

# In vitro prototyping of limonene biosynthesis using cell

Metabolic Engineering

61, 251-260

DOI: [10.1016/j.ymben.2020.05.006](https://doi.org/10.1016/j.ymben.2020.05.006)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Microbial production of limonene and its derivatives: Achievements and perspectives. <i>Biotechnology Advances</i> , 2020, 44, 107628.	6.0	55
2	Cell-free systems for accelerating glycoprotein expression and biomanufacturing. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 977-991.	1.4	33
3	Tuning the Cell-Free Protein Synthesis System for Biomanufacturing of Monomeric Human Filaggrin. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 590341.	2.0	7
4	Cell-Free Biocatalysis for the Production of Platform Chemicals. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	31
5	Synthetic biology, combinatorial biosynthesis, and chemoenzymatic synthesis of isoprenoids. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 675-702.	1.4	12
6	Recent Development of Extremophilic Bacteria and Their Application in Biorefinery. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 483.	2.0	84
7	Cell-Free Exploration of the Natural Product Chemical Space. <i>ChemBioChem</i> , 2021, 22, 84-91.	1.3	32
8	Harnessing in vitro platforms for natural product research: in vitro driven rational engineering and mining (iDREAM). <i>Current Opinion in Biotechnology</i> , 2021, 69, 1-9.	3.3	15
9	Optimising protein synthesis in cell-free systems, a review. <i>Engineering Biology</i> , 2021, 5, 10-19.	0.8	7
11	Complex natural product production methods and options. <i>Synthetic and Systems Biotechnology</i> , 2021, 6, 1-11.	1.8	10
12	Bio-synthesis of food additives and colorants-a growing trend in future food. <i>Biotechnology Advances</i> , 2021, 47, 107694.	6.0	47
13	The Nonribosomal Peptide Valinomycin: From Discovery to Bioactivity and Biosynthesis. <i>Microorganisms</i> , 2021, 9, 780.	1.6	18
14	Impact of Porous Matrices and Concentration by Lyophilization on Cell-Free Expression. <i>ACS Synthetic Biology</i> , 2021, 10, 1116-1131.	1.9	10
15	Improving cell-free glycoprotein synthesis by characterizing and enriching native membrane vesicles. <i>Nature Communications</i> , 2021, 12, 2363.	5.8	40
16	A Modular In Vitro Platform for the Production of Terpenes and Polyketides from CO <sub>2</sub> . <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16420-16425.	7.2	37
17	Eine modulare In vitro Plattform für die Produktion von Terpenen und Polyketiden aus CO <sub>2</sub> . <i>Angewandte Chemie</i> , 2021, 133, 16556-16561.	1.6	2
18	Cell-free gene expression. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	71
19	Designing Modular Cell-free Systems for Tunable Biotransformation of l-phenylalanine to Aromatic Compounds. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 730663.	2.0	11

#	ARTICLE	IF	CITATIONS
20	Cell-free Biosynthesis of Chlorogenic Acid Using a Mixture of Chassis Cell Extracts and Purified Spy-Cyclized Enzymes. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 7938-7947.	2.4	7
22	High-yield one-pot™ biosynthesis of raspberry ketone, a high-value fine chemical. <i>Synthetic Biology</i> , 2021, 6, ysab021.	1.2	3
23	An integrated in vivo/in vitro framework to enhance cell-free biosynthesis with metabolically rewired yeast extracts. <i>Nature Communications</i> , 2021, 12, 5139.	5.8	16
24	Removing the Obstacle to (±)-Menthol Biosynthesis by Building a Microbial Cell Factory of (+)-isopulegone from (±)-Limonene. <i>ChemSusChem</i> , 2022, 15, .	3.6	4
25	Biofoundry-assisted expression and characterization of plant proteins. <i>Synthetic Biology</i> , 2021, 6, ysab029.	1.2	14
26	Cell-Free Biosynthesis System: Methodology and Perspective of in Vitro Efficient Platform for Pyruvate Biosynthesis and Transformation. <i>ACS Synthetic Biology</i> , 2021, 10, 2417-2433.	1.9	6
27	Cell-free synthesis of industrial chemicals and biofuels from carbon feedstocks. <i>Current Opinion in Biotechnology</i> , 2022, 73, 158-163.	3.3	11
28	Industrial Biotechnology—An Industry at an Inflection Point. <i>Industrial Biotechnology</i> , 2020, 16, 321-332.	0.5	7
29	Modular cell-free expression plasmids to accelerate biological design in cells. <i>Synthetic Biology</i> , 2020, 5, ysaa019.	1.2	10
31	Data-driven enzyme immobilisation: a case study using DNA to immobilise galactose oxidase. <i>Engineering Biology</i> , 2020, 4, 43-46.	0.8	0
32	Synthesis of C2-C4 diols from bioresources: Pathways and metabolic intervention strategies. <i>Bioresource Technology</i> , 2022, 346, 126410.	4.8	1
33	Cell-free synthetic biology as an emerging biotechnology. , 2022, , 397-414.		2
34	White biotechnology and the production of bio-products. <i>Systems Microbiology and Biomanufacturing</i> , 2022, 2, 413-429.	1.5	9
35	Plant-Derived Cell-Free Biofactories for the Production of Secondary Metabolites. <i>Frontiers in Plant Science</i> , 2021, 12, 794999.	1.7	5
36	Toward improved terpenoids biosynthesis: strategies to enhance the capabilities of cell factories. <i>Bioresources and Bioprocessing</i> , 2022, 9, .	2.0	21
37	Synthetic minimal cells and their applications. , 2022, , 83-101.		2
39	Recent advances in applying cell-free systems for high-value and complex natural product biosynthesis. <i>Current Opinion in Microbiology</i> , 2022, 67, 102142.	2.3	21
40	Cell-free expression of NO synthase and P450 enzyme for the biosynthesis of an unnatural amino acid L-4-nitrotryptophan. <i>Synthetic and Systems Biotechnology</i> , 2022, 7, 775-783.	1.8	15

#	ARTICLE	IF	CITATIONS
42	Improving Thermostability and Catalytic Activity of Glycosyltransferase From <i>Panax ginseng</i> by Semi-Rational Design for Rebaudioside D Synthesis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 884898.	2.0	6
43	High-Throughput Regulatory Part Prototyping and Analysis by Cell-Free Protein Synthesis and Droplet Microfluidics. <i>ACS Synthetic Biology</i> , 2022, 11, 2108-2120.	1.9	6
44	An efficient cell-free protein synthesis platform for producing proteins with pyrrolysine-based noncanonical amino acids. <i>Biotechnology Journal</i> , 2022, 17, e2200096.	1.8	9
45	Metabolic engineering: tools for pathway rewiring and value creation. , 2022, , 3-26.		0
46	Transcriptional Tuning of Mevalonate Pathway Enzymes to Identify the Impact on Limonene Production in <i>Escherichia coli</i> . <i>ACS Omega</i> , 2022, 7, 18331-18338.	1.6	6
47	Cell-free prototyping enables implementation of optimized reverse $\beta$ -oxidation pathways in heterotrophic and autotrophic bacteria. <i>Nature Communications</i> , 2022, 13, .	5.8	27
48	A microfluidic optimal experimental design platform for forward design of cell-free genetic networks. <i>Nature Communications</i> , 2022, 13, .	5.8	12
49	Research progress on the application of cell-free synthesis systems for enzymatic processes. <i>Critical Reviews in Biotechnology</i> , 2023, 43, 938-955.	5.1	0
50	Chemical-triggered artificial cell based on metal-organic framework. <i>Chemical Engineering Journal</i> , 2022, 450, 138480.	6.6	6
51	Variability in cell-free expression reactions can impact qualitative genetic circuit characterization. <i>Synthetic Biology</i> , 2022, 7, .	1.2	7
52	Programmable Synthesis of Biobased Materials Using Cell-Free Systems. <i>Advanced Materials</i> , 2023, 35, .	11.1	3
53	Reconstitution of monoterpene indole alkaloid biosynthesis in genome engineered <i>Nicotiana benthamiana</i> . <i>Communications Biology</i> , 2022, 5, .	2.0	27
54	A ubiquitous amino acid source for prokaryotic and eukaryotic cell-free transcription-translation systems. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	5
56	Striving for sustainable biosynthesis: discovery, diversification, and production of antimicrobial drugs in <i>Escherichia coli</i> . <i>Biochemical Society Transactions</i> , 0, , .	1.6	4
57	Achievements and perspectives of synthetic biology in botanical insecticides. <i>Journal of Cellular Physiology</i> , 0, , .	2.0	6
58	Opportunities and Challenges of in vitro Synthetic Biosystem for Terpenoids Production. <i>Biotechnology and Bioprocess Engineering</i> , 2022, 27, 697-705.	1.4	1
59	Microbial Production of Limonene. , 2022, , 1-29.		0
60	Cell-free metabolic engineering enables selective biotransformation of fatty acids to value-added chemicals. <i>Metabolic Engineering Communications</i> , 2023, 16, e00217.	1.9	9

#	ARTICLE	IF	CITATIONS
61	Rapid prototyping enzyme homologs to improve titer of nicotinamide mononucleotide using a strategy combining cell-free protein synthesis with split GFP. <i>Biotechnology and Bioengineering</i> , 2023, 120, 1133-1146.	1.7	1
62	Cell-Free Systems for Sustainable Production of Biofuels. , 2023, , 331-348.		0
63	Investigating ethanol production using the <i>Zymomonas mobilis</i> crude extract. <i>Scientific Reports</i> , 2023, 13, .	1.6	0
64	Biosynthesis of monoterpenoid and sesquiterpenoid as natural flavors and fragrances. <i>Biotechnology Advances</i> , 2023, 65, 108151.	6.0	10
65	Mechanistic Insights into Cell-Free Gene Expression through an Integrated -Omics Analysis of Extract Processing Methods. <i>ACS Synthetic Biology</i> , 2023, 12, 405-418.	1.9	5
66	A dynamic kinetic model captures cell-free metabolism for improved butanol production. <i>Metabolic Engineering</i> , 2023, 76, 133-145.	3.6	7
67	Cell Extracts from Bacteria and Yeast Retain Metabolic Activity after Extended Storage and Repeated Thawing. <i>ACS Synthetic Biology</i> , 2023, 12, 904-908.	1.9	2