

Nicole R Buan

List of Publications by Year in descending order

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28
papers

1,158
citations

516710

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552781

26
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28
all docs

28
docs citations

28
times ranked

1093
citing authors

#	ARTICLE	IF	CITATIONS
1	Reintegrating Biology Through the Nexus of Energy, Information, and Matter. Integrative and Comparative Biology, 2022, 61, 2082-2094.	2.0	3
2	Metabolic Synergy between Human Symbionts <i>Bacteroides</i> and <i>Methanobrevibacter</i> . Microbiology Spectrum, 2022, 10, e0106722.	3.0	10
3	Anaerobic Production of Isoprene by Engineered <i>Methanosarcina</i> Species Archaea. Applied and Environmental Microbiology, 2021, 87, .	3.1	21
4	Isoprene Production from Municipal Wastewater Biosolids by Engineered Archaeon <i>Methanosarcina acetivorans</i> . Applied Sciences (Switzerland), 2021, 11, 3342.	2.5	6
5	Charting a New Frontier Integrating Mathematical Modeling in Complex Biological Systems from Molecules to Ecosystems. Integrative and Comparative Biology, 2021, .	2.0	2
6	Metabolic Feedback Inhibition Influences Metabolite Secretion by the Human Gut Symbiont <i>Bacteroides thetaiotaomicron</i> . MSystems, 2020, 5, .	3.8	13
7	Methanogens: pushing the boundaries of biology. Emerging Topics in Life Sciences, 2018, 2, 629-646.	2.6	88
8	Physiological Evidence for Isopotential Tunneling in the Electron Transport Chain of Methane-Producing Archaea. Applied and Environmental Microbiology, 2017, 83, .	3.1	18
9	BioSIMP: Using Software Testing Techniques for Sampling and Inference in Biological Organisms. , 2017, .		3
10	pNEB193-derived suicide plasmids for gene deletion and protein expression in the methane-producing archaeon, <i>Methanosarcina acetivorans</i> . Plasmid, 2016, 84-85, 27-35.	1.4	9
11	Mutual information upper bound of molecular communication based on cell metabolism. , 2016, .		11
12	High-throughput mutation, selection, and phenotype screening of mutant methanogenic archaea. Journal of Microbiological Methods, 2016, 131, 113-121.	1.6	6
13	Methods for Detecting Microbial Methane Production and Consumption by Gas Chromatography. Bio-protocol, 2016, 6, .	0.4	4
14	Rerouting Cellular Electron Flux To Increase the Rate of Biological Methane Production. Applied and Environmental Microbiology, 2015, 81, 6528-6537.	3.1	19
15	A Multienzyme Complex Channels Substrates and Electrons through Acetyl-CoA and Methane Biosynthesis Pathways in <i>Methanosarcina</i> . PLoS ONE, 2014, 9, e107563.	2.5	22
16	Genetic Methods for <i>Methanosarcina</i> Species. Methods in Enzymology, 2011, 494, 23-42.	1.0	39
17	Methanogenesis by <i>Methanosarcina acetivorans</i> involves two structurally and functionally distinct classes of heterodisulfide reductase. Molecular Microbiology, 2010, 75, 843-853.	2.5	97
18	Syntheses and characterization of vitamin B12-Pt(II) conjugates and their adenosylation in an enzymatic assay. Journal of Biological Inorganic Chemistry, 2008, 13, 335-347.	2.6	37

#	ARTICLE	IF	CITATIONS
19	Studies of the CobA-Type ATP:Co(I)rrinoid Adenosyltransferase Enzyme of Methanosarcina mazei Strain Gol ¹ . Journal of Bacteriology, 2006, 188, 3543-3550.	2.2	14
20	Purification and Initial Biochemical Characterization of ATP:Cob(I)alamin Adenosyltransferase (EutT) Enzyme of Salmonella enterica*. Journal of Biological Chemistry, 2006, 281, 16971-16977.	3.4	34
21	Computer-assisted Docking of Flavodoxin with the ATP:Co(I)rrinoid Adenosyltransferase (CobA) Enzyme Reveals Residues Critical for Protein-Protein Interactions but Not for Catalysis. Journal of Biological Chemistry, 2005, 280, 40948-40956.	3.4	27
22	Spectroscopic and Computational Studies of the ATP:Corrinoid Adenosyltransferase (CobA) from Salmonella enterica: Insights into the Mechanism of Adenosylcobalamin Biosynthesis. Journal of the American Chemical Society, 2005, 127, 8710-8719.	13.7	90
23	The eutT Gene of Salmonella enterica Encodes an Oxygen-Labile, Metal-Containing ATP:Corrinoid Adenosyltransferase Enzyme. Journal of Bacteriology, 2004, 186, 5708-5714.	2.2	67
24	Interactions between Small Heat Shock Protein Subunits and Substrate in Small Heat Shock Protein-Substrate Complexes. Journal of Biological Chemistry, 2004, 279, 1080-1089.	3.4	100
25	The Identity of Proteins Associated with a Small Heat Shock Protein during Heat Stress in Vivo Indicates That These Chaperones Protect a Wide Range of Cellular Functions. Journal of Biological Chemistry, 2004, 279, 7566-7575.	3.4	145
26	Spectroscopic and Computational Studies of Co ²⁺ Corrinoids: Spectral and Electronic Properties of the Biologically Relevant Base-On and Base-Off Forms of Co ²⁺ Cobalamin. Journal of the American Chemical Society, 2004, 126, 9735-9749.	13.7	120
27	Spectroscopic and Computational Studies of Co ³⁺ Corrinoids: Spectral and Electronic Properties of the B ₁₂ Cofactors and Biologically Relevant Precursors. Journal of the American Chemical Society, 2003, 125, 5897-5914.	13.7	122
28	The ATP:Co(I)rrinoid Adenosyltransferase (CobA) Enzyme of Salmonella enterica Requires the 2'-OH Group of ATP for Function and Yields Inorganic Triphosphate as Its Reaction Byproduct. Journal of Biological Chemistry, 2002, 277, 33127-33131.	3.4	31