

Joachim Mohn

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

2,898
citations

218677

26
h-index

175258

52
g-index

84
all docs

84
docs citations

84
times ranked

3079
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanisms of N ₂ O production in biological wastewater treatment under nitrifying and denitrifying conditions. <i>Water Research</i> , 2012, 46, 1027-1037.	11.3	443
2	Full-Scale Nitrogen Removal from Digester Liquid with Partial Nitritation and Anammox in One SBR. <i>Environmental Science & Technology</i> , 2009, 43, 5301-5306.	10.0	437
3	The nitrogen cycle: A review of isotope effects and isotope modeling approaches. <i>Soil Biology and Biochemistry</i> , 2017, 105, 121-137.	8.8	259
4	Determination of biogenic and fossil CO ₂ emitted by waste incineration based on ¹⁴ C and mass balances. <i>Bioresource Technology</i> , 2008, 99, 6471-6479.	9.6	139
5	Site-specific ¹⁵ N isotopic signatures of abiotically produced N ₂ O. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 78, 72-82.	3.9	103
6	Interlaboratory assessment of nitrous oxide isotopomer analysis by isotope ratio mass spectrometry and laser spectroscopy: current status and perspectives. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 1995-2007.	1.5	89
7	In situ observations of the isotopic composition of methane at the Cabauw tall tower site. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 10469-10487.	4.9	77
8	Determination of N ₂ O isotopomers with quantum cascade laser based absorption spectroscopy. <i>Optics Express</i> , 2008, 16, 9239.	3.4	73
9	What can we learn from N ₂ O isotope data? â€“ Analytics, processes and modelling. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8858.	1.5	67
10	Growth of <i>Nitrosococcus</i> -Related Ammonia Oxidizing Bacteria Coincides with Extremely Low pH Values in Wastewater with High Ammonia Content. <i>Environmental Science & Technology</i> , 2017, 51, 6857-6866.	10.0	64
11	Increased rates of denitrification in nitrogen-treated forest soils. <i>Forest Ecology and Management</i> , 2000, 137, 113-119.	3.2	61
12	Isotope Signatures of N ₂ O in a Mixed Microbial Population System: Constraints on N ₂ O Producing Pathways in Wastewater Treatment. <i>Environmental Science & Technology</i> , 2013, 47, 130118101927005.	10.0	59
13	N ₂ O production and consumption from stable isotopic and concentration data in the Peruvian coastal upwelling system. <i>Global Biogeochemical Cycles</i> , 2017, 31, 678-698.	4.9	59
14	Isotopic evidence for nitrous oxide production pathways in a partial nitritation-anammox reactor. <i>Water Research</i> , 2015, 83, 258-270.	11.3	52
15	Novel laser spectroscopic technique for continuous analysis of N ₂ O isotopomers â€“ application and intercomparison with isotope ratio mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 216-222.	1.5	50
16	First on-line isotopic characterization of N ₂ O above intensively managed grassland. <i>Biogeosciences</i> , 2015, 12, 2517-2531.	3.3	44
17	Real-time analysis of ¹³ C- and ¹⁵ N-D-CH ₄ in ambient air with laser spectroscopy: method development and first intercomparison results. <i>Atmospheric Measurement Techniques</i> . 2016, 9, 263-280.	3.1	43
18	Bioethanol Blending Reduces Nanoparticle, PAH, and Alkyl- and Nitro-PAH Emissions and the Genotoxic Potential of Exhaust from a Gasoline Direct Injection Flex-Fuel Vehicle. <i>Environmental Science & Technology</i> , 2016, 50, 11853-11861.	10.0	43

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19	Fossil and biogenic CO ₂ from waste incineration based on a yearlong radiocarbon study. <i>Waste Management</i> , 2012, 32, 1516-1520.	7.4	40
20	Application of a quantum cascade laser-based spectrometer in a closed chamber system for real-time ¹³ C and ¹⁸ O measurements of soil-respired CO ₂ . <i>Agricultural and Forest Meteorology</i> , 2011, 151, 39-48.	4.8	39
21	Continuous field measurements of ¹³ C and trace gases by FTIR spectroscopy. <i>Isotopes in Environmental and Health Studies</i> , 2008, 44, 241-251.	1.0	36
22	Attribution of N ₂ O sources in a grassland soil with laser spectroscopy based isotopocule analysis. <i>Biogeosciences</i> , 2019, 16, 3247-3266.	3.3	36
23	Methane preconcentration by adsorption: a methodology for materials and conditions selection. <i>Adsorption</i> , 2014, 20, 657-666.	3.0	35
24	N ₂ O isotopocule measurements using laser spectroscopy: analyzer characterization and intercomparison. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 2797-2831.	3.1	34
25	Time-resolved ammonia measurement in vehicle exhaust. <i>International Journal of Environment and Pollution</i> , 2004, 22, 342.	0.2	30
26	Nitrous oxide and methane emissions and nitrous oxide isotopic composition from waste incineration in Switzerland. <i>Waste Management</i> , 2015, 35, 135-140.	7.4	30
27	Co-formation and co-release of genotoxic PAHs, alkyl-PAHs and soot nanoparticles from gasoline direct injection vehicles. <i>Atmospheric Environment</i> , 2018, 178, 242-254.	4.1	29
28	First real-time isotopic characterisation of N ₂ O from chemodenitrification. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 267, 17-32.	3.9	28
29	Successful year-round mainstream partial nitritation anammox: Assessment of effluent quality, performance and N ₂ O emissions. <i>Water Research X</i> , 2022, 16, 100145.	6.1	28
30	Optimization of automated gas sample collection and isotope ratio mass spectrometric analysis of ¹³ C of CO ₂ in air. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 3883-3892.	1.5	26
31	Advances in reference materials and measurement techniques for greenhouse gas atmospheric observations. <i>Metrologia</i> , 2019, 56, 034006.	1.2	24
32	In-depth analysis of N ₂ O fluxes in tropical forest soils of the Congo Basin combining isotope and functional gene analysis. <i>ISME Journal</i> , 2021, 15, 3357-3374.	9.8	24
33	High-precision ¹³ CO ₂ analysis by FTIR spectroscopy using a novel calibration strategy. <i>Journal of Molecular Structure</i> , 2007, 834-836, 95-101.	3.6	23
34	Tracking nitrous oxide emission processes at a suburban site with semicontinuous, in situ measurements of isotopic composition. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 1850-1870.	3.3	23
35	Preliminary assessment of stable nitrogen and oxygen isotopic composition of USGS51 and USGS52 nitrous oxide reference gases and perspectives on calibration needs. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 1207-1214.	1.5	21
36	A dual tracer ratio method for comparative emission measurements in an experimental dairy housing. <i>Atmospheric Environment</i> , 2018, 179, 12-22.	4.1	19

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37	Temperature Dependence and Interferences of NO and N ₂ O Microelectrodes Used in Wastewater Treatment. <i>Environmental Science & Technology</i> , 2012, 46, 2257-2266.	10.0	17
38	Reassessment of the NH ₄ NO ₃ thermal decomposition technique for calibration of the N ₂ O isotopic composition. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 2487-2496.	1.5	17
39	Effects of Four Prototype Gasoline Particle Filters (GPFs) on Nanoparticle and Genotoxic PAH Emissions of a Gasoline Direct Injection (GDI) Vehicle. <i>Environmental Science & Technology</i> , 2018, 52, 10709-10718.	10.0	17
40	Low N ₂ O and variable CH ₄ fluxes from tropical forest soils of the Congo Basin. <i>Nature Communications</i> , 2022, 13, 330.	12.8	17
41	N ₂ O emissions and source processes in snow-covered soils in the Swiss Alps. <i>Isotopes in Environmental and Health Studies</i> , 2013, 49, 520-531.	1.0	15
42	Development of a field-deployable method for simultaneous, real-time measurements of the four most abundant N ₂ O isotopocules. <i>Isotopes in Environmental and Health Studies</i> , 2018, 54, 1-15.	1.0	13
43	Tracing N ₂ O formation in full-scale wastewater treatment with natural abundance isotopes indicates control by organic substrate and process settings. <i>Water Research X</i> , 2022, 15, 100130.	6.1	12
44	Denitrification Is the Main Nitrous Oxide Source Process in Grassland Soils According to Quasi-Continuous Isotopocule Analysis and Biogeochemical Modeling. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2019GB006505.	4.9	11
45	Methane Emissions and Milk Fatty Acid Profiles in Dairy Cows Fed Linseed, Measured at the Group Level in a Naturally Ventilated Housing and Individually in Respiration Chambers. <i>Animals</i> , 2020, 10, 1091.	2.3	11
46	The isotopic composition of atmospheric nitrous oxide observed at the high-altitude research station Jungfraujoch, Switzerland. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 6495-6519.	4.9	11
47	Biofuel-Promoted Polychlorinated Dibenzodioxin/furan Formation in an Iron-Catalyzed Diesel Particle Filter. <i>Environmental Science & Technology</i> , 2015, 49, 9273-9279.	10.0	10
48	Quantifying Isotopic Signatures of N ₂ O Using Quantum Cascade Laser Absorption Spectroscopy. <i>Chimia</i> , 2019, 73, 232.	0.6	9
49	Assessment of the inverse dispersion method for the determination of methane emissions from a dairy housing. <i>Agricultural and Forest Meteorology</i> , 2021, 307, 108501.	4.8	9
50	First investigation and absolute calibration of clumped isotopes in N ₂ O by mid-infrared laser spectroscopy. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8836.	1.5	7
51	Isotopically characterised N ₂ O reference materials for use as community standards. <i>Rapid Communications in Mass Spectrometry</i> , 2022, 36, e9296.	1.5	5
52	Nitrogen isotope effects can be used to diagnose N transformations in wastewater anammox systems. <i>Scientific Reports</i> , 2021, 11, 7850.	3.3	4
53	Comparison of Methane Emission Patterns from Dairy Housings with Solid and Slatted Floors at Two Locations. <i>Agronomy</i> , 2022, 12, 381.	3.0	3
54	CleanEx: A Versatile Automated Methane Preconcentration Device for High-Precision Analysis of ¹³ CH ₄ , ¹² CH ₃ D, and ¹³ CH ₃ D. <i>Analytical Chemistry</i> , 2022, 94, 9981-9986.	6.5	3

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55	Using Isotopic Fingerprints to Trace Nitrous Oxide in the Atmosphere. <i>Chimia</i> , 2017, 71, 46-46.	0.6	2
56	Photolytic fractionation of seven singly and doubly substituted nitrous oxide isotopocules measured by quantum cascade laser absorption spectroscopy. <i>Atmospheric Environment: X</i> , 2020, 8, 100094.	1.4	2
57	Characterisation of gas reference materials for underpinning atmospheric measurements of stable isotopes of nitrous oxide. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5447-5458.	3.1	1
58	Clumped isotope signatures of nitrous oxide formed by bacterial denitrification. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 328, 120-129.	3.9	1
59	MIR Spectroscopy beyond trace levels - environmental and industrial applications. , 2015, , .		0
60	Multi-Species, High-Precision MIR Trace Gas Detection for Environmental Applications. , 2018, , .		0
61	Optical isotope ratio spectroscopy “ complementing isotope ratio mass spectrometry. , 2021, , .		0