

# Chelsea R Thompson

## List of Publications by Year in descending order

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Version: 2024-02-01

35  
papers

1,533  
citations

304743

22  
h-index

361022

35  
g-index

62  
all docs

62  
docs citations

62  
times ranked

2208  
citing authors

#	ARTICLE	IF	CITATIONS
1	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. <i>Bulletin of the American Meteorological Society</i> , 2022, 103, E761-E790.	3.3	39
2	The global impacts of COVID-19 lockdowns on urban air pollution. <i>Elementa</i> , 2021, 9, .	3.2	94
3	Radiative and chemical implications of the size and composition of aerosol particles in the existing or modified global stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 8915-8932.	4.9	29
4	Large hemispheric difference in nucleation mode aerosol concentrations in the lowermost stratosphere at mid- and high latitudes. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 9065-9088.	4.9	8
5	Quantifying Methane and Ozone Precursor Emissions from Oil and Gas Production Regions across the Contiguous US. <i>Environmental Science &amp; Technology</i> , 2021, 55, 9129-9139.	10.0	23
6	Impact of stratospheric air and surface emissions on tropospheric nitrous oxide during ATom. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 11113-11132.	4.9	5
7	Heterogeneity and chemical reactivity of the remote troposphere defined by aircraft measurements. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 13729-13746.	4.9	4
8	Ambient aerosol properties in the remote atmosphere from global-scale in situ measurements. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15023-15063.	4.9	15
9	Rapid cloud removal of dimethyl sulfide oxidation products limits SO <sub>2</sub> and cloud condensation nuclei production in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	28
10	UAS Chromatograph for Atmospheric Trace Species (UCATS) – a versatile instrument for trace gas measurements on airborne platforms. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6795-6819.	3.1	9
11	Machine Learning Uncovers Aerosol Size Information From Chemistry and Meteorology to Quantify Potential Cloud-Forming Particles. <i>Geophysical Research Letters</i> , 2021, 48, .	4.0	7
12	Large contribution of biomass burning emissions to ozone throughout the global remote troposphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	51
13	Global Atmospheric Budget of Acetone: Air-Sea Exchange and the Contribution to Hydroxyl Radicals. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032553.	3.3	17
14	Missing OH reactivity in the global marine boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 4013-4029.	4.9	25
15	Global airborne sampling reveals a previously unobserved dimethyl sulfide oxidation mechanism in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4505-4510.	7.1	118
16	Global-scale distribution of ozone in the remote troposphere from the ATom and HIPPO airborne field missions. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 10611-10635.	4.9	31
17	Errors in top-down estimates of emissions using a known source. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 11855-11868.	4.9	11
18	On the sources and sinks of atmospheric VOCs: an integrated analysis of recent aircraft campaigns over North America. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 9097-9123.	4.9	32

#	ARTICLE	IF	CITATIONS
19	Mapping hydroxyl variability throughout the global remote troposphere via synthesis of airborne and satellite formaldehyde observations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 11171-11180.	7.1	58
20	Atmospheric Acetaldehyde: Importance of Air–Sea Exchange and a Missing Source in the Remote Troposphere. <i>Geophysical Research Letters</i> , 2019, 46, 5601-5613.	4.0	41
21	Methyl, Ethyl, and Propyl Nitrates: Global Distribution and Impacts on Reactive Nitrogen in Remote Marine Environments. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,429.	3.3	33
22	Development of a Fuel-Based Oil and Gas Inventory of Nitrogen Oxides Emissions. <i>Environmental Science &amp; Technology</i> , 2018, 52, 10175-10185.	10.0	19
23	Bromine atom production and chain propagation during springtime Arctic ozone depletion events in Barrow, Alaska. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 3401-3421.	4.9	11
24	Observations of VOC emissions and photochemical products over US oil- and gas-producing regions using high-resolution H <sub>2</sub> O <sup>+</sup> CIMS (PTR-ToF-MS). <i>Atmospheric Measurement Techniques</i> , 2017, 10, 2941-2968.	3.1	44
25	Quantifying wintertime boundary layer ozone production from frequent profile measurements in the Uinta Basin, UT, oil and gas region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 11,038.	3.3	15
26	Arctic springtime observations of volatile organic compounds during the OASIS-2009 campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 9789-9813.	3.3	16
27	Variability analyses, site characterization, and regional [OH] estimates using trace gas measurements from the NOAA Global Greenhouse Gas Reference Network. <i>Elementa</i> , 2016, 4, .	3.2	2
28	Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 411-429.	4.9	154
29	Interactions of bromine, chlorine, and iodine photochemistry during ozone depletions in Barrow, Alaska. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 9651-9679.	4.9	29
30	The NO <sub>2</sub> dependence of bromine chemistry in the Arctic atmospheric boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 10799-10809.	4.9	23
31	High winter ozone pollution from carbonyl photolysis in an oil and gas basin. <i>Nature</i> , 2014, 514, 351-354.	27.8	265
32	Highly Elevated Atmospheric Levels of Volatile Organic Compounds in the Uintah Basin, Utah. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4707-4715.	10.0	142
33	Reconstruction of Northern Hemisphere 1950–2010 atmospheric non-methane hydrocarbons. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 1463-1483.	4.9	31
34	Temporal and spatial characteristics of ozone depletion events from measurements in the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4875-4894.	4.9	40
35	Influence of oil and gas emissions on ambient atmospheric non-methane hydrocarbons in residential areas of Northeastern Colorado. <i>Elementa</i> , 2014, 3, .	3.2	55