Markus Greule

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7161435/publications.pdf

Version: 2024-02-01

49 papers	1,155 citations	430754 18 h-index	434063 31 g-index
57 all docs	57 docs citations	57 times ranked	1352 citing authors

#	Article	IF	Citations
1	Evidence for methane production by saprotrophic fungi. Nature Communications, 2012, 3, 1046.	5.8	169
2	Exogenous addition of H 2 for an in situ biogas upgrading through biological reduction of carbon dioxide into methane. Waste Management, 2017, 68, 146-156.	3.7	110
3	Improved rapid authentication of vanillin using Î´13C and Î´2H values. European Food Research and Technology, 2010, 231, 933-941.	1.6	52
4	A rapid and precise method for determination of D/H ratios of plant methoxyl groups. Rapid Communications in Mass Spectrometry, 2008, 22, 3983-3988.	0.7	49
5	Stable isotope and high precision concentration measurements confirm that all humans produce and exhale methane. Journal of Breath Research, 2016, 10, 016003.	1.5	41
6	Î´²H, Î´¹³C and Î´¹⁸O from whole wood,Î±-cellulose and lignin methoxyl groups inPinus sylvestris: a multi-parameter approach. Isotopes in Environmental and Health Studies, 2015, 51, 553-568.	0.5	36
7	Identification of methanogenic pathways in anaerobic digesters using stable carbon isotopes. Engineering in Life Sciences, 2010, 10, 509-514.	2.0	34
8	A simple rapid method to precisely determine ¹³C/¹²C ratios of plant methoxyl groups. Rapid Communications in Mass Spectrometry, 2009, 23, 1710-1714.	0.7	33
9	Measurements of 13C/12C Methane from Anaerobic Digesters: Comparison of Optical Spectrometry with Continuous-Flow Isotope Ratio Mass Spectrometry. Environmental Science & Technology, 2010, 44, 5067-5073.	4.6	30
10	Isotopic characterization of vanillin ex glucose by GC-IRMS - New challenge for natural vanilla flavour authentication?. Food Control, 2019, 106, 106735.	2.8	30
11	Non-microbial methane formation in oxic soils. Biogeosciences, 2012, 9, 5291-5301.	1.3	29
12	Non-microbial methane emissions from fresh leaves: Effects of physical wounding and anoxia. Atmospheric Environment, 2011, 45, 4915-4921.	1.9	26
13	Isotopic composition of H₂ from wood burning: Dependency on combustion efficiency, moisture content, and Î´D of local precipitation. Journal of Geophysical Research, 2010, 115, .	3.3	22
14	Mean annual temperatures of mid-latitude regions derived from Î´2H values of wood lignin methoxyl groups and its implications for paleoclimate studies. Science of the Total Environment, 2017, 574, 1276-1282.	3.9	22
15	Feed additives: authenticity assessment using multicomponent-/multielement-isotope ratio mass spectrometry. European Food Research and Technology, 2008, 227, 767-776.	1.6	21
16	Probing the diversity of chloromethane-degrading bacteria by comparative genomics and isotopic fractionation. Frontiers in Microbiology, 2014, 5, 523.	1.5	21
17	Late Quaternary relative humidity changes from Mt. Kilimanjaro, based on a coupled 2H-18O biomarker paleohygrometer approach. Quaternary International, 2017, 438, 116-130.	0.7	21
18	Organic compounds in fluid inclusions of Archean quartzâ€"Analogues of prebiotic chemistry on early Earth. PLoS ONE, 2017, 12, e0177570.	1.1	21

#	Article	IF	Citations
19	Vanilla authenticity control by DNA barcoding and isotope data aggregation. Flavour and Fragrance Journal, 2017, 32, 228-237.	1.2	20
20	Evidence for a major missing source in the global chloromethane budget from stable carbon isotopes. Atmospheric Chemistry and Physics, 2019, 19, 1703-1719.	1.9	20
21	Stable hydrogen-isotope analysis of methyl chloride emitted from heated halophytic plants. Atmospheric Environment, 2012, 62, 584-592.	1.9	18
22	Stable hydrogen and carbon isotope ratios of methoxyl groups during plant litter degradation. Isotopes in Environmental and Health Studies, 2015, 51, 143-154.	0.5	17
23	Earliest Eocene cold period and polar amplification - Insights from Î´2H values of lignin methoxyl groups of mummified wood. Palaeogeography, Palaeoclimatology, Palaeoecology, 2018, 505, 326-336.	1.0	17
24	Stable isotope determination of ester and ether methyl moieties in plant methoxyl groups. Isotopes in Environmental and Health Studies, 2011, 47, 470-482.	0.5	16
25	Chloromethane release from carbonaceous meteorite affords new insight into Mars lander findings. Scientific Reports, 2015, 4, 7010.	1.6	16
26	A Stable Isotope Approach to Assessing Water Loss in Fruits and Vegetables during Storage. Journal of Agricultural and Food Chemistry, 2015, 63, 1974-1981.	2.4	15
27	Hydrogen and carbon isotope fractionation during degradation of chloromethane by methylotrophic bacteria. MicrobiologyOpen, 2013, 2, 893-900.	1.2	14
28	Climate signals in Î´13C of wood lignin methoxyl groups from high-elevation larch trees. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 445, 60-71.	1.0	14
29	Stable hydrogen isotope values of lignin methoxyl groups of four tree species across Germany and their implication for temperature reconstruction. Science of the Total Environment, 2017, 579, 263-271.	3.9	14
30	Three wood isotopic reference materials for Î´2H and Î´13C measurements of plant methoxy groups. Chemical Geology, 2020, 533, 119428.	1.4	14
31	Insolation and Greenhouse Gas Forcing of the South American Monsoon System Across Three Glacialâ€interglacial Cycles. Geophysical Research Letters, 2020, 47, e2020GL087948.	1.5	14
32	Evidence of anaerobic syntrophic acetate oxidation in biogas batch reactors by analysis of¹³C carbon isotopes. Isotopes in Environmental and Health Studies, 2013, 49, 365-377.	0.5	13
33	Warm season precipitation signal in Î´²H values of wood lignin methoxyl groups from high elevation larch trees in Switzerland. Rapid Communications in Mass Spectrometry, 2017, 31, 1589-1598.	0.7	13
34	Chloromethane formation and degradation in the fern phyllosphere. Science of the Total Environment, 2018, 634, 1278-1287.	3.9	13
35	D/H ratios of methoxyl groups of the sedimentary organic matter of Lake Holzmaar (Eifel, Germany): A potential palaeoclimate/-hydrology proxy. Geochimica Et Cosmochimica Acta, 2014, 142, 39-52.	1.6	12
36	Sources and sinks of chloromethane in a salt marsh ecosystem: constraints from concentration and stable isotope measurements of laboratory incubation experiments. Environmental Sciences: Processes and Impacts, 2020, 22, 627-641.	1.7	12

#	Article	IF	Citations
37	Chloromethane Degradation in Soils: A Combined Microbial and Twoâ€Dimensional Stable Isotope Approach. Journal of Environmental Quality, 2018, 47, 254-262.	1.0	11
38	Methyl sulfates as methoxy isotopic reference materials for Î´¹³C and Î´²H measurements. Rapid Communications in Mass Spectrometry, 2019, 33, 343-350.	0.7	11
39	The stable carbon isotope signature of methane produced by saprotrophic fungi. Biogeosciences, 2020, 17, 3891-3901.	1.3	11
40	Heptan-2-ol and trans-linalool oxide (fur.) as inherent indicators of natural blackberry flavour using enantioselective and multielement-MDGC-IRMS analysis. European Food Research and Technology, 2008, 226, 1001-1006.	1.6	10
41	Position-specific isotope analysis of the methyl group carbon in methylcobalamin for the investigation of biomethylation processes. Analytical and Bioanalytical Chemistry, 2013, 405, 2833-2841.	1.9	10
42	Chloromethane emissions in human breath. Science of the Total Environment, 2017, 605-606, 405-410.	3.9	10
43	Mass spectrometric measurement of hydrogen isotope fractionation for the reactions of chloromethane with OH and Cl. Atmospheric Chemistry and Physics, 2018, 18, 6625-6635.	1.9	10
44	Measurements and applications of Î´2H values of wood lignin methoxy groups for paleoclimatic studies. Quaternary Science Reviews, 2021, 268, 107107.	1.4	10
45	Tree-ring Î´2H values from lignin methoxyl groups indicate sensitivity to European-scale temperature changes. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 546, 109665.	1.0	9
46	Comment on Authenticity and Traceability of Vanilla Flavors by Analysis of Stable Isotopes of Carbon and Hydrogen. Journal of Agricultural and Food Chemistry, 2015, 63, 5305-5306.	2.4	7
47	A fast and sensitive method for the continuous in situ determination of dissolved methane and its Î´¹³Câ€isotope ratio in surface waters. Limnology and Oceanography: Methods, 2018, 16, 273-285.	1.0	7
48	Chlorine Isotope Fractionation of the Major Chloromethane Degradation Processes in the Environment. Environmental Science & Technology, 2020, 54, 1634-1645.	4.6	7
49	Methane oxidation in industrial biogas plantsâ€”Insights in a novel methanotrophic environment evidenced by pmoA gene analyses and stable isotope labelling studies. Journal of Biotechnology, 2018, 270, 77-84.	1.9	2