Steffen KÃ¼mmel

List of Publications by Year
in descending order

28 papers	601 citations	567281 15 h-index	610901 24 g-index
29 all docs	29 docs citations	29 times ranked	744 citing authors

#	Article	IF	Citations
1	Compound-Specific Hydrogen Isotope Analysis of Heteroatom-Bearing Compounds via Gas Chromatographyâ€“Chromium-Based High-Temperature Conversion (Cr/HTC)â€“Isotope Ratio Mass Spectrometry. Analytical Chemistry, 2015, 87, 9443-9450.	6.5	74
2	Anaerobic naphthalene degradation by sulfate-reducing Desulfobacteraceae from various anoxic aquifers. FEMS Microbiology Ecology, 2015, 91, .	2.7	67
3	Recent advances in multi-element compound-specific stable isotope analysis of organohalides: Achievements, challenges and prospects for assessing environmental sources and transformation. Trends in Environmental Analytical Chemistry, 2016, 11, 1-8.	10.3	42
4	The deep-subsurface sulfate reducer Desulfotomaculum kuznetsovii employs two methanol-degrading pathways. Nature Communications, 2018, 9, 239.	12.8	36
5	Optimization of onâ€line hydrogen stable isotope ratio measurements of halogenâ€•and sulfurâ€bearing organic compounds using elemental analyzerâ€“chromium/highâ€temperature conversion isotope ratio mass spectrometry (EAâ€Cr/HTCâ€IRMS). Rapid Communications in Mass Spectrometry, 2017, 31, 475-484.	1.5	34
6	Calculation of Single Cell Assimilation Rates From SIP-NanoSIMS-Derived Isotope Ratios: A Comprehensive Approach. Frontiers in Microbiology, 2018, 9, 2342.	3.5	29
7	Hydrogen Isotope Fractionation As a Tool to Identify Aerobic and Anaerobic PAH Biodegradation. Environmental Science & Technology, 2016, 50, 3091-3100.	10.0	28
8	Validation of GCâ€“IRMS techniques for Î´13C and Î´2H CSIA of organophosphorus compounds and their potential for studying the mode of hydrolysis in the environment. Analytical and Bioanalytical Chemistry, 2017, 409, 2581-2590.	3.7	26
9	Distinct Carbon Isotope Fractionation Signatures during Biotic and Abiotic Reductive Transformation of Chlordecone. Environmental Science & Technology, 2018, 52, 3615-3624.	10.0	22
10	Compound-Specific Isotope Analysis and Enantiomer Fractionation to Characterize the Transformation of Hexachlorocyclohexane Isomers in a Soilâ€“Wheat Pot System. Environmental Science & Technology, 2020, 54, 8690-8698.	10.0	22
11	Evidence for Benzylsuccinate Synthase Subtypes Obtained by Using Stable Isotope Tools. Journal of Bacteriology, 2013, 195, 4660-4667.	2.2	21
12	Carbon and hydrogen stable isotope analysis for characterizing the chemical degradation of tributyl phosphate. Chemosphere, 2018, 212, 133-142.	8.2	19
13	Dual Câ€“Cl isotope analysis for characterizing the anaerobic transformation of Î±, Î², Î³, and Î´-hexachlorocyclohexane in contaminated aquifers. Water Research, 2020, 184, 116128.	11.3	19
14	A PCR-based assay for the detection of anaerobic naphthalene degradation. FEMS Microbiology Letters, 2014, 354, 55-59.	1.8	18
15	Tracing organic carbon and microbial community structure in mineralogically different soils exposed to redox fluctuations. Biogeochemistry, 2019, 143, 31-54.	3.5	18
16	Characterizing the biotransformation of hexachlorocyclohexanes in wheat using compound-specific stable isotope analysis and enantiomer fraction analysis. Journal of Hazardous Materials, 2021, 406, 124301.	12.4	17
17	Multi-element compound specific stable isotope analysis of chlorinated aliphatic contaminants derived from chlorinated pitches. Science of the Total Environment, 2018, 640-641, 153-162.	8.0	15
18	Soil from a Hexachlorocyclohexane Contaminated Field Site Inoculates Wheat in a Pot Experiment to Facilitate the Microbial Transformation of Î²-Hexachlorocyclohexane Examined by Compound-Specific Isotope Analysis. Environmental Science & Technology, 2021, 55, 13812-13821.	10.0	13

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19	Individual stages of bacterial dichloromethane degradation mapped by carbon and chlorine stable isotope analysis. Journal of Environmental Sciences, 2019, 78, 147-160.	6.1	12
20	Simultaneous Compound-Specific Analysis of Î´³³S and Î´³⁴S in Organic Compounds by GC-MC-ICPMS Using Medium- and Low-Mass-Resolution Modes. Analytical Chemistry, 2020, 92, 14685-14692.	6.5	11
21	Carbon, hydrogen and nitrogen stable isotope fractionation allow characterizing the reaction mechanisms of 1H-benzotriazole aqueous phototransformation. Water Research, 2021, 203, 117519.	11.3	11
22	Uptake of Î±-HCH by wheat from the gas phase and translocation to soil analyzed by a stable carbon isotope labeling experiment. Chemosphere, 2021, 264, 128489.	8.2	10
23	Multi-element isotopic evidence for monochlorobenzene and benzene degradation under anaerobic conditions in contaminated sediments. Water Research, 2021, 207, 117809.	11.3	9
24	Requirements for Chromium Reactors for Use in the Determination of H Isotopes in Compound-Specific Stable Isotope Analysis of Chlorinated Compounds. Analytical Chemistry, 2020, 92, 2383-2387.	6.5	8
25	Enrichment of ANMEâ€2 dominated anaerobic methanotrophy from cold seep sediment in an external ultrafiltration membrane bioreactor. Engineering in Life Sciences, 2018, 18, 368-378.	3.6	6
26	Analysis of Carbon and Hydrogen Stable Isotope Ratios of Phenolic Compounds: Method Development and Biodegradation Applications. ACS ES&T Water, 2022, 2, 32-39.	4.6	5
27	Liquid chromatography/isotope ratio mass spectrometry analysis of halogenated benzoates for characterization of the underlying degradation reaction in Thauera chlorobenzoica CBâ€1 ^T. Rapid Communications in Mass Spectrometry, 2018, 32, 906-912.	1.5	4
28	Uptake and Metabolization of HCH Isomers in Trees Examined over an Annual Growth Period by Compound-Specific Isotope Analysis and Enantiomer Fractionation. Environmental Science & Technology, 2022, 56, 10120-10130.	10.0	4