Darin Toohey

List of Publications by Year
in descending order

91 papers	5,181 citations	125106 35 h-index	107981 68 g-index
94 all docs	94 docs citations	94 times ranked	5150 citing authors

#	Article	IF	Citations
1	Aircraft measurements of water vapor heavy isotope ratios in the marine boundary layer and lower troposphere during ORACLES. Earth System Science Data, 2022, 14, 1811-1829.	3.7	3
2	Characterization of aerosol plumes from singing and playing wind instruments associated with the risk of airborne virus transmission. Indoor Air, 2022, 32, .	2.0	8
3	Organic composition of three different size ranges of aerosol particles over the Southern Ocean. Aerosol Science and Technology, 2021, 55, 268-288.	1.5	13
4	Cloudâ€Nucleating Particles Over the Southern Ocean in a Changing Climate. Earth's Future, 2021, 9, e2020EF001673.	2.4	33
5	Influences of Recent Particle Formation on Southern Ocean Aerosol Variability and Low Cloud Properties. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033529.	1.2	32
6	Observations of Clouds, Aerosols, Precipitation, and Surface Radiation over the Southern Ocean: An Overview of CAPRICORN, MARCUS, MICRE, and SOCRATES. Bulletin of the American Meteorological Society, 2021, 102, E894-E928.	1.7	103
7	Measurements and Simulations of Aerosol Released while Singing and Playing Wind Instruments. ACS Environmental Au, 2021, 1, 71-84.	3.3	24
8	Biomass Burning Smoke and Its Influence on Clouds Over the Western U. S.. Geophysical Research Letters, 2021, 48, e2021GL094224.	1.5	13
9	Observations of Ice Nucleating Particles in the Free Troposphere From Western US Wildfires. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033752.	1.2	24
10	High ice concentration observed in tropical maritime stratiform mixed-phase clouds with top temperatures warmer than â^'8â€¯Â°C. Atmospheric Research, 2020, 233, 104719.	1.8	17
11	Microphysical Properties of Generating Cells Over the Southern Ocean: Results From SOCRATES. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032237.	1.2	27
12	Constraining the Surface Flux of Sea Spray Particles From the Southern Ocean. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032026.	1.2	20
13	The Coming Surge of Rocket Emissions. Eos, 2019, 100, .	0.1	7
14	The O2/N2 Ratio and CO2 Airborne Southern Ocean Study. Bulletin of the American Meteorological Society, 2018, 99, 381-402.	1.7	28
15	Ultrafine and Fine Particulate Matter Inside and Outside of Mechanically Ventilated Buildings. International Journal of Environmental Research and Public Health, 2017, 14, 128.	1.2	17
16	A study of aerosol properties based on observations of particulate matter from the U.S. Embassy in Beijing, China. Earth's Future, 2016, 4, 381-395.	2.4	30
17	Abundance of fluorescent biological aerosol particles at temperatures conducive to the formation of mixed-phase and cirrus clouds. Atmospheric Chemistry and Physics, 2016, 16, 8205-8225.	1.9	50
18	Chemical processing within and above a loblolly pine forest in North Carolina, USA. Journal of Atmospheric Chemistry, 2015, 72, 235-259.	1.4	5

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19	STRATOSPHERIC CHEMISTRY TOPICS | Halogens. , 2015, , 215-220.		0
20	A fiber-coupled laser hygrometer for airborne total water measurement. Atmospheric Measurement Techniques, 2014, 7, 215-223.	1.2	10
21	Ice particles in the upper anvil regions of midlatitude continental thunderstorms: the case for frozen-drop aggregates. Atmospheric Chemistry and Physics, 2014, 14, 1973-1985.	1.9	27
22	My Year as a Jefferson Science Fellow. Eos, 2014, 95, 15-15.	0.1	0
23	Characterizing moisture exchange between the Hawaiian convective boundary layer and free troposphere using stable isotopes in water. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8208-8221.	1.2	48
24	Impacts of aerosol particles on the microphysical and radiative properties of stratocumulus clouds over the southeast Pacific Ocean. Atmospheric Chemistry and Physics, 2013, 13, 2541-2562.	1.9	34
25	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9233-9257.	1.2	231
26	Correlated measurements of ozone and particulates in the Ross Island region, Antarctica. Geophysical Research Letters, 2013, 40, 6319-6323.	1.5	6
27	Halogen activation via interactions with environmental ice and snow in the polar lower troposphere and other regions. Atmospheric Chemistry and Physics, 2012, 12, 6237-6271.	1.9	209
28	Properties of air mass mixing and humidity in the subtropics from measurements of the D/H isotope ratio of water vapor at the Mauna Loa Observatory. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	85
29	Dependence of SOA oxidation on organic aerosol mass concentration and OH exposure: experimental PAM chamber studies. Atmospheric Chemistry and Physics, 2011, 11, 1837-1852.	1.9	103
30	Trace gas and particle emissions from open biomass burning in Mexico. Atmospheric Chemistry and Physics, 2011, 11, 6787-6808.	1.9	133
31	Aviation and Chemistry and Transport Processes in the Upper Troposphere and Lower Stratosphere. Bulletin of the American Meteorological Society, 2010, 91, 485-490.	1.7	7
32	Potential climate impact of black carbon emitted by rockets. Geophysical Research Letters, 2010, 37, .	1.5	63
33	Limits on the Space Launch Market Related to Stratospheric Ozone Depletion. Astropolitics, 2009, 7, 50-82.	0.2	51
34	Emissions from biomass burning in the Yucatan. Atmospheric Chemistry and Physics, 2009, 9, 5785-5812.	1.9	433
35	Cloud Activating Properties of Aerosol Observed during CELTIC. Journals of the Atmospheric Sciences, 2007, 64, 441-459.	0.6	81
36	Demonstration of a VUV Lamp Photoionization Source for Improved Organic Speciation in an Aerosol Mass Spectrometer. Aerosol Science and Technology, 2007, 41, 828-839.	1.5	50

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37	Emissions from forest fires near Mexico City. Atmospheric Chemistry and Physics, 2007, 7, 5569-5584.	1.9	205
38	Introducing the concept of Potential Aerosol Mass (PAM). Atmospheric Chemistry and Physics, 2007, 7, 5727-5744.	1.9	269
39	Chlorine activation near the midlatitude tropopause. Journal of Geophysical Research, 2007, 112, .	3.3	22
40	Midlatitude ClO during the maximum atmospheric chlorine burden: in situ balloon measurements and model simulations. Atmospheric Chemistry and Physics, 2005, 5, 1623-1638.	1.9	5
41	Variability of active chlorine in the lowermost Arctic stratosphere. Journal of Geophysical Research, 2005, 110, .	3.3	10
42	Haze Aerosols in the Atmosphere of Early Earth: Manna from Heaven. Astrobiology, 2004, 4, 409-419.	1.5	61
43	Size-resolved particle emission indices in the stratospheric plume of an Athena II rocket. Journal of Geophysical Research, 2003, 108, .	3.3	13
44	Vertical profiles of activated ClO and ozone loss in the Arctic vortex in January and March 2000: In situ observations and model simulations. Journal of Geophysical Research, 2003, 108, .	3.3	19
45	Quantifying uptake of HNO3and H2O by alumina particles in Athena-2 rocket plume. Journal of Geophysical Research, 2003, 108, .	3.3	7
46	In situ observations of ClO near the winter polar tropopause. Journal of Geophysical Research, 2003, 108, .	3.3	22
47	In situ measurements of bromine oxide at two high-latitude boundary layer sites: Implications of variability. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	26
48	Measurements of quantum yields of bromine atoms in the photolysis of bromoform from 266 to 324 nm. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	15
49	On the review process: Editors speak. Eos, 2003, 84, 575.	0.1	0
50	Chemical depletion of Arctic ozone in winter 1999/2000. Journal of Geophysical Research, 2002, 107, SOL 18-1.	3.3	95
51	The emission and chemistry of reactive nitrogen species in the plume of an Athena II solid-fuel rocket motor. Geophysical Research Letters, 2002, 29, 34-1-34-4.	1.5	13
52	In situ measurements of carbon dioxide, 0.37â€“4.0 Î¼m particles, and water vapor in the stratospheric plumes of small rockets. Journal of Geophysical Research, 2002, 107, AAC 8-1.	3.3	10
53	Tests of halogen photochemistry using in situ measurements of ClO and BrO in the lower polar stratosphere. Journal of Geophysical Research, 2001, 106, 10411-10421.	3.3	47
54	Sunset observations of ClO in the Arctic Polar Vortex and implications for ozone loss. Geophysical Research Letters, 2001, 28, 4183-4186.	1.5	12

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55	Observation of stratospheric ozone depletion associated with Delta II rocket emissions. Geophysical Research Letters, 2000, 27, 2209-2212.	1.5	28
56	An Investigation of ClO Photchemistry in the Chemically Perturbed Arctic Vortex. Journal of Atmospheric Chemistry, 1999, 32, 61-81.	1.4	32
57	A wintertime in situ profile of BrO between 17 and 27 km in the Arctic vortex. Geophysical Research Letters, 1997, 24, 853-856.	1.5	29
58	On the occurrence of ClO in cirrus clouds and volcanic aerosol in the tropopause region. Geophysical Research Letters, 1997, 24, 2011-2014.	1.5	40
59	Validation of UARS Microwave Limb Sounder ClO measurements. Journal of Geophysical Research, 1996, 101, 10091-10127.	3.3	49
60	A critical review of stratospheric chemistry research in the U.S.: 1991-1994. Reviews of Geophysics, 1995, 33, 759-773.	9.0	6
61	In situ measurements of BrO During AASE II. Geophysical Research Letters, 1995, 22, 831-834.	1.5	37
62	The response of ClO radical concentrations to variations in NO2radical concentrations in the lower stratosphere. Geophysical Research Letters, 1994, 21, 2543-2546.	1.5	35
63	Removal of Stratospheric O3 by Radicals: In Situ Measurements of OH, HO2, NO, NO2, ClO, and BrO. Science, 1994, 266, 398-404.	6.0	384
64	35 P 03 In-situ aerosol measurements and evaluation on heterogeneous chemistry in the lower stratosphere. Journal of Aerosol Science, 1993, 24, S385-S386.	1.8	0
65	Chlorine Chemistry on Polar Stratospheric Cloud Particles in the Arctic Winter. Science, 1993, 261, 1130-1134.	6.0	150
66	The Seasonal Evolution of Reactive Chlorine in the Northern Hemisphere Stratosphere. Science, 1993, 261, 1134-1136.	6.0	69
67	In Situ Observations of Aerosol and Chlorine Monoxide After the 1991 Eruption of Mount Pinatubo: Effect of Reactions on Sulfate Aerosol. Science, 1993, 261, 1140-1143.	6.0	84
68	Stratospheric Meteorological Conditions in the Arctic Polar Vortex, 1991 to 1992. Science, 1993, 261, 1143-1146.	6.0	41
69	The evolution of CLO and NO along air parcel trajectories. Geophysical Research Letters, 1993, 20, 2511-2514.	1.5	32
70	Balloonâ€borne in situ measurements of CLO and ozone: Implications for heterogeneous chemistry and midâ€latitude ozone loss. Geophysical Research Letters, 1993, 20, 1795-1798.	1.5	40
71	The performance of a new instrument for in situ measurements of ClO in the lower stratosphere. Geophysical Research Letters, 1993, 20, 1791-1794.	1.5	18
72	In situ measurements of the ClO/HCl ratio: Heterogeneous processing on sulfate aerosols and polar stratospheric clouds. Geophysical Research Letters, 1993, 20, 2523-2526.	1.5	18

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73	In situ measurements of CLO at midâ€latitudes: Is there an effect from Mt. Pinatubo?. Geophysical Research Letters, 1993, 20, 2519-2522.	1.5	30
74	In situ measurements of midlatitude ClO in winter. Geophysical Research Letters, 1991, 18, 21-24.	1.5	35
75	Measurements of ClO and O₃ from 21Â°N to 61Â°N in the lower stratosphere during February 1988: Implications for heterogeneous chemistry. Geophysical Research Letters, 1991, 18, 2273-2276.	1.5	22
76	Free Radicals Within the Antarctic Vortex: The Role of CFCs in Antarctic Ozone Loss. Science, 1991, 251, 39-46.	6.0	375
77	The Potential for Ozone Depletion in the Arctic Polar Stratosphere. Science, 1991, 252, 1260-1266.	6.0	115
78	Low-lying isomers of the chlorine oxide dimer: a theoretical study. The Journal of Physical Chemistry, 1991, 95, 2107-2110.	2.9	37
79	In situ observations of ClO in the Arctic stratosphere: ERâ€2 aircraft results from 59Â°N TO 80Â°N latitude. Geophysical Research Letters, 1990, 17, 505-508.	1.5	109
80	The sunrise and sunset variation of ClO in the lower stratosphere. Geophysical Research Letters, 1990, 17, 509-512.	1.5	23
81	In situ measurements of BrO in the Arctic stratosphere. Geophysical Research Letters, 1990, 17, 513-516.	1.5	70
82	The polar stratospheric cloud event of January 24: Part 2, PHotochemistry. Geophysical Research Letters, 1990, 17, 541-544.	1.5	15
83	Kinetics of O₃ destruction by ClO and BrO within the Antarctic vortex: An analysis based on in situ ERâ€2 data. Journal of Geophysical Research, 1989, 94, 11480-11520.	3.3	199
84	Theoretical investigations of reactions of some radicals with hydroperoxo. 1. Hydrogen abstractions by direct mechanisms. The Journal of Physical Chemistry, 1989, 93, 1049-1058.	2.9	39
85	Rate constant for the reaction Br + O3 ? BrO + O2 from 248 to 418 K: Kinetics and mechanism. International Journal of Chemical Kinetics, 1988, 20, 131-144.	1.0	24
86	In Situ Northern Mid-Latitude Observations of ClO, O3, and BrO in the Wintertime Lower Stratosphere. Science, 1988, 242, 558-562.	6.0	41
87	Formation of bromine chloride(3.Pl.0+) in the reaction of bromine monoxide with chlorine monoxide. The Journal of Physical Chemistry, 1988, 92, 1705-1708.	2.9	28
88	Mechanism and kinetics of Br + HO2 .fwdarw. HBr + O2 and Br + H2O2 .fwdarw. products over the temperature range 260-390 K. The Journal of Physical Chemistry, 1987, 91, 1215-1222.	2.9	16
89	Kinetics of interaction of vibrationally excited OH(X2?i)v=9 with simple hydrocarbons at room temperature. International Journal of Chemical Kinetics, 1985, 17, 613-628.	1.0	0
90	Relative rate constants for removal of vibrationally excited OH(X2?i)v=9 by some small molecules at room temperature. International Journal of Chemical Kinetics, 1983, 15, 151-165.	1.0	12

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91	The production of O(3P) and ground state OH in the reaction of hydrogen atoms with ozone. Journal of Chemical Physics, 1981, 74, 4533-4543.	1.2	21