

Hans Hermann Richnow

List of Publications by Year in descending order

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311
papers

16,471
citations

14655

66
h-index

27406

106
g-index

320
all docs

320
docs citations

320
times ranked

11639
citing authors

#	ARTICLE	IF	CITATIONS
1	Anaerobic Microbial Degradation of Hydrocarbons: From Enzymatic Reactions to the Environment. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 5-28.	1.0	615
2	Methane formation from long-chain alkanes by anaerobic microorganisms. <i>Nature</i> , 1999, 401, 266-269.	27.8	591
3	Stable isotope fractionation analysis as a tool to monitor biodegradation in contaminated aquifers. <i>Journal of Contaminant Hydrology</i> , 2004, 75, 215-255.	3.3	390
4	Monitoring and assessing processes of organic chemicals removal in constructed wetlands. <i>Chemosphere</i> , 2009, 74, 349-362.	8.2	287
5	Thermophilic archaea activate butane via alkyl-coenzyme M formation. <i>Nature</i> , 2016, 539, 396-401.	27.8	279
6	Molecular signals for anaerobic methane oxidation in Black Sea seep carbonates and a microbial mat. <i>Marine Chemistry</i> , 2001, 73, 97-112.	2.3	240
7	Anaerobic Naphthalene Degradation by a Sulfate-Reducing Enrichment Culture. <i>Applied and Environmental Microbiology</i> , 2000, 66, 2743-2747.	3.1	223
8	Combined Application of Stable Carbon Isotope Analysis and Specific Metabolites Determination for Assessing In Situ Degradation of Aromatic Hydrocarbons in a Tar Oil-Contaminated Aquifer. <i>Environmental Science & Technology</i> , 2004, 38, 617-631.	10.0	198
9	Naphthalene Degradation and Incorporation of Naphthalene-Derived Carbon into Biomass by the Thermophile <i>Bacillus thermoleovorans</i> . <i>Applied and Environmental Microbiology</i> , 2000, 66, 518-523.	3.1	189
10	Quantification of organic pollutant degradation in contaminated aquifers using compound specific stable isotope analysis – Review of recent developments. <i>Organic Geochemistry</i> , 2012, 42, 1440-1460.	1.8	177
11	Fate of gram-negative bacterial biomass in soil – mineralization and contribution to SOM. <i>Soil Biology and Biochemistry</i> , 2006, 38, 2860-2870.	8.8	155
12	LaFeO ₃ and BiFeO ₃ perovskites as nanocatalysts for contaminant degradation in heterogeneous Fenton-like reactions. <i>Chemical Engineering Journal</i> , 2014, 239, 322-331.	12.7	151
13	The active microbial diversity drives ecosystem multifunctionality and is physiologically related to carbon availability in Mediterranean semi-arid soils. <i>Molecular Ecology</i> , 2016, 25, 4660-4673.	3.9	151
14	Differential sensitivity of total and active soil microbial communities to drought and forest management. <i>Global Change Biology</i> , 2017, 23, 4185-4203.	9.5	150
15	Anaerobic oxidation of ethane by archaea from a marine hydrocarbon seep. <i>Nature</i> , 2019, 568, 108-111.	27.8	149
16	Stable Hydrogen and Carbon Isotope Fractionation during Microbial Toluene Degradation: Mechanistic and Environmental Aspects. <i>Applied and Environmental Microbiology</i> , 2001, 67, 4842-4849.	3.1	146
17	Fate of microbial biomass-derived amino acids in soil and their contribution to soil organic matter. <i>Organic Geochemistry</i> , 2009, 40, 978-985.	1.8	141
18	Anaerobic Degradation of 2-Methylnaphthalene by a Sulfate-Reducing Enrichment Culture. <i>Applied and Environmental Microbiology</i> , 2000, 66, 5329-5333.	3.1	140

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19	¹³ C/ ¹² C isotope fractionation of aromatic hydrocarbons during microbial degradation. <i>Environmental Microbiology</i> , 1999, 1, 409-414.	3.8	139
20	Hyperthermophilic archaeobacteria within the crater and open-sea plume of erupting Macdonald Seamount. <i>Nature</i> , 1990, 345, 179-182.	27.8	138
21	Microbial in situ degradation of aromatic hydrocarbons in a contaminated aquifer monitored by carbon isotope fractionation. <i>Journal of Contaminant Hydrology</i> , 2003, 65, 101-120.	3.3	137
22	Combined Carbon and Hydrogen Isotope Fractionation Investigations for Elucidating Benzene Biodegradation Pathways. <i>Environmental Science & Technology</i> , 2008, 42, 4356-4363.	10.0	137
23	The ecological and physiological responses of the microbial community from a semiarid soil to hydrocarbon contamination and its bioremediation using compost amendment. <i>Journal of Proteomics</i> , 2016, 135, 162-169.	2.4	136
24	Degradation of crude oil by an arctic microbial consortium. <i>Extremophiles</i> , 2005, 9, 461-470.	2.3	131
25	Stable Isotope Fractionation of Tetrachloroethene during Reductive Dechlorination by <i>Sulfurospirillum multivorans</i> and <i>Desulfitobacterium</i> sp. Strain PCE-S and Abiotic Reactions with Cyanocobalamin. <i>Applied and Environmental Microbiology</i> , 2005, 71, 3413-3419.	3.1	130
26	Fate of bacterial biomass derived fatty acids in soil and their contribution to soil organic matter. <i>Organic Geochemistry</i> , 2009, 40, 29-37.	1.8	130
27	Effects of petroleum contamination on soil microbial numbers, metabolic activity and urease activity. <i>Chemosphere</i> , 2012, 87, 1273-1280.	8.2	129
28	Protein-based stable isotope probing (Protein-SIP) reveals active species within anoxic mixed cultures. <i>ISME Journal</i> , 2008, 2, 1122-1133.	9.8	126
29	Carbon and Hydrogen Stable Isotope Fractionation during Aerobic Bacterial Degradation of Aromatic Hydrocarbons. <i>Applied and Environmental Microbiology</i> , 2002, 68, 5191-5194.	3.1	123
30	Anaerobic benzene degradation by bacteria. <i>Microbial Biotechnology</i> , 2011, 4, 710-724.	4.2	122
31	Evaluation of Toluene Degradation Pathways by Two-Dimensional Stable Isotope Fractionation. <i>Environmental Science & Technology</i> , 2008, 42, 7793-7800.	10.0	119
32	Carbon Isotope Fractionation of Organic Contaminants Due to Retardation on Humic Substances: Implications for Natural Attenuation Studies in Aquifers. <i>Environmental Science & Technology</i> , 2005, 39, 6052-6062.	10.0	118
33	Current approaches for the assessment of in situ biodegradation. <i>Applied Microbiology and Biotechnology</i> , 2010, 86, 839-852.	3.6	118
34	Applicability of Stable Isotope Fractionation Analysis for the Characterization of Benzene Biodegradation in a BTEX-contaminated Aquifer. <i>Environmental Science & Technology</i> , 2007, 41, 3689-3696.	10.0	110
35	Protein-SIP enables time-resolved analysis of the carbon flux in a sulfate-reducing, benzene-degrading microbial consortium. <i>ISME Journal</i> , 2012, 6, 2291-2301.	9.8	109
36	Mycelium-mediated transfer of water and nutrients stimulates bacterial activity in dry and oligotrophic environments. <i>Nature Communications</i> , 2017, 8, 15472.	12.8	109

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37	Molecular characterization of bacterial communities mineralizing benzene under sulfate-reducing conditions. <i>FEMS Microbiology Ecology</i> , 2008, 66, 143-157.	2.7	107
38	Insights from quantitative metaproteomics and protein-stable isotope probing into microbial ecology. <i>ISME Journal</i> , 2013, 7, 1877-1885.	9.8	107
39	Disproportionation of elemental sulfur by haloalkaliphilic bacteria from soda lakes. <i>Extremophiles</i> , 2013, 17, 1003-1012.	2.3	104
40	Functional characterization of an anaerobic benzene-degrading enrichment culture by DNA stable isotope probing. <i>Environmental Microbiology</i> , 2010, 12, 401-411.	3.8	103
41	6-Oxocyclohex-1-ene-1-carboxyl-coenzyme A hydrolases from obligately anaerobic bacteria: characterization and identification of its gene as a functional marker for aromatic compounds degrading anaerobes. <i>Environmental Microbiology</i> , 2008, 10, 1547-1556.	3.8	99
42	Protein-based stable isotope probing. <i>Nature Protocols</i> , 2010, 5, 1957-1966.	12.0	97
43	Investigation of the geochemical impact of CO ₂ on shallow groundwater: design and implementation of a CO ₂ injection test in Northeast Germany. <i>Environmental Earth Sciences</i> , 2012, 67, 335-349.	2.7	91
44	Assimilation of CO ₂ by soil microorganisms and transformation into soil organic matter. <i>Organic Geochemistry</i> , 2004, 35, 1015-1024.	1.8	90
45	Carbon stable isotope fractionation and trophic transfer of fatty acids in fungal based soil food chains. <i>Soil Biology and Biochemistry</i> , 2005, 37, 945-953.	8.8	89
46	Multi-element isotope fractionation concepts to characterize the biodegradation of hydrocarbons "from enzymes to the environment. <i>Current Opinion in Biotechnology</i> , 2016, 41, 90-98.	6.6	88
47	Improving protein extraction and separation methods for investigating the metaproteome of anaerobic benzene communities within sediments. <i>Biodegradation</i> , 2009, 20, 737-750.	3.0	86
48	In situ biodegradation determined by carbon isotope fractionation of aromatic hydrocarbons in an anaerobic landfill leachate plume (Vejen, Denmark). <i>Journal of Contaminant Hydrology</i> , 2003, 64, 59-72.	3.3	84
49	Hydrochemical and isotopic effects associated with petroleum fuel biodegradation pathways in a chalk aquifer. <i>Journal of Contaminant Hydrology</i> , 2005, 79, 67-88.	3.3	84
50	Impact of Bioavailability Restrictions on Microbially Induced Stable Isotope Fractionation. 1. Theoretical Calculation. <i>Environmental Science & Technology</i> , 2008, 42, 6544-6551.	10.0	84
51	Stable Isotope Fractionation of ¹³ C-Hexachlorocyclohexane (Lindane) during Reductive Dechlorination by Two Strains of Sulfate-Reducing Bacteria. <i>Environmental Science & Technology</i> , 2009, 43, 3155-3161.	10.0	84
52	Changing Feeding Regimes To Demonstrate Flexible Biogas Production: Effects on Process Performance, Microbial Community Structure, and Methanogenesis Pathways. <i>Applied and Environmental Microbiology</i> , 2016, 82, 438-449.	3.1	84
53	Structural investigations of sulphur-rich macromolecular oil fractions and a kerogen by sequential chemical degradation. <i>Organic Geochemistry</i> , 1992, 19, 351-370.	1.8	83
54	Metabolites of xenobiotica and mineral oil constituents linked to macromolecular organic matter in polluted environments. <i>Organic Geochemistry</i> , 1994, 22, 671-680.	1.8	82

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55	Impact of Bioavailability Restrictions on Microbially Induced Stable Isotope Fractionation. 2. Experimental Evidence. <i>Environmental Science & Technology</i> , 2008, 42, 6552-6558.	10.0	82
56	In Situ Assessment of Biodegradation Potential Using Biotraps Amended with ¹³ C-Labeled Benzene or Toluene. <i>Environmental Science & Technology</i> , 2005, 39, 4983-4989.	10.0	81
57	Variations in ¹³ C/ ¹² C and D/H Enrichment Factors of Aerobic Bacterial Fuel Oxygenate Degradation. <i>Environmental Science & Technology</i> , 2007, 41, 2036-2043.	10.0	79
58	The effect of FISH and CARD-FISH on the isotopic composition of ¹³ C- and ¹⁵ N-labeled <i>Pseudomonas putida</i> cells measured by nanoSIMS. <i>Systematic and Applied Microbiology</i> , 2014, 37, 267-276.	2.8	78
59	Incorporation of carbon and nitrogen atoms into proteins measured by protein-based stable isotope probing (Protein-SIP). <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 2889-2897.	1.5	77
60	The use of ¹³ C-labelled polycyclic aromatic hydrocarbons for the analysis of their transformation in soil. <i>Chemosphere</i> , 1998, 36, 2211-2224.	8.2	75
61	Can the labile carbon contribute to carbon immobilization in semiarid soils? Priming effects and microbial community dynamics. <i>Soil Biology and Biochemistry</i> , 2013, 57, 892-902.	8.8	74
62	Mechanism of cis-trans Isomerization of Unsaturated Fatty Acids in <i>Pseudomonas putida</i> . <i>Journal of Bacteriology</i> , 2003, 185, 1730-1733.	2.2	71
63	Variability in microbial carbon isotope fractionation of tetra- and trichloroethene upon reductive dechlorination. <i>Chemosphere</i> , 2008, 71, 639-648.	8.2	71
64	Factors controlling the carbon isotope fractionation of tetra- and trichloroethene during reductive dechlorination by <i>Sulfurospirillum</i> ssp. and <i>Desulfotobacterium</i> sp. strain PCE-S. <i>FEMS Microbiology Ecology</i> , 2007, 62, 98-107.	2.7	70
65	Different types of methane monooxygenases produce similar carbon and hydrogen isotope fractionation patterns during methane oxidation. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 1173-1184.	3.9	69
66	Elucidation of in situ polycyclic aromatic hydrocarbon degradation by functional metaproteomics (protein-SIP). <i>Proteomics</i> , 2013, 13, 2910-2920.	2.2	69
67	Conductive Particles Enable Syntrophic Acetate Oxidation between <i>Geobacter</i> and <i>Methanosarcina</i> from Coastal Sediments. <i>MBio</i> , 2018, 9, .	4.1	69
68	Assessment of in situ biodegradation of monochlorobenzene in contaminated groundwater treated in a constructed wetland. <i>Environmental Pollution</i> , 2007, 148, 428-437.	7.5	68
69	Enantioselective Carbon Stable Isotope Fractionation of Hexachlorocyclohexane during Aerobic Biodegradation by <i>Sphingobium</i> spp.. <i>Environmental Science & Technology</i> , 2013, 47, 11432-11439.	10.0	68
70	Methane cycling in lake sediments and its influence on chironomid larval ¹³ C. <i>FEMS Microbiology Ecology</i> , 2005, 54, 339-350.	2.7	67
71	Stable isotope composition of biogas allows early warning of complete process failure as a result of ammonia inhibition in anaerobic digesters. <i>Bioresource Technology</i> , 2014, 167, 251-259.	9.6	67
72	Anaerobic naphthalene degradation by sulfate-reducing <i>Desulfobacteraceae</i> from various anoxic aquifers. <i>FEMS Microbiology Ecology</i> , 2015, 91, .	2.7	67

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73	Protein-SIP in environmental studies. <i>Current Opinion in Biotechnology</i> , 2016, 41, 26-33.	6.6	67
74	A biogeochemical-hydrological framework for the role of redox-active compounds in aquatic systems. <i>Nature Geoscience</i> , 2021, 14, 264-272.	12.9	67
75	A Multitracer Test Proving the Reliability of Rayleigh Equation-Based Approach for Assessing Biodegradation in a BTEX Contaminated Aquifer. <i>Environmental Science & Technology</i> , 2006, 40, 4245-4252.	10.0	66
76	Monitoring in situ biodegradation of benzene and toluene by stable carbon isotope fractionation. <i>Environmental Toxicology and Chemistry</i> , 2005, 24, 51-60.	4.3	65
77	Assessment of the natural attenuation of chlorinated ethenes in an anaerobic contaminated aquifer in the Bitterfeld/Wolfen area using stable isotope techniques, microcosm studies and molecular biomarkers. <i>Chemosphere</i> , 2007, 67, 300-311.	8.2	65
78	Experimental investigation of nitrogen and oxygen isotope fractionation in nitrate and nitrite during denitrification. <i>Biogeochemistry</i> , 2011, 103, 371-384.	3.5	65
79	Influence of mass transfer on stable isotope fractionation. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 441-452.	3.6	65
80	Stable Isotope Fractionation Caused by Glycyl Radical Enzymes during Bacterial Degradation of Aromatic Compounds. <i>Applied and Environmental Microbiology</i> , 2004, 70, 2935-2940.	3.1	64
81	Tracing the slow growth of anaerobic methane-oxidizing communities by ¹⁵ N-labelling techniques. <i>FEMS Microbiology Ecology</i> , 2008, 63, 401-411.	2.7	64
82	Organic pollutants associated with macromolecular soil organic matter: Mode of binding. <i>Organic Geochemistry</i> , 1997, 26, 745-758.	1.8	63
83	Development of an enantiomer-specific stable carbon isotope analysis (ESIA) method for assessing the fate of 1,2,3,4,5,6-hexachlorocyclohexane in the environment. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 1363-1372.	1.5	63
84	Hydrothermal petroleum generation in Red Sea sediments from the Kebrit and Shaban deeps. <i>Applied Geochemistry</i> , 1990, 5, 103-114.	3.0	62
85	Tracing the transformation of labelled [1- ¹³ C]phenanthrene in a soil bioreactor. <i>Environmental Pollution</i> , 2000, 108, 91-101.	7.5	62
86	Carbon and hydrogen isotope fractionation of benzene during biodegradation under sulfate-reducing conditions: a laboratory to field site approach. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 2439-2447.	1.5	61
87	Protein-based stable isotope probing (protein-SIP) in functional metaproteomics. <i>Mass Spectrometry Reviews</i> , 2012, 31, 683-697.	5.4	61
88	Reduction of the hydraulic retention time at constant high organic loading rate to reach the microbial limits of anaerobic digestion in various reactor systems. <i>Bioresource Technology</i> , 2016, 217, 62-71.	9.6	60
89	Gas-rich submarine exhalations during the 1989 eruption of Macdonald Seamount. <i>Earth and Planetary Science Letters</i> , 1991, 107, 318-327.	4.4	59
90	Sulfur and Oxygen Isotope Fractionation during Benzene, Toluene, Ethyl Benzene, and Xylene Degradation by Sulfate-Reducing Bacteria. <i>Environmental Science & Technology</i> , 2006, 40, 3879-3885.	10.0	59

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91	Assessment of in situ degradation of chlorinated ethenes and bacterial community structure in a complex contaminated groundwater system. <i>Water Research</i> , 2008, 42, 871-882.	11.3	59
92	Benzene oxidation under sulfate-reducing conditions in columns simulating in situ conditions. <i>Biodegradation</i> , 2007, 18, 625-636.	3.0	58
93	Differences of heterotrophic ¹³ CO ₂ assimilation by <i>Pseudomonas knackmussii</i> strain B13 and <i>Rhodococcus opacus</i> 1CP and potential impact on biomarker stable isotope probing. <i>Environmental Microbiology</i> , 2008, 10, 1641-1651.	3.8	58
94	Stable Sulfur and Oxygen Isotope Fractionation of Anoxic Sulfide Oxidation by Two Different Enzymatic Pathways. <i>Environmental Science & Technology</i> , 2014, 48, 9094-9102.	10.0	57
95	The role of lignin and cellulose in the carbon-cycling of degraded soils under semiarid climate and their relation to microbial biomass. <i>Soil Biology and Biochemistry</i> , 2014, 75, 152-160.	8.8	57
96	Natural attenuation research at the contaminated megasite Zeitz. <i>Journal of Hydrology</i> , 2006, 328, 393-407.	5.4	56
97	In-situ biodegradation of tetrachloroethene and trichloroethene in contaminated aquifers monitored by stable isotope fractionation. <i>Isotopes in Environmental and Health Studies</i> , 2003, 39, 113-124.	1.0	55
98	Stable carbon isotope fractionation during aerobic and anaerobic transformation of trichlorobenzene. <i>FEMS Microbiology Ecology</i> , 2004, 48, 313-321.	2.7	55
99	Combined Application of PCR-Based Functional Assays for the Detection of Aromatic-Compound-Degrading Anaerobes. <i>Applied and Environmental Microbiology</i> , 2011, 77, 5056-5061.	3.1	55
100	Carbon Isotopic Fractionation during Anaerobic Biotransformation of Methyltert-Butyl Ether and tert-Amyl Methyl Ether. <i>Environmental Science & Technology</i> , 2005, 39, 103-109.	10.0	53
101	Accelerated methanogenesis from aliphatic and aromatic hydrocarbons under iron- and sulfate-reducing conditions. <i>FEMS Microbiology Letters</i> , 2011, 315, 6-16.	1.8	53
102	Compound specific stable isotope analysis (CSIA) to characterize transformation mechanisms of 1,2,3,4,5,6-hexachlorocyclohexane. <i>Journal of Hazardous Materials</i> , 2014, 280, 750-757.	12.4	53
103	Evaluating degradation of hexachlorocyclohexane (HCH) isomers within a contaminated aquifer using compound-specific stable carbon isotope analysis (CSIA). <i>Water Research</i> , 2015, 71, 187-196.	11.3	53
104	Characterization of phenol and cresol biodegradation by compound-specific stable isotope analysis. <i>Environmental Pollution</i> , 2016, 210, 166-173.	7.5	52
105	Functional Gene Markers for Fumarate-Adding and Dearomatizing Key Enzymes in Anaerobic Aromatic Hydrocarbon Degradation in Terrestrial Environments. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 180-194.	1.0	52
106	Fate of anthracene in contaminated soil: transport and biochemical transformation under unsaturated flow conditions. <i>European Journal of Soil Science</i> , 2002, 53, 71-81.	3.9	51
107	Carbon Isotope Fractionation during Anaerobic Degradation of Methyl tert -Butyl Ether under Sulfate-Reducing and Methanogenic Conditions. <i>Applied and Environmental Microbiology</i> , 2006, 72, 1157-1163.	3.1	51
108	Combining metagenomics with metaproteomics and stable isotope probing reveals metabolic pathways used by a naturally occurring marine methylotroph. <i>Environmental Microbiology</i> , 2015, 17, 4007-4018.	3.8	51

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109	Methylamine as a nitrogen source for microorganisms from a coastal marine environment. <i>Environmental Microbiology</i> , 2017, 19, 2246-2257.	3.8	50
110	Compound Specific Stable Chlorine Isotopic Analysis of Volatile Aliphatic Compounds Using Gas Chromatography Hyphenated with Multiple Collector Inductively Coupled Plasma Mass Spectrometry. <i>Analytical Chemistry</i> , 2017, 89, 9131-9138.	6.5	50
111	Developing empirical monthly groundwater recharge equations based on modeling and remote sensing data – Modeling future groundwater recharge to predict potential climate change impacts. <i>Journal of Hydrology</i> , 2017, 546, 1-13.	5.4	49
112	Identification of dominant sulfamethoxazole-degraders in pig farm-impacted soil by DNA and protein stable isotope probing. <i>Environment International</i> , 2019, 126, 118-126.	10.0	49
113	Analysis of structure, function, and activity of a benzene-degrading microbial community. <i>FEMS Microbiology Ecology</i> , 2013, 85, 14-26.	2.7	48
114	Benzene and sulfide removal from groundwater treated in a microbial fuel cell. <i>Biotechnology and Bioengineering</i> , 2013, 110, 3104-3113.	3.3	48
115	Using compound-specific isotope analysis to assess the degradation of chloroacetanilide herbicides in lab-scale wetlands. <i>Chemosphere</i> , 2014, 99, 89-95.	8.2	48
116	In situ microcosms to evaluate natural attenuation potentials in contaminated aquifers. <i>Organic Geochemistry</i> , 2006, 37, 1394-1410.	1.8	47
117	Characterization of anaerobic xylene biodegradation by two-dimensional isotope fractionation analysis. <i>Environmental Microbiology Reports</i> , 2009, 1, 535-544.	2.4	47
118	Elucidating MTBE degradation in a mixed consortium using a multidisciplinary approach. <i>FEMS Microbiology Ecology</i> , 2010, 73, no-no.	2.7	47
119	ISOTOPIC FRACTIONATION INDICATES ANAEROBIC MONOCHLOROBENZENE BIODEGRADATION. <i>Environmental Toxicology and Chemistry</i> , 2005, 24, 1315.	4.3	46
120	Aerated treatment pond technology with biofilm promoting mats for the bioremediation of benzene, MTBE and ammonium contaminated groundwater. <i>Water Research</i> , 2010, 44, 1785-1796.	11.3	46
121	Carbon and hydrogen isotope fractionation during nitrite-dependent anaerobic methane oxidation by <i>Methylomirabilis oxyfera</i> . <i>Geochimica Et Cosmochimica Acta</i> , 2012, 89, 256-264.	3.9	46
122	Evaluation of stable isotope fingerprinting techniques for the assessment of the predominant methanogenic pathways in anaerobic digesters. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 2251-2262.	3.6	46
123	Stable isotope fractionation concepts for characterizing biotransformation of organohalides. <i>Current Opinion in Biotechnology</i> , 2016, 41, 108-113.	6.6	46
124	Characterization of toluene and ethylbenzene biodegradation under nitrate-, iron(III)- and manganese(IV)-reducing conditions by compound-specific isotope analysis. <i>Environmental Pollution</i> , 2016, 211, 271-281.	7.5	46
125	Rapid screening of PAH-residues in bioremediated soils. <i>Chemosphere</i> , 1995, 31, 3991-3999.	8.2	45
126	Formation of Nonextractable Soil Residues: A Stable Isotope Approach. <i>Environmental Science & Technology</i> , 1999, 33, 3761-3767.	10.0	45

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127	Methanogenic Hydrocarbon Degradation: Evidence from Field and Laboratory Studies. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 227-242.	1.0	45
128	Algal Remodeling in a Ubiquitous Planktonic Photosymbiosis. <i>Current Biology</i> , 2019, 29, 968-978.e4.	3.9	45
129	The chemical structure of macromolecular fractions of a sulfur-rich oil. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 2767-2780.	3.9	44
130	Enrichment of anaerobic benzene-degrading microorganisms by in situ microcosms. <i>FEMS Microbiology Ecology</i> , 2008, 63, 94-106.	2.7	44
131	A novel online approach to the determination of isotopic ratios for organically bound chlorine, bromine and sulphur. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 3114-3122.	1.5	44
132	Influences of the substrate feeding regime on methanogenic activity in biogas reactors approached by molecular and stable isotope methods. <i>Anaerobe</i> , 2014, 29, 91-99.	2.1	44
133	Effects of hydrogen and acetate on benzene mineralisation under sulphate-reducing conditions. <i>FEMS Microbiology Ecology</i> , 2011, 77, 238-247.	2.7	43
134	Carbon and hydrogen stable isotope fractionation associated with the anaerobic degradation of propane and butane by marine sulfate-reducing bacteria. <i>Environmental Microbiology</i> , 2014, 16, 130-140.	3.8	43
135	Improved Monitoring of Semi-Continuous Anaerobic Digestion of Sugarcane Waste: Effects of Increasing Organic Loading Rate on Methanogenic Community Dynamics. <i>International Journal of Molecular Sciences</i> , 2015, 16, 23210-23226.	4.1	42
136	Development and Validation of an Universal Interface for Compound-Specific Stable Isotope Analysis of Chlorine (³⁷ Cl/ ³⁵ Cl) by GC-High-Temperature Conversion (HTC)-MS/IRMS. <i>Analytical Chemistry</i> , 2015, 87, 2832-2839.	6.5	42
137	Recent advances in multi-element compound-specific stable isotope analysis of organohalides: Achievements, challenges and prospects for assessing environmental sources and transformation. <i>Trends in Environmental Analytical Chemistry</i> , 2016, 11, 1-8.	10.3	42
138	Microaerophilic Fe(II)-Oxidizing Zetaproteobacteria Isolated from Low-Fe Marine Coastal Sediments: Physiology and Composition of Their Twisted Stalks. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	3.1	42
139	Naphthenic acids from crude oils of Campos Basin. <i>Organic Geochemistry</i> , 1992, 18, 851-860.	1.8	41
140	Characterizing chemical transformation of organophosphorus compounds by ¹³ C and ² H stable isotope analysis. <i>Science of the Total Environment</i> , 2018, 615, 20-28.	8.0	41
141	Linking larval chironomids to methane: seasonal variation of the microbial methane cycle and chironomid δ ¹³ C. <i>Aquatic Microbial Ecology</i> , 2007, 46, 273-282.	1.8	41
142	Isotopic fingerprinting of methane and CO ₂ formation from aliphatic and aromatic hydrocarbons. <i>Organic Geochemistry</i> , 2010, 41, 482-490.	1.8	40
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