Danielle Tullman-Ercek

List of Publications by Year
in descending order

57 papers	1,744 citations	304743 22 h-index	315739 38 g-index
73 all docs	73 docs citations	73 times ranked	1857 citing authors

#	Article	IF	Citations
1	Density-based binning of gene clusters to infer function or evolutionary history using GeneGrouper. Bioinformatics, 2022, 38, 612-620.	4.1	4
2	Functional enzymeâ€"polymer complexes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119509119.	7.1	13
3	Mussel Adhesive-Inspired Proteomimetic Polymer. Journal of the American Chemical Society, 2022, 144, 4383-4392.	13.7	24
4	Linking the Salmonella enterica 1,2-Propanediol Utilization Bacterial Microcompartment Shell to the Enzymatic Core via the Shell Protein PduB. Journal of Bacteriology, 2022, 204, e0057621.	2.2	7
5	Vertex protein PduN tunes encapsulated pathway performance by dictating bacterial metabolosome morphology. Nature Communications, 2022, 13, .	12.8	7
6	Self-assembling Shell Proteins PduA and PduJ have Essential and Redundant Roles in Bacterial Microcompartment Assembly. Journal of Molecular Biology, 2021, 433, 166721.	4.2	24
7	An optimized growth medium for increased recombinant protein secretion titer via the type III secretion system. Microbial Cell Factories, 2021, 20, 44.	4.0	7
8	Dynamic Control of Gene Expression with Riboregulated Switchable Feedback Promoters. ACS Synthetic Biology, 2021, 10, 1199-1213.	3.8	19
9	Computational and Experimental Approaches to Controlling Bacterial Microcompartment Assembly. ACS Central Science, 2021, 7, 658-670.	11.3	21
10	High-Throughput Screening Test for Adhesion in Soft Materials Using Centrifugation. ACS Central Science, 2021, 7, 1135-1143.	11.3	7
11	Bacterial microcompartments: tiny organelles with big potential. Current Opinion in Microbiology, 2021, 63, 36-42.	5.1	24
12	Editorial overview: Bacterial microcompartments to the fore as metabolism is put in its place. Current Opinion in Microbiology, 2021, 64, 159-161.	5.1	0
13	Engineering a Virus-like Particle to Display Peptide Insertions Using an Apparent Fitness Landscape. Biomacromolecules, 2020, 21, 4194-4204.	5.4	13
14	Apparent size and morphology of bacterial microcompartments varies with technique. PLoS ONE, 2020, 15, e0226395.	2.5	27
15	Multiplexed mass spectrometry of individual ions improves measurement of proteoforms and their complexes. Nature Methods, 2020, 17, 391-394.	19.0	110
16	A genomic integration platform for heterologous cargo encapsulation in 1,2-propanediol utilization bacterial microcompartments. Biochemical Engineering Journal, 2020, 156, 107496.	3.6	18
17	Editorial overview: Energy biotechnology. Current Opinion in Biotechnology, 2019, 57, vii-ix.	6.6	0
18	Learning from protein fitness landscapes: a review of mutability, epistasis, and evolution. Current Opinion in Systems Biology, 2019, 14, 25-31.	2.6	13

#	Article	IF	Citations
19	Systematic Engineering of a Protein Nanocage for High-Yield, Site-Specific Modification. Journal of the American Chemical Society, 2019, 141, 3875-3884.	13.7	25
20	Cargo encapsulation in bacterial microcompartments: Methods and analysis. Methods in Enzymology, 2019, 617, 155-186.	1.0	22
21	Experimental Evaluation of Coevolution in a Self-Assembling Particle. Biochemistry, 2019, 58, 1527-1538.	2.5	19
22	Engineering expression and function of membrane proteins. Methods, 2018, 147, 66-72.	3.8	13
23	Quantitative characterization of all single amino acid variants of a viral capsid-based drug delivery vehicle. Nature Communications, 2018, 9, 1385.	12.8	43
24	Evolutionary engineering improves tolerance for medium-chain alcohols in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2018, 11, 90.	6.2	17
25	Developing Gram-negative bacteria for the secretion of heterologous proteins. Microbial Cell Factories, 2018, 17, 196.	4.0	84
26	An estimate is worth about a thousand experiments: using order-of-magnitude estimates to identify cellular engineering targets. Microbial Cell Factories, 2018, 17, 135.	4.0	1
27	Spatially organizing biochemistry: choosing a strategy to translate synthetic biology to the factory. Scientific Reports, 2018, 8, 8196.	3.3	14
28	A Pseudomonas putida efflux pump acts on short-chain alcohols. Biotechnology for Biofuels, 2018, 11, 136.	6.2	42
29	Type III Secretion Filaments as Templates for Metallic Nanostructure Synthesis. Methods in Molecular Biology, 2018, 1798, 155-171.	0.9	0
30	Dissecting difference in heterologous protein secretion titer by Type III secretion system between strains of Salmonella enterica. FASEB Journal, 2018, 32, 674.22.	0.5	0
31	<i>De novo</i> design of signal sequences to localize cargo to the 1,2â€propanediol utilization microcompartment. Protein Science, 2017, 26, 1086-1092.	7.6	30
32	Evidence for Improved Encapsulated Pathway Behavior in a Bacterial Microcompartment through Shell Protein Engineering. ACS Synthetic Biology, 2017, 6, 1880-1891.	3.8	71
33	Practical considerations for the encapsulation of multi-enzyme cargos within the bacterial microcompartment for metabolic engineering. Current Opinion in Systems Biology, 2017, 5, 16-22.	2.6	16
34	A Secretion-Amplification Role for <i>Salmonella enterica</i> Translocon Protein SipD. ACS Synthetic Biology, 2017, 6, 1006-1015.	3.8	17
35	Use of Transcriptional Control to Increase Secretion of Heterologous Proteins in T3S Systems. Methods in Molecular Biology, 2017, 1531, 71-79.	0.9	2
36	A systems-level model reveals that 1,2-Propanediol utilization microcompartments enhance pathway flux through intermediate sequestration. PLoS Computational Biology, 2017, 13, e1005525.	3.2	51

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37	Type III secretion as a generalizable strategy for the production of fullâ€length biopolymerâ€forming proteins. Biotechnology and Bioengineering, 2016, 113, 2313-2320.	3.3	26
38	Proteins adopt functionally active conformations after type III secretion. Microbial Cell Factories, 2016, 15, 213.	4.0	10
39	Tuning the Catalytic Activity of Subcellular Nanoreactors. Journal of Molecular Biology, 2016, 428, 2989-2996.	4.2	27
40	A Selection for Assembly Reveals That a Single Amino Acid Mutant of the Bacteriophage MS2 Coat Protein Forms a Smaller Virus-like Particle. Nano Letters, 2016, 16, 5944-5950.	9.1	36
41	Type-III secretion filaments as scaffolds for inorganic nanostructures. Journal of the Royal Society Interface, 2016, 13, 20150938.	3.4	7
42	Transcriptional feedback regulation of efflux protein expression for increased tolerance to and production of n-butanol. Metabolic Engineering, 2016, 33, 130-137.	7.0	48
43	Dumpster Diving in the Gut: Bacterial Microcompartments as Part of a Host-Associated Lifestyle. PLoS Pathogens, 2016, 12, e1005558.	4.7	45
44	Getting pumped: membrane efflux transporters for enhanced biomolecule production. Current Opinion in Chemical Biology, 2015, 28, 15-19.	6.1	41
45	'Channeling' Hans Krebs. Nature Chemical Biology, 2015, 11, 180-181.	8.0	7
46	Influence of Electrostatics on Small Molecule Flux through a Protein Nanoreactor. ACS Synthetic Biology, 2015, 4, 1011-1019.	3.8	58
47	Localization of Proteins to the 1,2-Propanediol Utilization Microcompartment by Non-native Signal Sequences Is Mediated by a Common Hydrophobic Motif. Journal of Biological Chemistry, 2015, 290, 24519-24533.	3.4	53
48	Engineering Transcriptional Regulation to Control Pdu Microcompartment Formation. PLoS ONE, 2014, 9, e113814.	2.5	25
49	Using Transcriptional Control To Increase Titers of Secreted Heterologous Proteins by the Type III Secretion System. Applied and Environmental Microbiology, 2014, 80, 5927-5934.	3.1	18
50	The effects of time, temperature, and pH on the stability of PDU bacterial microcompartments. Protein Science, 2014, 23, 1434-1441.	7.6	16
51	A rapid flow cytometry assay for the relative quantification of protein encapsulation into bacterial microcompartments. Biotechnology Journal, 2014, 9, 348-354.	3.5	41
52	Production and applications of engineered viral capsids. Applied Microbiology and Biotechnology, 2014, 98, 5847-5858.	3.6	69
53	Enhancing Tolerance to Short-Chain Alcohols by Engineering the Escherichia coli AcrB Efflux Pump to Secrete the Non-native Substrate <i>n</i>-Butanol. ACS Synthetic Biology, 2014, 3, 30-40.	3.8	103
54	Engineering nanoscale protein compartments for synthetic organelles. Current Opinion in Biotechnology, 2013, 24, 627-632.	6.6	55

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55	An assay for the bacterial sweet spot. Biotechnology Journal, 2013, 8, 1377-1378.	3.5	0
56	Osmolyte-Mediated Encapsulation of Proteins inside MS2 Viral Capsids. ACS Nano, 2012, 6, 8658-8664.	14.6	110
57	Engineering the <i>Salmonella</i> type III secretion system to export spider silk monomers. Molecular Systems Biology, 2009, 5, 309.	7.2	130