Lei Zhou

List of Publications by Year
in descending order

32 papers	811 citations	687363 13 h-index	501196 28 g-index
32 all docs	32 docs citations	32 times ranked	837 citing authors

#	Article	IF	Citations
1	Microbial communities involved in anaerobic degradation of alkanes. International Biodeterioration and Biodegradation, 2011, 65, 1-13.	3.9	175
2	High Frequency of Thermodesulfovibrio spp. and Anaerolineaceae in Association with Methanoculleus spp. in a Long-Term Incubation of n-Alkanes-Degrading Methanogenic Enrichment Culture. Frontiers in Microbiology, 2016, 7, 1431.	3.5	95
3	Analyses of n-alkanes degrading community dynamics of a high-temperature methanogenic consortium enriched from production water of a petroleum reservoir by a combination of molecular techniques. Ecotoxicology, 2012, 21, 1680-1691.	2.4	67
4	Diversity and Composition of Sulfate-Reducing Microbial Communities Based on Genomic DNA and RNA Transcription in Production Water of High Temperature and Corrosive Oil Reservoir. Frontiers in Microbiology, 2017, 8, 1011.	3.5	63
5	Anaerobic Degradation of Paraffins by Thermophilic Actinobacteria under Methanogenic Conditions. Environmental Science & Technology, 2020, 54, 10610-10620.	10.0	53
6	Characterization of bacterial composition and diversity in a long-term petroleum contaminated soil and isolation of high-efficiency alkane-degrading strains using an improved medium. World Journal of Microbiology and Biotechnology, 2018, 34, 34.	3.6	48
7	Direct microbial transformation of carbon dioxide to value-added chemicals: A comprehensive analysis and application potentials. Bioresource Technology, 2019, 288, 121401.	9.6	40
8	Simultaneous methanogenesis and acetogenesis from the greenhouse carbon dioxide by an enrichment culture supplemented with zero-valent iron. Renewable Energy, 2019, 132, 861-870.	8.9	32
9	Accelerated CO2 reduction to methane for energy by zero valent iron in oil reservoir production waters. Energy, 2018, 147, 663-671.	8.8	27
10	Methanogenic Degradation of Long n -Alkanes Requires Fumarate-Dependent Activation. Applied and Environmental Microbiology, 2019, 85, .	3.1	22
11	Methanogenic biodegradation of C9 to C12n-alkanes initiated by Smithella via fumarate addition mechanism. AMB Express, 2020, 10, 23.	3.0	22
12	Methanogenic degradation of branched alkanes in enrichment cultures of production water from a high-temperature petroleum reservoir. Applied Microbiology and Biotechnology, 2019, 103, 2391-2401.	3.6	21
13	Formate-Dependent Microbial Conversion of CO2 and the Dominant Pathways of Methanogenesis in Production Water of High-temperature Oil Reservoirs Amended with Bicarbonate. Frontiers in Microbiology, 2016, 7, 365.	3.5	19
14	Long-chain n-alkane biodegradation coupling to methane production in an enriched culture from production water of a high-temperature oil reservoir. AMB Express, 2020, 10, 63.	3.0	13
15	Activation of CO2-reducing methanogens in oil reservoir after addition of nutrient. Journal of Bioscience and Bioengineering, 2016, 122, 740-747.	2.2	12
16	Microbial reduction of CO2 from injected NaH13CO3 with degradation of n-hexadecane in the enrichment culture derived from a petroleum reservoir. International Biodeterioration and Biodegradation, 2018, 127, 192-200.	3.9	12
17	Assessment of Five Electronâ€Shuttling Molecules in the Extracellular Electron Transfer of Electromethanogenesis by using Methanosarcina barkeri. ChemElectroChem, 2020, 7, 3783-3789.	3.4	11
18	Microbial Lipopeptide-Producing Strains and Their Metabolic Roles under Anaerobic Conditions. Microorganisms, 2021, 9, 2030.	3.6	10

#	Article	IF	Citations
19	New evidence for a hydroxylation pathway for anaerobic alkane degradation supported by analyses of functional genes and signature metabolites in oil reservoirs. AMB Express, 2021, 11, 18.	3.0	10
20	Synthesis and Characterization of Anaerobic Degradation Biomarkers of n-Alkanes via Hydroxylation/Carboxylation Pathways. European Journal of Mass Spectrometry, 2016, 22, 31-37.	1.0	7
21	A high yield method for the direct amidation of longâ€chain fatty acids. International Journal of Chemical Kinetics, 2020, 52, 99-108.	1.6	7
22	Insight into the Adsorption Mechanisms of CO2, CH4, and Their Mixtures on Kerogen Type IIIA. Energy & Fuels, 2020, 34, 14300-14311.	5.1	7
23	Propionate metabolism and diversity of relevant functional genes by in silico analysis and detection in subsurface petroleum reservoirs. World Journal of Microbiology and Biotechnology, 2017, 33, 182.	3.6	6
24	Electron donors and mediators in the thermodynamics and kinetics of CO2 bioreduction. Renewable and Sustainable Energy Reviews, 2022, 156, 111997.	16.4	5
25	Genetic engineering of the branchedâ€chain fatty acid biosynthesis pathway to enhance surfactin production from Bacillus subtilis. Biotechnology and Applied Biochemistry, 2023, 70, 238-248.	3.1	5
26	A twoâ€step synthesis of deuterium labeled 8, 8, 9, 9â€d₄â€hexadecane from nonanoic acid. Journal of Labelled Compounds and Radiopharmaceuticals, 2012, 55, 158-160.	1.0	4
27	Simultaneous detection of transcribed functional assA gene and the corresponding metabolites of linear alkanes (C4, C5, and C7) in production water of a low-temperature oil reservoir. Science of the Total Environment, 2020, 746, 141290.	8.0	4
28	Dominant and Active Methanogens in the Production Waters From a High-Temperature Petroleum Reservoir by DNA- and RNA-Based Analysis. Geomicrobiology Journal, 2021, 38, 191-198.	2.0	4
29	Aminirod propionatiphilus gen. nov., sp. nov., an isolated secondary fermenter in methanogenic hydrocarbon-degrading communities. International Biodeterioration and Biodegradation, 2021, 165, 105323.	3.9	3
30	Discovery of the nonâ€cosmopolitan lineages in Candidatus Thermoprofundales. Environmental Microbiology, 2022, 24, 3063-3080.	3.8	3
31	Bioconversion Pathway of CO2 in the Presence of Ethanol by Methanogenic Enrichments from Production Water of a High-Temperature Petroleum Reservoir. Energies, 2019, 12, 918.	3.1	2
32	Synthesis and mass spectra of rearrangement bio-signature metabolites of anaerobic alkane degradation via fumarate addition. Analytical Biochemistry, 2020, 600, 113746.	2.4	2