

Airborne methane remote measurements reveal heavy- Corners region

Proceedings of the National Academy of Sciences of the United States of America
113, 9734-9739

DOI: [10.1073/pnas.1605617113](https://doi.org/10.1073/pnas.1605617113)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Geochemistry Articles â€œ August 2016. Organic Geochemistry, 2016, 101, e1-e38.	1.8	0
2	Satellite observations of atmospheric methane and their value for quantifying methane emissions. Atmospheric Chemistry and Physics, 2016, 16, 14371-14396.	4.9	230
3	Super-emitters in natural gas infrastructure are caused by abnormal process conditions. Nature Communications, 2017, 8, 14012.	12.8	118
4	Spectral remote sensing for onshore seepage characterization: A critical overview. Earth-Science Reviews, 2017, 168, 48-72.	9.1	59
5	Methane, Black Carbon, and Ethane Emissions from Natural Gas Flares in the Bakken Shale, North Dakota. Environmental Science & Technology, 2017, 51, 5317-5325.	10.0	74
6	Airborne Quantification of Methane Emissions over the Four Corners Region. Environmental Science & Technology, 2017, 51, 5832-5837.	10.0	52
7	A national assessment of underground natural gas storage: identifying wells with designs likely vulnerable to a single-point-of-failure. Environmental Research Letters, 2017, 12, 064004.	5.2	32
8	Rapid, Vehicle-Based Identification of Location and Magnitude of Urban Natural Gas Pipeline Leaks. Environmental Science & Technology, 2017, 51, 4091-4099.	10.0	105
9	A UAV-based system for detecting natural gas leaks. Journal of Unmanned Vehicle Systems, 0, , .	1.2	23
10	The Role of Geological Barriers in Achieving Robust Well Integrity. Energy Procedia, 2017, 114, 5193-5205.	1.8	23
11	Variation in Methane Emission Rates from Well Pads in Four Oil and Gas Basins with Contrasting Production Volumes and Compositions. Environmental Science & Technology, 2017, 51, 8832-8840.	10.0	94
12	MAHI: An Airborne Mid-Infrared Imaging Spectrometer for Industrial Emissions Monitoring. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4558-4566.	6.3	9
13	Mobile measurement of methane emissions from natural gas developments in northeastern British Columbia, Canada. Atmospheric Chemistry and Physics, 2017, 17, 12405-12420.	4.9	73
14	Quantifying methane emissions from natural gas production in north-eastern Pennsylvania. Atmospheric Chemistry and Physics, 2017, 17, 13941-13966.	4.9	54
15	Constraining sector-specific CO ₂ and CH ₄ emissions in the US. Atmospheric Chemistry and Physics, 2017, 17, 3963-3985.	4.9	19
17	Airborne DOAS retrievals of methane, carbon dioxide, and water vapor concentrations at high spatial resolution: application to AVIRIS-NG. Atmospheric Measurement Techniques, 2017, 10, 3833-3850.	3.1	72
18	The Human Health Implications of Oil and Natural Gas Development. Advances in Chemical Pollution, Environmental Management and Protection, 2017, 1, 113-145.	0.5	4
19	Methane emissions from a Californian landfill, determined from airborne remote sensing and in situ measurements. Atmospheric Measurement Techniques, 2017, 10, 3429-3452.	3.1	36

#	ARTICLE	IF	CITATIONS
21	On methane emissions from shale gas development. <i>Energy</i> , 2018, 152, 594-600.	8.8	32
22	Imaging spectrometer stray spectral response: In-flight characterization, correction, and validation. <i>Remote Sensing of Environment</i> , 2018, 204, 850-860.	11.0	37
23	Quantifying uncertainties from mobile-laboratory-derived emissions of well pads using inverse Gaussian methods. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 15145-15168.	4.9	47
24	Testing the performance of field calibration techniques for low-cost gas sensors in new deployment locations: across a county line and across Colorado. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 6351-6378.	3.1	21
25	Assessing the capability of different satellite observing configurations to resolve the distribution of methane emissions at kilometer scales. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 8265-8278.	4.9	27
26	Quantifying methane point sources from fine-scale satellite observations of atmospheric methane plumes. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 5673-5686.	3.1	142
28	Evaluating Methods To Estimate Methane Emissions from Oil and Gas Production Facilities Using LES Simulations. <i>Environmental Science & Technology</i> , 2018, 52, 11206-11214.	10.0	7
29	Bootstrap inversion technique for atmospheric trace gas source detection and quantification using long open-path laser measurements. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 1565-1582.	3.1	12
30	Evaluating the effects of surface properties on methane retrievals using a synthetic airborne visible/infrared imaging spectrometer next generation (AVIRIS-NG) image. <i>Remote Sensing of Environment</i> , 2018, 215, 386-397.	11.0	32
31	Airborne remote sensing and in situ measurements of atmospheric CO ₂ to quantify point source emissions. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 721-739.	3.1	24
32	Natural geological seepage of hydrocarbon gas in the Appalachian Basin and Midwest USA in relation to shale tectonic fracturing and past industrial hydrocarbon production. <i>Science of the Total Environment</i> , 2018, 644, 982-993.	8.0	23
33	Assessment of methane emissions from the U.S. oil and gas supply chain. <i>Science</i> , 2018, 361, 186-188.	12.6	519
34	Machine Learning for the Geosciences: Challenges and Opportunities. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2019, 31, 1544-1554.	5.7	287
35	Retrieval of Atmospheric Parameters and Surface Reflectance from Visible and Shortwave Infrared Imaging Spectroscopy Data. <i>Surveys in Geophysics</i> , 2019, 40, 333-360.	4.6	36
36	An overview of ABoVE airborne campaign data acquisitions and science opportunities. <i>Environmental Research Letters</i> , 2019, 14, 080201.	5.2	57
37	Satellite Discovery of Anomalously Large Methane Point Sources From Oil/Gas Production. <i>Geophysical Research Letters</i> , 2019, 46, 13507-13516.	4.0	127
38	Characterizing anthropogenic methane sources in the Houston and Barnett Shale areas of Texas using the isotopic signature δ ¹³ C in CH ₄ . <i>Science of the Total Environment</i> , 2019, 696, 133856.	8.0	7
39	Emissions of methane in Europe inferred by total column measurements. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 3963-3980.	4.9	10

#	ARTICLE	IF	CITATIONS
40	Neural network radiative transfer for imaging spectroscopy. Atmospheric Measurement Techniques, 2019, 12, 2567-2578.	3.1	21
41	User needs for future Landsat missions. Remote Sensing of Environment, 2019, 231, 111214.	11.0	38
42	A review of close-range and screening technologies for mitigating fugitive methane emissions in upstream oil and gas. Environmental Research Letters, 2019, 14, 053002.	5.2	64
43	Characterizing Regional Methane Emissions from Natural Gas Liquid Unloading. Environmental Science & Technology, 2019, 53, 4619-4629.	10.0	17
44	Imaging Spectroscopy for the Detection, Assessment and Monitoring of Natural and Anthropogenic Hazards. Surveys in Geophysics, 2019, 40, 431-470.	4.6	10
45	Interpreting contemporary trends in atmospheric methane. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2805-2813.	7.1	205
46	Methane Mapping with Future Satellite Imaging Spectrometers. Remote Sensing, 2019, 11, 3054.	4.0	30
47	California's methane super-emitters. Nature, 2019, 575, 180-184.	27.8	192
48	Potential of next-generation imaging spectrometers to detect and quantify methane point sources from space. Atmospheric Measurement Techniques, 2019, 12, 5655-5668.	3.1	58
49	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
50	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
51	Deep Remote Sensing Methods for Methane Detection in Overhead Hyperspectral Imagery. , 2020, , .		11
52	Strong temporal variability in methane fluxes from natural gas well pad soils. Atmospheric Pollution Research, 2020, 11, 1386-1395.	3.8	13
53	Quantifying Time-Averaged Methane Emissions from Individual Coal Mine Vents with GHGSat-D Satellite Observations. Environmental Science & Technology, 2020, 54, 10246-10253.	10.0	46
54	Temporal Variability of Emissions Revealed by Continuous, Long-Term Monitoring of an Underground Natural Gas Storage Facility. Environmental Science & Technology, 2020, 54, 14589-14597.	10.0	12
55	Continuous and real-time indoor and outdoor methane sensing with portable optical sensor using rapidly pulsed IR LEDs. Talanta, 2020, 218, 121144.	5.5	18
56	Fast and Accurate Retrieval of Methane Concentration From Imaging Spectrometer Data Using Sparsity Prior. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6480-6492.	6.3	41
57	Synthesis of Methane Observations Across Scales: Strategies for Deploying a Multitiered Observing Network. Geophysical Research Letters, 2020, 47, e2020GL087869.	4.0	16

#	ARTICLE	IF	CITATIONS
58	Daily Satellite Observations of Methane from Oil and Gas Production Regions in the United States. <i>Scientific Reports</i> , 2020, 10, 1379.	3.3	76
59	Methane emissions from underground gas storage in California. <i>Environmental Research Letters</i> , 2020, 15, 045005.	5.2	25
60	Airborne Mapping Reveals Emergent Power Law of Arctic Methane Emissions. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085707.	4.0	39
61	Quantifying methane emissions from the largest oil-producing basin in the United States from space. <i>Science Advances</i> , 2020, 6, eaaz5120.	10.3	155
62	Multisatellite Imaging of a Gas Well Blowout Enables Quantification of Total Methane Emissions. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090864.	4.0	39
63	Imaging Spectroscopy for Conservation Applications. <i>Remote Sensing</i> , 2021, 13, 292.	4.0	10
64	Absorptive Weak Plume Detection on Gaussian and Non-Gaussian Background Clutter. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021, 14, 6842-6854.	4.9	3
65	Retrieval of Global Carbon Dioxide From TanSat Satellite and Comprehensive Validation With TCCON Measurements and Satellite Observations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-16.	6.3	12
66	Detection and quantification of CH ₄ plumes using the WFM-DOAS retrieval on AVIRIS-NG hyperspectral data. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 1267-1291.	3.1	16
67	The GHGSat-D imaging spectrometer. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 2127-2140.	3.1	62
68	A Statistical Evaluation of WRF-LES Trace Gas Dispersion Using Project Prairie Grass Measurements. <i>Monthly Weather Review</i> , 2021, , .	1.4	2
69	High-frequency monitoring of anomalous methane point sources with multispectral Sentinel-2 satellite observations. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 2771-2785.	3.1	57
70	Repair Failures Call for New Policies to Tackle Leaky Natural Gas Distribution Systems. <i>Environmental Science & Technology</i> , 2021, 55, 6561-6570.	10.0	10
72	NASA's surface biology and geology designated observable: A perspective on surface imaging algorithms. <i>Remote Sensing of Environment</i> , 2021, 257, 112349.	11.0	148
73	Quantifying Global Power Plant Carbon Dioxide Emissions With Imaging Spectroscopy. <i>AGU Advances</i> , 2021, 2, e2020AV000350.	5.4	32
74	Satellite-based survey of extreme methane emissions in the Permian basin. <i>Science Advances</i> , 2021, 7, .	10.3	66
75	Intermittency of Large Methane Emitters in the Permian Basin. <i>Environmental Science and Technology Letters</i> , 2021, 8, 567-573.	8.7	83
76	Where the Methane Isâ€”Insights from Novel Airborne LiDAR Measurements Combined with Ground Survey Data. <i>Environmental Science & Technology</i> , 2021, 55, 9773-9783.	10.0	54

#	ARTICLE	IF	CITATIONS
77	Mechanisms for log normal concentration distributions in the environment. <i>Scientific Reports</i> , 2021, 11, 16418.	3.3	14
78	Mobile atmospheric measurements and local-scale inverse estimation of the location and rates of brief CH ₄ and CO ₂ releases from point sources. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5987-6003.	3.1	6
79	Impact of scene-specific enhancement spectra on matched filter greenhouse gas retrievals from imaging spectroscopy. <i>Remote Sensing of Environment</i> , 2021, 264, 112574.	11.0	11
80	Mapping methane point emissions with the PRISMA spaceborne imaging spectrometer. <i>Remote Sensing of Environment</i> , 2021, 265, 112671.	11.0	59
81	Improved methane emission estimates using AVIRIS-NG and an Airborne Doppler Wind Lidar. <i>Remote Sensing of Environment</i> , 2021, 266, 112681.	11.0	13
82	VideoGasNet: Deep learning for natural gas methane leak classification using an infrared camera. <i>Energy</i> , 2022, 238, 121516.	8.8	18
83	Mobile measurement of methane emissions from natural gas developments in northeastern British Columbia, Canada. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 12405-12420.	4.9	16
84	An Analysis of Abandoned Oil Well Characteristics Affecting Methane Emissions Estimates in the Cherokee Platform in Eastern Oklahoma. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089663.	4.0	24
85	Quantum-cascade-laser-based dual-comb thermometry and speciation at high temperatures. <i>Measurement Science and Technology</i> , 2021, 32, 035501.	2.6	15
86	Using remote sensing to detect, validate, and quantify methane emissions from California solid waste operations. <i>Environmental Research Letters</i> , 2020, 15, 054012.	5.2	49
87	Attribution of methane point source emissions using airborne imaging spectroscopy and the Vista-California methane infrastructure dataset. <i>Environmental Research Letters</i> , 2020, 15, 124001.	5.2	8
88	Investigating large methane enhancements in the U.S. San Juan Basin. <i>Elementa</i> , 2020, 8, .	3.2	8
89	Methane source attribution in a U.S. dry gas basin using spatial patterns of ground and airborne ethane and methane measurements. <i>Elementa</i> , 2019, 7, .	3.2	10
90	A methane emissions reduction equivalence framework for alternative leak detection and repair programs. <i>Elementa</i> , 2019, 7, .	3.2	8
91	Single-blind inter-comparison of methane detection technologies – results from the Stanford/EDF Mobile Monitoring Challenge. <i>Elementa</i> , 2019, 7, .	3.2	54
92	Air quality impacts from oil and natural gas development in Colorado. <i>Elementa</i> , 2020, 8, .	3.2	17
94	Detection of Methane Emission from a Local Source Using GOSAT Target Observations. <i>Remote Sensing</i> , 2020, 12, 267.	4.0	19
95	Towards accurate methane point-source quantification from high-resolution 2-D plume imagery. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 6667-6681.	3.1	30

#	ARTICLE	IF	CITATIONS
96	Quantifying the impact of aerosol scattering on the retrieval of methane from airborne remote sensing measurements. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 6755-6769.	3.1	8
97	Advanced Leak Detection and Quantification of Methane Emissions Using sUAS. <i>Drones</i> , 2021, 5, 117.	4.9	13
98	Quantifying CO2 emissions from a thermal power plant based on CO2 column measurements by portable Fourier transform spectrometers. <i>Remote Sensing of Environment</i> , 2021, 267, 112714.	11.0	8
99	High Ethylene and Propylene in an Area Dominated by Oil Production. <i>Atmosphere</i> , 2021, 12, 1.	2.3	20
100	UAV-based remote sensing for the petroleum industry and environmental monitoring: State-of-the-art and perspectives. <i>Journal of Petroleum Science and Engineering</i> , 2022, 208, 109633.	4.2	61
101	Quantification of CH ₄ coal mining emissions in Upper Silesia by passive airborne remote sensing observations with the Methane Airborne MAPper (MAMAP) instrument during the CO ₂ and Methane (CoMet) campaign. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 17345-17371.	4.9	16
102	Characterizing Methane Emission Hotspots From Thawing Permafrost. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006922.	4.9	19
103	MethaNet – An AI-driven approach to quantifying methane point-source emission from high-resolution 2-D plume imagery. <i>Remote Sensing of Environment</i> , 2022, 269, 112809.	11.0	13
104	Regional Surveys of CH ₄ Point Sources Across North America: Campaigns, Algorithms, and Results. , 2020, , .		0
105	Methane Gas Emission Detection using Deep Learning and Hyperspectral Imagery. , 2021, , .		1
106	Geomorphological patterns of remotely sensed methane hot spots in the Mackenzie Delta, Canada. <i>Environmental Research Letters</i> , 2022, 17, 015009.	5.2	6
107	Methane emissions in the United States, Canada, and Mexico: evaluation of national methane emission inventories and 2010–2017 sectoral trends by inverse analysis of in situ (GLOBALVIEWplus) Tj ETQq1 1 0.784314 rgBT /Overlock 101 <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 395-418.	4.9	25
110	Satellites Detect Abatable Super-Emissions in One of the World's Largest Methane Hotspot Regions. <i>Environmental Science & Technology</i> , 2022, 56, 2143-2152.	10.0	40
111	Global assessment of oil and gas methane ultra-emitters. <i>Science</i> , 2022, 375, 557-561.	12.6	114
112	Mapping methane plumes at very high spatial resolution with the WorldView-3 satellite. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 1657-1674.	3.1	28
113	Remote sensing of methane plumes: instrument tradeoff analysis for detecting and quantifying local sources at global scale. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 7999-8017.	3.1	7
114	Joint Use of in-Scene Background Radiance Estimation and Optimal Estimation Methods for Quantifying Methane Emissions Using PRISMA Hyperspectral Satellite Data: Application to the Korpezhe Industrial Site. <i>Remote Sensing</i> , 2021, 13, 4992.	4.0	6
115	Controlled-release experiment to investigate uncertainties in UAV-based emission quantification for methane point sources. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 2177-2198.	3.1	14

#	ARTICLE	IF	CITATIONS
116	Intelligent monitoring of fugitive emissions – comparison of continuous monitoring with intelligent analytics to other emissions monitoring technologies. , 2022, 62, 56-65.		1
117	Quantifying methane emissions from the global scale down to point sources using satellite observations of atmospheric methane. Atmospheric Chemistry and Physics, 2022, 22, 9617-9646.	4.9	62
118	Methane remote sensing and emission quantification of offshore shallow water oil and gas platforms in the Gulf of Mexico. Environmental Research Letters, 2022, 17, 084039.	5.2	20
119	Using satellites to uncover large methane emissions from landfills. Science Advances, 2022, 8, .	10.3	45
120	Comprehensive Summary of Methane Airborne Quantification Results. , 2022, , .		0
121	Using Multiscale Ethane/Methane Observations to Attribute Coal Mine Vent Emissions in the San Juan Basin From 2013 to 2021. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	1
122	Strong methane point sources contribute a disproportionate fraction of total emissions across multiple basins in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	31
123	Satellite quantification of oil and natural gas methane emissions in the US and Canada including contributions from individual basins. Atmospheric Chemistry and Physics, 2022, 22, 11203-11215.	4.9	32
124	Comparing airborne algorithms for greenhouse gas flux measurements over the Alberta oil sands. Atmospheric Measurement Techniques, 2022, 15, 5841-5859.	3.1	4
125	Evaluating the detectability of methane point sources from satellite observing systems using microscale modeling. Scientific Reports, 2022, 12, .	3.3	1
126	Recent Advances Toward Transparent Methane Emissions Monitoring: A Review. Environmental Science & Technology, 2022, 56, 16567-16581.	10.0	7
127	Detecting and quantifying methane emissions from oil and gas production: algorithm development with ground-truth calibration based on Sentinel-2 satellite imagery. Atmospheric Measurement Techniques, 2022, 15, 7155-7169.	3.1	2
128	Understanding the potential of Sentinel-2 for monitoring methane point emissions. Atmospheric Measurement Techniques, 2023, 16, 89-107.	3.1	14
129	Empirical quantification of methane emission intensity from oil and gas producers in the Permian basin. Environmental Research Letters, 2023, 18, 024029.	5.2	5
130	Methane emissions decline from reduced oil, natural gas, and refinery production during COVID-19. Environmental Research Communications, 2023, 5, 021006.	2.3	2
131	Comparison of Methane Detection Using Shortwave and Longwave Infrared Hyperspectral Sensors Under Varying Environmental Conditions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2023, 16, 2517-2531.	4.9	0
132	Constraining industrial ammonia emissions using hyperspectral infrared imaging. Remote Sensing of Environment, 2023, 291, 113559.	11.0	0
133	Observation-derived 2010-2019 trends in methane emissions and intensities from US oil and gas fields tied to activity metrics. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.1	7

#	ARTICLE	IF	CITATIONS
134	Analysis of a tiered top-down approach using satellite and aircraft platforms to monitor oil and gas facilities in the Permian basin. <i>Renewable and Sustainable Energy Reviews</i> , 2023, 178, 113265.	16.4	2
135	Robust probabilities of detection and quantification uncertainty for aerial methane detection: Examples for three airborne technologies. <i>Remote Sensing of Environment</i> , 2023, 288, 113499.	11.0	12
136	Spectrometric imaging of sub-hourly methane emission dynamics from coal mine ventilation. <i>Environmental Research Letters</i> , 2023, 18, 044030.	5.2	1
137	Single-blind validation of space-based point-source detection and quantification of onshore methane emissions. <i>Scientific Reports</i> , 2023, 13, .	3.3	20
138	Applications of Artificial Intelligence and Machine Learning in Geospatial Data. <i>Advances in Geospatial Technologies Book Series</i> , 2023, , 196-219.	0.2	1
139	Using a deep neural network to detect methane point sources and quantify emissions from PRISMA hyperspectral satellite images. <i>Atmospheric Measurement Techniques</i> , 2023, 16, 2627-2640.	3.1	2
140	Quantification of oil and gas methane emissions in the Delaware and Marcellus basins using a network of continuous tower-based measurements. <i>Atmospheric Chemistry and Physics</i> , 2023, 23, 6127-6144.	4.9	3
141	Atmospheric remote sensing for anthropogenic methane emissions: Applications and research opportunities. <i>Science of the Total Environment</i> , 2023, 893, 164701.	8.0	11
142	Toward a versatile spaceborne architecture for immediate monitoring of the global methane pledge. <i>Atmospheric Chemistry and Physics</i> , 2023, 23, 5233-5249.	4.9	0
143	Improving quantification of methane point source emissions from imaging spectroscopy. <i>Remote Sensing of Environment</i> , 2023, 295, 113652.	11.0	12
144	S2MetNet: A novel dataset and deep learning benchmark for methane point source quantification using Sentinel-2 satellite imagery. <i>Remote Sensing of Environment</i> , 2023, 295, 113708.	11.0	1
145	Daily detection and quantification of methane leaks using Sentinel-3: a tiered satellite observation approach with Sentinel-2 and Sentinel-5p. <i>Remote Sensing of Environment</i> , 2023, 296, 113716.	11.0	5
146	Verifying Methane Inventories and Trends With Atmospheric Methane Data. <i>AGU Advances</i> , 2023, 4, .	5.4	1
147	Automated detection and monitoring of methane super-emitters using satellite data. <i>Atmospheric Chemistry and Physics</i> , 2023, 23, 9071-9098.	4.9	8
148	MethaneMapper: Spectral Absorption Aware Hyperspectral Transformer for Methane Detection. , 2023, , .		2
149	Plume detection and emission estimate for biomass burning plumes from TROPOMI carbon monoxide observations using APE v1.1. <i>Geoscientific Model Development</i> , 2023, 16, 4835-4852.	3.6	0
150	Methane retrievals from airborne HySpex observations in the shortwave infrared. <i>Atmospheric Measurement Techniques</i> , 2023, 16, 4195-4214.	3.1	0
151	Avoiding methane emission rate underestimates when using the divergence method. <i>Environmental Research Letters</i> , 2023, 18, 114033.	5.2	0

#	ARTICLE	IF	CITATIONS
152	æ,©åæ°”å½“é€šéµéµéµ—1æ³•åšè¿å±•. Guangxue Xuebao/Acta Optica Sinica, 2023, 43, 1899906.	1.2	1
153	ç...ç,è¡CEä,šç”²çf·æž’æ”¾å«æ~ÿé¥æ,,ÿç”ç©¶è¿¿å±±•ä,žå±±•æœœ». Guangxue Xuebao/Acta Optica Sinica, 2023, 43, 1899908.	0	0
154	Application of Portable CH4 Detector Based on TDLAS Technology in Natural Gas Purification Plant. Atmosphere, 2023, 14, 1709.	2.3	2
155	Measuring Carbon Dioxide Emissions From Liquefied Natural Gas (LNG) Terminals With Imaging Spectroscopy. Geophysical Research Letters, 2023, 50, .	4.0	0
156	Assessing the Relative Importance of Satellite-Detected Methane Superemitters in Quantifying Total Emissions for Oil and Gas Production Areas in Algeria. Environmental Science & Technology, 2023, 57, 19545-19556.	10.0	0
157	Attribution of individual methane and carbon dioxide emission sources using EMIT observations from space. Science Advances, 2023, 9, .	10.3	5
158	Methane point source quantification using MethaneAIR: a new airborne imaging spectrometer. Atmospheric Measurement Techniques, 2023, 16, 5771-5785.	3.1	1
159	Geostationary satellite observations of extreme and transient methane emissions from oil and gas infrastructure. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.1	0
160	Performance and sensitivity of column-wise and pixel-wise methane retrievals for imaging spectrometers. Atmospheric Measurement Techniques, 2023, 16, 6065-6074.	3.1	1
161	A Preliminary Methane Emission Study of Typical Coalbed Methane Production Areas Based on Multi-satellites Remote Sensing Data. Journal of Physics: Conference Series, 2024, 2679, 012056.	0.4	0
162	Quantifying particulate matter optical properties and flow rate in industrial stack plumes from the PRISMA hyperspectral imager. Atmospheric Measurement Techniques, 2024, 17, 57-71.	3.1	0
163	High-Resolution Methane Mapping With the EnMAP Satellite Imaging Spectroscopy Mission. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62, 1-12.	6.3	1
164	The Improvement of Methane Plume Detection with High-Resolution Satellite-Based Imaging Spectrometers. , 0, , .		0
166	Large-Scale Controlled Experiment Demonstrates Effectiveness of Methane Leak Detection and Repair Programs at Oil and Gas Facilities. Environmental Science & Technology, 0, , .	10.0	0
167	First TanSat CO2 retrieval over land and ocean using both nadir and glint spectroscopy. Remote Sensing of Environment, 2024, 304, 114053.	11.0	0
168	Exploring Urban XCO2 Patterns Using PRISMA Satellite: A Case Study in Shanghai. Atmosphere, 2024, 15, 246.	2.3	0
169	Exploiting the entire near-infrared spectral range to improve the detection of methane plumes with high-resolution imaging spectrometers. Atmospheric Measurement Techniques, 2024, 17, 1333-1346.	3.1	0
170	Evolution of light-absorbing plume inversion methods using synthetic CO2 emissions. Remote Sensing of Environment, 2024, 305, 113900.	11.0	0

#	ARTICLE	IF	CITATIONS
171	Individual coal mine methane emissions constrained by eddy covariance measurements: low bias and missing sources. <i>Atmospheric Chemistry and Physics</i> , 2024, 24, 3009-3028.	4.9	0
172	US oil and gas system emissions from nearly one million aerial site measurements. <i>Nature</i> , 2024, 627, 328-334.	27.8	0
173	Exploiting the Matched Filter to Improve the Detection of Methane Plumes with Sentinel-2 Data. <i>Remote Sensing</i> , 2024, 16, 1023.	4.0	0
174	Increased methane emissions from oil and gas following the Soviet Union's collapse. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2024, 121, .	7.1	0