Stefan Schwietzke

List of Publications by Year
in descending order

34	1,998	257450 24	361022 35
papers	citations	h-index	g-index

52	52	52	2390
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Upward revision of global fossil fuel methane emissions based on isotope database. Nature, 2016, 538, 88-91.	27.8	400
2	Chinaâ€™s coal mine methane regulations have not curbed growing emissions. Nature Communications, 2019, 10, 303.	12.8	125
3	Global Inventory of Gas Geochemistry Data from Fossil Fuel, Microbial and Burning Sources, version 2017. Earth System Science Data, 2017, 9, 639-656.	9.9	125
4	Comparisons of Airborne Measurements and Inventory Estimates of Methane Emissions in the Alberta Upstream Oil and Gas Sector. Environmental Science & Technology, 2017, 51, 13008-13017.	10.0	102
5	Gridded maps of geological methane emissions and their isotopic signature. Earth System Science Data, 2019, 11, 1-22.	9.9	102
6	Temporal variability largely explains top-down/bottom-up difference in methane emission estimates from a natural gas production region. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11712-11717.	7.1	87
7	Application of Gauss's theorem to quantify localized surface emissions from airborne measurements of wind and trace gases. Atmospheric Measurement Techniques, 2017, 10, 3345-3358.	3.1	86
8	Improved Mechanistic Understanding of Natural Gas Methane Emissions from Spatially Resolved Aircraft Measurements. Environmental Science & Technology, 2017, 51, 7286-7294.	10.0	83
9	Advancing Scientific Understanding of the Global Methane Budget in Support of the Paris Agreement. Global Biogeochemical Cycles, 2019, 33, 1475-1512.	4.9	73
10	Natural Gas Fugitive Emissions Rates Constrained by Global Atmospheric Methane and Ethane. Environmental Science & Technology, 2014, 48, 7714-7722.	10.0	71
11	Discrepancy between simulated and observed ethane and propane levels explained by underestimated fossil emissions. Nature Geoscience, 2018, 11, 178-184.	12.9	56
12	Quantifying methane emissions from natural gas production in north-eastern Pennsylvania. Atmospheric Chemistry and Physics, 2017, 17, 13941-13966.	4.9	54
13	Airborne Quantification of Methane Emissions over the Four Corners Region. Environmental Science & Technology, 2017, 51, 5832-5837.	10.0	52
14	Improved Constraints on Global Methane Emissions and Sinks Using Î´¹³Câ€CH₄. Global Biogeochemical Cycles, 2021, 35, e2021GB007000.	4.9	50
15	U.S. CH₄ 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
16	Relevance of Emissions Timing in Biofuel Greenhouse Gases and Climate Impacts. Environmental Science & Technology, 2011, 45, 8197-8203.	10.0	40
17	Global Bottom-Up Fossil Fuel Fugitive Methane and Ethane Emissions Inventory for Atmospheric Modeling. ACS Sustainable Chemistry and Engineering, 2014, 2, 1992-2001.	6.7	40
18	Global geological methane emissions: An update of top-down and bottom-up estimates. Elementa, 2019, 7, .	3.2	37

#	Article	IF	Citations
19	Aerially guided leak detection and repair: A pilot field study for evaluating the potential of methane emission detection and cost-effectiveness. Journal of the Air and Waste Management Association, 2019, 69, 71-88.	1.9	36
20	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
21	A tale of two regions: methane emissions from oil and gas production in offshore/onshore Mexico. Environmental Research Letters, 2021, 16, 024019.	5.2	30
22	Comparing facility-level methane emission rate estimates at natural gas gathering and boosting stations. Elementa, 2017, 5, .	3.2	29
23	Using global isotopic data to constrain the role of shale gas production in recent increases in atmospheric methane. Scientific Reports, 2020, 10, 4199.	3.3	29
24	Methane mapping, emission quantification, and attribution in two European cities: Utrecht (NL) and Hamburg (DE). Atmospheric Chemistry and Physics, 2020, 20, 14717-14740.	4.9	29
25	Ethanol Production from Maize. Biotechnology in Agriculture and Forestry, 2009, , 347-364.	0.2	25
26	Isotopic source signatures: Impact of regional variability on the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mi>Î´</mml:mi><mml:mrow><mml:mn>13</mml:mn></mml:mrow></mml:msup><m trend and spatial distribution. Atmospheric Environment, 2018, 174, 99-111.	4.1	24
27	Quantification and assessment of methane emissions from offshore oil and gas facilities on the Norwegian continental shelf. Atmospheric Chemistry and Physics, 2022, 22, 4303-4322.	4.9	23
28	Characterizing Regional Methane Emissions from Natural Gas Liquid Unloading. Environmental Science & Technology, 2019, 53, 4619-4629.	10.0	17
29	Isotopic signatures of major methane sources in the coal seam gas fields and adjacent agricultural districts, Queensland, Australia. Atmospheric Chemistry and Physics, 2021, 21, 10527-10555.	4.9	14
30	Improved global wetland carbon isotopic signatures support post-2006 microbial methane emission increase. Communications Earth & Environment, 2022, 3, .	6.8	11
31	Methane source attribution in a U.S. dry gas basin using spatial patterns of ground and airborne ethane and methane measurements. Elementa, 2019, 7, .	3.2	10
32	Investigating large methane enhancements in the U.S. San Juan Basin. Elementa, 2020, 8, .	3.2	8
33	Coal seam gas industry methane emissions in the Surat Basin, Australia: comparing airborne measurements with inventories. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200458.	3.4	7
34	Conflicting estimates of natural geologic methane emissions. Elementa, 2021, 9, .	3.2	3