Cristal Zuniga

List of Publications by Year
in descending order

32 papers	1,399 citations	448610 19 h-index	511568 30 g-index
35 all docs	35 docs citations	35 times ranked	2243 citing authors

#	Article	IF	Citations
1	Flux balance analysis of the ammonia-oxidizing bacterium Nitrosomonas europaea ATCC19718 unravels specific metabolic activities while degrading toxic compounds. PLoS Computational Biology, 2022, 18, e1009828.	1.5	4
2	Genome-Scale Metabolic Modeling Enables In-Depth Understanding of Big Data. Metabolites, 2022, 12, 14.	1.3	37
3	Multi-Objective Optimization of Microalgae Metabolism: An Evolutive Algorithm Based on FBA. Metabolites, 2022, 12, 603.	1.3	1
4	Host DNA Depletion in Saliva Samples for Improved Shotgun Metagenomics. Methods in Molecular Biology, 2021, 2327, 87-92.	0.4	1
5	The sum is greater than the parts: exploiting microbial communities to achieve complex functions. Current Opinion in Biotechnology, 2021, 67, 149-157.	3.3	25
6	Analysis of the cyanobacterial amino acid metabolism with a precise genome-scale metabolic reconstruction of Anabaena sp. UTEX 2576. Biochemical Engineering Journal, 2021, 171, 108008.	1.8	8
7	Biotechnology for secure biocontainment designs in an emerging bioeconomy. Current Opinion in Biotechnology, 2021, 71, 25-31.	3.3	23
8	Kinetic, metabolic, and statistical analytics: addressing metabolic transport limitations among organelles and microbial communities. Current Opinion in Biotechnology, 2021, 71, 91-97.	3.3	4
9	Creating a synthetic lichen: Mutualistic co-culture of fungi and extracellular polysaccharide-secreting cyanobacterium Nostoc PCC 7413. Algal Research, 2020, 45, 101755.	2.4	24
10	Synthetic microbial communities of heterotrophs and phototrophs facilitate sustainable growth. Nature Communications, 2020, 11, 3803.	5.8	55
11	Linking metabolic phenotypes to pathogenic traits among â€œCandidatus Liberibacter asiaticusâ€•and its hosts. Npj Systems Biology and Applications, 2020, 6, 24.	1.4	20
12	Modeling of nitrogen fixation and polymer production in the heterotrophic diazotroph Azotobacter vinelandii DJ. Metabolic Engineering Communications, 2020, 11, e00132.	1.9	17
13	Dynamic resource allocation drives growth under nitrogen starvation in eukaryotes. Npj Systems Biology and Applications, 2020, 6, 14.	1.4	18
14	Ten simple rules for writing and sharing computational analyses in Jupyter Notebooks. PLoS Computational Biology, 2019, 15, e1007007.	1.5	86
15	Utilizing genome-scale models to optimize nutrient supply for sustained algal growth and lipid productivity. Npj Systems Biology and Applications, 2019, 5, 33.	1.4	21
16	Environmental stimuli drive a transition from cooperation to competition in synthetic phototrophic communities. Nature Microbiology, 2019, 4, 2184-2191.	5.9	54
17	Gut bacteria responding to dietary change encode sialidases that exhibit preference for red meat-associated carbohydrates. Nature Microbiology, 2019, 4, 2082-2089.	5.9	56
18	A computational knowledge-base elucidates the response of Staphylococcus aureus to different media types. PLoS Computational Biology, 2019, 15, e1006644.	1.5	41

#	Article	IF	Citations
19	A systematic comparison of two empirical gas-liquid mass transfer determination methodologies to characterize methane biodegradation in stirred tank bioreactors. Journal of Environmental Management, 2018, 217, 247-252.	3.8	7
20	Simultaneous methane abatement and PHB production by Methylocystis hirsuta in a novel gas-recycling bubble column bioreactor. Chemical Engineering Journal, 2018, 334, 691-697.	6.6	61
21	Predicting Dynamic Metabolic Demands in the Photosynthetic Eukaryote Chlorella vulgaris. Plant Physiology, 2018, 176, 450-462.	2.3	49
22	Optimization of carbon and energy utilization through differential translational efficiency. Nature Communications, 2018, 9, 4474.	5.8	35
23	Advances in metabolic modeling of oleaginous microalgae. Biotechnology for Biofuels, 2018, 11, 241.	6.2	49
24	Improving saliva shotgun metagenomics by chemical host DNA depletion. Microbiome, 2018, 6, 42.	4.9	218
25	Draft Genome Sequence of Sphingobacterium sp. CZ-UAM, Isolated from a Methanotrophic Consortium. Genome Announcements, 2017, 5, .	0.8	5
26	Elucidation of complexity and prediction of interactions in microbial communities. Microbial Biotechnology, 2017, 10, 1500-1522.	2.0	117
27	Genome-Scale Metabolic Model for the Green Alga Chlorella vulgaris UTEX 395 Accurately Predicts Phenotypes under Autotrophic, Heterotrophic, and Mixotrophic Growth Conditions. Plant Physiology, 2016, 172, 589-602.	2.3	86
28	Unraveling interactions in microbial communities - from co-cultures to microbiomes. Journal of Microbiology, 2015, 53, 295-305.	1.3	57
29	Effect of silicone oil fraction and stirring rate on methane degradation in a stirred tank reactor. Journal of Chemical Technology and Biotechnology, 2010, 85, 314-319.	1.6	37
30	Oxygen transfer in three-phase airlift and stirred tank reactors using silicone oil as transfer vector. Process Biochemistry, 2009, 44, 619-624.	1.8	63
31	Microbiological and kinetic aspects of a biofilter for the removal of toluene from waste gases. , 1999, 63, 175-184.		111
32	Effect of nitrogen feastâ€“famine cycles and semiâ€continuous cultivation on the productivity of energyâ€rich compounds by Scenedesmus obtusiusculus ATâ€UAM. Journal of Chemical Technology and Biotechnology, 0, , .	1.6	2