatics on ozone and secondary NMOG formation. Atmospheric Chemistry and Physics, 2019, 19, 14875-14899.	4.9	92
13	Eastern Pacific Emitted Aerosol Cloud Experiment. Bulletin of the American Meteorological Society, 2013, 94, 709-729.	3.3	89
14	Formation of highly oxygenated low-volatility products from cresol oxidation. Atmospheric Chemistry and Physics, 2017, 17, 3453-3474.	4.9	89
15	Isoprene NO₃ Oxidation Products from the RO₂ + HO₂ Pathway. Journal of Physical Chemistry A, 2015, 119, 10158-10171.	2.5	86
16	Observations of Sharp Oxalate Reductions in Stratocumulus Clouds at Variable Altitudes: Organic Acid and Metal Measurements During the 2011 E-PEACE Campaign. Environmental Science & Technology, 2013, 47, 7747-7756.	10.0	84
17	Emissions of nitrogenâ€containing organic compounds from the burning of herbaceous and arboraceous biomass: Fuel composition dependence and the variability of commonly used nitrile tracers. Geophysical Research Letters, 2016, 43, 9903-9912.	4.0	79
18	Ship impacts on the marine atmosphere: insights into the contribution of shipping emissions to the properties of marine aerosol and clouds. Atmospheric Chemistry and Physics, 2012, 12, 8439-8458.	4.9	75

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19	Diurnal Variability and Emission Pattern of Decamethylcyclopentasiloxane (D₅) from the Application of Personal Care Products in Two North American Cities. Environmental Science & Technology, 2018, 52, 5610-5618.	10.0	72
20	Oxygenated Aromatic Compounds are Important Precursors of Secondary Organic Aerosol in Biomass-Burning Emissions. Environmental Science & Technology, 2020, 54, 8568-8579.	10.0	72
21	Characterisation and airborne deployment of a new counterflow virtual impactor inlet. Atmospheric Measurement Techniques, 2012, 5, 1259-1269.	3.1	68
22	Nighttime Chemical Transformation in Biomass Burning Plumes: A Box Model Analysis Initialized with Aircraft Observations. Environmental Science & Technology, 2019, 53, 2529-2538.	10.0	68
23	Secondary organic aerosol formation from the laboratory oxidation of biomass burning emissions. Atmospheric Chemistry and Physics, 2019, 19, 12797-12809.	4.9	67
24	Identifying Volatile Chemical Product Tracer Compounds in U.S. Cities. Environmental Science & Technology, 2021, 55, 188-199.	10.0	60
25	Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. Atmospheric Chemistry and Physics, 2021, 21, 11201-11224.	4.9	60
26	Observations Confirm that Volatile Chemical Products Are a Major Source of Petrochemical Emissions in U.S. Cities. Environmental Science & Technology, 2021, 55, 4332-4343.	10.0	57
27	Secondary Organic Aerosol Composition from C₁₂ Alkanes. Journal of Physical Chemistry A, 2015, 119, 4281-4297.	2.5	53
28	Emissions of volatile organic compounds (VOCs) from concentrated animal feeding operations (CAFOs): chemical compositions and separation of sources. Atmospheric Chemistry and Physics, 2017, 17, 4945-4956.	4.9	53
29	Sources of nitrate in stratocumulus cloud water: Airborne measurements during the 2011 E-PEACE and 2013 NiCE studies. Atmospheric Environment, 2014, 97, 166-173.	4.1	52
30	Impact of emissions from shipping, land, and the ocean on stratocumulus cloud water elemental composition during the 2011 E-PEACE field campaign. Atmospheric Environment, 2014, 89, 570-580.	4.1	48
31	Evaluation of NO⁺ reagent ion chemistry for online measurements of atmospheric volatile organic compounds. Atmospheric Measurement Techniques, 2016, 9, 2909-2925.	3.1	48
32	Reactive Uptake and Photo-Fenton Oxidation of Glycolaldehyde in Aerosol Liquid Water. Environmental Science & Technology, 2013, 47, 4307-4316.	10.0	47
33	On the Mixing and Evaporation of Secondary Organic Aerosol Components. Environmental Science & Technology, 2013, 47, 6173-6180.	10.0	46
34	The nitrogen budget of laboratory-simulated western US wildfires during the FIREX 2016 Fire Lab study. Atmospheric Chemistry and Physics, 2020, 20, 8807-8826.	4.9	45
35	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	10.3	45
36	Urban Oxidation Flow Reactor Measurements Reveal Significant Secondary Organic Aerosol Contributions from Volatile Emissions of Emerging Importance. Environmental Science & Technology, 2020, 54, 714-725.	10.0	44

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37	Role of ozone in SOA formation from alkane photooxidation. Atmospheric Chemistry and Physics, 2014, 14, 1733-1753.	4.9	43
38	Secondary Organic Aerosol Coating Formation and Evaporation: Chamber Studies Using Black Carbon Seed Aerosol and the Single-Particle Soot Photometer. Aerosol Science and Technology, 2013, 47, 326-347.	3.1	42
39	Real-Time Studies of Iron Oxalate-Mediated Oxidation of Glycolaldehyde as a Model for Photochemical Aging of Aqueous Tropospheric Aerosols. Environmental Science & Technology, 2016, 50, 12241-12249.	10.0	42
40	Biomass-burning-derived particles from a wide variety of fuels â€“ Part 2: Effects of photochemical aging on particle optical and chemical properties. Atmospheric Chemistry and Physics, 2020, 20, 8511-8532.	4.9	41
41	The Caltech Photooxidation Flow Tube reactor: design, fluid dynamics and characterization. Atmospheric Measurement Techniques, 2017, 10, 839-867.	3.1	39
42	Nighttime and daytime dark oxidation chemistry in wildfire plumes: an observation and model analysis of FIREX-AQ aircraft data. Atmospheric Chemistry and Physics, 2021, 21, 16293-16317.	4.9	34
43	Observations of continental biogenic impacts on marine aerosol and clouds off the coast of California. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6724-6748.	3.3	33
44	Variability and Time of Day Dependence of Ozone Photochemistry in Western Wildfire Plumes. Environmental Science & Technology, 2021, 55, 10280-10290.	10.0	31
45	Hygroscopic properties of smoke-generated organic aerosol particles emitted in the marine atmosphere. Atmospheric Chemistry and Physics, 2013, 13, 9819-9835.	4.9	30
46	A multi-year data set on aerosol-cloud-precipitation-meteorology interactions for marine stratocumulus clouds. Scientific Data, 2018, 5, 180026.	5.3	29
47	Primary emissions of glyoxal and methylglyoxal from laboratory measurements of open biomass burning. Atmospheric Chemistry and Physics, 2018, 18, 15451-15470.	4.9	28
48	Rapid cloud removal of dimethyl sulfide oxidation products limits SO ₂ and cloud condensation nuclei production in the marine atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	28
49	Biomass Burning Plumes in the Vicinity of the California Coast: Airborne Characterization of Physicochemical Properties, Heating Rates, and Spatiotemporal Features. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,560.	3.3	25
50	Stratocumulus Cloud Clearings and Notable Thermodynamic and Aerosol Contrasts across the Clearâ€“Cloudy Interface. Journals of the Atmospheric Sciences, 2016, 73, 1083-1099.	1.7	24
51	Volatile organic compound emissions from solvent- and water-borne coatings â€“ compositional differences and tracer compound identifications. Atmospheric Chemistry and Physics, 2021, 21, 6005-6022.	4.9	24
52	Formaldehyde evolution in US wildfire plumes during the Fire Influence on Regional to Global Environments and Air Quality experiment (FIREX-AQ). Atmospheric Chemistry and Physics, 2021, 21, 18319-18331.	4.9	24
53	Bioavailability of jarosite for stimulating acid mine drainage attenuation. Geochimica Et Cosmochimica Acta, 2012, 78, 65-76.	3.9	23
54	Contrasting cloud composition between coupled and decoupled marine boundary layer clouds. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,679.	3.3	21

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55	Airborne extractive electrospray mass spectrometry measurements of the chemical composition of organic aerosol. Atmospheric Measurement Techniques, 2021, 14, 1545-1559.	3.1	20
56	Effects of Biomass Burning on Stratocumulus Droplet Characteristics, Drizzle Rate, and Composition. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12301-12318.	3.3	18
57	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035203.	3.3	16
58	Airborne Emission Rate Measurements Validate Remote Sensing Observations and Emission Inventories of Western U.S. Wildfires. Environmental Science & Technology, 2022, 56, 7564-7577.	10.0	15
59	A note on the effects of inorganic seed aerosol on the oxidation state of secondary organic aerosolâ€”‹i›Î±‹/i›â€Pinene ozonolysis. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,476.	3.3	14
60	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	10.0	11
61	Marine Boundary Layer Clouds Associated with Coastally Trapped Disturbances: Observations and Model Simulations. Journals of the Atmospheric Sciences, 2019, 76, 2963-2993.	1.7	4
62	Correction to Reactive Uptake and Photo-Fenton Oxidation of Glycolaldehyde in Aerosol Liquid Water. Environmental Science & Technology, 2013, 47, 10093-10093.	10.0	3