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List of Publications by Year
in descending order

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45 papers	4,324 citations	172457 29 h-index	233421 45 g-index
48 all docs	48 docs citations	48 times ranked	3477 citing authors

#	Article	IF	Citations
1	TROPOMI on the ESA Sentinel-5 Precursor: A GMES mission for global observations of the atmospheric composition for climate, air quality and ozone layer applications. Remote Sensing of Environment, 2012, 120, 70-83.	11.0	1,159
2	Toward accurate CO₂and CH₄observations from GOSAT. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	355
3	Satellite observations of atmospheric methane and their value for quantifying methane emissions. Atmospheric Chemistry and Physics, 2016, 16, 14371-14396.	4.9	230
4	Tropical methane emissions: A revised view from SCIAMACHY onboard ENVISAT. Geophysical Research Letters, 2008, 35, .	4.0	199
5	Global column-averaged methane mixing ratios from 2003 to 2009 as derived from SCIAMACHY: Trends and variability. Journal of Geophysical Research, 2011, 116, .	3.3	188
6	Toward Global Mapping of Methane With TROPOMI: First Results and Intersatellite Comparison to GOSAT. Geophysical Research Letters, 2018, 45, 3682-3689.	4.0	170
7	Quantifying methane emissions from the largest oil-producing basin in the United States from space. Science Advances, 2020, 6, eaaz5120.	10.3	155
8	Retrievals of atmospheric CO_2 from simulated space-borne measurements of backscattered near-infrared sunlight: accounting for aerosol effects. Applied Optics, 2009, 48, 3322.	2.1	146
9	Methane retrievals from Greenhouse Gases Observing Satellite (GOSAT) shortwave infrared measurements: Performance comparison of proxy and physics retrieval algorithms. Journal of Geophysical Research, 2012, 117, .	3.3	128
10	Satellite Discovery of Anomalously Large Methane Point Sources From Oil/Gas Production. Geophysical Research Letters, 2019, 46, 13507-13516.	4.0	127
11	Impact of aerosol and thin cirrus on retrieving and validating XCO₂ from GOSAT shortwave infrared measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4887-4905.	3.3	111
12	Satellite observations reveal extreme methane leakage from a natural gas well blowout. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26376-26381.	7.1	107
13	A multi-year methane inversion using SCIAMACHY, accounting for systematic errors using TCCON measurements. Atmospheric Chemistry and Physics, 2014, 14, 3991-4012.	4.9	106
14	The operational methane retrieval algorithm for TROPOMI. Atmospheric Measurement Techniques, 2016, 9, 5423-5440.	3.1	93
15	Carbon monoxide total column retrievals from TROPOMI shortwave infrared measurements. Atmospheric Measurement Techniques, 2016, 9, 4955-4975.	3.1	92
16	Measuring Carbon Monoxide With TROPOMI: First Results and a Comparison With ECMWFâ€IFS Analysis Data. Geophysical Research Letters, 2018, 45, 2826-2832.	4.0	82
17	Satellite-based survey of extreme methane emissions in the Permian basin. Science Advances, 2021, 7, .	10.3	66
18	Reduced carbon uptake during the 2010 Northern Hemisphere summer from GOSAT. Geophysical Research Letters, 2013, 40, 2378-2383.	4.0	65

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19	Satellite-derived methane hotspot emission estimates using a fast data-driven method. Atmospheric Chemistry and Physics, 2017, 17, 5751-5774.	4.9	63
20	Global satellite observations of column-averaged carbon dioxide and methane: The GHG-CCI XCO2 and XCH4 CRDP3 data set. Remote Sensing of Environment, 2017, 203, 276-295.	11.0	52
21	Anomalous carbon uptake in Australia as seen by GOSAT. Geophysical Research Letters, 2015, 42, 8177-8184.	4.0	45
22	SCIAMACHY CO over land and oceans: 2003â€“2007 interannual variability. Atmospheric Chemistry and Physics, 2009, 9, 3799-3813.	4.9	44
23	Enhanced methane emissions from tropical wetlands during the 2011 La NiÃ±a. Scientific Reports, 2017, 7, 45759.	3.3	41
24	Carbon monoxide air pollution on sub-city scales and along arterial roads detected by the Tropospheric Monitoring Instrument. Atmospheric Chemistry and Physics, 2019, 19, 3579-3588.	4.9	41
25	Satellites Detect Abatable Super-Emissions in One of the Worldâ€™s Largest Methane Hotspot Regions. Environmental Science & Technology, 2022, 56, 2143-2152.	10.0	40
26	Multisatellite Imaging of a Gas Well Blowout Enables Quantification of Total Methane Emissions. Geophysical Research Letters, 2021, 48, e2020GL090864.	4.0	39
27	Methane Emissions from Superemitting Coal Mines in Australia Quantified Using TROPOMI Satellite Observations. Environmental Science & Technology, 2021, 55, 16573-16580.	10.0	39
28	Carbon monoxide from shortwave infrared reflectance measurements: A new retrieval approach for clear sky and partially cloudy atmospheres. Remote Sensing of Environment, 2012, 120, 255-266.	11.0	34
29	Improved water vapour spectroscopy in the 4174â€“4300 cm^{â^'1} region and its impact on SCIAMACHY HDO/H₂O measurements. Atmospheric Measurement Techniques, 2013, 6, 879-894.	3.1	30
30	1.5Âyears of TROPOMI CO measurements: comparisons to MOPITT and ATom. Atmospheric Measurement Techniques, 2020, 13, 4841-4864.	3.1	29
31	CH₄, CO, and H₂O spectroscopy for the Sentinel-5 Precursor mission: an assessment with the Total Carbon Column Observing Network measurements. Atmospheric Measurement Techniques, 2012, 5, 1387-1398.	3.1	26
32	Using satellite data to identify the methane emission controls of South Sudan's wetlands. Biogeosciences, 2021, 18, 557-572.	3.3	26
33	Systematic detection of local CH₄ anomalies by combining satellite measurements with high-resolution forecasts. Atmospheric Chemistry and Physics, 2021, 21, 5117-5136.	4.9	24
34	Quantifying burning efficiency in megacities using the NO₂â^•CO ratio from the Tropospheric Monitoring Instrument (TROPOMI). Atmospheric Chemistry and Physics, 2020, 20, 10295-10310.	4.9	23
35	Evaluating urban methane emissions from space using TROPOMI methane and carbon monoxide observations. Remote Sensing of Environment, 2022, 268, 112756.	11.0	23
36	Ensemble-based satellite-derived carbon dioxide and methane column-averaged dry-air mole fraction data sets (2003â€“2018) for carbon and climate applications. Atmospheric Measurement Techniques, 2020, 13, 789-819.	3.1	22

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37	Carbon monoxide total columns from SCIAMACHY 2.3â€¯Âµm atmospheric reflectance measurements: towards aÂfull-mission data product (2003â€“2012). Atmospheric Measurement Techniques, 2016, 9, 227-248.	3.1	17
38	Detection of carbon monoxide pollution from cities and wildfires on regional and urban scales: the benefit of CO column retrievals from SCIAMACHY 2.3â€¯Âµm measurements under cloudy conditions. Atmospheric Measurement Techniques, 2018, 11, 2553-2565.	3.1	17
39	Influence of Atmospheric Transport on Estimates of Variability in the Global Methane Burden. Geophysical Research Letters, 2019, 46, 2302-2311.	4.0	16
40	Deep convolutional neural networks for surface coal mines determination from sentinel-2 images. European Journal of Remote Sensing, 2021, 54, 296-309.	3.5	16
41	Carbon monoxide column retrieval for clear-sky and cloudy atmospheres: a full-mission data set from SCIAMACHY 2.3â€¯Âµm reflectance measurements. Atmospheric Measurement Techniques, 2017, 10, 1769-1782.	3.1	12
42	Full-physics carbon dioxide retrievals from the Orbiting Carbon Observatory-2 (OCO-2) satellite by only using the 2.06â€‰Âµm band. Atmospheric Measurement Techniques, 2019, 12, 6049-6058.	3.1	8
43	Reconstructing and quantifying methane emissions from the full duration of a 38-day natural gas well blowout using space-based observations. Remote Sensing of Environment, 2022, 270, 112755.	11.0	7
44	A high-resolution gridded inventory of coal mine methane emissions for India and Australia. Elementa, 2022, 10, .	3.2	5
45	Special issue on remote sensing of greenhouse gas emissions. Remote Sensing of Environment, 2022, 277, 113069.	11.0	1