## **Pieter P Tans**

List of Publications by Year in descending order

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		3334	3732
276	37,374	91	179
papers	citations	h-index	g-index
313	313	313	23227
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Atmospheric carbon dioxide measurements in the remote global troposphere, 1981-1984. Tellus, Series B: Chemical and Physical Meteorology, 2022, 40, 81.	1.6	77
2	Oxygen isotopic equilibrium between carbon dioxide and water in soils. Tellus, Series B: Chemical and Physical Meteorology, 2022, 50, 163.	1.6	51
3	Carbon cycle research after Kyoto. Tellus, Series B: Chemical and Physical Meteorology, 2022, 51, 562.	1.6	6
4	A 3-dimensional study of δ <sup>18</sup> O in atmospheric CO <sub>2</sub> : contribution of different land ecosystems. Tellus, Series B: Chemical and Physical Meteorology, 2022, 51, 642.	1.6	36
5	Calculating isotopic fractionation from atmospheric measurements at various scales. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 207.	1.6	62
6	The atmospheric signal of terrestrial carbon isotopic discrimination and its implication for partitioning carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 197.	1.6	18
7	Vertical profiles of CO <sub>2</sub> above eastern Amazonia suggest a net carbon flux to the atmosphere and balanced biosphere between 2000 and 2009. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 581.	1.6	63
8	Observation of atmospheric CO <sub>2</sub> and CO at Shangri-La station: results from the only regional station located at southwestern China. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28506.	1.6	19
9	On calculating the transfer of carbon-13 in reservoir models of the carbon cycle. Tellus, 2022, 32, 464.	0.8	31
10	REMINISCING ON THE USE AND ABUSE OF <sup>14</sup> C AND <sup>13</sup> C IN ATMOSPHERIC CO <sub>2</sub> . Radiocarbon, 2022, 64, 747-760.	1.8	1
11	Fill dynamics and sample mixing in the AirCore. Atmospheric Measurement Techniques, 2022, 15, 1903-1916.	3.1	5
12	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	9.9	663
13	Comments on Skrable et al. (2022). Health Physics, 2022, 122, 707-709.	0.5	0
14	Improved global wetland carbon isotopic signatures support post-2006 microbial methane emission increase. Communications Earth & Environment, 2022, 3, .	6.8	11
15	Atmospheric oil and natural gas hydrocarbon trends in the Northern Colorado Front Range are notably smaller than inventory emissions reductions. Elementa, 2021, 9, .	3.2	4
16	Revision of the World Meteorological Organization Global Atmosphere Watch (WMO/GAW) CO <sub>2</sub> calibration scale. Atmospheric Measurement Techniques, 2021, 14, 3015-3032.	3.1	30
17	Improved Constraints on Global Methane Emissions and Sinks Using <i>δ</i> <sup>13</sup> C H <sub>4</sub> . Global Biogeochemical Cycles, 2021, 35, e2021GB007000.	4.9	50
18	COS-derived GPP relationships with temperature and light help explain high-latitude atmospheric CO <sub>2</sub> seasonal cycle amplification. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21

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19	Strong Southern Ocean carbon uptake evident in airborne observations. Science, 2021, 374, 1275-1280.	12.6	44
20	Siberian and temperate ecosystems shape Northern Hemisphere atmospheric CO <sub>2</sub> seasonal amplification. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21079-21087.	7.1	27
21	Estimating the short-time rate of change in the trend of the Keeling curve. Scientific Reports, 2020, 10, 21222.	3.3	3
22	Estimating US fossil fuel CO <sub>2</sub> emissions from measurements of <sup>14</sup> C in atmospheric CO <sub>2</sub> . Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13300-13307.	7.1	65
23	Investigating large methane enhancements in the U.S. San Juan Basin. Elementa, 2020, 8, .	3.2	8
24	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	9.9	1,477
25	Very old firn air linked to strong density layering at Styx Glacier, coastal Victoria Land, East Antarctica. Cryosphere, 2019, 13, 2407-2419.	3.9	7
26	Enhanced North American carbon uptake associated with El Niño. Science Advances, 2019, 5, eaaw0076.	10.3	45
27	Longâ€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.	4.0	35
28	Five decades of northern land carbon uptake revealed by the interhemispheric CO2 gradient. Nature, 2019, 568, 221-225.	27.8	124
29	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	9.9	1,159
30	Potential improvements aimed at high precision l´13C isotopic ratio determinations in CO2 mixtures using optical absorption spectrometry. Talanta, 2018, 184, 73-86.	5.5	3
31	Comparison of atmospheric CO2 mole fractions and source–sink characteristics at four WMO/GAW stations in China. Atmospheric Environment, 2018, 180, 216-225.	4.1	13
32	Analysis of patterns in the concentrations of atmospheric greenhouse gases measured in two typical urban clusters in China. Atmospheric Environment, 2018, 173, 343-354.	4.1	24
33	The carbon cycle response to two El Nino types: an observational study. Environmental Research Letters, 2018, 13, 024001.	5.2	22
34	Experiments with CO <sub>2</sub> -in-air reference gases in high-pressure aluminum cylinders. Atmospheric Measurement Techniques, 2018, 11, 5565-5586.	3.1	6
35	CTDAS-Lagrange v1.0: a high-resolution data assimilation system for regional carbon dioxide observations. Geoscientific Model Development, 2018, 11, 3515-3536.	3.6	16
36	COCAP: a carbon dioxide analyser for small unmanned aircraft systems. Atmospheric Measurement Techniques, 2018, 11, 1833-1849.	3.1	22

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37	The CarbonTracker Data Assimilation System for CO <sub>2</sub> and <i>lî</i> <sup>13</sup> C (CTDAS-C13 v1.0): retrieving information onÂland–atmosphere exchange processes. Geoscientific Model Development, 2018, 11, 283-304.	3.6	6
38	Ratios of greenhouse gas emissions observed over the Yellow Sea and the East China Sea. Science of the Total Environment, 2018, 633, 1022-1031.	8.0	10
39	Increased water-use efficiency and reduced CO2 uptake by plants during droughts at a continental scale. Nature Geoscience, 2018, 11, 744-748.	12.9	139
40	Revision of global carbon fluxes based on a reassessment of oceanic and riverine carbon transport. Nature Geoscience, 2018, 11, 504-509.	12.9	95
41	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	9.9	1,167
42	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	9.9	801
43	Accelerating net terrestrial carbon uptake during the warming hiatus due to reduced respiration. Nature Climate Change, 2017, 7, 148-152.	18.8	151
44	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. Nature Climate Change, 2017, 7, 359-363.	18.8	183
45	Carbon dioxide sources from Alaska driven by increasing early winter respiration from Arctic tundra. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5361-5366.	7.1	149
46	Improved Mechanistic Understanding of Natural Gas Methane Emissions from Spatially Resolved Aircraft Measurements. Environmental Science & Technology, 2017, 51, 7286-7294.	10.0	83
47	U.S. CH <sub>4</sub> emissions from oil and gas production: Have recent large increases been detected?. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4070-4083.	3.3	47
48	Atmospheric CO2 at Waliguan station in China: Transport climatology, temporal patterns and source-sink region representativeness. Atmospheric Environment, 2017, 159, 107-116.	4.1	11
49	Study of atmospheric CO2 and CH4 at Longfengshan WMO/GAW regional station: The variations, trends, influence of local sources/sinks, and transport. Science China Earth Sciences, 2017, 60, 1886-1895.	5.2	21
50	Considerable contribution of the Montreal Protocol to declining greenhouse gas emissions from the United States. Geophysical Research Letters, 2017, 44, 8075-8083.	4.0	30
51	Towards real-time verification of CO2 emissions. Nature Climate Change, 2017, 7, 848-850.	18.8	168
52	Gradients of column CO <sub>2</sub> across North America from the NOAA Global Greenhouse Gas Reference Network. Atmospheric Chemistry and Physics, 2017, 17, 15151-15165.	4.9	12
53	Compiled records of carbon isotopes in atmospheric CO <sub>2</sub> for historical simulations in CMIP6. Geoscientific Model Development, 2017, 10, 4405-4417.	3.6	154
54	Abundances of isotopologues and calibration of CO <sub>2</sub> greenhouse gas measurements. Atmospheric Measurement Techniques, 2017, 10, 2669-2685.	3.1	33

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55	Bias corrections of GOSAT SWIR XCO <sub>2</sub> and XCH <sub>4</sub> with TCCON data and their evaluation using aircraft measurement data. Atmospheric Measurement Techniques, 2016, 9, 3491-3512.	3.1	40
56	No significant increase in longâ€ŧerm CH <sub>4</sub> emissions on North Slope of Alaska despite significant increase in air temperature. Geophysical Research Letters, 2016, 43, 6604-6611.	4.0	52
57	Development of a Northern Continental Air Standard Reference Material. Analytical Chemistry, 2016, 88, 3376-3385.	6.5	15
58	Upward revision of global fossil fuel methane emissions based on isotope database. Nature, 2016, 538, 88-91.	27.8	400
59	Strong regional atmospheric 14 C signature of respired CO 2 observed from a tall tower over the midwestern United States. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2275-2295.	3.0	5
60	Investigating Alaskan methane and carbon dioxide fluxes using measurements from the CARVE tower. Atmospheric Chemistry and Physics, 2016, 16, 5383-5398.	4.9	26
61	Reversal of global atmospheric ethane and propane trends largely due to US oil and natural gas production. Nature Geoscience, 2016, 9, 490-495.	12.9	149
62	Characteristics of atmospheric CO2 and CH4 at the Shangdianzi regional background station in China. Atmospheric Environment, 2016, 131, 1-8.	4.1	34
63	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.	7.1	32
64	Climatological variability of air temperature and precipitation observed in South Korea for the last 50Âyears. Air Quality, Atmosphere and Health, 2016, 9, 645-651.	3.3	14
65	Variability analyses, site characterization, and regional [OH] estimates using trace gas measurements from the NOAA Global Greenhouse Gas Reference Network. Elementa, 2016, 4, .	3.2	2
66	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	9.9	905
67	Toward quantification and source sector identification of fossil fuel CO <sub>2</sub> emissions from an urban area: Results from the INFLUX experiment. Journal of Geophysical Research D: Atmospheres, 2015, 120, 292-312.	3.3	140
68	U.S. emissions of HFCâ€134a derived for 2008–2012 from an extensive flaskâ€air sampling network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 801-825.	3.3	30
69	Analysis of CO <sub>2</sub> mole fraction data: first evidence of large-scale changes in CO <sub>2</sub> uptake at high northern latitudes. Atmospheric Chemistry and Physics, 2015, 15, 13739-13758.	4.9	23
70	Comparison of the regional CO <sub>2</sub> mole fraction filtering approaches at a WMO/GAW regional station in China. Atmospheric Measurement Techniques, 2015, 8, 5301-5313.	3.1	27
71	Audit of the global carbon budget: estimate errors and their impact on uptake uncertainty. Biogeosciences, 2015, 12, 2565-2584.	3.3	96
72	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.	3.3	153

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73	Tropical nighttime warming as a dominant driver of variability in the terrestrial carbon sink. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15591-15596.	7.1	92
74	Decadal trends of atmospheric methane in East Asia from 1991 to 2013. Air Quality, Atmosphere and Health, 2015, 8, 293-298.	3.3	15
75	Aircraft-Based Estimate of Total Methane Emissions from the Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8124-8131.	10.0	190
76	Atmospheric CO2 and its δ13C measurements from flask sampling at Lin'an regional background station in China. Atmospheric Environment, 2015, 117, 220-226.	4.1	16
77	An approach for verifying biogenic greenhouse gas emissions inventories with atmospheric CO <sub>2</sub> concentration data. Environmental Research Letters, 2015, 10, 034012.	5.2	27
78	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	9.9	616
79	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	9.9	463
80	Validation of XCH <sub>4</sub> derived from SWIR spectra of GOSAT TANSO-FTS with aircraft measurement data. Atmospheric Measurement Techniques, 2014, 7, 2987-3005.	3.1	32
81	CO&Itsub>2&It/sub>, CO, and CH&Itsub>4&It/sub> measurements from tall towers in the NOAA Earth System Research Laboratory's Global Greenhouse Gas Reference Network: instrumentation, uncertainty analysis, and recommendations for future high-accuracy greenhouse gas monitoring efforts. Atmospheric Measurement Techniques, 2014, 7,	3.1	199
82	Steps for success of OCO-2. Nature Geoscience, 2014, 7, 691-691.	12.9	5
83	A Cost-Effective Trace Gas Measurement Program for Long-Term Monitoring of the Stratospheric Circulation. Bulletin of the American Meteorological Society, 2014, 95, 147-155.	3.3	11
84	Frequency-comb-based remote sensing of greenhouse gases over kilometer air paths. Optica, 2014, 1, 290.	9.3	296
85	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	9.9	311
86	ObsPack: a framework for the preparation, delivery, and attribution of atmospheric greenhouse gas measurements. Earth System Science Data, 2014, 6, 375-384.	9.9	88
87	In situ measurement of atmospheric CO <sub>2</sub> at the four WMO/GAW stations in China. Atmospheric Chemistry and Physics, 2014, 14, 2541-2554.	4.9	102
88	Methane Leaks from North American Natural Gas Systems. Science, 2014, 343, 733-735.	12.6	709
89	Net terrestrial CO <sub>2</sub> exchange over China during 2001-2010 estimated with an ensemble data assimilation system for atmospheric CO <sub>2</sub> . Journal of Geophysical Research D: Atmospheres, 2014, 119, 3500-3515.	3.3	54
90	A study on carbon dioxide concentrations and carbon isotopes measured in East Asia during 1991–2011. Air Quality, Atmosphere and Health, 2014, 7, 173-179.	3.3	8

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91	Improving stratospheric transport trend analysis based on SF <sub>6</sub> and CO <sub>2</sub> measurements. Journal of Geophysical Research D: Atmospheres, 2014, 119, 14,110.	3.3	57
92	Reconstruction of Northern Hemisphere 1950–2010 atmospheric non-methane hydrocarbons. Atmospheric Chemistry and Physics, 2014, 14, 1463-1483.	4.9	31
93	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.	4.9	Ο
94	Estimating Asian terrestrial carbon fluxes from CONTRAIL aircraft and surface CO <sub>2</sub> observations for the period 2006–2010. Atmospheric Chemistry and Physics, 2014, 14, 5807-5824.	4.9	38
95	CarbonTracker-CH <sub>4</sub> : an assimilation system for estimating emissions of atmospheric methane. Atmospheric Chemistry and Physics, 2014, 14, 8269-8293.	4.9	187
96	A new look at methane and nonmethane hydrocarbon emissions from oil and natural gas operations in the Colorado Denverâ€Julesburg Basin. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6836-6852.	3.3	257
97	Methane emissions estimate from airborne measurements over a western United States natural gas field. Geophysical Research Letters, 2013, 40, 4393-4397.	4.0	414
98	Multiyear average characteristics of CO2 variations in the free atmosphere over Colorado (40°ÂN,) Tj ETQq0 0	0 rgBT /Ov	verlock 10 Tf 5
99	Enhanced Seasonal Exchange of CO <sub>2</sub> by Northern Ecosystems Since 1960. Science, 2013, 341, 1085-1089.	12.6	329
100	Reply to comment on "Hydrocarbon emissions characterization in the Colorado Front Range-A pilot study―by Michael A. Levi. Journal of Geophysical Research D: Atmospheres, 2013, 118, 236-242.	3.3	8
101	Carbon flux estimation for Siberia by inverse modeling constrained by aircraft and tower CO <sub>2</sub> measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1100-1122.	3.3	49
102	Short-term variations of atmospheric CO2 and dominant causes in summer and winter: Analysis of 14-year continuous observational data at Waliguan, China. Atmospheric Environment, 2013, 77, 140-148.	4.1	20
103	Constraints on emissions of carbon monoxide, methane, and a suite of hydrocarbons in the Colorado Front Range using observations of <sup>14</sup> CO <sub>2</sub> . Atmospheric Chemistry and Physics, 2013, 13, 11101-11120.	4.9	27
104	Long-term greenhouse gas measurements from aircraft. Atmospheric Measurement Techniques, 2013, 6, 511-526.	3.1	87
105	A multi-year record of airborne CO <sub>2</sub> observations in the US Southern Great Plains. Atmospheric Measurement Techniques, 2013, 6, 751-763.	3.1	44
106	Atmospheric Carbon Dioxide Variability in the Community Earth System Model: Evaluation and Transient Dynamics during the Twentieth and Twenty-First Centuries. Journal of Climate, 2013, 26, 4447-4475.	3.2	48
107	Allocation of Terrestrial Carbon Sources Using <sup>14</sup> CO <sub>2</sub> : Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, 1484-1495.	1.8	35

108Atmospheric column-averaged mole fractions of carbon dioxide at 53 aircraft measurement sites.<br/>Atmospheric Chemistry and Physics, 2013, 13, 5265-5275.4.920

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109	Corrigendum to "Atmospheric column-averaged mole fractions of carbon dioxide at 53 aircraft measurement sites" published in Atmos. Chem. Phys. 13, 5265–5275, 2013. Atmospheric Chemistry and Physics, 2013, 13, 9213-9216.	4.9	2
110	Validation of XCO <sub>2</sub> derived from SWIR spectra of GOSAT TANSO-FTS with aircraft measurement data. Atmospheric Chemistry and Physics, 2013, 13, 9771-9788.	4.9	106
111	Biosphere model simulations of interannual variability in terrestrial <sup>13</sup> C/ <sup>12</sup> C exchange. Global Biogeochemical Cycles, 2013, 27, 637-649.	4.9	46
112	Accurate measurements of carbon monoxide in humid air using the cavity ring-down spectroscopy (CRDS) technique. Atmospheric Measurement Techniques, 2013, 6, 1031-1040.	3.1	64
113	Inverse Modeling of CO <sub>2</sub> Fluxes Using GOSAT Data and Multi-Year Ground-Based Observations. Scientific Online Letters on the Atmosphere, 2013, 9, 45-50.	1.4	34
114	An integrated flask sample collection system for greenhouse gas measurements. Atmospheric Measurement Techniques, 2012, 5, 2321-2327.	3.1	33
115	Estimation of regional surface CO2fluxes with GOSAT observations using two inverse modeling approaches. , 2012, , .		2
116	Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study. Journal of Geophysical Research, 2012, 117, .	3.3	359
117	Characterization and validation of CO <sub>2</sub> and CH <sub>4</sub> products from the GOSAT thermal infrared band. Proceedings of SPIE, 2012, , .	0.8	0
118	Microcollection of Gases in a Capillary Tube: Preservation of Spatial and Temporal Resolution. Analytical Chemistry, 2012, 84, 8310-8316.	6.5	4
119	Increase in observed net carbon dioxide uptake by land and oceans during the past 50 years. Nature, 2012, 488, 70-72.	27.8	583
120	Linking emissions of fossil fuel CO <sub>2</sub> and other anthropogenic trace gases using atmospheric <sup>14</sup> CO <sub>2</sub> . Journal of Geophysical Research, 2012, 117, .	3.3	121
121	Atmospheric CO <sub>2</sub> inversion validation using vertical profile measurements: Analysis of four independent inversion models. Journal of Geophysical Research, 2011, 116, .	3.3	41
122	Atmospheric observations of carbon monoxide and fossil fuel CO <sub>2</sub> emissions from East Asia. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	65
123	Novel applications of carbon isotopes in atmospheric CO <sub>2</sub> : what can atmospheric measurements teach us about processes in the biosphere?. Biogeosciences, 2011, 8, 3093-3106.	3.3	30
124	Impact of CO <sub>2</sub> measurement bias on CarbonTracker surface flux estimates. Journal of Geophysical Research, 2011, 116, .	3.3	33
125	Spatial and temporal resolution of carbon flux estimates for 1983–2002. Biogeosciences, 2011, 8, 1309-1331.	3.3	35
126	Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide. Atmospheric Chemistry and Physics, 2011, 11, 11007-11021.	4.9	37

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127	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.	4.9	148
128	Simulation of variability in atmospheric carbon dioxide using a global coupled Eulerian – Lagrangian transport model. Geoscientific Model Development, 2011, 4, 317-324.	3.6	18
129	Trends and Temporal Variations of Major Greenhouse Gases at a Rural Site in Central Europe. , 2011, , 29-47.		3
130	Observed and simulated global distribution and budget of atmospheric C <sub>2</sub> -C <sub>5</sub> alkanes. Atmospheric Chemistry and Physics, 2010, 10, 4403-4422.	4.9	104
131	On the regional distributions of background carbon monoxide concentrations observed in East Asia during 1991–2008. Asia-Pacific Journal of Atmospheric Sciences, 2010, 46, 89-95.	2.3	5
132	Seven years of recent European net terrestrial carbon dioxide exchange constrained by atmospheric observations. Global Change Biology, 2010, 16, 1317-1337.	9.5	223
133	Land use and season affect fluxes of CO <sub>2</sub> , CH <sub>4</sub> , CO, N <sub>2</sub> O, H <sub>2</sub> and isotopic source signatures in Panama: evidence from nocturnal boundary layer profiles. Global Change Biology, 2010, 16, 2721-2736.	9.5	30
134	AirCore: An Innovative Atmospheric Sampling System. Journal of Atmospheric and Oceanic Technology, 2010, 27, 1839-1853.	1.3	145
135	Atmospheric constraints on 2004 emissions of methane and nitrous oxide in North America from atmospheric measurements and a receptor-oriented modeling framework. Journal of Integrative Environmental Sciences, 2010, 7, 125-133.	2.5	20
136	Deep air convection in the firn at a zero-accumulation site, central Antarctica. Earth and Planetary Science Letters, 2010, 293, 359-367.	4.4	82
137	Apparent seasonal cycle in isotopic discrimination of carbon in the atmosphere and biosphere due to vapor pressure deficit. Global Biogeochemical Cycles, 2010, 24, .	4.9	22
138	Regional US carbon sinks from three-dimensional atmospheric CO <sub>2</sub> sampling. Proceedings of the United States of America, 2010, 107, 18348-18353.	7.1	61
139	An Accounting of the Observed Increase in Oceanic and Atmospheric CO2 and the Outlook for the Future. Oceanography, 2009, 22, 26-35.	1.0	96
140	A new look at atmospheric carbon dioxide. Atmospheric Environment, 2009, 43, 2084-2086.	4.1	139
141	Volatile Organic Compounds in the Global Atmosphere. Eos, 2009, 90, 513-514.	0.1	44
142	Regional N <sub>2</sub> O fluxes in Amazonia derived from aircraft vertical profiles. Atmospheric Chemistry and Physics, 2009, 9, 8785-8797.	4.9	29
143	Spatial distribution of Δ <sup>14</sup> CO <sub>2</sub> across Eurasia: measurements from the TROICA-8 expedition. Atmospheric Chemistry and Physics, 2009, 9, 175-187.	4.9	34
144	On the regional background levels of carbon monoxide observed in East Asia during 1991â^1⁄42004. Air Quality, Atmosphere and Health, 2008, 1, 37-44.	3.3	14

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145	Sampling, storage, and analysis of C2–C7 non-methane hydrocarbons from the US National Oceanic and Atmospheric Administration Cooperative Air Sampling Network glass flasks. Journal of Chromatography A, 2008, 1188, 75-87.	3.7	30
146	Trends and temporal variations of major greenhouse gases at a rural site in Central Europe. Atmospheric Environment, 2008, 42, 8707-8716.	4.1	50
147	Highâ€resolution emissions of CO <sub>2</sub> from power generation in the USA. Journal of Geophysical Research, 2008, 113, .	3.3	42
148	Combined Simple Biosphere/Carnegieâ€Ames‣tanford Approach terrestrial carbon cycle model. Journal of Geophysical Research, 2008, 113, .	3.3	138
149	Separating contributions from natural and anthropogenic sources in atmospheric methane from the Black Sea region, Romania. Applied Geochemistry, 2008, 23, 2871-2879.	3.0	7
150	Carbon Crucible. Science, 2008, 320, 460-461.	12.6	49
151	Application of a Differential Fuel-Cell Analyzer for Measuring Atmospheric Oxygen Variations. Journal of Atmospheric and Oceanic Technology, 2007, 24, 82-94.	1.3	74
152	Weak Northern and Strong Tropical Land Carbon Uptake from Vertical Profiles of Atmospheric CO2. Science, 2007, 316, 1732-1735.	12.6	775
153	An atmospheric perspective on North American carbon dioxide exchange: CarbonTracker. Proceedings of the United States of America, 2007, 104, 18925-18930.	7.1	895
154	Experimental and numerical studies of the 18O exchange between CO2 and water in the atmosphere–soil invasion flux. Geochimica Et Cosmochimica Acta, 2007, 71, 2657-2671.	3.9	11
155	Airborne measurements indicate large methane emissions from the eastern Amazon basin. Geophysical Research Letters, 2007, 34, .	4.0	115
156	Precision requirements for space-based data. Journal of Geophysical Research, 2007, 112, .	3.3	322
157	On the global distribution, seasonality, and budget of atmospheric carbonyl sulfide (COS) and some similarities to CO2. Journal of Geophysical Research, 2007, 112, .	3.3	213
158	Threeâ€dimensional SF <sub>6</sub> data and tropospheric transport simulations: Signals, modeling accuracy, and implications for inverse modeling. Journal of Geophysical Research, 2007, 112, .	3.3	35
159	A new high precision14CO2time series for North American continental air. Journal of Geophysical Research, 2007, 112, .	3.3	83
160	Deriving daily carbon fluxes from hourly CO2mixing ratios measured on the WLEF tall tower: An upscaling methodology. Journal of Geophysical Research, 2007, 112, .	3.3	12
161	New constraints on Northern Hemisphere growing season net flux. Geophysical Research Letters, 2007, 34, .	4.0	147
162	Temperature anomaly reemergence in seasonally frozen soils. Journal of Geophysical Research, 2007, 112	3.3	12

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163	Inverse modeling estimates of the global nitrous oxide surface flux from 1998-2001. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	4.9	161
164	Atmospheric potential oxygen: New observations and their implications for some atmospheric and oceanic models. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	4.9	64
165	Comparison of14CO2, CO, and SF6as tracers for recently added fossil fuel CO2in the atmosphere and implications for biological CO2exchange. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	186
166	Estimating uncertainty of the WMO mole fraction scale for carbon dioxide in air. Journal of Geophysical Research, 2006, 111, .	3.3	146
167	Tracking climate forcing: The annual greenhouse gas index. Eos, 2006, 87, 509.	0.1	27
168	Mauna Loa volcano is not a methane source: Implications for Mars. Geophysical Research Letters, 2006, 33, .	4.0	20
169	Boreal ecosystems sequestered more carbon in warmer years. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	42
170	Stable isotopic analysis of atmospheric methane by infrared spectroscopy by use of diode laser difference-frequency generation. Applied Optics, 2006, 45, 4136.	2.1	10
171	The role of carbon dioxide in climate forcing from 1979 to 2004: introduction of the Annual Greenhouse Gas Index. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 614-619.	1.6	132
172	Regional CO2 fluxes inferred from mixing ratio measurements: estimates from flask air samples in central Kansas, USA. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 523-536.	1.6	21
173	Seventh International CO2 Conference, Boulder, Colorado, 25-30 September 2005. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 327-327.	1.6	0
174	Modeling dynamics of stable carbon isotopic exchange between a boreal forest ecosystem and the atmosphere. Global Change Biology, 2006, 12, 1842-1867.	9.5	13
175	Simulating dynamics of –13C of CO2 in the planetary boundary layer over a boreal forest region: covariation between surface fluxes and atmospheric mixing. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 537-549.	1.6	12
176	A direct carbon budgeting approach to infer carbon sources and sinks. Design and synthetic application to complement the NACP observation network. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 366-375.	1.6	17
177	Evaluation of solid adsorbent materials for cryogen-free trapping—gas chromatographic analysis of atmospheric C2–C6 non-methane hydrocarbons. Journal of Chromatography A, 2006, 1134, 1-15.	3.7	31
178	An improved Kalman Smoother for atmospheric inversions. Atmospheric Chemistry and Physics, 2005, 5, 2691-2702.	4.9	83
179	Canopy-scale delta13C of photosynthetic and respiratory CO2 fluxes: observations in forest biomes across the United States. Global Change Biology, 2005, 11, 633-643.	9.5	67
180	Atmospheric O2/N2changes, 1993-2002: Implications for the partitioning of fossil fuel CO2sequestration. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	78

#	Article	IF	CITATIONS
181	Maximum likelihood estimation of covariance parameters for Bayesian atmospheric trace gas surface flux inversions. Journal of Geophysical Research, 2005, 110, .	3.3	118
182	An ensemble data assimilation system to estimate CO2surface fluxes from atmospheric trace gas observations. Journal of Geophysical Research, 2005, 110, .	3.3	177
183	Estimating photosynthetic13C discrimination in terrestrial CO2exchange from canopy to regional scales. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	39
184	A geostatistical approach to surface flux estimation of atmospheric trace gases. Journal of Geophysical Research, 2004, 109, .	3.3	146
185	CH4sources estimated from atmospheric observations of CH4and its13C/12C isotopic ratios: 1. Inverse modeling of source processes. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	139
186	CH4sources estimated from atmospheric observations of CH4and its13C/12C isotopic ratios: 2. Inverse modeling of CH4fluxes from geographical regions. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	99
187	Toward regional-scale modeling using the two-way nested global model TM5: Characterization of transport using SF6. Journal of Geophysical Research, 2004, 109, .	3.3	73
188	A comprehensive global three-dimensional model of $\hat{l}$ '180 in atmospheric CO2: 2. Mapping the atmospheric signal. Journal of Geophysical Research, 2003, 108, .	3.3	49
189	Strategies for measurement of atmospheric column means of carbon dioxide from aircraft using discrete sampling. Journal of Geophysical Research, 2003, 108, .	3.3	23
190	Atmospheric methane levels off: Temporary pause or a new steady-state?. Geophysical Research Letters, 2003, 30, .	4.0	379
191	Elevated atmospheric CO2effects and soil water feedbacks on soil respiration components in a Colorado grassland. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	4.9	85
192	The atmospheric signal of terrestrial carbon isotopic discrimination and its implication for partitioning carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 197-206.	1.6	31
193	Calculating isotopic fractionation from atmospheric measurements at various scales. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 207-214.	1.6	135
194	THE CARBON CYCLE AND ANTHROPOGENIC CLIMATE CHANGE. , 2003, , .		0
195	Development of analytical methods and measurements of13C/12C in atmospheric CH4from the NOAA Climate Monitoring and Diagnostics Laboratory Global Air Sampling Network. Journal of Geophysical Research, 2002, 107, ACH 11-1.	3.3	115
196	Carbon isotope discrimination of arctic and boreal biomes inferred from remote atmospheric measurements and a biosphere-atmosphere model. Global Biogeochemical Cycles, 2002, 16, 1-1-15.	4.9	47
197	Land use effects on atmospheric13C imply a sizable terrestrial CO2sink in tropical latitudes. Geophysical Research Letters, 2002, 29, 68-1-68-4.	4.0	25
198	What is the concentration footprint of a tall tower?. Journal of Geophysical Research, 2001, 106, 17831-17840.	3.3	124

#	Article	IF	CITATIONS
199	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
200	A new method for describing long-term changes in total ozone. Geophysical Research Letters, 2001, 28, 4535-4538.	4.0	23
201	Partitioning net ecosystem carbon exchange with isotopic fluxes of CO2. Global Change Biology, 2001, 7, 127-145.	9.5	178
202	A time-dependent assimilation and source retrieval technique for atmospheric tracers. Geophysical Monograph Series, 2000, , 265-277.	0.1	3
203	The CO2 budget and rectification airborne study: Strategies for measuring rectifiers and regional fluxes. Geophysical Monograph Series, 2000, , 311-324.	0.1	25
204	Measurements of landscape-scale fluxes of carbon dioxide in the Peruvian Amazon by vertical profiling through the atmospheric boundary layer. Journal of Geophysical Research, 2000, 105, 22137-22146.	3.3	24
205	An interpretation of trace gas correlations during Barrow, Alaska, winter dark periods, 1986-1997. Journal of Geophysical Research, 2000, 105, 17267-17278.	3.3	30
206	Global Carbon Sinks and Their Variability Inferred from Atmospheric O2 and 13C. Science, 2000, 287, 2467-2470.	12.6	471
207	Regional Changes in Carbon Dioxide Fluxes of Land and Oceans Since 1980. Science, 2000, 290, 1342-1346.	12.6	680
208	KEYNOTE PERSPECTIVE. Carbon cycle research after Kyoto. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 562-571.	1.6	8
209	A 3-dimensional study of delta18O in atmospheric CO2: contribution of different land ecosystems. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 642-667.	1.6	40
210	Influence of El Niño on the equatorial Pacific contribution to atmospheric CO2 accumulation. Nature, 1999, 398, 597-601.	27.8	277
211	A global calculation of the $\hat{l}'13C$ of soil respired carbon: Implications for the biospheric uptake of anthropogenic CO2. Global Biogeochemical Cycles, 1999, 13, 519-530.	4.9	44
212	Measurement of180/160 in the soil-atmosphere CO2flux. Global Biogeochemical Cycles, 1999, 13, 761-774.	4.9	96
213	Development of the CO2latitude gradient in recent decades. Global Biogeochemical Cycles, 1999, 13, 821-826.	4.9	26
214	Increases in early season ecosystem uptake explain recent changes in the seasonal cycle of atmospheric CO2at high northern latitudes. Geophysical Research Letters, 1999, 26, 2765-2768.	4.0	206
215	Continuing decline in the growth rate of the atmospheric methane burden. Nature, 1998, 393, 447-450.	27.8	384
216	Oxygen isotopic equilibrium between carbon dioxide and water in soils. Tellus, Series B: Chemical and Physical Meteorology, 1998, 50, 163-178.	1.6	57

#	Article	IF	CITATIONS
217	Measurements of carbon dioxide on very tall towers: results of the NOAA/CMDL program. Tellus, Series B: Chemical and Physical Meteorology, 1998, 50, 401-415.	1.6	137
218	Determination of the isotopic(13C/12C) discrimination by terrestrial biology from a global network of observations. Global Biogeochemical Cycles, 1998, 12, 555-562.	4.9	96
219	THE GLOBAL CARBON CYCLE:In Balance, with a Little Help from the Plants. , 1998, 281, 183-184.		29
220	A Large Terrestrial Carbon Sink in North America Implied by Atmospheric and Oceanic Carbon Dioxide Data and Models. , 1998, 282, 442-446.		713
221	Measurements of carbon dioxide on very tall towers: results of the NOAA/CMDL program. Tellus, Series B: Chemical and Physical Meteorology, 1998, 50, 401-415.	1.6	143
222	A Design for Unattended Monitoring of Carbon Dioxide on a Very Tall Tower. Journal of Atmospheric and Oceanic Technology, 1997, 14, 1139-1145.	1.3	31
223	Anthropogenic sources of halocarbons, sulfur hexafluoride, carbon monoxide, and methane in the southeastern United States. Journal of Geophysical Research, 1997, 102, 15915-15925.	3.3	58
224	A note on isotopic ratios and the global atmospheric methane budget. Global Biogeochemical Cycles, 1997, 11, 77-81.	4.9	82
225	A three-dimensional synthesis study of $\hat{l}\hat{l}180$ in atmospheric CO2: 1. Surface fluxes. Journal of Geophysical Research, 1997, 102, 5857-5872.	3.3	200
226	A three-dimensional synthesis study of $\hat{I}$ 18O in atmospheric CO2: 2. Simulations with the TM2 transport model. Journal of Geophysical Research, 1997, 102, 5873-5883.	3.3	75
227	A high precision manometric system for absolute calibrations of CO2in dry air. Journal of Geophysical Research, 1997, 102, 5885-5894.	3.3	81
228	The Co2 Lifetime Concept Should Be Banished; An Editorial Comment. Climatic Change, 1997, 37, 487-490.	3.6	8
229	Variability in the O2/N2ratio of southern hemisphere air, 1991-1994: Implications for the carbon cycle. Global Biogeochemical Cycles, 1996, 10, 9-21.	4.9	115
230	The seasonal cycle of atmospheric CO2: A study based on the NCAR Community Climate Model (CCM2). Journal of Geophysical Research, 1996, 101, 15079-15097.	3.3	36
231	Changes in CH4and CO growth rates after the eruption of Mt. Pinatubo and their link with changes in tropical tropospheric UV flux. Geophysical Research Letters, 1996, 23, 2761-2764.	4.0	108
232	Monitoring the isotopic composition of atmospheric CO2: Measurements from the NOAA Global Air Sampling Network. Journal of Geophysical Research, 1996, 101, 25897-25916.	3.3	186
233	Influence of two atmospheric transport models on inf erring sources and sinks of atmospheric CO2. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 568-582.	1.6	10
234	Influence of two atmospheric transport models on inferring sources and sinks of atmospheric CO2. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 568-582.	1.6	12

#	Article	IF	CITATIONS
235	A feasible Global Carbon Cycle Observing System: a plan to decipher today's carbon cycle based on observations. Global Change Biology, 1996, 2, 309-318.	9.5	94
236	Atmospheric gas concentrations over the past century measured in air from firn at the South Pole. Nature, 1996, 383, 231-235.	27.8	288
237	Measurements of carbon dioxide on a very tall tower. Tellus, Series B: Chemical and Physical Meteorology, 1995, 47, 535-549.	1.6	90
238	Changes in oceanic and terrestrial carbon uptake since 1982. Nature, 1995, 373, 326-330.	27.8	457
239	Partitioning of ocean and land uptake of CO2as inferred by δ13C measurements from the NOAA Climate Monitoring and Diagnostics Laboratory Global Air Sampling Network. Journal of Geophysical Research, 1995, 100, 5051.	3.3	315
240	A Large Northern Hemisphere Terrestrial CO2 Sink Indicated by the 13C/12C Ratio of Atmospheric CO2. Science, 1995, 269, 1098-1102.	12.6	752
241	Extension and integration of atmospheric carbon dioxide data into a globally consistent measurement record. Journal of Geophysical Research, 1995, 100, 11593.	3.3	330
242	A high precision isotope ratio mass spectrometry method for measuring the ratio of air. Geochimica Et Cosmochimica Acta, 1994, 58, 4751-4758.	3.9	103
243	A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992. Geophysical Research Letters, 1994, 21, 45-48.	4.0	203
244	Carbon monoxide budget in the northern hemisphere. Geophysical Research Letters, 1994, 21, 433-436.	4.0	52
245	Correction to "A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992―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.	4.0	9
246	Reply to "Comments on â€~A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992'― Geophysical Research Letters, 1994, 21, 2447-2448.	4.0	8
247	Evidence for interannual variability of the carbon cycle from the National Oceanic and Atmospheric Administration/Climate Monitoring and Diagnostics Laboratory Global Air Sampling Network. Journal of Geophysical Research, 1994, 99, 22831.	3.3	674
248	Recent Changes in Atmospheric Carbon Monoxide. Science, 1994, 263, 1587-1590.	12.6	197
249	Verification of flux measurement using relaxed eddy accumulation. Atmospheric Environment Part A General Topics, 1993, 27, 2417-2426.	1.3	95
250	What atmospheric oxygen measurements can tell us about the global carbon cycle. Global Biogeochemical Cycles, 1993, 7, 37-67.	4.9	185
251	Oceanic <sup>13</sup> C/ <sup>12</sup> C observations: A new window on ocean CO <sub>2</sub> uptake. Global Biogeochemical Cycles, 1993, 7, 353-368.	4.9	233
252	Observational Strategy for Assessing the Role of Terrestrial Ecosystems in the Global Carbon Cycle: Scaling Down to Regional Levels. , 1993, , 179-190.		19

#	Article	IF	CITATIONS
253	Variations in atmospheric methane at Mauna Loa Observatory related to longâ€range transport. Journal of Geophysical Research, 1992, 97, 6003-6010.	3.3	62
254	Mixing ratios of carbon monoxide in the troposphere. Journal of Geophysical Research, 1992, 97, 20731-20750.	3.3	228
255	Slowing down of the global accumulation of atmospheric methane during the 1980s. Nature, 1992, 358, 313-316.	27.8	295
256	Climatic Change in Tasmania Inferred from a 1089-Year Tree-Ring Chronology of Huon Pine. Science, 1991, 253, 1266-1268.	12.6	126
257	Observational Contrains on the Global Atmospheric Co2 Budget. Science, 1990, 247, 1431-1438.	12.6	1,981
258	Error estimates of background atmospheric CO <sub>2</sub> patterns from weekly flask samples. Journal of Geophysical Research, 1990, 95, 14063-14070.	3.3	16
259	Correlations among combustion effluent species at Barrow, Alaska: Aerosol black carbon, carbon dioxide, and methane. Journal of Atmospheric Chemistry, 1989, 9, 283-299.	3.2	50
260	Latitudinal distribution of the sources and sinks of atmospheric carbon dioxide derived from surface observations and an atmospheric transport model. Journal of Geophysical Research, 1989, 94, 5151-5172.	3.3	187
261	Atmospheric carbon dioxide at Mauna Loa Observatory: 2. Analysis of the NOAA GMCC data, 1974–1985. Journal of Geophysical Research, 1989, 94, 8549-8565.	3.3	671
262	Atmospheric carbon dioxide measurements at Cape Matatula, American Samoa, 1976–1987. Journal of Geophysical Research, 1989, 94, 14817-14829.	3.3	12
263	Longâ€ŧerm air quality monitoring at the South Pole by the NOAA Program Geophysical Monitoring for Climatic Change. Reviews of Geophysics, 1988, 26, 63-80.	23.0	16
264	Atmospheric carbon dioxide measurements in the remote global troposphere, 1981-1984. Tellus, Series B: Chemical and Physical Meteorology, 1988, 40B, 81-115.	1.6	123
265	Low backgroundâ€rate detector for 40â€keV ions using a conversion dynode and a microchannelâ€plate electron multiplier to reject lowâ€energy ions, electrons, and photons. Review of Scientific Instruments, 1988, 59, 98-111.	1.3	12
266	Latitudinal variation in oxygen-18 of atmospheric CO2. Nature, 1987, 327, 495-497.	27.8	184
267	A 40 keV cyclotron for radioisotope dating. Nuclear Instruments & Methods in Physics Research B, 1984, 5, 230-232.	1.4	9
268	Past atmospheric CO <sub>2</sub> levels and the <sup>13</sup> C/ <sup>12</sup> C ratios in tree rings. Tellus, 1980, 32, 268-283.	0.8	57
269	On calculating the transfer of carbon-13 in reservoir models of the carbon cycle. Tellus, 1980, 32, 464-469.	0.8	34
270	Past atmospheric CO2 levels and the 13C/12C ratios in tree rings. Tellus, 1980, 32, 268-283.	0.8	101

#	Article	IF	CITATIONS
271	Predicted shift in the <sup>13</sup> <i>C</i> / <sup>12</sup> <i>C</i> ratio of atmospheric carbon dioxide. Geophysical Research Letters, 1980, 7, 505-508.	4.0	64
272	Recent trends in the 13C/12C ratio of atmospheric carbon dioxide. Nature, 1979, 277, 121-123.	27.8	364
273	Natural atmospheric 14C variation and the Suess effect. Nature, 1979, 280, 826-828.	27.8	151
274	Chemical pretreatment and radial flow of 14C in tree rings. Nature, 1978, 271, 234-235.	27.8	55
275	Design, Construction and Calibration of A High Accuracy Carbon-14 Counting Set up. Radiocarbon, 1978, 21, 22-40.	1.8	23
276	Hydrocarbon Tracers Suggest Methane Emissions from Fossil Sources Occur Predominately Before Gas Processing and That Petroleum Plays Are a Significant Source. Environmental Science & Technology, 0, , .	10.0	3