Diana Z Sousa

List of Publications by Year in descending order

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84	4,327	134610 34	134545 62
papers	citations	h-index	g-index

90	90	90	4911
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Acetate Degradation at Low pH by the Moderately Acidophilic Sulfate Reducer Acididesulfobacillus acetoxydans gen. nov. sp. nov.. Frontiers in Microbiology, 2022, 13, 816605.	1.5	6
2	Principles, Advances, and Perspectives of Anaerobic Digestion of Lipids. Environmental Science & Technology, 2022, 56, 4749-4775.	4.6	27
3	Enhanced ectoines production by carbon dioxide capture: A step further towards circular economy. Journal of CO2 Utilization, 2022, 61, 102009.	3.3	3
4	Stimulating Effect of Trichococcus flocculiformis on a Coculture of Syntrophomonas wolfei and Methanospirillum hungatei. Applied and Environmental Microbiology, 2022, 88, .	1.4	7
5	Genome-scale metabolic modelling enables deciphering ethanol metabolism via the acrylate pathway in the propionate-producer Anaerotignum neopropionicum. Microbial Cell Factories, 2022, 21, .	1.9	8
6	Natranaerofaba carboxydovora gen. nov., sp. nov., an extremely haloalkaliphilic <scp>CO</scp>â€utilizing acetogen from a hypersaline soda lake representing a novel deep phylogenetic lineage in the class â€˜Natranaerobiiaâ€™. Environmental Microbiology, 2021, 23, 3460-3476.	1.8	20
7	Innovations to culturing the uncultured microbial majority. Nature Reviews Microbiology, 2021, 19, 225-240.	13.6	254
8	Anaerobic microbial methanol conversion in marine sediments. Environmental Microbiology, 2021, 23, 1348-1362.	1.8	15
9	Synthetic co-cultures: novel avenues for bio-based processes. Current Opinion in Biotechnology, 2021, 67, 72-79.	3.3	52
10	Editorial overview: Microbial community engineering. Current Opinion in Biotechnology, 2021, 67, vi-ix.	3.3	0
11	Product Inhibition and pH Affect Stoichiometry and Kinetics of Chain Elongating Microbial Communities in Sequencing Batch Bioreactors. Frontiers in Bioengineering and Biotechnology, 2021, 9, 693030.	2.0	9
12	Propionate Production from Carbon Monoxide by Synthetic Cocultures of Acetobacterium wieringae and Propionigenic Bacteria. Applied and Environmental Microbiology, 2021, 87, e0283920.	1.4	17
13	Impact of the algal-bacterial community structure, physio-types and biological and environmental interactions on the performance of a high rate algal pond treating biogas and wastewater. Fuel, 2021, 302, 121148.	3.4	17
14	Special Issue â€œAnaerobes in Biogeochemical Cyclesâ€• Microorganisms, 2021, 9, 23.	1.6	0
15	Conversion of Carbon Monoxide to Chemicals Using Microbial Consortia. Advances in Biochemical Engineering/Biotechnology, 2021, , 1.	0.6	0
16	Genome-guided analysis allows the identification of novel physiological traits in Trichococcus species. BMC Genomics, 2020, 21, 24.	1.2	21
17	The reductive glycine pathway allows autotrophic growth of Desulfovibrio desulfuricans. Nature Communications, 2020, 11, 5090.	5.8	152
18	Modeling a co-culture of Clostridium autoethanogenum and Clostridium kluyveri to increase syngas conversion to medium-chain fatty-acids. Computational and Structural Biotechnology Journal, 2020, 18, 3255-3266.	1.9	29

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19	Effect of Sub-Stoichiometric Fe(III) Amounts on LCFA Degradation by Methanogenic Communities. Microorganisms, 2020, 8, 1375.	1.6	6
20	Effect of Sulfate on Carbon Monoxide Conversion by a Thermophilic Syngas-Fermenting Culture Dominated by a Desulfofundulus Species. Frontiers in Microbiology, 2020, 11, 588468.	1.5	8
21	Long-Chain Fatty Acids Degradation by Desulfomonile Species and Proposal of â€œCandidatus Desulfomonile Palmitatoxidansâ€• Frontiers in Microbiology, 2020, 11, 539604.	1.5	13
22	Effect of nickel, cobalt, and iron on methanogenesis from methanol and cometabolic conversion of 1,2â€dichloroethene by Methanosarcina barkeri. Biotechnology and Applied Biochemistry, 2020, 67, 744-750.	1.4	6
23	Coâ€cultivation of Thermoanaerobacter strains with a methanogenic partner enhances glycerol conversion. Microbial Biotechnology, 2020, 13, 962-973.	2.0	3
24	Enrichment of Anaerobic Syngas-Converting Communities and Isolation of a Novel Carboxydotrophic Acetobacterium wieringae Strain JM. Frontiers in Microbiology, 2020, 11, 58.	1.5	21
25	Elucidating Syntrophic Butyrate-Degrading Populations in Anaerobic Digesters Using Stable-Isotope-Informed Genome-Resolved Metagenomics. MSystems, 2019, 4, .	1.7	19
26	Development of a Bioelectrochemical System as a Tool to Enrich H2-Producing Syntrophic Bacteria. Frontiers in Microbiology, 2019, 10, 110.	1.5	10
27	Ecophysiology of Acetoclastic Methanogens. , 2019, , 1-14.		4
28	Short term changes in the abundance of nitrifying microorganisms in a soil-plant system simultaneously exposed to copper nanoparticles and atrazine. Science of the Total Environment, 2019, 670, 1068-1074.	3.9	27
29	Metabolic shift induced by synthetic co-cultivation promotes high yield of chain elongated acids from syngas. Scientific Reports, 2019, 9, 18081.	1.6	43
30	Inhibition Studies with 2-Bromoethanesulfonate Reveal a Novel Syntrophic Relationship in Anaerobic Oleate Degradation. Applied and Environmental Microbiology, 2019, 85, .	1.4	30
31	Trichococcus shcherbakoviae sp. nov., isolated from a laboratory-scale anaerobic EGSB bioreactor operated at low temperature. International Journal of Systematic and Evolutionary Microbiology, 2019, 69, 529-534.	0.8	23
32	Ecophysiology of Acetoclastic Methanogens. , 2019, , 109-121.		6
33	Towards sustainable feedstocks: A guide to electron donors for microbial carbon fixation. Current Opinion in Biotechnology, 2018, 50, 195-205.	3.3	80
34	The deep-subsurface sulfate reducer Desulfotomaculum kuznetsovii employs two methanol-degrading pathways. Nature Communications, 2018, 9, 239.	5.8	36
35	High Rate Biomethanation of Carbon Monoxide-Rich Gases via a Thermophilic Synthetic Coculture. ACS Sustainable Chemistry and Engineering, 2018, 6, 2169-2176.	3.2	31
36	DNA-SIP based genome-centric metagenomics identifies key long-chain fatty acid-degrading populations in anaerobic digesters with different feeding frequencies. ISME Journal, 2018, 12, 112-123.	4.4	88

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37	Enrichment of syngasâ€converting communities from a multiâ€orifice baffled bioreactor. Microbial Biotechnology, 2018, 11, 639-646.	2.0	15
38	Co-culture of a Novel Fermentative Bacterium, Lucifera butyrica gen. nov. sp. nov., With the Sulfur Reducer Desulfurella amilsii for Enhanced Sulfidogenesis. Frontiers in Microbiology, 2018, 9, 3108.	1.5	22
39	Novel energy conservation strategies and behaviour of Pelotomaculum schinkii driving syntrophic propionate catabolism. Environmental Microbiology, 2018, 20, 4503-4511.	1.8	31
40	Exploiting the potential of gas fermentation. Industrial Crops and Products, 2017, 106, 21-30.	2.5	32
41	Effect of Nickel and Cobalt on Methanogenic Enrichment Cultures and Role of Biogenic Sulfide in Metal Toxicity Attenuation. Frontiers in Microbiology, 2017, 8, 1341.	1.5	30
42	Whole Proteome Analyses on Ruminiclostridium cellulolyticum Show a Modulation of the Cellulolysis Machinery in Response to Cellulosic Materials with Subtle Differences in Chemical and Structural Properties. PLoS ONE, 2017, 12, e0170524.	1.1	16
43	Proteomic Analysis of the Hydrogen and Carbon Monoxide Metabolism of Methanothermobacter marburgensis. Frontiers in Microbiology, 2016, 7, 1049.	1.5	27
44	Comparative Analysis of Carbon Monoxide Tolerance among Thermoanaerobacter Species. Frontiers in Microbiology, 2016, 7, 1330.	1.5	7
45	A Narrow pH Range Supports Butanol, Hexanol, and Octanol Production from Syngas in a Continuous Co-culture of Clostridium ljungdahlii and Clostridium kluyveri with In-Line Product Extraction. Frontiers in Microbiology, 2016, 7, 1773.	1.5	131
46	Toxicity of long chain fatty acids towards acetate conversion by Methanosaeta concilii and Methanosarcina mazei. Microbial Biotechnology, 2016, 9, 514-518.	2.0	52
47	Harnessing the power of microbial autotrophy. Nature Reviews Microbiology, 2016, 14, 692-706.	13.6	189
48	Production of medium-chain fatty acids and higher alcohols by a synthetic co-culture grown on carbon monoxide or syngas. Biotechnology for Biofuels, 2016, 9, 82.	6.2	169
49	Conversion of C_n-Unsaturated into C_{n-2}-Saturated LCFA Can Occur Uncoupled from Methanogenesis in Anaerobic Bioreactors. Environmental Science & Technology, 2016, 50, 3082-3090.	4.6	51
50	Lachnotalea glycerini gen. nov., sp. nov., an anaerobe isolated from a nanofiltration unit treating anoxic groundwater. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 774-779.	0.8	13
51	Description of Trichococcus ilyis sp. nov. by combined physiological and in silico genome hybridization analyses. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 3957-3963.	0.8	27
52	Pathways and Bioenergetics of Anaerobic Carbon Monoxide Fermentation. Frontiers in Microbiology, 2015, 6, 1275.	1.5	156
53	Hydrogenotrophic activity under increased H2/CO2 pressure: Effect on methane production and microbial community. Journal of Biotechnology, 2015, 208, S57.	1.9	3
54	Meta-omics approaches to understand and improve wastewater treatment systems. Reviews in Environmental Science and Biotechnology, 2015, 14, 385-406.	3.9	67

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55	How to use molecular biology tools for the study of the anaerobic digestion process?. Reviews in Environmental Science and Biotechnology, 2015, 14, 555-593.	3.9	60
56	Methanogens, sulphate and heavy metals: a complex system. Reviews in Environmental Science and Biotechnology, 2015, 14, 537-553.	3.9	113
57	A genomic view on syntrophic versus non-syntrophic lifestyle in anaerobic fatty acid degrading communities. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 2004-2016.	0.5	107
58	CO₂ Dissolution and Design Aspects of a Multiorifice Oscillatory Baffled Column. Industrial & Engineering Chemistry Research, 2014, 53, 17303-17316.	1.8	17
59	Ercella succinigenes gen. nov., sp. nov., an anaerobic succinate-producing bacterium. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 2449-2454.	0.8	36
60	Long-term acclimation of anaerobic sludges for high-rate methanogenesis from LCFA. Biomass and Bioenergy, 2014, 67, 297-303.	2.9	42
61	Genome analyses of the carboxydotrophic sulfate-reducers Desulfotomaculum nigrificans and Desulfotomaculum carboxydivorans and reclassification of Desulfotomaculum caboxydivorans as a later synonym of Desulfotomaculum nigrificans. Standards in Genomic Sciences, 2014, 9, 655-675.	1.5	25
62	Genome analysis of Desulfotomaculum gibsoniae strain GrollT a highly versatile Gram-positive sulfate-reducing bacterium. Standards in Genomic Sciences, 2014, 9, 821-839.	1.5	27
63	Carbendazim dissipation in the biomixture of on-farm biopurification systems and its effect on microbial communities. Chemosphere, 2013, 93, 1084-1093.	4.2	64
64	Enrichment of anaerobic syngas-converting bacteria from thermophilic bioreactor sludge. FEMS Microbiology Ecology, 2013, 86, 590-597.	1.3	48
65	Moorella stamsii sp. nov., a new anaerobic thermophilic hydrogenogenic carboxydotroph isolated from digester sludge. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 4072-4076.	0.8	58
66	Endurance of methanogenic archaea in anaerobic bioreactors treating oleate-based wastewater. Applied Microbiology and Biotechnology, 2013, 97, 2211-2218.	1.7	22
67	Atrazine dissipation and its impact on the microbial communities and community level physiological profiles in a microcosm simulating the biomixture of on-farm biopurification system. Journal of Hazardous Materials, 2013, 260, 459-467.	6.5	58
68	Activity and Viability of Methanogens in Anaerobic Digestion of Unsaturated and Saturated Long-Chain Fatty Acids. Applied and Environmental Microbiology, 2013, 79, 4239-4245.	1.4	90
69	Role of syntrophic microbial communities in high-rate methanogenic bioreactors. Water Science and Technology, 2012, 66, 352-362.	1.2	112
70	Effects of pre-treatment and bioaugmentation strategies on the anaerobic digestion of chicken feathers. Bioresource Technology, 2012, 120, 114-119.	4.8	39
71	Bioaugmentation of Sewage Sludge with Trametes versicolor in Solid-Phase Biopiles Produces Degradation of Pharmaceuticals and Affects Microbial Communities. Environmental Science & Technology, 2012, 46, 12012-12020.	4.6	50
72	Syntrophic Degradation of Fatty Acids by Methanogenic Communities. , 2012, , 127-142.		7

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73	Thermochemical pre- and biological co-treatments to improve hydrolysis and methane production from poultry litter. Bioresource Technology, 2012, 111, 141-147.	4.8	86
74	Biohydrogen production from arabinose and glucose using extreme thermophilic anaerobic mixed cultures. Biotechnology for Biofuels, 2012, 5, 6.	6.2	47
75	Strategies to suppress hydrogenâ€consuming microorganisms affect macro and micro scale structure and microbiology of granular sludge. Biotechnology and Bioengineering, 2011, 108, 1766-1775.	1.7	23
76	Methane production from oleate: Assessing the bioaugmentation potential of Syntrophomonas zehnderi. Water Research, 2010, 44, 4940-4947.	5.3	40
77	Waste lipids to energy: how to optimize methane production from longâ€chain fatty acids (LCFA). Microbial Biotechnology, 2009, 2, 538-550.	2.0	233
78	Ecophysiology of syntrophic communities that degrade saturated and unsaturated long-chain fatty acids. FEMS Microbiology Ecology, 2009, 68, 257-272.	1.3	171
79	Effect of sulfate on methanogenic communities that degrade unsaturated and saturated longâ€chain fatty acids (LCFA). Environmental Microbiology, 2009, 11, 68-80.	1.8	53
80	Anaerobic microbial LCFA degradation in bioreactors. Water Science and Technology, 2008, 57, 439-444.	1.2	31
81	Syntrophomonas zehnderi sp. nov., an anaerobe that degrades long-chain fatty acids in co-culture with Methanobacterium formicicum. International Journal of Systematic and Evolutionary Microbiology, 2007, 57, 609-615.	0.8	149
82	Microbial Communities Involved in Anaerobic Degradation of Unsaturated or Saturated Long-Chain Fatty Acids. Applied and Environmental Microbiology, 2007, 73, 1054-1064.	1.4	108
83	Molecular assessment of complex microbial communities degrading long chain fatty acids in methanogenic bioreactors. FEMS Microbiology Ecology, 2007, 60, 252-265.	1.3	114
84	Mineralization of LCFA associated with anaerobic sludge: Kinetics, enhancement of methanogenic activity, and effect of VFA. Biotechnology and Bioengineering, 2004, 88, 502-511.	1.7	165