

# Stephen A Montzka

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6891252/publications.pdf>

Version: 2024-02-01

182  
papers

19,587  
citations

14644

66  
h-index

13365

130  
g-index

246  
all docs

246  
docs citations

246  
times ranked

16877  
citing authors

#	ARTICLE	IF	CITATIONS
1	The RCP greenhouse gas concentrations and their extensions from 1765 to 2300. <i>Climatic Change</i> , 2011, 109, 213-241.	1.7	2,948
2	Non-CO2 greenhouse gases and climate change. <i>Nature</i> , 2011, 476, 43-50.	13.7	934
3	Three-dimensional climatological distribution of tropospheric OH: Update and evaluation. <i>Journal of Geophysical Research</i> , 2000, 105, 8931-8980.	3.3	730
4	The shared socio-economic pathway (SSP) greenhouse gas concentrations and their extensions to 2500. <i>Geoscientific Model Development</i> , 2020, 13, 3571-3605.	1.3	539
5	Observational constraints on recent increases in the atmospheric CH <sub>4</sub> burden. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	499
6	Anthropogenic emissions of methane in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20018-20022.	3.3	437
7	Methane emissions estimate from airborne measurements over a western United States natural gas field. <i>Geophysical Research Letters</i> , 2013, 40, 4393-4397.	1.5	414
8	Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	359
9	Historical greenhouse gas concentrations for climate modelling (CMIP6). <i>Geoscientific Model Development</i> , 2017, 10, 2057-2116.	1.3	350
10	Present and future trends in the atmospheric burden of ozone-depleting halogens. <i>Nature</i> , 1999, 398, 690-694.	13.7	313
11	Small Interannual Variability of Global Atmospheric Hydroxyl. <i>Science</i> , 2011, 331, 67-69.	6.0	306
12	Decline in the Tropospheric Abundance of Halogen from Halocarbons: Implications for Stratospheric Ozone Depletion. <i>Science</i> , 1996, 272, 1318-1322.	6.0	301
13	Toward a better understanding and quantification of methane emissions from shale gas development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6237-6242.	3.3	296
14	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	289
15	Ruminants, climate change and climate policy. <i>Nature Climate Change</i> , 2014, 4, 2-5.	8.1	276
16	An unexpected and persistent increase in global emissions of ozone-depleting CFC-11. <i>Nature</i> , 2018, 557, 413-417.	13.7	269
17	A new look at methane and nonmethane hydrocarbon emissions from oil and natural gas operations in the Colorado Denver-Julesburg Basin. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 6836-6852.	1.2	257
18	A record of atmospheric halocarbons during the twentieth century from polar firn air. <i>Nature</i> , 1999, 399, 749-755.	13.7	235

#	ARTICLE	IF	CITATIONS
19	Role of atmospheric oxidation in recent methane growth. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5373-5377.	3.3	231
20	Large historical growth in global terrestrial gross primary production. Nature, 2017, 544, 84-87.	13.7	219
21	On the global distribution, seasonality, and budget of atmospheric carbonyl sulfide (COS) and some similarities to CO <sub>2</sub> . Journal of Geophysical Research, 2007, 112, .	3.3	213
22	Photosynthetic Control of Atmospheric Carbonyl Sulfide During the Growing Season. Science, 2008, 322, 1085-1088.	6.0	196
23	Hydrocarbon measurements in the southeastern United States: The Rural Oxidants in the Southern Environment (ROSE) Program 1990. Journal of Geophysical Research, 1995, 100, 25945.	3.3	191
24	Oceanic distributions and emissions of short-lived halocarbons. Global Biogeochemical Cycles, 2007, 21, .	1.9	173
25	An important contribution to springtime Arctic aerosol from biomass burning in Russia. Geophysical Research Letters, 2010, 37, .	1.5	172
26	Isoprene and its oxidation products, methyl vinyl ketone and methacrolein, in the rural troposphere. Journal of Geophysical Research, 1993, 98, 1101-1111.	3.3	169
27	Airborne gas chromatograph for in situ measurements of long-lived species in the upper troposphere and lower stratosphere. Geophysical Research Letters, 1996, 23, 347-350.	1.5	158
28	Recent decreases in fossil-fuel emissions of ethane and methane derived from firn air. Nature, 2011, 476, 198-201.	13.7	156
29	Seasonal climatology of CO <sub>2</sub> across North America from aircraft measurements in the NOAA/ESRL Global Greenhouse Gas Reference Network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5155-5190.	1.2	153
30	When will the Antarctic ozone hole recover?. Geophysical Research Letters, 2006, 33, .	1.5	151
31	A coupled model of the global cycles of carbonyl sulfide and CO <sub>2</sub> : A possible new window on the carbon cycle. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 842-852.	1.3	149
32	Reversal of global atmospheric ethane and propane trends largely due to US oil and natural gas production. Nature Geoscience, 2016, 9, 490-495.	5.4	149
33	Assessment of fossil fuel carbon dioxide and other anthropogenic trace gas emissions from airborne measurements over Sacramento, California in spring 2009. Atmospheric Chemistry and Physics, 2011, 11, 705-721.	1.9	148
34	Increase in CFC-11 emissions from eastern China based on atmospheric observations. Nature, 2019, 569, 546-550.	13.7	148
35	The increasing threat to stratospheric ozone from dichloromethane. Nature Communications, 2017, 8, 15962.	5.8	147
36	Efficiency of short-lived halogens at influencing climate through depletion of stratospheric ozone. Nature Geoscience, 2015, 8, 186-190.	5.4	146

#	ARTICLE	IF	CITATIONS
37	The observation of a C <sub>5</sub> alcohol emission in a North American pine forest. <i>Geophysical Research Letters</i> , 1993, 20, 1039-1042.	1.5	145
38	A Net Sink for Atmospheric CH <sub>3</sub> Br in the East Pacific Ocean. <i>Science</i> , 1995, 267, 1002-1005.	6.0	144
39	State of the Climate in 2015. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, S1-S275.	1.7	142
40	Preserving Montreal Protocol Climate Benefits by Limiting HFCs. <i>Science</i> , 2012, 335, 922-923.	6.0	139
41	State of the Climate in 2013. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, S1-S279.	1.7	138
42	Ecosystem photosynthesis inferred from measurements of carbonyl sulphide flux. <i>Nature Geoscience</i> , 2013, 6, 186-190.	5.4	137
43	The role of carbon dioxide in climate forcing from 1979 to 2004: introduction of the Annual Greenhouse Gas Index. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2006, 58, 614-619.	0.8	132
44	Distribution of halon-1211 in the upper troposphere and lower stratosphere and the 1994 total bromine budget. <i>Journal of Geophysical Research</i> , 1998, 103, 1513-1526.	3.3	131
45	A decline in tropospheric organic bromine. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	129
46	State of the Climate in 2012. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, S1-S258.	1.7	129
47	New Observational Constraints for Atmospheric Hydroxyl on Global and Hemispheric Scales. <i>Science</i> , 2000, 288, 500-503.	6.0	124
48	Linking emissions of fossil fuel CO <sub>2</sub> and other anthropogenic trace gases using atmospheric <sup>14</sup> CO <sub>2</sub> . <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	121
49	Observational evidence for interhemispheric hydroxyl-radical parity. <i>Nature</i> , 2014, 513, 219-223.	13.7	121
50	Relationships between carbonyl sulfide (COS) and CO <sub>2</sub> during leaf gas exchange. <i>New Phytologist</i> , 2010, 186, 869-878.	3.5	110
51	Re-evaluation of the lifetimes of the major CFCs and CH <sub>3</sub> Cl and CCl <sub>3</sub> using atmospheric trends. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 2691-2702.	1.9	105
52	Evolution of alkyl nitrates with air mass age. <i>Journal of Geophysical Research</i> , 1995, 100, 22805.	3.3	104
53	Ozone variability and halogen oxidation within the Arctic and sub-Arctic springtime boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10223-10236.	1.9	104
54	Estimates of total organic and inorganic chlorine in the lower stratosphere from in situ and flask measurements during AASE II. <i>Journal of Geophysical Research</i> , 1995, 100, 3057.	3.3	99

#	ARTICLE	IF	CITATIONS
55	Reviews and syntheses: Carbonyl sulfide as a multi-scale tracer for carbon and water cycles. <i>Biogeosciences</i> , 2018, 15, 3625-3657.	1.3	98
56	Rapid growth of hydrofluorocarbon 134a and hydrochlorofluorocarbons 141b, 142b, and 22 from Advanced Global Atmospheric Gases Experiment (AGAGE) observations at Cape Grim, Tasmania, and Mace Head, Ireland. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	96
57	Peroxy radicals in the ROSE experiment: Measurement and theory. <i>Journal of Geophysical Research</i> , 1992, 97, 20671-20686.	3.3	94
58	On the consistency between global and regional methane emissions inferred from SCIAMACHY, TANSO-FTS, IASI and surface measurements. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 577-592.	1.9	91
59	A 350-year atmospheric history for carbonyl sulfide inferred from Antarctic firn air and air trapped in ice. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	84
60	Recent Trends in Global Emissions of Hydrochlorofluorocarbons and Hydrofluorocarbons: Reflecting on the 2007 Adjustments to the Montreal Protocol. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4439-4449.	1.1	84
61	Deep air convection in the firn at a zero-accumulation site, central Antarctica. <i>Earth and Planetary Science Letters</i> , 2010, 293, 359-367.	1.8	82
62	Global tropospheric distribution and calibration scale of HCFC-22. <i>Geophysical Research Letters</i> , 1993, 20, 703-706.	1.5	81
63	Measurements of 3-methyl furan, methyl vinyl ketone, and methacrolein at a rural forested site in the southeastern United States. <i>Journal of Geophysical Research</i> , 1995, 100, 11393.	3.3	74
64	Photochemical ozone production in the rural southeastern United States during the 1990 Rural Oxidants in the Southern Environment (ROSE) program. <i>Journal of Geophysical Research</i> , 1998, 103, 22491-22508.	3.3	74
65	Quantifying contributions of chlorofluorocarbon banks to emissions and impacts on the ozone layer and climate. <i>Nature Communications</i> , 2020, 11, 1380.	5.8	72
66	Observations of HFC-134a in the remote troposphere. <i>Geophysical Research Letters</i> , 1996, 23, 169-172.	1.5	70
67	Chlorine budget and partitioning during the Stratospheric Aerosol and Gas Experiment (SAGE) III Ozone Loss and Validation Experiment (SOLVE). <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	69
68	Seasonal fluxes of carbonyl sulfide in a midlatitude forest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14162-14167.	3.3	69
69	Role of OH variability in the stalling of the global atmospheric CH <sub>4</sub> growth rate from 1999 to 2006. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7943-7956.	1.9	68
70	Long-term observations of stratospheric bromine reveal slow down in growth. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	67
71	Evaluating global emission inventories of biogenic bromocarbons. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11819-11838.	1.9	66
72	Accelerated increases observed for hydrochlorofluorocarbons since 2004 in the global atmosphere. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	65

#	ARTICLE	IF	CITATIONS
73	Recent trends in atmospheric methyl bromide: analysis of post-Montreal Protocol variability. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 5963-5974.	1.9	63
74	The contribution of natural and anthropogenic very short-lived species to stratospheric bromine. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 371-380.	1.9	63
75	Temporal decrease in upper atmospheric chlorine. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	62
76	A decline in emissions of CFC-11 and related chemicals from eastern China. <i>Nature</i> , 2021, 590, 433-437.	13.7	61
77	Global Climate. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, S9-S128.	1.7	61
78	Global emissions of refrigerants HCFC-22 and HFC-134a: Unforeseen seasonal contributions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17379-17384.	3.3	59
79	Delay in recovery of the Antarctic ozone hole from unexpected CFC-11 emissions. <i>Nature Communications</i> , 2019, 10, 5781.	5.8	58
80	Constraining surface carbon fluxes using in situ measurements of carbonyl sulfide and carbon dioxide. <i>Global Biogeochemical Cycles</i> , 2014, 28, 161-179.	1.9	57
81	A decrease in the growth rates of atmospheric halon concentrations. <i>Nature</i> , 1992, 359, 403-405.	13.7	55
82	Enhanced ozone over western North America from biomass burning in Eurasia during April 2008 as seen in surface and profile observations. <i>Atmospheric Environment</i> , 2010, 44, 4497-4509.	1.9	55
83	A decline in global CFC-11 emissions during 2018~2019. <i>Nature</i> , 2021, 590, 428-432.	13.7	55
84	Undersaturation of CH <sub>3</sub> Br in the Southern Ocean. <i>Geophysical Research Letters</i> , 1997, 24, 171-172.	1.5	54
85	Optimal estimation of the surface fluxes of methyl chloride using a 3-D global chemical transport model. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5515-5533.	1.9	51
86	Increasing concentrations of dichloromethane, CH <sub>2</sub> Cl <sub>2</sub> , inferred from CARIBIC air samples collected 1998~2012. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1939-1958.	1.9	51
87	A multi-model intercomparison of halogenated very short-lived substances (TransCom-VLSL): linking oceanic emissions and tropospheric transport for a reconciled estimate of the stratospheric source gas injection of bromine. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 9163-9187.	1.9	51
88	Quantification and source apportionment of the methane emission flux from the city of Indianapolis. <i>Elementa</i> , 2015, 3, .	1.1	50
89	Growth and distribution of halons in the atmosphere. <i>Journal of Geophysical Research</i> , 1998, 103, 1503-1511.	3.3	48
90	U.S. CH <sub>4</sub> emissions from oil and gas production: Have recent large increases been detected?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 4070-4083.	1.2	47

#	ARTICLE	IF	CITATIONS
91	The potential of carbonyl sulfide as a proxy for gross primary production at flux tower sites. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	46
92	A new multi-gas constrained model of trace gas non-homogeneous transport in firn: evaluation and behaviour at eleven polar sites. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11465-11483.	1.9	46
93	Enhanced North American carbon uptake associated with El Niño. <i>Science Advances</i> , 2019, 5, eaaw0076.	4.7	45
94	Estimate of carbonyl sulfide tropical oceanic surface fluxes using Aura Tropospheric Emission Spectrometer observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 11,012.	1.2	43
95	Early trends in the global tropospheric abundance of hydrochlorofluorocarbon-141b and 142b. <i>Geophysical Research Letters</i> , 1994, 21, 2483-2486.	1.5	42
96	Growth in stratospheric chlorine from short-lived chemicals not controlled by the Montreal Protocol. <i>Geophysical Research Letters</i> , 2015, 42, 4573-4580.	1.5	42
97	Global and regional emission estimates for HCFC-22. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 10033-10050.	1.9	40
98	Constraints and biases in a tropospheric two-box model of OH. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 407-424.	1.9	40
99	Implications of methyl bromide supersaturations in the temperate North Atlantic Ocean. <i>Journal of Geophysical Research</i> , 2000, 105, 19763-19769.	3.3	39
100	Variations in ozone depletion potentials of very short-lived substances with season and emission region. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	39
101	Peak growing season gross uptake of carbon in North America is largest in the Midwest USA. <i>Nature Climate Change</i> , 2017, 7, 450-454.	8.1	39
102	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.	1.7	39
103	Kinetics of the OH Reaction with Methyl Chloroform and Its Atmospheric Implications. <i>Science</i> , 1992, 257, 227-230.	6.0	38
104	Evaluation of ozone precursor source types using principal component analysis of ambient air measurements in rural Alabama. <i>Journal of Geophysical Research</i> , 1995, 100, 22853.	3.3	38
105	Recent increases in global HFC emissions. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	38
106	Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 11007-11021.	1.9	37
107	Tropospheric SF <sub>6</sub> : Age of air from the Northern Hemisphere midlatitude surface. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 11,429.	1.2	37
108	Results from the International Halocarbons in Air Comparison Experiment (IHALACE). <i>Atmospheric Measurement Techniques</i> , 2014, 7, 469-490.	1.2	37

#	ARTICLE	IF	CITATIONS
109	Allocation of Terrestrial Carbon Sources Using $^{14}\text{CO}_2$ : Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, 1484-1495.	0.8	35
110	Long-Term Measurements Show Little Evidence for Large Increases in Total U.S. Methane Emissions Over the Past Decade. Geophysical Research Letters, 2019, 46, 4991-4999.	1.5	35
111	Background Concentrations of 18 Air Toxics for North America. Journal of the Air and Waste Management Association, 2006, 56, 3-11.	0.9	34
112	Spatial distribution of $^{14}\text{CO}_2$ across Eurasia: measurements from the TROICA-8 expedition. Atmospheric Chemistry and Physics, 2009, 9, 175-187.	1.9	34
113	Characterization of Aura TES carbonyl sulfide retrievals over ocean. Atmospheric Measurement Techniques, 2014, 7, 163-172.	1.2	34
114	Ambient mixing ratios of atmospheric halogenated compounds at five background stations in China. Atmospheric Environment, 2017, 160, 55-69.	1.9	34
115	Recent Trends in Stratospheric Chlorine From Very Short-Lived Substances. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2318-2335.	1.2	34
116	Atmospheric variability of methyl chloride during the last 300 years from an Antarctic ice core and firn air. Geophysical Research Letters, 2004, 31, .	1.5	33
117	Continuous and high-precision atmospheric concentration measurements of COS, $\text{CO}_2$ , CO and $\text{H}_2\text{O}$ using a quantum cascade laser spectrometer (QCLS). Atmospheric Measurement Techniques, 2016, 9, 5293-5314.	1.2	32
118	Continued emissions of carbon tetrachloride from the United States nearly two decades after its phaseout for dispersive uses. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2880-2885.	3.3	32
119	Renewed and emerging concerns over the production and emission of ozone-depleting substances. Nature Reviews Earth & Environment, 2020, 1, 251-263.	12.2	32
120	Present and future sources and emissions of halocarbons: Toward new constraints. Journal of Geophysical Research, 2007, 112, .	3.3	30
121	U.S. emissions of HFC-134a derived for 2008–2012 from an extensive flask-air sampling network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 801-825.	1.2	30
122	Considerable contribution of the Montreal Protocol to declining greenhouse gas emissions from the United States. Geophysical Research Letters, 2017, 44, 8075-8083.	1.5	30
123	Observations of greenhouse gases as climate indicators. Climatic Change, 2021, 165, 12.	1.7	30
124	Projections of hydrofluorocarbon (HFC) emissions and the resulting global warming based on recent trends in observed abundances and current policies. Atmospheric Chemistry and Physics, 2022, 22, 6087-6101.	1.9	29
125	Modelling marine emissions and atmospheric distributions of halocarbons and dimethyl sulfide: the influence of prescribed water concentration vs. prescribed emissions. Atmospheric Chemistry and Physics, 2015, 15, 11753-11772.	1.9	28
126	Inverse modelling of carbonyl sulfide: implementation, evaluation and implications for the global budget. Atmospheric Chemistry and Physics, 2021, 21, 3507-3529.	1.9	28



#	ARTICLE	IF	CITATIONS
127	Tracking climate forcing: The annual greenhouse gas index. <i>Eos</i> , 2006, 87, 509.	0.1	27
128	Constraints on emissions of carbon monoxide, methane, and a suite of hydrocarbons in the Colorado Front Range using observations of $\text{CO}$ and $\text{CH}_4$ . <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11101-11120.	1.9	27
129	Global HCFC-22 measurements with MIPAS: retrieval, validation, global distribution and its evolution over 2005–2012. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 3345-3368.	1.9	27
130	Deriving Global OH Abundance and Atmospheric Lifetimes for Long-Lived Gases: A Search for $\text{CH}_3\text{CCl}_3$ Alternatives. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,914.	1.2	26
131	Estimates of European emissions of methyl chloroform using a Bayesian inversion method. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9755-9770.	1.9	25
132	Estimating methane emissions from biological and fossil fuel sources in the San Francisco Bay Area. <i>Geophysical Research Letters</i> , 2017, 44, 486-495.	1.5	25
133	New Directions: Watching over tropospheric hydroxyl (OH). <i>Atmospheric Environment</i> , 2006, 40, 5741-5743.	1.9	24
134	European emissions of HCFC-22 based on eleven years of high frequency atmospheric measurements and a Bayesian inversion method. <i>Atmospheric Environment</i> , 2015, 112, 196-207.	1.9	24
135	Atmospheric histories and global emissions of halons $\text{CBrClF}_2$ , $\text{CBrF}_3$ , and $\text{CBr}_2\text{F}_2$ . <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 3663-3686.	1.2	24
136	Multispecies Assessment of Factors Influencing Regional $\text{CO}_2$ and $\text{CH}_4$ Enhancements During the Winter 2017 ACT-America Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031339.	1.2	23
137	The influence of the stratospheric Quasi-Biennial Oscillation on trace gas levels at the Earth's surface. <i>Nature Geoscience</i> , 2020, 13, 22-27.	5.4	23
138	Post-coring entrapment of modern air in some shallow ice cores collected near the firn-ice transition: evidence from CFC-12 measurements in Antarctic firn air and ice cores. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5135-5144.	1.9	21
139	Methyl Chloroform Continues to Constrain the Hydroxyl (OH) Variability in the Troposphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033862.	1.2	21
140	Carbonyl sulfide: comparing a mechanistic representation of the vegetation uptake in a land surface model and the leaf relative uptake approach. <i>Biogeosciences</i> , 2021, 18, 2917-2955.	1.3	21
141	COS-derived GPP relationships with temperature and light help explain high-latitude atmospheric $\text{CO}_2$ seasonal cycle amplification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	21
142	Methyl chloride in the upper troposphere observed by the CARIBIC passenger aircraft observatory: Large-scale distributions and Asian summer monsoon outflow. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5542-5558.	1.2	18
143	A Synthesis Inversion to Constrain Global Emissions of Two Very Short Lived Chlorocarbons: Dichloromethane, and Perchloroethylene. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031818.	1.2	18
144	Urban/industrial pollution for the New York City–Washington, D. C., corridor, 1996–1998: 2. A study of the efficacy of the Montreal Protocol and other regulatory measures. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	17

#	ARTICLE	IF	CITATIONS
145	Ocean Biogeochemistry Control on the Marine Emissions of Brominated Very Short-Lived Ozone-Depleting Substances: A Machine-Learning Approach. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 12319-12339.	1.2	17
146	Aircraft-Based Observations of Ozone-Depleting Substances in the Upper Troposphere and Lower Stratosphere in and Above the Asian Summer Monsoon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033137.	1.2	17
147	Recovery of the Ozone Layer: The Ozone Depleting Gas Index. <i>Eos</i> , 2009, 90, 1-2.	0.1	15
148	Increase in HFC-134a emissions in response to the success of the Montreal Protocol. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 11,728.	1.2	15
149	Superconductor metal oxide catalyst in a chemiluminescence chromatography detector. <i>Journal of Chromatography A</i> , 1988, 452, 75-83.	1.8	14
150	A comprehensive estimate for loss of atmospheric carbon tetrachloride (CCl <sub>4</sub> ) to the ocean. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 10899-10910.	1.9	14
151	A three-dimensional-model inversion of methyl chloroform to constrain the atmospheric oxidative capacity. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 4809-4824.	1.9	13
152	Urban/industrial pollution for the New York City-Washington, D. C., corridor, 1996-1998: 1. Providing independent verification of CO and PCE emissions inventories. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	12
153	Atmospheric histories, growth rates and solubilities in seawater and other natural waters of the potential transient tracers HCFC-22, HCFC-141b, HCFC-142b, HFC-134a, HFC-125, HFC-23, PFC-14 and PFC-116. <i>Ocean Science</i> , 2019, 15, 33-60.	1.3	12
154	Carbonyl sulfide as an inverse tracer for biogenic organic carbon in gas and aerosol phases. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	11
155	Plant Uptake of Atmospheric Carbonyl Sulfide in Coast Redwood Forests. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 3391-3404.	1.3	11
156	Chemical evidence of inter-hemispheric air mass intrusion into the Northern Hemisphere mid-latitudes. <i>Scientific Reports</i> , 2018, 8, 4669.	1.6	11
157	Observing the atmospheric evolution of ozone-depleting substances. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 384-392.	0.4	10
158	Quantifying the vertical transport of CHBr <sub>3</sub> and CH <sub>2</sub> Br <sub>2</sub> over the western Pacific. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 13135-13153.	1.9	10
159	Anthropogenic Impacts on Atmospheric Carbonyl Sulfide Since the 19th Century Inferred From Polar Firn Air and Ice Core Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033074.	1.2	10
160	Investigating stratospheric changes between 2009 and 2018 with halogenated trace gas data from aircraft, AirCores, and a global model focusing on CFC-11. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9771-9782.	1.9	10
161	Allocation of Terrestrial Carbon Sources Using <sup>14</sup> CO <sub>2</sub> ; Methods, Measurement, and Modeling. <i>Radiocarbon</i> , 2013, 55, .	0.8	9
162	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.	1.2	9

#	ARTICLE	IF	CITATIONS
163	Seasonal variation of bromocarbons at Hateruma Island, Japan: implications for global sources. <i>Journal of Atmospheric Chemistry</i> , 2017, 74, 171-185.	1.4	8
164	O <sub>3</sub> , CH <sub>4</sub> , CO <sub>2</sub> , CO, NO <sub>2</sub> and NMHC aircraft measurements in the Uinta Basin oil and gas region under low and high ozone conditions in winter 2012 and 2013. <i>Elementa</i> , 2016, 4, .	1.1	8
165	ENSO-Driven Fires Cause Large Interannual Variability in the Naturally Emitted, Ozone-Depleting Trace Gas CH <sub>3</sub> Br. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
166	Changes in the levels and variability of halocarbons and the compliance with the Montreal Protocol from an urban view. <i>Chemosphere</i> , 2015, 138, 438-446.	4.2	6
167	Radiation and atmospheric circulation controls on carbonyl sulfide concentrations in the marine boundary layer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 13,113.	1.2	6
168	Temporary pause in the growth of atmospheric ethane and propane in 2015-2018. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15153-15170.	1.9	6
169	Model sensitivity studies of the decrease in atmospheric carbon tetrachloride. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 15741-15754.	1.9	5
170	Impact of stratospheric air and surface emissions on tropospheric nitrous oxide during ATom. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 11113-11132.	1.9	5
171	Comparison of halocarbon measurements in an atmospheric dry whole air sample. <i>Elementa</i> , 2015, 3, .	1.1	5
172	Low-temperature oxidation of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.0</sub> with nitrogen dioxide. <i>Journal of Materials Research</i> , 1991, 6, 891-894.	1.2	4
173	Corrigendum to "Global and regional emission estimates for HCFC-22", <i>Atmos. Chem. Phys.</i> , 12, 10033-10050, 2012. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4857-4858.	1.9	4
174	Atmospheric oil and natural gas hydrocarbon trends in the Northern Colorado Front Range are notably smaller than inventory emissions reductions. <i>Elementa</i> , 2021, 9, .	1.1	4
175	Chapter 2. Source Gases that Affect Stratospheric Ozone. , 0, , 33-77.		4
176	Tropospheric Age-of-Air: Influence of SF <sub>6</sub> Emissions on Recent Surface Trends and Model Biases. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035451.	1.2	3
177	A Post-Phaseout Retrospective Reassessment of the Global Methyl Bromide Budget. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	3
178	Hydrocarbon Tracers Suggest Methane Emissions from Fossil Sources Occur Predominately Before Gas Processing and That Petroleum Plays Are a Significant Source. <i>Environmental Science &amp; Technology</i> , 0, , .	4.6	3
179	Exploring the Potential of Using Carbonyl Sulfide to Track the Urban Biosphere Signal. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034106.	1.2	2
180	Continental-scale contributions to the global CFC-11 emission increase between 2012 and 2017. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 2891-2907.	1.9	2

#	ARTICLE	IF	CITATIONS
181	Surrogate gas prediction model as a proxy for $\delta^{14}\text{C}$ -based measurements of fossil fuel $\text{CO}_2$ . Journal of Geophysical Research D: Atmospheres, 2016, 121, 7489-7505.	1.2	1
182	Corrigendum to "Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide". Atmospheric Chemistry and Physics, 2014, 14, 9511-9511.	1.9	0