Paul Steele

List of Publications by Year
in descending order

93 papers	13,966 citations	50566 48 h-index	49824 91 g-index
123 all docs	123 docs citations	123 times ranked	11861 citing authors

#	Article	IF	Citations
1	A 1000-year high precision record of δ¹³C in atmospheric CO₂. Tellus, Series B: Chemical and Physical Meteorology, 2022, 51, 170.	0.8	447
2	Observations and modelling of the global distribution and long-term trend of atmospheric ¹⁴CO₂. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 26.	0.8	287
3	Unexpected nascent atmospheric emissions of three ozone-depleting hydrochlorofluorocarbons. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
4	Growing Atmospheric Emissions of Sulfuryl Fluoride. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034327.	1.2	10
5	Changing trends and emissions of hydrochlorofluorocarbons (HCFCs) and their hydrofluorocarbon (HFCs) replacements. Atmospheric Chemistry and Physics, 2017, 17, 4641-4655.	1.9	42
6	Low atmospheric CO2 levels during the Little Ice Age due to cooling-induced terrestrial uptake. Nature Geoscience, 2016, 9, 691-694.	5.4	40
7	Global and regional emissions estimates of 1,1-difluoroethane (HFC-152a,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td (CH&a and air archive observations. Atmospheric Chemistry and Physics, 2016, 16, 365-382.	1.9	30
8	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	3.7	824
9	Variations in global methane sources and sinks during 1910â€“2010. Atmospheric Chemistry and Physics, 2015, 15, 2595-2612.	1.9	108
10	Biomass burning emissions of trace gases and particles in marine air at Cape Grim, Tasmania. Atmospheric Chemistry and Physics, 2015, 15, 13393-13411.	1.9	27
11	Simulations of atmospheric methane for Cape Grim, Tasmania, to constrain southeastern Australian methane emissions. Atmospheric Chemistry and Physics, 2015, 15, 305-317.	1.9	9
12	Seasonal changes in the tropospheric carbon monoxide profile over the remote Southern Hemisphere evaluated using multi-model simulations and aircraft observations. Atmospheric Chemistry and Physics, 2015, 15, 3217-3239.	1.9	14
13	Increase in HFCâ€134a emissions in response to the success of the Montreal Protocol. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,728.	1.2	15
14	Simulation of atmospheric N₂O with GEOS-Chem and its adjoint: evaluation of observational constraints. Geoscientific Model Development, 2015, 8, 3179-3198.	1.3	15
15	Results from the International Halocarbons in Air Comparison Experiment (IHALACE). Atmospheric Measurement Techniques, 2014, 7, 469-490.	1.2	37
16	Observational evidence for interhemispheric hydroxyl-radical parity. Nature, 2014, 513, 219-223.	13.7	121
17	Characterization of uncertainties in atmospheric trace gas inversions using hierarchical Bayesian methods. Atmospheric Chemistry and Physics, 2014, 14, 3855-3864.	1.9	116
18	Nitrous oxide emissions 1999 to 2009 from a global atmospheric inversion. Atmospheric Chemistry and Physics, 2014, 14, 1801-1817.	1.9	59

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19	Corrigendum to ``Gas transport in firn: multiple-tracer characterisation and model intercomparison for NEEM, Northern Greenland'' published in Atmos. Chem. Phys., 12, 4259â€“4277, 2012. Atmospheric Chemistry and Physics, 2014, 14, 3571-3572.	1.9	2
20	TransCom N₂O model inter-comparison â€“ Part 1: Assessing the influence of transport and surface fluxes on tropospheric N₂O variability. Atmospheric Chemistry and Physics, 2014, 14, 4349-4368.	1.9	34
21	Global and regional emissions estimates for N₂O. Atmospheric Chemistry and Physics, 2014, 14, 4617-4641.	1.9	91
22	Corrigendum to "Global and regional emission estimates for HCFC-22", Atmos. Chem. Phys., 12, 10033â€“10050, 2012. Atmospheric Chemistry and Physics, 2014, 14, 4857-4858.	1.9	4
23	On the consistency between global and regional methane emissions inferred from SCIAMACHY, TANSO-FTS, IASI and surface measurements. Atmospheric Chemistry and Physics, 2014, 14, 577-592.	1.9	91
24	TransCom N₂O model inter-comparison â€“ Part 2: Atmospheric inversion estimates of N₂O emissions. Atmospheric Chemistry and Physics, 2014, 14, 6177-6194.	1.9	49
25	Global emissions of HFC-143a (CH₃CF₃) and HFC-32 (CH₂F₂) from in situ and air archive atmospheric observations. Atmospheric Chemistry and Physics, 2014, 14, 9249-9258.	1.9	39
26	Recent and future trends in synthetic greenhouse gas radiative forcing. Geophysical Research Letters, 2014, 41, 2623-2630.	1.5	102
27	A revised 1000â€‰year atmospheric Î´¹³Câ€CO₂ record from Law Dome and South Pole, Antarctica. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8482-8499.	1.2	171
28	Nitrogen trifluoride global emissions estimated from updated atmospheric measurements. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2029-2034.	3.3	49
29	Re-evaluation of the lifetimes of the major CFCs and CH₃CCl₃ using atmospheric trends. Atmospheric Chemistry and Physics, 2013, 13, 2691-2702.	1.9	105
30	Estimating regional methane surface fluxes: the relative importance of surface and GOSAT mole fraction measurements. Atmospheric Chemistry and Physics, 2013, 13, 5697-5713.	1.9	94
31	A 60 yr record of atmospheric carbon monoxide reconstructed from Greenland firn air. Atmospheric Chemistry and Physics, 2013, 13, 7567-7585.	1.9	37
32	Interannual variability in tropospheric nitrous oxide. Geophysical Research Letters, 2013, 40, 4426-4431.	1.5	15
33	Reassessing the variability in atmospheric H₂ using the twoâ€way nested TM5 model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3764-3780.	1.2	26
34	Global and regional emission estimates for HCFC-22. Atmospheric Chemistry and Physics, 2012, 12, 10033-10050.	1.9	40
35	Corrigendum to "Source attribution of the changes in atmospheric methane for 2006â€“2008" published in Atmos. Chem. Phys., 11, 3689â€“3700, 2011. Atmospheric Chemistry and Physics, 2012, 12, 9381-9382.	1.9	0
36	Gas transport in firn: multiple-tracer characterisation and model intercomparison for NEEM, Northern Greenland. Atmospheric Chemistry and Physics, 2012, 12, 4259-4277.	1.9	130

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37	...heric histories and growth trends of C₄F₁₀, C₅F₁₂, C₆F₁₄, C₇F₁₆ and C₈F₁₈. Atmospheric Che...	1.9	23
38	Trends and seasonal cycles in the isotopic composition of nitrous oxide since 1940. Nature Geoscience, 2012, 5, 261-265.	5.4	220
39	Atmospheric CO₂inversion validation using vertical profile measurements: Analysis of four independent inversion models. Journal of Geophysical Research, 2011, 116, .	3.3	41
40	Source attribution of the changes in atmospheric methane for 2006â€“2008. Atmospheric Chemistry and Physics, 2011, 11, 3689-3700.	1.9	252
41	Exploring causes of interannual variability in the seasonal cycles of tropospheric nitrous oxide. Atmospheric Chemistry and Physics, 2011, 11, 3713-3730.	1.9	60
42	Global modelling of H₂ mixing ratios and isotopic compositions with the TM5 model. Atmospheric Chemistry and Physics, 2011, 11, 7001-7026.	1.9	35
43	Atmospheric three-dimensional inverse modeling of regional industrial emissions and global oceanic uptake of carbon tetrachloride. Atmospheric Chemistry and Physics, 2010, 10, 10421-10434.	1.9	32
44	History of atmospheric SF₆ from 1973 to 2008. Atmospheric Chemistry and Physics, 2010, 10, 10305-10320.	1.9	136
45	Perfluorocarbons in the global atmosphere: tetrafluoromethane, hexafluoroethane, and octafluoropropane. Atmospheric Chemistry and Physics, 2010, 10, 5145-5164.	1.9	141
46	HFC-23 (CHF₃) emission trend response to HCFC-22 (CHClF₂) production and recent HFC-23 emission abatement measures. Atmospheric Chemistry and Physics, 2010, 10, 7875-7890.	1.9	76
47	The global SF₆ source inferred from long-term high precision atmospheric measurements and its comparison with emission inventories. Atmospheric Chemistry and Physics, 2010, 10, 2655-2662.	1.9	125
48	CO₂ surface fluxes at grid point scale estimated from a global 21 year reanalysis of atmospheric measurements. Journal of Geophysical Research, 2010, 115, .	3.3	276
49	Growth Rate, Seasonal, Synoptic, Diurnal Variations and Budget of Methane in the Lower Atmosphere. Journal of the Meteorological Society of Japan, 2009, 87, 635-663.	0.7	74
50	Global and regional emissions of HFCâ€125 (CHF₂CF₃) from in situ and air archive atmospheric observations at AGAGE and SOGE observatories. Journal of Geophysical Research, 2009, 114, .	3.3	38
51	Renewed growth of atmospheric methane. Geophysical Research Letters, 2008, 35, .	1.5	439
52	Weak Northern and Strong Tropical Land Carbon Uptake from Vertical Profiles of Atmospheric CO2. Science, 2007, 316, 1732-1735.	6.0	775
53	Optimal estimation of the soil uptake rate of molecular hydrogen from the Advanced Global Atmospheric Gases Experiment and other measurements. Journal of Geophysical Research, 2007, 112, .	3.3	54
54	Precursors to Particles (P2P) at Cape Grim 2006: campaign overview. Environmental Chemistry, 2007, 4, 143.	0.7	17

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55	Contribution of anthropogenic and natural sources to atmospheric methane variability. Nature, 2006, 443, 439-443.	13.7	935
56	Modification of air standard composition by diffusive and surface processes. Journal of Geophysical Research, 2005, 110, .	3.3	30
57	Conversion of NOAA atmospheric dry air CH4mole fractions to a gravimetrically prepared standard scale. Journal of Geophysical Research, 2005, 110, .	3.3	325
58	Data and modelling requirements for CO2 inversions using high-frequency data. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 512-521.	0.8	27
59	Measurements of biomass burning influences in the troposphere over southeast Australia during the SAFARI 2000 dry season campaign. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	28
60	Data and modelling requirements for CO2 inversions using high-frequency data. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 512-521.	0.8	5
61	PFC and Carbon Dioxide Emissions from an Australian Aluminium Smelter Using Time-Integrated Stack Sampling and GC-MS, GC-FID Analysis. Minerals, Metals and Materials Series, 2003, , 871-876.	0.3	3
62	In situ measurements of atmospheric methane at GAGE/AGAGE sites during 1985â€“2000 and resulting source inferences. Journal of Geophysical Research, 2002, 107, ACH 20-1.	3.3	135
63	Interannual growth rate variations of atmospheric CO2and its Î´13C, H2, CH4, and CO between 1992 and 1999 linked to biomass burning. Global Biogeochemical Cycles, 2002, 16, 21-1-21-22.	1.9	245
64	Using high temporal frequency data for CO2inversions. Global Biogeochemical Cycles, 2002, 16, 1-1-1-18.	1.9	98
65	NOAA/CSIRO Flask Air Intercomparison Experiment: A strategy for directly assessing consistency among atmospheric measurements made by independent laboratories. Journal of Geophysical Research, 2001, 106, 20445-20464.	3.3	91
66	Continuous high-frequency observations of hydrogen at the Mace Head baseline atmospheric monitoring station over the 1994-1998 period. Journal of Geophysical Research, 2000, 105, 12105-12121.	3.3	59
67	A history of chemically and radiatively important gases in air deduced from ALE/GAGE/AGAGE. Journal of Geophysical Research, 2000, 105, 17751-17792.	3.3	648
68	Precision Trace Gas Analysis by FT-IR Spectroscopy. 1. Simultaneous Analysis of CO2, CH4, N2O, and CO in Air. Analytical Chemistry, 2000, 72, 206-215.	3.2	148
69	Precision Trace Gas Analysis by FT-IR Spectroscopy. 2. The13C/12C Isotope Ratio of CO2. Analytical Chemistry, 2000, 72, 216-221.	3.2	92
70	A 1000-year high precision record of delta13C in atmospheric CO2. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 170-193.	0.8	404
71	Partitioning of the global fossil CO2sink using a 19-year trend in atmospheric O2. Geophysical Research Letters, 1999, 26, 1897-1900.	1.5	54
72	A history of Î´13C in atmospheric CH4from the Cape Grim Air Archive and Antarctic firn air. Journal of Geophysical Research, 1999, 104, 23631-23643.	3.3	60

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73	High Precision Long-Term Monitoring of Radiatively Active and Related Trace Gases at Surface Sites and from Aircraft in the Southern Hemisphere Atmosphere. Journals of the Atmospheric Sciences, 1999, 56, 279-285.	0.6	28
74	An internally consistent set of globally distributed atmospheric carbon monoxide mixing ratios developed using results from an intercomparison of measurements. Journal of Geophysical Research, 1998, 103, 19285-19293.	3.3	73
75	Distribution of halon-1211 in the upper troposphere and lower stratosphere and the 1994 total bromine budget. Journal of Geophysical Research, 1998, 103, 1513-1526.	3.3	131
76	Ground-based infrared solar spectroscopic measurements of carbon monoxide during 1994 Measurement of Air Pollution From Space flights. Journal of Geophysical Research, 1998, 103, 19317-19325.	3.3	23
77	Atmospheric methane between 1000 A.D. and present: Evidence of anthropogenic emissions and climatic variability. Journal of Geophysical Research, 1998, 103, 15979-15993.	3.3	441
78	Modeling air movement and bubble trapping in firn. Journal of Geophysical Research, 1997, 102, 6747-6763.	3.3	127
79	Natural and anthropogenic changes in atmospheric CO2over the last 1000 years from air in Antarctic ice and firn. Journal of Geophysical Research, 1996, 101, 4115-4128.	3.3	922
80	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
81	A determination of the CH4, NO x and CO2 emissions from the Prudhoe Bay, Alaska oil development. Journal of Atmospheric Chemistry, 1995, 20, 213-227.	1.4	26
82	A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992. Geophysical Research Letters, 1994, 21, 45-48.	1.5	203
83	Correction to â€œA dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992â€•by E. J. Dlugokencky, K. A. Masarie, P. M. Lang, P. P. Tans, L. P. Steele, and E. G. Nisbet. Geophysical Research Letters, 1994, 21, 507-507.	1.5	9
84	Reply to â€œComments on â€˜A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992'â€• Geophysical Research Letters, 1994, 21, 2447-2448.	1.5	8
85	The growth rate and distribution of atmospheric methane. Journal of Geophysical Research, 1994, 99, 17021.	3.3	477
86	Slowing down of the global accumulation of atmospheric methane during the 1980s. Nature, 1992, 358, 313-316.	13.7	295
87	Carbon isotopic composition of atmospheric CH₄: Fossil and biomass burning source strengths. Global Biogeochemical Cycles, 1991, 5, 25-47.	1.9	218
88	Threeâ€dimensional model synthesis of the global methane cycle. Journal of Geophysical Research, 1991, 96, 13033-13065.	3.3	820
89	Carbon dioxide and methane in the Arctic atmosphere. Journal of Atmospheric Chemistry, 1989, 9, 81-99.	1.4	46
90	Longâ€term air quality monitoring at the South Pole by the NOAA Program Geophysical Monitoring for Climatic Change. Reviews of Geophysics, 1988, 26, 63-80.	9.0	16

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91	The global distribution of methane in the troposphere. Journal of Atmospheric Chemistry, 1987, 5, 125-171.	1.4	283
92	The Global Distribution of Methane in the Troposphere. , 1987, , 417-463.		44
93	Tropospheric methane in the mid-latitudes of the Southern Hemisphere. Journal of Atmospheric Chemistry, 1984, 1, 125-135.	1.4	43