Jocelyn C Turnbull

List of Publications by Year
in descending order

65 papers	3,551 citations	236833 25 h-index	138417 58 g-index
89 all docs	89 docs citations	89 times ranked	4049 citing authors

#	Article	IF	Citations
1	Variable effects of nitrogen additions on the stability and turnover of soil carbon. Nature, 2002, 419, 915-917.	13.7	643
2	14C Activity and Global Carbon Cycle Changes over the Past 50,000 Years. Science, 2004, 303, 202-207.	6.0	465
3	Marine-derived 14C calibration and activity record for the past 50,000 years updated from the Cariaco Basin. Quaternary Science Reviews, 2006, 25, 3216-3227.	1.4	249
4	Highâ€resolution atmospheric inversion of urban CO₂ emissions during the dormant season of the Indianapolis Flux Experiment (INFLUX). Journal of Geophysical Research D: Atmospheres, 2016, 121, 5213-5236.	1.2	219
5	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.	1.5	186
6	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
7	Toward quantification and source sector identification of fossil fuel CO₂ emissions from an urban area: Results from the INFLUX experiment. Journal of Geophysical Research D: Atmospheres, 2015, 120, 292-312.	1.2	140
8	Linking emissions of fossil fuel CO₂ and other anthropogenic trace gases using atmospheric ¹⁴CO₂. Journal of Geophysical Research, 2012, 117, .	3.3	121
9	ATMOSPHERIC RADIOCARBON FOR THE PERIOD 1950â€“2019. Radiocarbon, 2022, 64, 723-745.	0.8	117
10	Assessment of uncertainties of an aircraft-based mass balance approach for quantifying urban greenhouse gas emissions. Atmospheric Chemistry and Physics, 2014, 14, 9029-9050.	1.9	109
11	On the use of ¹⁴CO₂ as a tracer for fossil fuel CO₂: Quantifying uncertainties using an atmospheric transport model. Journal of Geophysical Research, 2009, 114, .	3.3	107
12	A new high precision14CO2time series for North American continental air. Journal of Geophysical Research, 2007, 112, .	3.3	83
13	Atmospheric observations of carbon monoxide and fossil fuel CO₂emissions from East Asia. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	65
14	Geological evidence for past large earthquakes and tsunamis along the Hikurangi subduction margin, New Zealand. Marine Geology, 2019, 412, 139-172.	0.9	63
15	The Indianapolis Flux Experiment (INFLUX): A test-bed for developing urban greenhouse gas emission measurements. Elementa, 2017, 5, .	1.1	59
16	Sixty years of radiocarbon dioxide measurements at Wellington, New Zealand: 1954â€“2014. Atmospheric Chemistry and Physics, 2017, 17, 14771-14784.	1.9	54
17	Policy-Relevant Assessment of Urban CO₂ Emissions. Environmental Science & Technology, 2020, 54, 10237-10245.	4.6	52
18	Synthesis of Urban CO₂ Emission Estimates from Multiple Methods from the Indianapolis Flux Project (INFLUX). Environmental Science & Technology, 2019, 53, 287-295.	4.6	50

#	Article	IF	Citations
19	Assessing the optimized precision of the aircraft mass balance method for measurement of urban greenhouse gas emission rates through averaging. Elementa, 2017, 5, .	1.1	46
20	Allocation of Terrestrial Carbon Sources Using ¹⁴CO₂: Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, 1484-1495.	0.8	35
21	An integrated flask sample collection system for greenhouse gas measurements. Atmospheric Measurement Techniques, 2012, 5, 2321-2327.	1.2	33
22	Tower measurement network of in-situ CO2, CH4, and CO in support of the Indianapolis FLUX (INFLUX) Experiment. Elementa, 2017, 5, .	1.1	31
23	Independent evaluation of point source fossil fuel CO ₂ emissions to better than 10%. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10287-10291.	3.3	30
24	Atmospheric measurement of point source fossil CO₂ emissions. Atmospheric Chemistry and Physics, 2014, 14, 5001-5014.	1.9	29
25	XCAMS: The compact 14C accelerator mass spectrometer extended for 10Be and 26Al at GNS Science, New Zealand. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 25-33.	0.6	28
26	Reconciling the differences between a bottom-up and inverse-estimated FFCO2 emissions estimate in a large US urban area. Elementa, 2017, 5, .	1.1	28
27	Constraints on emissions of carbon monoxide, methane, and a suite of hydrocarbons in the Colorado Front Range using observations of ¹⁴CO₂. Atmospheric Chemistry and Physics, 2013, 13, 11101-11120.	1.9	27
28	High-Precision Atmospheric ¹⁴CO₂ Measurement at the Rafter Radiocarbon Laboratory. Radiocarbon, 2015, 57, 377-388.	0.8	25
29	Quantification of urban atmospheric boundary layer greenhouse gas dry mole fraction enhancements in the dormant season: Results from the Indianapolis Flux Experiment (INFLUX). Elementa, 2017, 5, .	1.1	24
30	Rafter radiocarbon sample preparation and data flow: Accommodating enhanced throughput and precision. Nuclear Instruments & Methods in Physics Research B, 2013, 294, 194-198.	0.6	22
31	Temporal variability in the sources and fluxes of CO2 in a residential area in an evergreen subtropical city. Atmospheric Environment, 2016, 143, 164-176.	1.9	17
32	Radiocarbon bomb-peak signal in tree-rings from the tropical Andes register low latitude atmospheric dynamics in the Southern Hemisphere. Science of the Total Environment, 2021, 774, 145126.	3.9	17
33	Initial Results of an Intercomparison of AMS-Based Atmospheric ¹⁴CO₂ Measurements. Radiocarbon, 2013, 55, 1475-1483.	0.8	16
34	Source Sector Attribution of CO₂ Emissions Using an Urban CO/CO₂ Bayesian Inversion System. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,611.	1.2	16
35	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15
36	Compatibility of Atmospheric ¹⁴CO₂ Measurements: Comparing the Heidelberg Low-Level Counting Facility to International Accelerator Mass Spectrometry (AMS) Laboratories. Radiocarbon, 2017, 59, 875-883.	0.8	15

#	Article	IF	Citations
37	Carbon monoxide isotopic measurements in Indianapolis constrain urban source isotopic signatures and support mobile fossil fuel emissions as the dominant wintertime CO source. Elementa, 2017, 5, .	1.1	13
38	Observations of atmospheric ¹⁴CO₂ at Anmyeondo GAW station, South Korea: implications for fossil fuel CO₂ and emission ratios. Atmospheric Chemistry and Physics, 2020, 20, 12033-12045.	1.9	13
39	A New Automated Extraction System for ¹⁴C Measurement for Atmospheric Co₂. Radiocarbon, 2010, 52, 1261-1269.	0.8	11
40	Integrating chronological uncertainties for annually laminated lake sediments using layer counting, independent chronologies and Bayesian age modelling (Lake Ohau, South Island, New Zealand). Quaternary Science Reviews, 2018, 188, 104-120.	1.4	10
41	Global Network Measurements of Atmospheric Trace Gas Isotopes. , 2010, , 3-31.		9
42	Allocation of Terrestrial Carbon Sources Using 14CO2; Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, .	0.8	9
43	Investigations into the use of multi-species measurements for source apportionment of the Indianapolis fossil fuel CO2 signal. Elementa, 2018, 6, .	1.1	9
44	Refining the Chronology of the Agate Basin Complex: Radiocarbon Dating the Frazier Site, Northeastern Colorado. Plains Anthropologist, 2011, 56, 243-258.	0.6	8
45	Detecting long-term changes in point-source fossil CO₂ emissions with tree ring archives. Atmospheric Chemistry and Physics, 2016, 16, 5481-5495.	1.9	8
46	Authenticating bioplastics using carbon and hydrogen stable isotopes â€“ An alternative analytical approach. Rapid Communications in Mass Spectrometry, 2021, 35, e9051.	0.7	8
47	Pretreatment of Terrestrial Macrofossils. Radiocarbon, 2020, 62, 349-360.	0.8	7
48	Initial Results of an Intercomparison of AMS-Based Atmospheric 14CO2 Measurements. Radiocarbon, 2013, 55, .	0.8	7
49	An improved estimate for the <i>Î´</i>¹³C and <i>Î´</i>¹⁸O signatures of carbon monoxide produced from atmospheric oxidation of volatile organic compounds. Atmospheric Chemistry and Physics, 2019, 19, 8547-8562.	1.9	6
50	Source decomposition of eddy-covariance CO₂ flux measurements for evaluating a high-resolution urban CO₂ emissions inventory. Environmental Research Letters, 2022, 17, 074035.	2.2	6
51	Report on the 20th International Radiocarbon Conference Graphitization Workshop. Radiocarbon, 2010, 52, 1230-1235.	0.8	5
52	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.	1.3	5
53	A New Background Method for Greenhouse Gases Flux Calculation Based in Back-Trajectories Over the Amazon. Atmosphere, 2020, 11, 734.	1.0	5
54	A multi-city urban atmospheric greenhouse gas measurement data synthesis. Scientific Data, 2022, 9, .	2.4	5

#	Article	IF	Citations
55	The influence of near-field fluxes on seasonal carbon dioxide enhancements: results from the Indianapolis Flux Experiment (INFLUX). Carbon Balance and Management, 2021, 16, 4.	1.4	4
56	Dramatic Lockdown Fossil Fuel CO₂ Decrease Detected by Citizen Science-Supported Atmospheric Radiocarbon Observations. Environmental Science & Technology, 2022, 56, 9882-9890.	4.6	4
57	Atmospheric Radiocarbon Workshop Report. Radiocarbon, 2013, 55, 1470-1474.	0.8	3
58	Testing the effectiveness of AMS radiocarbon pretreatment and preparation on archaeological textiles. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 469-472.	0.6	2
59	The impact of the COVID-19 lockdown on greenhouse gases: a multi-city analysis of in situ atmospheric observations. Environmental Research Communications, 2022, 4, 041004.	0.9	2
60	Seashore Settlement Patterns in the KonÃ© and NaÃ¯a Periods: Case Studies from Southwestern New Caledonia. Journal of Island and Coastal Archaeology, 2019, 14, 130-142.	0.6	1
61	Atmospheric Radiocarbon Workshop Report. Radiocarbon, 2013, 55, .	0.8	1
62	Using carbon-14 and carbon-13 measurements for source attribution of atmospheric methane in the Athabasca oil sands region. Atmospheric Chemistry and Physics, 2022, 22, 2121-2133.	1.9	1
63	Comment on â€œWorld Atmospheric CO2, Its 14C Specific Activity, Non-fossil Component, Anthropogenic Fossil Component, and Emissions (1750â€“2018),â€•by Kenneth Skrable, George Chabot, and Clayton French. Health Physics, 2022, 122, 717-719.	0.3	1
64	RADIOCARBON AND ATMOSPHERIC 14CO2 PIONEER ATHOL RAFTER. Radiocarbon, 0, , 1-9.	0.8	0
65	Identification and Quantification of Methane Emissions in an Urban Setting. , 2011, , .		0