Loretta J Mickley

List of Publications by Year in Descending Order

118 papers	9,200 citations	52 h-index	95 g-index
125 ext. papers	10,839 ext. citations	7.4 avg, IF	6.13 L-index

#	Paper	IF	Citations
118	Rapid rise in premature mortality due to anthropogenic air pollution in fast-growing tropical cities from 2005 to 2018.. *Science Advances*, **2022**, 8, eabm4435	14.3	0
117	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	6.2	6
116	Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem. *Environmental Research*, **2021**, 195, 110754	7.9	100
115	Improved estimates of preindustrial biomass burning reduce the magnitude of aerosol climate forcing in the Southern Hemisphere. *Science Advances*, **2021**, 7,	14.3	4
114	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	6.8	3
113	Detection of delay in post-monsoon agricultural burning across Punjab, India: potential drivers and consequences for air quality. *Environmental Research Letters*, **2021**, 16, 014014	6.2	6
112	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,	14.3	22
111	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	6.3	2
110	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. *Nature Geoscience*, **2021**, 14, 77-84	18.3	37
109	Crop residue burning practices across north India inferred from household survey data: Bridging gaps in satellite observations. *Atmospheric Environment: X*, **2020**, 8, 100091	2.8	4
108	How Do Brazilian Fires Affect Air Pollution and Public Health?. *GeoHealth*, **2020**, 4, e2020GH000331	5	5
107	Air pollution from wildfires and human health vulnerability in Alaskan communities under climate change. *Environmental Research Letters*, **2020**, 15,	6.2	5
106	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	6.8	9
105	Diagnosing spatial biases and uncertainties in global fire emissions inventories: Indonesia as regional case study. *Remote Sensing of Environment*, **2020**, 237, 111557	13.2	37
104	Assessing NO Concentration and Model Uncertainty with High Spatiotemporal Resolution across the Contiguous United States Using Ensemble Model Averaging. *Environmental Science & Technology*, **2020**, 54, 1372-1384	10.3	61
103	Global Importance of Hydroxymethanesulfonate in Ambient Particulate Matter: Implications for Air Quality. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2020JD032706	4.4	14
102	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	10.3	32

101	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	4.9	15
100	Effects of Increasing Aridity on Ambient Dust and Public Health in the U.S. Southwest Under Climate Change. *GeoHealth*, **2019**, 3, 127-144	5	32
99	Fires, Smoke Exposure, and Public Health: An Integrative Framework to Maximize Health Benefits From Peatland Restoration. *GeoHealth*, **2019**, 3, 178-189	5	19
98	Using satellite observations of tropospheric NO₂ columns to infer long-term trends in US NO_{<i>x</i>} emissions: the importance of accounting for the free tropospheric NO₂ background. *Atmospheric Chemistry and Physics*, **2019**, 19, 8863-8878	6.8	55
97	An ensemble-based model of PM concentration across the contiguous United States with high spatiotemporal resolution. *Environment International*, **2019**, 130, 104909	12.9	170
96	Air pollution accountability of energy transitions: the relative importance of point source emissions and wind fields in exposure changes. *Environmental Research Letters*, **2019**, 14,	6.2	4
95	Air Quality and Health Impact of Future Fossil Fuel Use for Electricity Generation and Transport in Africa. *Environmental Science & Technology*, **2019**, 53, 13524-13534	10.3	21
94	Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases. *Science*, **2019**, 363,	33.3	22
93	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	6.2	38
92	Southeast Atmosphere Studies: learning from model-observation syntheses. *Atmospheric Chemistry and Physics*, **2018**, 18, 2615-2651	6.8	31
91	Insignificant effect of climate change on winter haze pollution in Beijing. *Atmospheric Chemistry and Physics*, **2018**, 18, 17489-17496	6.8	23
90	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	4.9	46
89	Effect of climate change on winter haze pollution in Beijing: uncertain and likely small **2018**,		1
88	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	6.8	64
87	Role of the Madden-Julian Oscillation in the Transport of Smoke From Sumatra to the Malay Peninsula During Severe Non-El Niño Haze Events. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 6282-6294	4.4	12
86	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	11.5	24
85	Wildfire-specific Fine Particulate Matter and Risk of Hospital Admissions in Urban and Rural Counties. *Epidemiology*, **2017**, 28, 77-85	3.1	100
84	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	10.3	80

83	Isotopic evidence of multiple controls on atmospheric oxidants over climate transitions. *Nature*, **2017**, 546, 133-136	50.4	27
82	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	3.8	35
81	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	4.4	48
80	Synoptic meteorological modes of variability for fine particulate matter (PM_{2.5}) air quality in major metropolitan regions of China **2017**,		1
79	Strong Dependence of U.S. Summertime Air Quality on the Decadal Variability of Atlantic Sea Surface Temperatures. *Geophysical Research Letters*, **2017**, 44, 12527-12535	4.9	7
78	What Controls Springtime Fine Dust Variability in the Western United States? Investigating the 2002–2015 Increase in Fine Dust in the U.S. Southwest. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 12,449-12,467	4.4	25
77	Effects of El Niño on summertime ozone air quality in the eastern United States. *Geophysical Research Letters*, **2017**, 44, 12543-12550	4.9	13
76	Long-term (2005–2014) 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	4.9	36
75	Halogen chemistry reduces tropospheric O₃ radiative forcing. *Atmospheric Chemistry and Physics*, **2017**, 17, 1557-1569	6.8	35
74	Influence of 2000–2050 climate change on particulate matter in the United States: results from a new statistical model. *Atmospheric Chemistry and Physics*, **2017**, 17, 4355-4367	6.8	44
73	Strong influence of 2000–2050 climate change on particulate matter in the United States: Results from a new statistical model **2016**,		1
72	Particulate Air Pollution from Wildfires in the Western US under Climate Change. *Climatic Change*, **2016**, 138, 655-666	4.5	145
71	Observing atmospheric formaldehyde (HCHO) from space: validation and intercomparison of six retrievals from four satellites (OMI, GOME2A, GOME2B, OMPS) with SEACRS aircraft observations over the Southeast US. *Atmospheric Chemistry and Physics*, **2016**, 16, 13477-13490	6.8	75
70	Future respiratory hospital admissions from wildfire smoke under climate change in the Western US. *Environmental Research Letters*, **2016**, 11, 124018	6.2	20
69	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	4.9	61
68	Public health impacts of the severe haze in Equatorial Asia in September–October 2015: demonstration of a new framework for informing fire management strategies to reduce downwind smoke exposure. *Environmental Research Letters*, **2016**, 11, 094023	6.2	185
67	Sensitivity of population smoke exposure to fire locations in Equatorial Asia. *Atmospheric Environment*, **2015**, 102, 11-17	5.3	32
66	Regional air quality impacts of future fire emissions in Sumatra and Kalimantan. *Environmental Research Letters*, **2015**, 10, 054010	6.2	28

65	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	7.6	22
64	Future fire emissions associated with projected land use change in Sumatra. *Global Change Biology*, **2015**, 21, 345-62	11.4	24
63	Fire emissions and regional air quality impacts from fires in oil palm, timber, and logging concessions in Indonesia. *Environmental Research Letters*, **2015**, 10, 085005	6.2	107
62	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	4.9	8
61	Impact of 2050 climate change on North American wildfire: consequences for ozone air quality. *Atmospheric Chemistry and Physics*, **2015**, 15, 10033-10055	6.8	38
60	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	6.8	71
59	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	6.8	11
58	Annual distributions and sources of Arctic aerosol components, aerosol optical depth, and aerosol absorption. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 4107-4124	4.4	65
57	Factors controlling variability in the oxidative capacity of the troposphere since the Last Glacial Maximum. *Atmospheric Chemistry and Physics*, **2014**, 14, 3589-3622	6.8	76
56	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	6.2	72
55	Projection of wildfire activity in southern California in the mid-21st century. *Climate Dynamics*, **2014** , 43, 1973-1991	4.2	29
54	Sensitivity of surface ozone over China to 2000⁄2050 global changes of climate and emissions. *Atmospheric Environment*, **2013**, 75, 374-382	5.3	82
53	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	5.3	152
52	Projected effect of 2000⁄2050 changes in climate and emissions on aerosol levels in China and associated transboundary transport. *Atmospheric Chemistry and Physics*, **2013**, 13, 7937-7960	6.8	41
51	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	4.9	66
50	Tropospheric bromine chemistry: implications for present and pre-industrial ozone and mercury. *Atmospheric Chemistry and Physics*, **2012**, 12, 6723-6740	6.8	181
49	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	6.8	117
48	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	6.8	130

47	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 1: Aerosol trends and radiative forcing. *Atmospheric Chemistry and Physics*, **2012**, 12, 3333-3348	6.8	136
46	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 2: Climate response. *Atmospheric Chemistry and Physics*, **2012**, 12, 3349-3362	6.8	119
45	Impact of 2000–2050 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	6.8	65
44	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	6.8	71
43	Intercontinental influence of NOx and CO emissions on particulate matter air quality. *Atmospheric Environment*, **2011**, 45, 3318-3324	5.3	47
42	Kudzu (Pueraria montana) 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, 10115-9	11.5	56
41	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	5.3	575
40	A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations. *Bulletin of the American Meteorological Society*, **2009**, 90, 1843-1864	6.1	153
39	Effect of changes in climate and emissions on future sulfate-nitrate-ammonium aerosol levels in the United States. *Journal of Geophysical Research*, **2009**, 114,		259
38	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,		286
37	Linking global to regional models to assess future climate impacts on surface ozone levels in the United States. *Journal of Geophysical Research*, **2008**, 113,		94
36	Effects of 2000–2050 global change on ozone air quality in the United States. *Journal of Geophysical Research*, **2008**, 113,		142
35	Effects of 2000–2050 changes in climate and emissions on global tropospheric ozone and the policy-relevant background surface ozone in the United States. *Journal of Geophysical Research*, **2008**, 113,		100
34	Sensitivity of US air quality to mid-latitude cyclone frequency and implications of 1980–2006 climate change. *Atmospheric Chemistry and Physics*, **2008**, 8, 7075-7086	6.8	136
33	Why are there large differences between models in global budgets of tropospheric ozone?. *Journal of Geophysical Research*, **2007**, 112,		221
32	Biogenic secondary organic aerosol over the United States: Comparison of climatological simulations with observations. *Journal of Geophysical Research*, **2007**, 112,		189
31	Wildfires drive interannual variability of organic carbon aerosol in the western U.S. in summer. *Geophysical Research Letters*, **2007**, 34,	4.9	103
30	A Future Short of Breath? Possible Effects of Climate Change on Smog. *Environment*, **2007**, 49, 32-43	2.8	7

29	Radiative forcing since preindustrial times due to ozone change in the troposphere and the lower stratosphere. *Atmospheric Chemistry and Physics*, **2006**, 6, 575-599	6.8	126
28	Climate response to the increase in tropospheric ozone since preindustrial times: A comparison between ozone and equivalent CO2 forcings. *Journal of Geophysical Research*, **2004**, 109,		67
27	Global radiative forcing of coupled tropospheric ozone and aerosols in a unified general circulation model. *Journal of Geophysical Research*, **2004**, 109,		117
26	Effects of future climate change on regional air pollution episodes in the United States. *Geophysical Research Letters*, **2004**, 31,	4.9	172
25	Interactions between tropospheric chemistry and aerosols in a unified general circulation model. *Journal of Geophysical Research*, **2003**, 108, AAC 1-1		137
24	Fresh air in the 21st century?. *Geophysical Research Letters*, **2003**, 30,	4.9	152
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		99
22	Indonesian wildfires of 1997: Impact on tropospheric chemistry. *Journal of Geophysical Research*, **2003**, 108,		122
21	Eastern Asian emissions of anthropogenic halocarbons deduced from aircraft concentration data. *Journal of Geophysical Research*, **2003**, 108, n/a-n/a		58
20	Global modeling of tropospheric chemistry with assimilated meteorology: Model description and evaluation. *Journal of Geophysical Research*, **2001**, 106, 23073-23095		1601
19	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		196
18	Uncertainty in preindustrial abundance of tropospheric ozone: Implications for radiative forcing calculations. *Journal of Geophysical Research*, **2001**, 106, 3389-3399		90
17	Radiative forcing from tropospheric ozone calculated with a unified chemistry-climate model. *Journal of Geophysical Research*, **1999**, 104, 30153-30172		119
16	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		13
15	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		8
14	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		100
13	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		12
12	Deconvolution of experimental differential cross sections. *Journal of Chemical Physics*, **1989**, 91, 5402-5411	3.19	3

11	Impacts of changes in land use and land cover on atmospheric chemistry and air quality over the 21st century	3
10	Impacts of future climate change and effects of biogenic emissions on surface ozone and particulate matter concentrations in US	2
9	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 1: Aerosol trends and radiative forcing	8
8	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 2: Climate response	3
7	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	5
6	Impact of 2000–2050 climate change on fine particulate matter (PM</sub>2.5</sub>) air quality inferred from a multi-model analysis of meteorological modes	3
5	Tropospheric bromine chemistry: implications for present and pre-industrial ozone and mercury	1
4	Influence of synoptic patterns on surface ozone variability over the Eastern United States from 1980 to 2012	1
3	Uncertainties in isoprene photochemistry and emissions: implications for the oxidative capacity of past and present atmospheres and for trends in climate forcing agents	2
2	Sensitivity of US air quality to mid-latitude cyclone frequency and implications of 1980–2006 climate change	3
1	Factors controlling variability in the oxidative capacity of the troposphere since the Last Glacial Maximum	2