Roy L Mauldin

List of Publications by Year
in descending order

35 papers	5,179 citations	172457 29 h-index	361022 35 g-index
35 all docs	35 docs citations	35 times ranked	4018 citing authors

#	Article	IF	Citations
1	Direct Observations of Atmospheric Aerosol Nucleation. Science, 2013, 339, 943-946.	12.6	876
2	The Role of Sulfuric Acid in Atmospheric Nucleation. Science, 2010, 327, 1243-1246.	12.6	694
3	A new atmospherically relevant oxidant of sulphur dioxide. Nature, 2012, 488, 193-196.	27.8	465
4	Atmospheric sulphuric acid and neutral cluster measurements using CI-APi-TOF. Atmospheric Chemistry and Physics, 2012, 12, 4117-4125.	4.9	393
5	Sulfuric acid and OH concentrations in a boreal forest site. Atmospheric Chemistry and Physics, 2009, 9, 7435-7448.	4.9	348
6	New Particle Formation in the Remote Troposphere: A Comparison of Observations at Various Sites. Geophysical Research Letters, 1999, 26, 307-310.	4.0	240
7	A criterion for new particle formation in the sulfur-rich Atlanta atmosphere. Journal of Geophysical Research, 2005, 110, .	3.3	187
8	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
9	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. Nature, 2020, 581, 184-189.	27.8	169
10	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	10.3	164
11	Rapid cycling of reactive nitrogen in the marine boundary layer. Nature, 2016, 532, 489-491.	27.8	159
12	High levels of molecular chlorine in the Arctic atmosphere. Nature Geoscience, 2014, 7, 91-94.	12.9	105
13	Measurements of OH, H2SO4, and MSA at the South Pole during ISCAT. Geophysical Research Letters, 2001, 28, 3629-3632.	4.0	101
14	Role of iodine oxoacids in atmospheric aerosol nucleation. Science, 2021, 371, 589-595.	12.6	94
15	Competing atmospheric reactions of CH₂OO with SO₂and water vapour. Physical Chemistry Chemical Physics, 2014, 16, 19130.	2.8	93
16	Gas-Phase Ozonolysis of Selected Olefins: The Yield of Stabilized Criegee Intermediate and the Reactivity toward SO₂. Journal of Physical Chemistry Letters, 2012, 3, 2892-2896.	4.6	88
17	Connection of Sulfuric Acid to Atmospheric Nucleation in Boreal Forest. Environmental Science & Technology, 2009, 43, 4715-4721.	10.0	84
18	New particle formation in the Front Range of the Colorado Rocky Mountains. Atmospheric Chemistry and Physics, 2008, 8, 1577-1590.	4.9	83

#	ARTICLE	IF	CITATIONS
19	Ambient observations of dimers from terpene oxidation in the gas phase: Implications for new particle formation and growth. Geophysical Research Letters, 2017, 44, 2958-2966.	4.0	71
20	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. Environmental Science & Technology, 2020, 54, 7911-7921.	10.0	66
21	Overview of the Manitou Experimental Forest Observatory: site description and selected science results from 2008 to 2013. Atmospheric Chemistry and Physics, 2014, 14, 6345-6367.	4.9	62
22	An investigation of South Pole HOxchemistry: Comparison of model results with ISCAT observations. Geophysical Research Letters, 2001, 28, 3633-3636.	4.0	61
23	Size-dependent influence of NO _x on the growth rates of organic aerosol particles. Science Advances, 2020, 6, eaay4945.	10.3	61
24	New insights on OH: Measurements around and in clouds. Geophysical Research Letters, 1997, 24, 3033-3036.	4.0	60
25	Ambient Measurements of Highly Oxidized Gas-Phase Molecules during the Southern Oxidant and Aerosol Study (SOAS) 2013. ACS Earth and Space Chemistry, 2018, 2, 653-672.	2.7	56
26	The driving factors of new particle formation and growth in the polluted boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 14275-14291.	4.9	38
27	Mercury Emission Ratios from Coal-Fired Power Plants in the Southeastern United States during NOMADSS. Environmental Science & Technology, 2015, 49, 10389-10397.	10.0	36
28	Airborne observations of DMSO, DMS, and OH at marine tropical latitudes. Geophysical Research Letters, 2001, 28, 2201-2204.	4.0	34
29	Molecular Composition and Volatility of Nucleated Particles from Î±-Pinene Oxidation between â^’50 Â°C and +25 Â°C. Environmental Science & Technology, 2019, 53, 12357-12365.	10.0	32
30	Synergistic HNO3â€“H2SO4â€“NH3 upper tropospheric particle formation. Nature, 2022, 605, 483-489.	27.8	26
31	A complete dynamical ozone budget measured in the tropical marine boundary layer during PASE. Journal of Atmospheric Chemistry, 2011, 68, 55-70.	3.2	21
32	Pacific Atmospheric Sulfur Experiment (PASE): dynamics and chemistry of the south Pacific tropical trade wind regime. Journal of Atmospheric Chemistry, 2011, 68, 5-25.	3.2	13
33	Sources and characteristics of summertime organic aerosol in the Colorado Front Range: perspective from measurements and WRF-Chem modeling. Atmospheric Chemistry and Physics, 2018, 18, 8293-8312.	4.9	13
34	Chemical composition of nanoparticles from <i>Î±</i>-pinene nucleation and the influence of isoprene and relative humidity at low temperature. Atmospheric Chemistry and Physics, 2021, 21, 17099-17114.	4.9	12
35	Indirect Measurements of the Composition of Ultrafine Particles in the Arctic Lateâ€Winter. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035428.	3.3	2