

# Claire R Shen

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

2,615  
citations

471061

17  
h-index

610482

24  
g-index

26  
all docs

26  
docs citations

26  
times ranked

2498  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metabolic engineering of <i>Escherichia coli</i> for 1-butanol production. <i>Metabolic Engineering</i> , 2008, 10, 305-311.	3.6	764
2	Driving Forces Enable High-Titer Anaerobic 1-Butanol Synthesis in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2011, 77, 2905-2915.	1.4	572
3	Conversion of proteins into biofuels by engineering nitrogen flux. <i>Nature Biotechnology</i> , 2011, 29, 346-351.	9.4	265
4	CRISPR-Cas9 for the genome engineering of cyanobacteria and succinate production. <i>Metabolic Engineering</i> , 2016, 38, 293-302.	3.6	181
5	Extending Carbon Chain Length of 1-Butanol Pathway for 1-Hexanol Synthesis from Glucose by Engineered <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2011, 133, 11399-11401.	6.6	131
6	CRISPR interference (CRISPRi) for gene regulation and succinate production in cyanobacterium <i>S. elongatus</i> PCC 7942. <i>Microbial Cell Factories</i> , 2016, 15, 196.	1.9	128
7	Isobutanol production as an alternative metabolic sink to rescue the growth deficiency of the glycogen mutant of <i>Synechococcus elongatus</i> PCC 7942. <i>Photosynthesis Research</i> , 2014, 120, 301-310.	1.6	101
8	Photosynthetic production of 2-methyl-1-butanol from CO <sub>2</sub> in cyanobacterium <i>Synechococcus elongatus</i> PCC7942 and characterization of the native acetohydroxyacid synthase. <i>Energy and Environmental Science</i> , 2012, 5, 9574.	15.6	99
9	Metabolic engineering of cyanobacteria for photosynthetic 3-hydroxypropionic acid production from CO <sub>2</sub> using <i>Synechococcus elongatus</i> PCC 7942. <i>Metabolic Engineering</i> , 2015, 31, 163-170.	3.6	90
10	Synergy as design principle for metabolic engineering of 1-propanol production in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2013, 17, 12-22.	3.6	59
11	Engineering efficient production of itaconic acid from diverse substrates in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , 2017, 249, 73-81.	1.9	31
12	Selection of an endogenous 2,3-butanediol pathway in <i>Escherichia coli</i> by fermentative redox balance. <i>Metabolic Engineering</i> , 2017, 39, 181-191.	3.6	26
13	Saturated mutagenesis of ketoisovalerate decarboxylase V461 enabled specific synthesis of 1-pentanol via the ketoacid elongation cycle. <i>Scientific Reports</i> , 2017, 7, 11284.	1.6	26
14	Stiffness Variable Polymers Comprising Phase-Changing Side-Chains: Material Syntheses and Application Explorations. <i>Advanced Materials</i> , 2022, 34, e2109798.	11.1	24
15	Directed Evolution of Ribosomal Protein S1 for Enhanced Translational Efficiency of High GC <i>Rhodospseudomonas palustris</i> DNA in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 18929-18936.	1.6	23
16	Using a Microfluidic Gradient Generator to Characterize BG-11 Medium for the Growth of Cyanobacteria <i>Synechococcus elongatus</i> PCC7942. <i>Micromachines</i> , 2015, 6, 1755-1767.	1.4	18
17	Self-regulated 1-butanol production in <i>Escherichia coli</i> based on the endogenous fermentative control. <i>Biotechnology for Biofuels</i> , 2016, 9, 267.	6.2	18
18	Biotransformation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid by a Syntrophic Consortium of Engineered <i>Synechococcus elongatus</i> and <i>Pseudomonas putida</i> . <i>Biotechnology Journal</i> , 2020, 15, e1900357.	1.8	16

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19	Photosynthetic Reduction of Xylose to Xylitol Using Cyanobacteria. <i>Biotechnology Journal</i> , 2020, 15, e1900354.	1.8	12
20	Dual-functional antibiofilm polymer composite for biodegradable medical devices. <i>Materials Science and Engineering C</i> , 2021, 123, 111985.	3.8	9
21	Overcoming glutamate auxotrophy in <i>Escherichia coli</i> itaconate overproducer by the Weimberg pathway. <i>Metabolic Engineering Communications</i> , 2021, 13, e00190.	1.9	8
22	Engineering cofactor flexibility enhanced 2,3-butanediol production in <i>Escherichia coli</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1605-1612.	1.4	7
23	Metabolomics-Driven Identification of the Rate-Limiting Steps in 1-Propanol Production. <i>Frontiers in Microbiology</i> , 2022, 13, 871624.	1.5	4
24	Identifying metabolic elements that contribute to productivity of 1-propanol bioproduction using metabolomic analysis. <i>Metabolomics</i> , 2018, 14, 96.	1.4	3
25	Using gradient micro-fluidics chips to optimize BG-11 medium for the growth of cyanobacteria <i>Synechococcus elongatus</i> PCC7942. , 2015, , .		0