

Harry R Beller

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2220853/publications.pdf>

Version: 2024-02-01

79
papers

5,814
citations

50276
46
h-index

79698
73
g-index

82
all docs

82
docs citations

82
times ranked

5575
citing authors

#	ARTICLE	IF	CITATIONS
1	A genomic catalog of Earth's microbiomes. <i>Nature Biotechnology</i> , 2021, 39, 499-509.	17.5	457
2	Anaerobic bacterial metabolism of hydrocarbons. <i>FEMS Microbiology Reviews</i> , 1998, 22, 459-473.	8.6	400
3	The Genome Sequence of the Obligately Chemolithoautotrophic, Facultatively Anaerobic Bacterium <i>Thiobacillus denitrificans</i> . <i>Journal of Bacteriology</i> , 2006, 188, 1473-1488.	2.2	306
4	A Real-Time Polymerase Chain Reaction Method for Monitoring Anaerobic, Hydrocarbon-Degrading Bacteria Based on a Catabolic Gene. <i>Environmental Science & Technology</i> , 2002, 36, 3977-3984.	10.0	197
5	Anaerobic activation of toluene and o-xylene by addition to fumarate in denitrifying strain T. <i>Journal of Bacteriology</i> , 1997, 179, 670-676.	2.2	192
6	Isolation and characterization of a novel toluene-degrading, sulfate-reducing bacterium. <i>Applied and Environmental Microbiology</i> , 1996, 62, 1188-1196.	3.1	186
7	Engineering of <i>Ralstonia eutropha</i> H16 for Autotrophic and Heterotrophic Production of Methyl Ketones. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4433-4439.	3.1	139
8	Anaerobic, Nitrate-Dependent Oxidation of U(IV) Oxide Minerals by the Chemolithoautotrophic Bacterium <i>Thiobacillus denitrificans</i> . <i>Applied and Environmental Microbiology</i> , 2005, 71, 2170-2174.	3.1	138
9	Genes Involved in Long-Chain Alkene Biosynthesis in <i>Micrococcus luteus</i> . <i>Applied and Environmental Microbiology</i> , 2010, 76, 1212-1223.	3.1	138
10	Microbial degradation of toluene under sulfate-reducing conditions and the influence of iron on the process. <i>Applied and Environmental Microbiology</i> , 1992, 58, 786-793.	3.1	138
11	Natural products as biofuels and bio-based chemicals: fatty acids and isoprenoids. <i>Natural Product Reports</i> , 2015, 32, 1508-1526.	10.3	131
12	Engineering of Bacterial Methyl Ketone Synthesis for Biofuels. <i>Applied and Environmental Microbiology</i> , 2012, 78, 70-80.	3.1	130
13	Metatranscriptomic evidence of pervasive and diverse chemolithoautotrophy relevant to C, S, N and Fe cycling in a shallow alluvial aquifer. <i>ISME Journal</i> , 2016, 10, 2106-2117.	9.8	119
14	The East River, Colorado, Watershed: A Mountainous Community Testbed for Improving Predictive Understanding of Multiscale Hydrological-Biogeochemical Dynamics. <i>Vadose Zone Journal</i> , 2018, 17, 1-25.	2.2	115
15	Metabolites Detected during Biodegradation of ¹³ C ₆ -Benzene in Nitrate-Reducing and Methanogenic Enrichment Cultures. <i>Environmental Science & Technology</i> , 2005, 39, 6681-6691.	10.0	112
16	Benzylsuccinate Formation as a Means of Anaerobic Toluene Activation by Sulfate-Reducing Strain PRTOL1. <i>Applied and Environmental Microbiology</i> , 1997, 63, 3729-3731.	3.1	111
17	Initial Reactions in Anaerobic Oxidation of m-Xylene by the Denitrifying Bacterium <i>Azoarcus</i> sp. Strain T. <i>Journal of Bacteriology</i> , 1999, 181, 6403-6410.	2.2	110
18	Lessons from Two Design-Build-Test-Learn Cycles of Dodecanol Production in <i>Escherichia coli</i> Aided by Machine Learning. <i>ACS Synthetic Biology</i> , 2019, 8, 1337-1351.	3.8	107

#	ARTICLE	IF	CITATIONS
19	Byproducts of Anaerobic Alkylbenzene Metabolism Useful as Indicators of in Situ Bioremediation. Environmental Science & Technology, 1995, 29, 2864-2870.	10.0	106
20	Development of a broad-host synthetic biology toolbox for <i>Ralstonia eutropha</i> and its application to engineering hydrocarbon biofuel production. Microbial Cell Factories, 2013, 12, 107.	4.0	103
21	Water Table Dynamics and Biogeochemical Cycling in a Shallow, Variably-Saturated Floodplain. Environmental Science & Technology, 2017, 51, 3307-3317.	10.0	100
22	Analysis of the Novel Benzylsuccinate Synthase Reaction for Anaerobic Toluene Activation Based on Structural Studies of the Product. Journal of Bacteriology, 1998, 180, 5454-5457.	2.2	93
23	Metabolic indicators for detecting in situ anaerobic alkylbenzene degradation. Biodegradation, 2000, 11, 125-139.	3.0	86
24	Metabolic by-products of anaerobic toluene degradation by sulfate-reducing enrichment cultures. Applied and Environmental Microbiology, 1992, 58, 3192-3195.	3.1	86
25	Anaerobic Toluene Activation by Benzylsuccinate Synthase in a Highly Enriched Methanogenic Culture. Applied and Environmental Microbiology, 2000, 66, 5503-5505.	3.1	82
26	Use of Liquid Chromatography/Tandem Mass Spectrometry To Detect Distinctive Indicators of In Situ RDX Transformation in Contaminated Groundwater. Environmental Science & Technology, 2002, 36, 2060-2066.	10.0	82
27	Whole-Genome Transcriptional Analysis of Chemolithoautotrophic Thiosulfate Oxidation by <i>Thiobacillus denitrificans</i> under Aerobic versus Denitrifying Conditions. Journal of Bacteriology, 2006, 188, 7005-7015.	2.2	80
28	Aerobic Biodegradation of Methyl tert -Butyl Ether by Aquifer Bacteria from Leaking Underground Storage Tank Sites. Applied and Environmental Microbiology, 2001, 67, 5824-5829.	3.1	77
29	Analysis of Perchlorate in Groundwater by Electrospray Ionization Mass Spectrometry/Mass Spectrometry. Environmental Science & Technology, 2000, 34, 1862-1864.	10.0	76
30	PCR Amplification-Independent Methods for Detection of Microbial Communities by the High-Density Microarray PhyloChip. Applied and Environmental Microbiology, 2011, 77, 6313-6322.	3.1	74
31	Physiological and Transcriptional Studies of Cr(VI) Reduction under Aerobic and Denitrifying Conditions by an Aquifer-Derived <i>Pseudomonad</i> . Environmental Science & Technology, 2010, 44, 7491-7497.	10.0	73
32	Substrate range of benzylsuccinate synthase from <i>Azoarcus</i> sp. strain T. FEMS Microbiology Letters, 1999, 178, 147-153.	1.8	72
33	Anaerobic biotransformation of RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) by aquifer bacteria using hydrogen as the sole electron donor. Water Research, 2002, 36, 2533-2540.	11.3	71
34	In Situ Transformation of Deuterated Toluene and Xylene to Benzylsuccinic Acid Analogues in BTEX-Contaminated Aquifers. Environmental Science & Technology, 2002, 36, 4127-4134.	10.0	69
35	Biochemical and genetic evidence of benzylsuccinate synthase in toluene-degrading, ferric iron-reducing <i>Geobacter metallireducens</i> . Biodegradation, 2002, 13, 149-154.	3.0	69
36	Comparative Assessments of Benzene, Toluene, and Xylene Natural Attenuation by Quantitative Polymerase Chain Reaction Analysis of a Catabolic Gene, Signature Metabolites, and Compound-Specific Isotope Analysis. Environmental Science & Technology, 2008, 42, 6065-6072.	10.0	68

#	ARTICLE	IF	CITATIONS
37	Genome Sequence of the Fleming Strain of <i>Micrococcus luteus</i> , a Simple Free-Living Actinobacterium. Journal of Bacteriology, 2010, 192, 841-860.	2.2	68
38	Genomic and Physiological Characterization of the Chromate-Reducing, Aquifer-Derived Firmicute Pelosinus sp. Strain HCF1. Applied and Environmental Microbiology, 2013, 79, 63-73.	3.1	65
39	Identification of intermediates formed during anaerobic benzene degradation by an iron-reducing enrichment culture. Environmental Microbiology, 2008, 10, 1703-1712.	3.8	63
40	Reoxidation of Chromium(III) Products Formed under Different Biogeochemical Regimes. Environmental Science & Technology, 2017, 51, 4918-4927.	10.0	60
41	Differential Isotopic Fractionation during Cr(VI) Reduction by an Aquifer-Derived Bacterium under Aerobic versus Denitrifying Conditions. Applied and Environmental Microbiology, 2012, 78, 2462-2464.	3.1	57
42	" Genome-enabled studies of anaerobic, nitrate-dependent iron oxidation in the chemolithoautotrophic bacterium Thiobacillus denitrificans". Frontiers in Microbiology, 2013, 4, 249.	3.5	54
43	Substantial improvements in methyl ketone production in E. coli and insights on the pathway from in vitro studies. Metabolic Engineering, 2014, 26, 67-76.	7.0	53
44	Biogeochemistry and natural attenuation of nitrate in groundwater at an explosives test facility. Applied Geochemistry, 2004, 19, 1483-1494.	3.0	52
45	Monoterpene <i>thermometer</i> ™ of tropical forest-atmosphere response to climate warming. Plant, Cell and Environment, 2017, 40, 441-452.	5.7	52
46	Analysis of Benzylsuccinates in Groundwater by Liquid Chromatography/Tandem Mass Spectrometry and Its Use for Monitoring In Situ BTEX Biodegradation. Environmental Science & Technology, 2002, 36, 2724-2728.	10.0	50
47	Discovery of enzymes for toluene synthesis from anoxic microbial communities. Nature Chemical Biology, 2018, 14, 451-457.	8.0	47
48	Optimization of the IPP-bypass mevalonate pathway and fed-batch fermentation for the production of isoprenol in Escherichia coli. Metabolic Engineering, 2019, 56, 85-96.	7.0	46
49	Biochemical and Structural Studies of NADH-Dependent FabG Used To Increase the Bacterial Production of Fatty Acids under Anaerobic Conditions. Applied and Environmental Microbiology, 2014, 80, 497-505.	3.1	42
50	The Snowmelt Niche Differentiates Three Microbial Life Strategies That Influence Soil Nitrogen Availability During and After Winter. Frontiers in Microbiology, 2020, 11, 871.	3.5	32
51	Methyl ketone production by <i>Pseudomonas putida</i> is enhanced by plant-derived amino acids. Biotechnology and Bioengineering, 2019, 116, 1909-1922.	3.3	29
52	In vitro Characterization of Phenylacetate Decarboxylase, a Novel Enzyme Catalyzing Toluene Biosynthesis in an Anaerobic Microbial Community. Scientific Reports, 2016, 6, 31362.	3.3	27
53	Engineering E. coli for simultaneous glucose-xylose utilization during methyl ketone production. Microbial Cell Factories, 2018, 17, 12.	4.0	27
54	Investigation of Proposed Ladderane Biosynthetic Genes from Anammox Bacteria by Heterologous Expression in E. coli. PLoS ONE, 2016, 11, e0151087.	2.5	26

#	ARTICLE	IF	CITATIONS
55	Analysis of anaerobic BTX biodegradation in a subarctic aquifer using isotopes and benzylsuccinates. <i>Journal of Contaminant Hydrology</i> , 2005, 81, 167-186.	3.3	25
56	Divergent Aquifer Biogeochemical Systems Converge on Similar and Unexpected Cr(VI) Reduction Products. <i>Environmental Science & Technology</i> , 2014, 48, 10699-10706.	10.0	24
57	Anaerobic bacterial metabolism of hydrocarbons. <i>FEMS Microbiology Reviews</i> , 1998, 22, 459-473.	8.6	18
58	The role of iron in enhancing anaerobic toluene degradation in sulfate-reducing enrichment cultures. <i>Microbial Ecology</i> , 1995, 30, 105-14.	2.8	17
59	Development of a Genetic System for the Chemolithoautotrophic Bacterium <i>Thiobacillus denitrificans</i> . <i>Applied and Environmental Microbiology</i> , 2007, 73, 3265-3271.	3.1	17
60	Biochemical production of ethanol and fatty acid ethyl esters from switchgrass: A comparative analysis of environmental and economic performance. <i>Biomass and Bioenergy</i> , 2013, 49, 49-62.	5.7	17
61	Identification of c-type cytochromes involved in anaerobic, bacterial U(IV) oxidation. <i>Biodegradation</i> , 2009, 20, 45-53.	3.0	16
62	Improving methyl ketone production in <i>Escherichia coli</i> by heterologous expression of NADH-dependent FabG. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1161-1172.	3.3	15
63	Metatranscriptomic Analysis Reveals Unexpectedly Diverse Microbial Metabolism in a Biogeochemical Hot Spot in an Alluvial Aquifer. <i>Frontiers in Microbiology</i> , 2017, 8, 40.	3.5	14
64	Methyl Ketones from Municipal Solid Waste Blends by One-Pot Ionic-Liquid Pretreatment, Saccharification, and Fermentation. <i>ChemSusChem</i> , 2019, 12, 4313-4322.	6.8	14
65	Insight into the Mechanism of Phenylacetate Decarboxylase (PhdB), a Toluene-Producing Glycyl Radical Enzyme. <i>ChemBioChem</i> , 2020, 21, 663-671.	2.6	14
66	Generalized Schemes for High-Throughput Manipulation of the <i>Desulfovibrio vulgaris</i> Genome. <i>Applied and Environmental Microbiology</i> , 2011, 77, 7595-7604.	3.1	13
67	Hexachlorophene distributions in estuarine sediments. <i>Bulletin of Environmental Contamination and Toxicology</i> , 1988, 41, 645-650.	2.7	11
68	Characterization of Chromium Bioremediation Products in Flow-Through Column Sediments Using Micro-X-ray Fluorescence and X-ray Absorption Spectroscopy. <i>Journal of Environmental Quality</i> , 2015, 44, 729-738.	2.0	11
69	Structure of FabH and factors affecting the distribution of branched fatty acids in <i>Micrococcus luteus</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2012, 68, 1320-1328.	2.5	9
70	Use of carbon stable isotopes to monitor biostimulation and electron donor fate in chromium-contaminated groundwater. <i>Chemosphere</i> , 2019, 235, 440-446.	8.2	7
71	Complete genome sequence of <i>Tolomonas auensis</i> type strain (TA 4T). <i>Standards in Genomic Sciences</i> , 2011, 5, 112-120.	1.5	6
72	Anaerobic Dissolution Rates of U(IV)-Oxide by Abiotic and Nitrate-Dependent Bacterial Pathways. <i>Environmental Science & Technology</i> , 2020, 54, 8010-8021.	10.0	6

#	ARTICLE	IF	CITATIONS
73	Genetic Manipulation of the Obligate Chemolithoautotrophic Bacterium <i>Thiobacillus denitrificans</i> . <i>Methods in Molecular Biology</i> , 2012, 881, 99-136.	0.9	5
74	Functionalizing bacterial cell surfaces with a phage protein. <i>Chemical Communications</i> , 2013, 49, 910-912.	4.1	4
75	Definitive Alkene Identification Needed for in Vitro Studies with Ole (Olefin Biosynthesis) Proteins. <i>Journal of Biological Chemistry</i> , 2011, 286, 1e11.	3.4	3
76	Microbial ElectroCatalytic (MEC) Biofuel Production. , 2013, , 1091-1099.		2
77	Enhanced fatty acid production in engineered chemolithoautotrophic bacteria using reduced sulfur compounds as energy sources. <i>Metabolic Engineering Communications</i> , 2016, 3, 211-215.	3.6	1
78	Paired RNA Radiocarbon and Sequencing Analyses Indicate the Importance of Autotrophy in a Shallow Alluvial Aquifer. <i>Scientific Reports</i> , 2019, 9, 10370.	3.3	1
79	COMBINED RADIOCARBON AND SEQUENCING ANALYSES TO UNDERSTAND CARBON SOURCES IN GROUNDWATER SYSTEMS. , 2020, , .		0