Anna Karion

List of Publications by Year
in descending order

55 papers	5,148 citations	147801 31 h-index	155660 55 g-index
83 all docs	83 docs citations	83 times ranked	4429 citing authors

#	Article	IF	Citations
1	A Modified Vegetation Photosynthesis and Respiration Model (VPRM) for the Eastern USA and Canada, Evaluated With Comparison to Atmospheric Observations and Other Biospheric Models. Journal of Geophysical Research G: Biogeosciences, 2022, 127, e2021JG006290.	3.0	13
2	New York City greenhouse gas emissions estimated with inverse modeling of aircraft measurements. Elementa, 2022, 10, .	3.2	8
3	Carbon Monoxide Emissions from the Washington, DC, and Baltimore Metropolitan Area: Recent Trend and COVID-19 Anomaly. Environmental Science & Technology, 2022, 56, 2172-2180.	10.0	7
4	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.	2.3	2
5	A multi-city urban atmospheric greenhouse gas measurement data synthesis. Scientific Data, 2022, 9, .	5.3	5
6	Background conditions for an urban greenhouse gas network in the Washington, DC,Âand Baltimore metropolitan region. Atmospheric Chemistry and Physics, 2021, 21, 6257-6273.	4.9	10
7	The Impact of COVIDâ€19 on CO₂ Emissions in the Los Angeles and Washington DC/Baltimore Metropolitan Areas. Geophysical Research Letters, 2021, 48, e2021GL092744.	4.0	32
8	An emerging GHG estimation approach can help cities achieve their climate and sustainability goals. Environmental Research Letters, 2021, 16, 084003.	5.2	22
9	Wintertime CO₂, CH₄, and CO Emissions Estimation for the Washington, DCâ€“Baltimore Metropolitan Area Using an Inverse Modeling Technique. Environmental Science & Technology, 2020, 54, 2606-2614.	10.0	25
10	Assessment of Planetary Boundary Layer Parameterizations and Urban Heat Island Comparison: Impacts and Implications for Tracer Transport. Journal of Applied Meteorology and Climatology, 2020, 59, 1637-1653.	1.5	5
11	Greenhouse gas observations from the Northeast Corridor tower network. Earth System Science Data, 2020, 12, 699-717.	9.9	27
12	Greenhouse gas observations from the Northeast Corridor tower network. Earth System Science Data, 2020, 12, .	9.9	3
13	Seasonally Resolved Excess Urban Methane Emissions from the Baltimore/Washington, DC Metropolitan Region. Environmental Science & Technology, 2019, 53, 11285-11293.	10.0	21
14	Intercomparison of atmospheric trace gas dispersion models: Barnett Shale case study. Atmospheric Chemistry and Physics, 2019, 19, 2561-2576.	4.9	24
15	Investigating sources of variability and error in simulations of carbon dioxide in an urban region. Atmospheric Environment, 2019, 199, 55-69.	4.1	28
16	Synthesis of Urban CO₂ Emission Estimates from Multiple Methods from the Indianapolis Flux Project (INFLUX). Environmental Science & Technology, 2019, 53, 287-295.	10.0	50
17	Siting Background Towers to Characterize Incoming Air for Urban Greenhouse Gas Estimation: A Case Study in the Washington, DC/Baltimore Area. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2910-2926.	3.3	27
18	Reducing errors in aircraft atmospheric inversion estimates of point-source emissions: the Aliso Canyon natural gas leak as a natural tracer experiment. Environmental Research Letters, 2018, 13, 045003.	5.2	10

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19	Bootstrap inversion technique for atmospheric trace gas source detection and quantification using long open-path laser measurements. Atmospheric Measurement Techniques, 2018, 11, 1565-1582.	3.1	12
20	Assessment of methane emissions from the U.S. oil and gas supply chain. Science, 2018, 361, 186-188.	12.6	519
21	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
22	Quantifying methane emissions from natural gas production in north-eastern Pennsylvania. Atmospheric Chemistry and Physics, 2017, 17, 13941-13966.	4.9	54
23	Carbon dioxide and methane measurements from the Los Angeles Megacity Carbon Project â€“ PartÂ1: calibration, urban enhancements, and uncertainty estimates. Atmospheric Chemistry and Physics, 2017, 17, 8313-8341.	4.9	96
24	Evaluation and environmental correction of ambient CO₂ measurements from a low-cost NDIR sensor. Atmospheric Measurement Techniques, 2017, 10, 2383-2395.	3.1	72
25	Assessing the optimized precision of the aircraft mass balance method for measurement of urban greenhouse gas emission rates through averaging. Elementa, 2017, 5, .	3.2	46
26	The Indianapolis Flux Experiment (INFLUX): A test-bed for developing urban greenhouse gas emission measurements. Elementa, 2017, 5, .	3.2	59
27	Lidar Characterization of Boundary Layer Transport and Mixing for Estimating Urban-Scale Greenhouse Gas Emissions. EPJ Web of Conferences, 2016, 119, 09001.	0.3	1
28	The influence of daily meteorology on boreal fire emissions and regional trace gas variability. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2793-2810.	3.0	9
29	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.	3.3	219
30	A multiyear estimate of methane fluxes in Alaska from CARVE atmospheric observations. Global Biogeochemical Cycles, 2016, 30, 1441-1453.	4.9	36
31	Investigating Alaskan methane and carbon dioxide fluxes using measurements from the CARVE tower. Atmospheric Chemistry and Physics, 2016, 16, 5383-5398.	4.9	26
32	Quantifying atmospheric methane emissions from oil and natural gas production in the Bakken shale region of North Dakota. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6101-6111.	3.3	99
33	Cold season emissions dominate the Arctic tundra methane budget. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 40-45.	7.1	278
34	O3, CH4, CO2, CO, NO2 and NMHC aircraft measurements in the Uinta Basin oil and gas region under low and high ozone conditions in winter 2012 and 2013. Elementa, 2016, 4, .	3.2	8
35	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.	3.3	140
36	Atmospheric transport simulations in support of the Carbon in Arctic Reservoirs Vulnerability Experiment (CARVE). Atmospheric Chemistry and Physics, 2015, 15, 4093-4116.	4.9	22

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37	Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. Atmospheric Chemistry and Physics, 2015, 15, 411-429.	4.9	154
38	Seasonal climatology of CO₂ 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
39	Reconciling divergent estimates of oil and gas methane emissions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15597-15602.	7.1	209
40	Aircraft-Based Estimate of Total Methane Emissions from the Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8124-8131.	10.0	190
41	Airborne Ethane Observations in the Barnett Shale: Quantification of Ethane Flux and Attribution of Methane Emissions. Environmental Science & Technology, 2015, 49, 8158-8166.	10.0	100
42	Aircraft-Based Measurements of Point Source Methane Emissions in the Barnett Shale Basin. Environmental Science & Technology, 2015, 49, 7904-7913.	10.0	93
43	Quantification and source apportionment of the methane emission flux from the city of Indianapolis. Elementa, 2015, 3, .	3.2	50
44	Methane emissions from Alaska in 2012 from CARVE airborne observations. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16694-16699.	7.1	58
45	Assessment of uncertainties of an aircraft-based mass balance approach for quantifying urban greenhouse gas emissions. Atmospheric Chemistry and Physics, 2014, 14, 9029-9050.	4.9	109
46	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
47	Methane emissions estimate from airborne measurements over a western United States natural gas field. Geophysical Research Letters, 2013, 40, 4393-4397.	4.0	414
48	High accuracy measurements of dry mole fractions of carbon dioxide and methane in humid air. Atmospheric Measurement Techniques, 2013, 6, 837-860.	3.1	151
49	Long-term greenhouse gas measurements from aircraft. Atmospheric Measurement Techniques, 2013, 6, 511-526.	3.1	87
50	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
51	An integrated flask sample collection system for greenhouse gas measurements. Atmospheric Measurement Techniques, 2012, 5, 2321-2327.	3.1	33
52	Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study. Journal of Geophysical Research, 2012, 117, .	3.3	359
53	Linking emissions of fossil fuel CO₂ and other anthropogenic trace gases using atmospheric ¹⁴CO₂. Journal of Geophysical Research, 2012, 117, .	3.3	121
54	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

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55	Aircraft-Based Measurements of the Carbon Footprint of Indianapolis. Environmental Science & Technology, 2009, 43, 7816-7823.	10.0	167