Loretta J Mickley

List of Publications by Year
in descending order

109 papers	12,549 citations	20759 60 h-index	27345 106 g-index
125 all docs	125 docs citations	125 times ranked	10219 citing authors

#	Article	IF	Citations
1	Global modeling of tropospheric chemistry with assimilated meteorology: Model description and evaluation. Journal of Geophysical Research, 2001, 106, 23073-23095.	3.3	1,927
2	Correlations between fine particulate matter (PM2.5) and meteorological variables in the United States: Implications for the sensitivity of PM2.5 to climate change. Atmospheric Environment, 2010, 44, 3976-3984.	1.9	803
3	Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem. Environmental Research, 2021, 195, 110754.	3.7	391
4	An ensemble-based model of PM2.5 concentration across the contiguous United States with high spatiotemporal resolution. Environment International, 2019, 130, 104909.	4.8	370
5	Impacts of climate change from 2000 to 2050 on wildfire activity and carbonaceous aerosol concentrations in the western United States. Journal of Geophysical Research, 2009, 114, .	3.3	356
6	Effect of changes in climate and emissions on future sulfateâ€nitrateâ€ammonium aerosol levels in the United States. Journal of Geophysical Research, 2009, 114, .	3.3	319
7	Why are there large differences between models in global budgets of tropospheric ozone?. Journal of Geophysical Research, 2007, 112, .	3.3	257
8	Public health impacts of the severe haze in Equatorial Asia in Septemberâ€“October 2015: demonstration of a new framework for informing fire management strategies to reduce downwind smoke exposure. Environmental Research Letters, 2016, 11, 094023.	2.2	249
9	General circulation model assessment of direct radiative forcing by the sulfate-nitrate-ammonium-water inorganic aerosol system. Journal of Geophysical Research, 2001, 106, 1097-1111.	3.3	228
10	Tropospheric bromine chemistry: implications for present and pre-industrial ozone and mercury. Atmospheric Chemistry and Physics, 2012, 12, 6723-6740.	1.9	223
11	Particulate air pollution from wildfires in the Western US under climate change. Climatic Change, 2016, 138, 655-666.	1.7	219
12	Biogenic secondary organic aerosol over the United States: Comparison of climatological simulations with observations. Journal of Geophysical Research, 2007, 112, .	3.3	210
13	Ensemble projections of wildfire activity and carbonaceous aerosol concentrations over the western United States in the mid-21st century. Atmospheric Environment, 2013, 77, 767-780.	1.9	200
14	Effects of future climate change on regional air pollution episodes in the United States. Geophysical Research Letters, 2004, 31, .	1.5	199
15	Fresh air in the 21st century?. Geophysical Research Letters, 2003, 30, .	1.5	192
16	Effects of 2000â€“2050 global change on ozone air quality in the United States. Journal of Geophysical Research, 2008, 113, .	3.3	186
17	A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations. Bulletin of the American Meteorological Society, 2009, 90, 1843-1864.	1.7	175
18	Wildfire-specific Fine Particulate Matter and Risk of Hospital Admissions in Urban and Rural Counties. Epidemiology, 2017, 28, 77-85.	1.2	175

#	ARTICLE	IF	CITATIONS
19	Meteorological modes of variability for fine particulate matter (PM_{2.5}) air quality in the United States: implications for PM_{2.5} sensitivity to climate change. Atmospheric Chemistry and Physics, 2012, 12, 3131-3145.	1.9	165
20	Sensitivity of US air quality to mid-latitude cyclone frequency and implications of 1980â€“2006 climate change. Atmospheric Chemistry and Physics, 2008, 8, 7075-7086.	1.9	164
21	Climatic effects of 1950â€“2050 changes in US anthropogenic aerosols â€“ Part 1: Aerosol trends and radiative forcing. Atmospheric Chemistry and Physics, 2012, 12, 3333-3348.	1.9	157
22	Assessing NO₂ Concentration and Model Uncertainty with High Spatiotemporal Resolution across the Contiguous United States Using Ensemble Model Averaging. Environmental Science & Technology, 2020, 54, 1372-1384.	4.6	155
23	Radiative forcing in the 21st century due to ozone changes in the troposphere and the lower stratosphere. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	153
24	Interactions between tropospheric chemistry and aerosols in a unified general circulation model. Journal of Geophysical Research, 2003, 108, AAC 1-1.	3.3	152
25	Indonesian wildfires of 1997: Impact on tropospheric chemistry. Journal of Geophysical Research, 2003, 108, .	3.3	140
26	Radiative forcing since preindustrial times due to ozone change in the troposphere and the lower stratosphere. Atmospheric Chemistry and Physics, 2006, 6, 575-599.	1.9	140
27	Radiative forcing from tropospheric ozone calculated with a unified chemistry-climate model. Journal of Geophysical Research, 1999, 104, 30153-30172.	3.3	139
28	Fire emissions and regional air quality impacts from fires in oil palm, timber, and logging concessions in Indonesia. Environmental Research Letters, 2015, 10, 085005.	2.2	139
29	Climatic effects of 1950â€“2050 changes in US anthropogenic aerosols â€“ Part 2: Climate response. Atmospheric Chemistry and Physics, 2012, 12, 3349-3362.	1.9	136
30	Impacts of changes in land use and land cover on atmospheric chemistry and air quality over the 21st century. Atmospheric Chemistry and Physics, 2012, 12, 1597-1609.	1.9	135
31	Formaldehyde (HCHO) As a Hazardous Air Pollutant: Mapping Surface Air Concentrations from Satellite and Inferring Cancer Risks in the United States. Environmental Science & Technology, 2017, 51, 5650-5657.	4.6	131
32	Global radiative forcing of coupled tropospheric ozone and aerosols in a unified general circulation model. Journal of Geophysical Research, 2004, 109, .	3.3	128
33	Effects of 2000â€“2050 changes in climate and emissions on global tropospheric ozone and the policyâ€relevant background surface ozone in the United States. Journal of Geophysical Research, 2008, 113, .	3.3	118
34	Wildfires drive interannual variability of organic carbon aerosol in the western U.S. in summer. Geophysical Research Letters, 2007, 34, .	1.5	116
35	An Ensemble Learning Approach for Estimating High Spatiotemporal Resolution of Ground-Level Ozone in the Contiguous United States. Environmental Science & Technology, 2020, 54, 11037-11047.	4.6	114
36	Validation of nitric oxide and nitrogen dioxide measurements made by the Halogen Occultation Experiment for UARS platform. Journal of Geophysical Research, 1996, 101, 10241-10266.	3.3	110

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37	Sensitivity of surface ozone over China to 2000â€“2050 global changes of climate and emissions. Atmospheric Environment, 2013, 75, 374-382.	1.9	107
38	Linking global to regional models to assess future climate impacts on surface ozone levels in the United States. Journal of Geophysical Research, 2008, 113, .	3.3	106
39	Uncertainty in preindustrial abundance of tropospheric ozone: Implications for radiative forcing calculations. Journal of Geophysical Research, 2001, 106, 3389-3399.	3.3	102
40	Observing atmospheric formaldehyde (HCHO) from space: validation and intercomparison of six retrievals from four satellites (OMI, GOME2A, GOME2B, OMPS) with SEAC⁴RS aircraft observations over the southeast US. Atmospheric Chemistry and Physics, 2016, 16, 13477-13490.	1.9	99
41	Anthropogenic emissions of highly reactive volatile organic compounds in eastern Texas inferred from oversampling of satellite (OMI) measurements of HCHO columns. Environmental Research Letters, 2014, 9, 114004.	2.2	95
42	Synoptic meteorological modes of variability for fine particulate matter (PM_{2.5}) air quality in major metropolitan regions of China. Atmospheric Chemistry and Physics, 2018, 18, 6733-6748.	1.9	95
43	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. Nature Geoscience, 2021, 14, 77-84.	5.4	94
44	Factors controlling variability in the oxidative capacity of the troposphere since the Last Glacial Maximum. Atmospheric Chemistry and Physics, 2014, 14, 3589-3622.	1.9	92
45	Excess of COVID-19 cases and deaths due to fine particulate matter exposure during the 2020 wildfires in the United States. Science Advances, 2021, 7, .	4.7	91
46	Using satellite observations of tropospheric NO₂ columns to infer long-term trends in US NO_{<i>x</i>} emissions:Âthe importance of accounting for the free tropospheric NO₂ background. Atmospheric Chemistry and Physics, 2019, 19, 8863-8878.	1.9	89
47	Diagnosing spatial biases and uncertainties in global fire emissions inventories: Indonesia as regional case study. Remote Sensing of Environment, 2020, 237, 111557.	4.6	89
48	Influence of synoptic patterns on surface ozone variability over the eastern United States from 1980 to 2012. Atmospheric Chemistry and Physics, 2015, 15, 10925-10938.	1.9	88
49	Impacts of future climate change and effects of biogenic emissions on surface ozone and particulate matter concentrations in the United States. Atmospheric Chemistry and Physics, 2011, 11, 4789-4806.	1.9	85
50	Impact of increasing heat waves on U.S. ozone episodes in the 2050s: Results from a multimodel analysis using extreme value theory. Geophysical Research Letters, 2016, 43, 4017-4025.	1.5	85
51	Annual distributions and sources of Arctic aerosol components, aerosol optical depth, and aerosol absorption. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4107-4124.	1.2	79
52	Who Among the Elderly Is Most Vulnerable to Exposure to and Health Risks of Fine Particulate Matter From Wildfire Smoke?. American Journal of Epidemiology, 2017, 186, 730-735.	1.6	79
53	Impact of 2000â€“2050 climate change on fine particulate matter (PM_{2.5}) air quality inferred from a multi-model analysis of meteorological modes. Atmospheric Chemistry and Physics, 2012, 12, 11329-11337.	1.9	77
54	Effect of CO₂ inhibition on biogenic isoprene emission: Implications for air quality under 2000 to 2050 changes in climate, vegetation, and land use. Geophysical Research Letters, 2013, 40, 3479-3483.	1.5	75

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55	Climate response to the increase in tropospheric ozone since preindustrial times: A comparison between ozone and equivalent CO2forcings. Journal of Geophysical Research, 2004, 109, .	3.3	73
56	Kudzu (<i>Pueraria montana</i>) invasion doubles emissions of nitric oxide and increases ozone pollution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10115-10119.	3.3	73
57	Contribution of Hydroxymethane Sulfonate to Ambient Particulate Matter: A Potential Explanation for High Particulate Sulfur During Severe Winter Haze in Beijing. Geophysical Research Letters, 2018, 45, 11,969.	1.5	72
58	Multidecadal trends in aerosol radiative forcing over the Arctic: Contribution of changes in anthropogenic aerosol to Arctic warming since 1980. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3573-3594.	1.2	70
59	Longâ€term (2005â€“2014) trends in formaldehyde (HCHO) columns across North America as seen by the OMI satellite instrument: Evidence of changing emissions of volatile organic compounds. Geophysical Research Letters, 2017, 44, 7079-7086.	1.5	68
60	Eastern Asian emissions of anthropogenic halocarbons deduced from aircraft concentration data. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	67
61	Drought-sensitivity of fine dust in the US Southwest: Implications for air quality and public health under future climate change. Environmental Research Letters, 2018, 13, 054025.	2.2	66
62	Influence of 2000â€“2050 climate change on particulate matter in the United States: results from a new statistical model. Atmospheric Chemistry and Physics, 2017, 17, 4355-4367.	1.9	65
63	Intercontinental influence of NOx and CO emissions on particulate matter air quality. Atmospheric Environment, 2011, 45, 3318-3324.	1.9	57
64	Effects of Increasing Aridity on Ambient Dust and Public Health in the U.S. Southwest Under Climate Change. GeoHealth, 2019, 3, 127-144.	1.9	56
65	Projected effect of 2000â€“2050 changes in climate and emissions on aerosol levels in China and associated transboundary transport. Atmospheric Chemistry and Physics, 2013, 13, 7937-7960.	1.9	54
66	Impact of 2050 climate change on North American wildfire: consequences for ozone air quality. Atmospheric Chemistry and Physics, 2015, 15, 10033-10055.	1.9	54
67	Isotopic evidence of multiple controls on atmospheric oxidants over climate transitions. Nature, 2017, 546, 133-136.	13.7	49
68	Air Quality and Health Impact of Future Fossil Fuel Use for Electricity Generation and Transport in Africa. Environmental Science & Technology, 2019, 53, 13524-13534.	4.6	44
69	Halogen chemistry reduces tropospheric O₃ radiative forcing. Atmospheric Chemistry and Physics, 2017, 17, 1557-1569.	1.9	43
70	Sensitivity of population smoke exposure to fire locations in Equatorial Asia. Atmospheric Environment, 2015, 102, 11-17.	1.9	39
71	Projection of wildfire activity in southern California in the mid-twenty-first century. Climate Dynamics, 2014, 43, 1973-1991.	1.7	38
72	Insignificant effect of climate change on winter haze pollution in Beijing. Atmospheric Chemistry and Physics, 2018, 18, 17489-17496.	1.9	37

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73	Regional air quality impacts of future fire emissions in Sumatra and Kalimantan. Environmental Research Letters, 2015, 10, 054010.	2.2	36
74	Southeast Atmosphere Studies: learning from model-observation syntheses. Atmospheric Chemistry and Physics, 2018, 18, 2615-2651.	1.9	36
75	Paleo-Perspectives on Potential Future Changes in the Oxidative Capacity of the Atmosphere Due to Climate Change and Anthropogenic Emissions. Current Pollution Reports, 2015, 1, 57-69.	3.1	34
76	What Controls Springtime Fine Dust Variability in the Western United States? Investigating the 2002â€“2015 Increase in Fine Dust in the U.S. Southwest. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,449.	1.2	34
77	Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases. Science, 2019, 363, .	6.0	34
78	Seasonal prediction of US summertime ozone using statistical analysis of large scale climate patterns. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2491-2496.	3.3	33
79	Trends and spatial shifts in lightning fires and smoke concentrations in response to 21st century climate over the national forests and parks of the western United States. Atmospheric Chemistry and Physics, 2020, 20, 8827-8838.	1.9	32
80	Rapid rise in premature mortality due to anthropogenic air pollution in fast-growing tropical cities from 2005 to 2018. Science Advances, 2022, 8, eabm4435.	4.7	31
81	Fires, Smoke Exposure, and Public Health: An Integrative Framework to Maximize Health Benefits From Peatland Restoration. GeoHealth, 2019, 3, 178-189.	1.9	30
82	Future respiratory hospital admissions from wildfire smoke under climate change in the Western US. Environmental Research Letters, 2016, 11, 124018.	2.2	29
83	Future fire emissions associated with projected land use change in Sumatra. Global Change Biology, 2015, 21, 345-362.	4.2	28
84	Global Importance of Hydroxymethanesulfonate in Ambient Particulate Matter: Implications for Air Quality. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032706.	1.2	28
85	Effects of El NiÃ±o on Summertime Ozone Air Quality in the Eastern United States. Geophysical Research Letters, 2017, 44, 12543-12550.	1.5	23
86	Improved estimates of preindustrial biomass burning reduce the magnitude of aerosol climate forcing in the Southern Hemisphere. Science Advances, 2021, 7, .	4.7	22
87	Predicting the Impact of Climate Change on Severe Wintertime Particulate Pollution Events in Beijing Using Extreme Value Theory. Geophysical Research Letters, 2019, 46, 1824-1830.	1.5	21
88	Catalytic role of formaldehyde in particulate matter formation. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	19
89	Effects of postdepositional processing on nitrogen isotopes of nitrate in the Greenland Ice Sheet Project 2 ice core. Geophysical Research Letters, 2015, 42, 5346-5354.	1.5	17
90	Role of the Maddenâ€Julian Oscillation in the Transport of Smoke From Sumatra to the Malay Peninsula During Severe Nonâ€El NiÃ±o Haze Events. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6282-6294.	1.2	17

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91	Vibrational circular dichroism study of (2S,3S)-dideuteriobutyrolactone. Synthesis, normal mode analysis, and comparison of experimental and calculated spectra. The Journal of Physical Chemistry, 1992, 96, 10139-10149.	2.9	16
92	Evolution of chlorine and nitrogen species in the lower stratosphere during Antarctic spring: Use of tracers to determine chemical change. Journal of Geophysical Research, 1997, 102, 21479-21491.	3.3	15
93	Detection of delay in post-monsoon agricultural burning across Punjab, India: potential drivers and consequences for air quality. Environmental Research Letters, 2021, 16, 014014.	2.2	15
94	Crop residue burning practices across north India inferred from household survey data: Bridging gaps in satellite observations. Atmospheric Environment: X, 2020, 8, 100091.	0.8	14
95	How Do Brazilian Fires Affect Air Pollution and Public Health?. GeoHealth, 2020, 4, e2020GH000331.	1.9	14
96	Air pollution from wildfires and human health vulnerability in Alaskan communities under climate change. Environmental Research Letters, 2020, 15, 094019.	2.2	13
97	Uncertainties in isoprene photochemistry and emissions: implications for the oxidative capacity of past and present atmospheres and for climate forcing agents. Atmospheric Chemistry and Physics, 2015, 15, 7977-7998.	1.9	12
98	Global search for temporal shifts in fire activity: potential human influence on southwest Russia and north Australia fire seasons. Environmental Research Letters, 2021, 16, 044023.	2.2	12
99	GCAP 2.0: a global 3-D chemical-transport model framework for past, present, and future climate scenarios. Geoscientific Model Development, 2021, 14, 5789-5823.	1.3	11
100	A new approach for determining optimal placement of PM_{2.5}air quality sensors: case study for the contiguous United States. Environmental Research Letters, 2022, 17, 034034.	2.2	11
101	Response of summertime odd nitrogen and ozone at 17 mbar to Mount Pinatubo aerosol over the southern midlatitudes: Observations from the Halogen Occultation Experiment. Journal of Geophysical Research, 1997, 102, 23573-23582.	3.3	9
102	Strong Dependence of U.S. Summertime Air Quality on the Decadal Variability of Atlantic Sea Surface Temperatures. Geophysical Research Letters, 2017, 44, 12527-12535.	1.5	9
103	Response of dust emissions in southwestern North America to 21st century trends in climate, CO₂ fertilization, and land use: implications for air quality. Atmospheric Chemistry and Physics, 2021, 21, 57-68.	1.9	8
104	A Future Short of Breath? Possible Effects of Climate Change on Smog. Environment, 2007, 49, 32-43.	0.8	7
105	Air pollution accountability of energy transitions: the relative importance of point source emissions and wind fields in exposure changes. Environmental Research Letters, 2019, 14, 115003.	2.2	7
106	Aerosolâ€Radiation Interactions in China in Winter: Competing Effects of Reduced Shortwave Radiation and Cloudâ€Snowfallâ€Albedo Feedbacks Under Rapidly Changing Emissions. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	5
107	Estimating the health effects of environmental mixtures using principal stratification. Statistics in Medicine, 2022, 41, 1815-1828.	0.8	4
108	Deconvolution of experimental differential cross sections. Journal of Chemical Physics, 1989, 91, 5402-5411.	1.2	3

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109	The Association Between PM2.5 and Blood Pressure in Indonesia. ISEE Conference Abstracts, 2021, 2021, .	0.0	0