

Jan Zarzycki

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

2,877
citations

331670

21
h-index

454955

30
g-index

32
all docs

32
docs citations

32
times ranked

4021
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering microalgae as a whole cell catalyst for PET degradation. <i>Methods in Enzymology</i> , 2021, 648, 435-455.	1.0	1
2	Lensless digital holographic microscopy as an efficient method to monitor enzymatic plastic degradation. <i>Marine Pollution Bulletin</i> , 2021, 163, 111950.	5.0	9
3	Engineering a Highly Efficient Carboligase for Synthetic One-Carbon Metabolism. <i>ACS Catalysis</i> , 2021, 11, 5396-5404.	11.2	24
4	A new-to-nature carboxylation module to improve natural and synthetic CO ₂ fixation. <i>Nature Catalysis</i> , 2021, 4, 105-115.	34.4	83
5	Mesoscopic to Macroscopic Electron Transfer by Hopping in a Crystal Network of Cytochromes. <i>Journal of the American Chemical Society</i> , 2020, 142, 10459-10467.	13.7	13
6	The architecture of the diaminobutyrate acetyltransferase active site provides mechanistic insight into the biosynthesis of the chemical chaperone ectoine. <i>Journal of Biological Chemistry</i> , 2020, 295, 2822-2838.	3.4	12
7	Using a marine microalga as a chassis for polyethylene terephthalate (PET) degradation. <i>Microbial Cell Factories</i> , 2019, 18, 171.	4.0	164
8	Marine Proteobacteria metabolize glycolate via the $\hat{1}^2$ -hydroxyaspartate cycle. <i>Nature</i> , 2019, 575, 500-504.	27.8	71
9	Four amino acids define the CO ₂ binding pocket of enoyl-CoA carboxylases/reductases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13964-13969.	7.1	38
10	Sulfur-Oxidizing Symbionts without Canonical Genes for Autotrophic CO ₂ Fixation. <i>MBio</i> , 2019, 10, .	4.1	29
11	Bacterial microcompartments. <i>Nature Reviews Microbiology</i> , 2018, 16, 277-290.	28.6	328
12	Structural basis for substrate specificity of methylsuccinyl-CoA dehydrogenase, an unusual member of the acyl-CoA dehydrogenase family. <i>Journal of Biological Chemistry</i> , 2018, 293, 1702-1712.	3.4	8
13	A short history of RubisCO: the rise and fall (?) of Nature's predominant CO ₂ fixing enzyme. <i>Current Opinion in Biotechnology</i> , 2018, 49, 100-107.	6.6	216
14	Design and in vitro realization of carbon-conserving photorespiration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11455-E11464.	7.1	97
15	The multicatalytic compartment of propionyl-CoA synthase sequesters a toxic metabolite. <i>Nature Chemical Biology</i> , 2018, 14, 1127-1132.	8.0	34
16	In Vitro Characterization and Concerted Function of Three Core Enzymes of a Glycyl Radical Enzyme - Associated Bacterial Microcompartment. <i>Scientific Reports</i> , 2017, 7, 42757.	3.3	51
17	Malate Synthase and $\hat{1}^2$ -Methylmalyl Coenzyme A Lyase Reactions in the Methylaspartate Cycle in <i>Haloarcula hispanica</i> . <i>Journal of Bacteriology</i> , 2017, 199, .	2.2	9
18	Biochemical and synthetic biology approaches to improve photosynthetic CO ₂ -fixation. <i>Current Opinion in Chemical Biology</i> , 2016, 34, 72-79.	6.1	98

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19	Structure and Function of a Bacterial Microcompartment Shell Protein Engineered to Bind a [4Fe-4S] Cluster. <i>Journal of the American Chemical Society</i> , 2016, 138, 5262-5270.	13.7	58
20	Bioinformatic analysis of the distribution of inorganic carbon transporters and prospective targets for bioengineering to increase Ci uptake by cyanobacteria. <i>Photosynthesis Research</i> , 2015, 126, 99-109.	2.9	18
21	Bioinformatic Characterization of Glycyl Radical Enzyme-Associated Bacterial Microcompartments. <i>Applied and Environmental Microbiology</i> , 2015, 81, 8315-8329.	3.1	59
22	Introduction of a Synthetic CO ₂ -fixing Photorespiratory Bypass into a Cyanobacterium. <i>Journal of Biological Chemistry</i> , 2014, 289, 9493-9500.	3.4	87
23	Cyanobacterial-based approaches to improving photosynthesis in plants. <i>Journal of Experimental Botany</i> , 2013, 64, 787-798.	4.8	121
24	The crystal structures of the tri-functional <i>Chloroflexus aurantiacus</i> and bi-functional <i>Rhodobacter sphaeroides</i> malyl-CoA lyases and comparison with CitE-like superfamily enzymes and malate synthases. <i>BMC Structural Biology</i> , 2013, 13, 28.	2.3	11
25	Metaproteomics of a gutless marine worm and its symbiotic microbial community reveal unusual pathways for carbon and energy use. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E1173-82.	7.1	191
26	A spectrophotometric assay for measuring acetyl-Coenzyme A carboxylase. <i>Analytical Biochemistry</i> , 2011, 411, 100-105.	2.4	15
27	Coassimilation of Organic Substrates via the Autotrophic 3-Hydroxypropionate Bi-Cycle in <i>Chloroflexus aurantiacus</i> . <i>Applied and Environmental Microbiology</i> , 2011, 77, 6181-6188.	3.1	68
28	Autotrophic carbon fixation in archaea. <i>Nature Reviews Microbiology</i> , 2010, 8, 447-460.	28.6	590
29	Identifying the missing steps of the autotrophic 3-hydroxypropionate CO ₂ fixation cycle in <i>Chloroflexus aurantiacus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21317-21322.	7.1	234
30	Mesaconyl-Coenzyme A Hydratase, a New Enzyme of Two Central Carbon Metabolic Pathways in Bacteria. <i>Journal of Bacteriology</i> , 2008, 190, 1366-1374.	2.2	39