

Overproduction of free fatty acids in *E. coli*: Implication

Metabolic Engineering

10, 333-339

DOI: [10.1016/j.ymben.2008.08.006](https://doi.org/10.1016/j.ymben.2008.08.006)

Citation Report

#	ARTICLE	IF	CITATIONS
4	Metabolic engineering: Enabling technology for biofuels production. <i>Metabolic Engineering</i> , 2008, 10, 293-294.	3.6	26
5	<i>Escherichia coli</i> Unsaturated Fatty Acid Synthesis. <i>Journal of Biological Chemistry</i> , 2009, 284, 29526-29535.	1.6	181
6	Current state and perspectives of producing biodiesel-like compounds by biotechnology. <i>Microbial Biotechnology</i> , 2009, 2, 551-565.	2.0	26
7	Improving cellular malonyl-CoA level in <i>Escherichia coli</i> via metabolic engineering. <i>Metabolic Engineering</i> , 2009, 11, 192-198.	3.6	223
8	Industrial biotechnology: Tools and applications. <i>Biotechnology Journal</i> , 2009, 4, 1725-1739.	1.8	85
9	New microbial fuels: a biotech perspective. <i>Current Opinion in Microbiology</i> , 2009, 12, 274-281.	2.3	313
11	Bioethanol and biodiesel: Alternative liquid fuels for future generations. <i>Engineering in Life Sciences</i> , 2010, 10, 8-18.	2.0	117
12	Advanced biofuel production in microbes. <i>Biotechnology Journal</i> , 2010, 5, 147-162.	1.8	331
13	Increasing unsaturated fatty acid contents in <i>Escherichia coli</i> by coexpression of three different genes. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 271-280.	1.7	73
14	Fatty acid alkyl esters: perspectives for production of alternative biofuels. <i>Applied Microbiology and Biotechnology</i> , 2010, 85, 1713-1733.	1.7	122
15	Biofuel production in <i>Escherichia coli</i> : the role of metabolic engineering and synthetic biology. <i>Applied Microbiology and Biotechnology</i> , 2010, 86, 419-434.	1.7	220
16	Biotechnological processes for biodiesel production using alternative oils. <i>Applied Microbiology and Biotechnology</i> , 2010, 88, 621-636.	1.7	152
17	Synthetic biology for biofuels: Building designer microbes from the scratch. <i>Biotechnology and Bioprocess Engineering</i> , 2010, 15, 11-21.	1.4	29
18	Utilizing elementary mode analysis, pathway thermodynamics, and a genetic algorithm for metabolic flux determination and optimal metabolic network design. <i>BMC Systems Biology</i> , 2010, 4, 49.	3.0	33
19	A perspective: Photosynthetic production of fatty acid-based biofuels in genetically engineered cyanobacteria. <i>Biotechnology Advances</i> , 2010, 28, 742-746.	6.0	103
20	A process for microbial hydrocarbon synthesis: Overproduction of fatty acids in <i>Escherichia coli</i> and catalytic conversion to alkanes. <i>Biotechnology and Bioengineering</i> , 2010, 106, 193-202.	1.7	223
21	Quantitative analysis and engineering of fatty acid biosynthesis in <i>E. coli</i> . <i>Metabolic Engineering</i> , 2010, 12, 378-386.	3.6	198
22	Biofuel production by in vitro synthetic enzymatic pathway biotransformation. <i>Current Opinion in Biotechnology</i> , 2010, 21, 663-669.	3.3	76

#	ARTICLE	IF	CITATIONS
23	Theoretical study of lipid biosynthesis in wild-type <i>Escherichia coli</i> and in a protoplast form using elementary flux mode analysis. <i>FEBS Journal</i> , 2010, 277, 1023-1034.	2.2	8
24	Microbial production of fatty-acid-derived fuels and chemicals from plant biomass. <i>Nature</i> , 2010, 463, 559-562.	13.7	1,192
25	Production of Lipids for Biofuels Using Bacteria. , 2010, , 291-314.		4
26	Pilot-Scale Production of Fatty Acid Ethyl Esters by an Engineered <i>Escherichia coli</i> Strain Harboring the p(Microdiesel) Plasmid. <i>Applied and Environmental Microbiology</i> , 2010, 76, 4560-4565.	1.4	61
27	Synthetic Biology Guides Biofuel Production. <i>Journal of Biomedicine and Biotechnology</i> , 2010, 2010, 1-9.	3.0	59
28	Biofuels: Biomolecular Engineering Fundamentals and Advances. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2010, 1, 19-36.	3.3	61
29	Genetic Engineering of <i>Escherichia coli</i> for Biofuel Production. <i>Annual Review of Genetics</i> , 2010, 44, 53-69.	3.2	119
30	Genetic Engineering of Algae for Enhanced Biofuel Production. <i>Eukaryotic Cell</i> , 2010, 9, 486-501.	3.4	969
31	Metabolic engineering of <i>Escherichia coli</i> for biofuel production. <i>Biofuels</i> , 2010, 1, 493-504.	1.4	33
32	Engineering <i>Escherichia coli</i> for Biodiesel Production Utilizing a Bacterial Fatty Acid Methyltransferase. <i>Applied and Environmental Microbiology</i> , 2011, 77, 8052-8061.	1.4	107
33	Engineering microorganisms for biofuel production. <i>Biofuels</i> , 2011, 2, 153-166.	1.4	20
34	Simpler Is Better: High-Yield and Potential Low-Cost Biofuels Production through Cell-Free Synthetic Pathway Biotransformation (SyPaB). <i>ACS Catalysis</i> , 2011, 1, 998-1009.	5.5	74
36	Analysis of biofuels production from sugar based on three criteria: Thermodynamics, bioenergetics, and product separation. <i>Energy and Environmental Science</i> , 2011, 4, 784-792.	15.6	97
37	Efficient free fatty acid production in <i>Escherichia coli</i> using plant acyl-ACP thioesterases. <i>Metabolic Engineering</i> , 2011, 13, 713-722.	3.6	122
39	Quantifying Bio-Engineering: The Importance of Biophysics in Biofuel Research. , 2011, , .		1
40	Structural and functional analyses of a saturated acyl ACP thioesterase, type B from immature seed tissue of <i>Jatropha curcas</i> . <i>Plant Biology</i> , 2011, 13, 453-461.	1.8	17
41	Lipids from heterotrophic microbes: advances in metabolism research. <i>Trends in Biotechnology</i> , 2011, 29, 53-61.	4.9	170
42	What is vital (and not vital) to advance economically-competitive biofuels production. <i>Process Biochemistry</i> , 2011, 46, 2091-2110.	1.8	99

#	ARTICLE	IF	CITATIONS
43	Prospects for microbial biodiesel production. <i>Biotechnology Journal</i> , 2011, 6, 277-285.	1.8	70
44	Biodiesel production with microalgae as feedstock: from strains to biodiesel. <i>Biotechnology Letters</i> , 2011, 33, 1269-1284.	1.1	164
45	Increasing fatty acid production in <i>E. coli</i> by simulating the lipid accumulation of oleaginous microorganisms. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2011, 38, 919-925.	1.4	53
46	A recombinant $\hat{1}$ -dioxygenase from rice to produce fatty aldehydes using <i>E. coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2011, 90, 989-995.	1.7	24
47	Biosynthesis of isoprene in <i>Escherichia coli</i> via methylerythritol phosphate (MEP) pathway. <i>Applied Microbiology and Biotechnology</i> , 2011, 90, 1915-1922.	1.7	136
48	Bacterial production of free fatty acids from freshwater macroalgal cellulose. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 435-446.	1.7	31
49	Challenges of the utilization of wood polymers: how can they be overcome?. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 1525-1536.	1.7	52
50	Renewable energy from Cyanobacteria: energy production optimization by metabolic pathway engineering. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 471-490.	1.7	273
51	Engineering microbes to produce biofuels. <i>Current Opinion in Biotechnology</i> , 2011, 22, 388-393.	3.3	38
52	Improvement of fatty acid biosynthesis by engineered recombinant <i>Escherichia coli</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2011, 16, 706-713.	1.4	24
53	Characterization of a novel thioesterase (PtTE) from <i>Phaeodactylum tricornutum</i> . <i>Journal of Basic Microbiology</i> , 2011, 51, 666-672.	1.8	68
54	Biohydrogenation from Biomass Sugar Mediated by In Vitro Synthetic Enzymatic Pathways. <i>Chemistry and Biology</i> , 2011, 18, 372-380.	6.2	97
55	Optimizing pressurized liquid extraction of microbial lipids using the response surface method. <i>Journal of Chromatography A</i> , 2011, 1218, 373-379.	1.8	46
56	Industrial fermentation of renewable diesel fuels. <i>Current Opinion in Biotechnology</i> , 2011, 22, 344-350.	3.3	56
57	Biodiesel production from sediments of a eutrophic reservoir. <i>Biomass and Bioenergy</i> , 2011, 35, 2280-2284.	2.9	3
58	Genetic engineering of fatty acid chain length in <i>Phaeodactylum tricornutum</i> . <i>Metabolic Engineering</i> , 2011, 13, 89-95.	3.6	233
59	Application and engineering of fatty acid biosynthesis in <i>Escherichia coli</i> for advanced fuels and chemicals. <i>Metabolic Engineering</i> , 2011, 13, 28-37.	3.6	134
60	Photosynthesis driven conversion of carbon dioxide to fatty alcohols and hydrocarbons in cyanobacteria. <i>Metabolic Engineering</i> , 2011, 13, 169-176.	3.6	224

#	ARTICLE	IF	CITATIONS
61	In vitro reconstitution and steady-state analysis of the fatty acid synthase from <i>Escherichia coli</i> . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18643-18648.	3.3	152
62	Membrane Stresses Induced by Overproduction of Free Fatty Acids in <i>Escherichia coli</i> . Applied and Environmental Microbiology, 2011, 77, 8114-8128.	1.4	135
64	The Role of Synthetic Biology in the Design of Microbial Cell Factories for Biofuel Production. Journal of Biomedicine and Biotechnology, 2011, 2011, 1-9.	3.0	31
65	Metabolic Engineering of Cyanobacteria for Direct Conversion of CO ₂ to Hydrocarbon Biofuels. Progress in Botany Fortschritte Der Botanik, 2012, , 81-93.	0.1	15
66	Engineering <i>Escherichia coli</i> for Biotransformation of Biomass into Fatty Acid Derived Fuels. Current Chemical Biology, 2012, 6, 7-13.	0.2	0
67	Application of synthetic biology in cyanobacteria and algae. Frontiers in Microbiology, 2012, 3, 344.	1.5	149
68	Cyanobacterial biofuel production. Journal of Biotechnology, 2012, 162, 50-56.	1.9	243
69	From Fields to Fuels: Recent Advances in the Microbial Production of Biofuels. ACS Synthetic Biology, 2012, 1, 498-513.	1.9	77
70	Effect of acetate formation pathway and long chain fatty acid CoA-ligase on the free fatty acid production in <i>E. coli</i> expressing acy-ACP thioesterase from <i>Ricinus communis</i> . Metabolic Engineering, 2012, 14, 380-387.	3.6	52
71	Metabolic engineering of <i>Escherichia coli</i> BL21 for biosynthesis of heparosan, a bioengineered heparin precursor. Metabolic Engineering, 2012, 14, 521-527.	3.6	69
72	An integrated computational and experimental study for overproducing fatty acids in <i>Escherichia coli</i> . Metabolic Engineering, 2012, 14, 687-704.	3.6	102
73	ATP drives direct photosynthetic production of 1-butanol in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6018-6023.	3.3	327
74	Feedstocks for advanced biodiesel production. , 2012, , 69-90.		12
75	Photosynthetic production of ethanol from carbon dioxide in genetically engineered cyanobacteria. Energy and Environmental Science, 2012, 5, 9857-9865.	15.6	337
76	Metabolic engineering: enabling technology for biofuels production. Wiley Interdisciplinary Reviews: Energy and Environment, 2012, 1, 165-172.	1.9	3
77	Production of extracellular fatty acid using engineered <i>Escherichia coli</i> . Microbial Cell Factories, 2012, 11, 41.	1.9	65
78	Optimization of fatty alcohol biosynthesis pathway for selectively enhanced production of C ₁₂ /14 and C ₁₆ /18 fatty alcohols in engineered <i>Escherichia coli</i> . Microbial Cell Factories, 2012, 11, 65.	1.9	85
79	Manipulation of the carbon storage regulator system for metabolite remodeling and biofuel production in <i>Escherichia coli</i> . Microbial Cell Factories, 2012, 11, 79.	1.9	53

#	ARTICLE	IF	CITATIONS
80	Transcriptomic analysis of the oleaginous microalga <i>Neochloris oleoabundans</i> reveals metabolic insights into triacylglyceride accumulation. <i>Biotechnology for Biofuels</i> , 2012, 5, 74.	6.2	178
81	Boosting the free fatty acid synthesis of <i>Escherichia coli</i> by expression of a cytosolic <i>Acinetobacter baylyi</i> thioesterase. <i>Biotechnology for Biofuels</i> , 2012, 5, 76.	6.2	45
82	Microbial Production of Fatty-Acid-Based Biofuels. , 2012, , 213-230.		2
83	Biochemical and Structural Characterization of the trans-Enoyl-CoA Reductase from <i>Treponema denticola</i> . <i>Biochemistry</i> , 2012, 51, 6827-6837.	1.2	19
84	Systems biology of yeast: enabling technology for development of cell factories for production of advanced biofuels. <i>Current Opinion in Biotechnology</i> , 2012, 23, 624-630.	3.3	83
85	Alternative biofuel production in non-natural hosts. <i>Current Opinion in Biotechnology</i> , 2012, 23, 744-750.	3.3	31
86	<i>Escherichia coli</i> for biofuel production: bridging the gap from promise to practice. <i>Trends in Biotechnology</i> , 2012, 30, 538-545.	4.9	86
87	Engineering <i>Escherichia coli</i> to synthesize free fatty acids. <i>Trends in Biotechnology</i> , 2012, 30, 659-667.	4.9	174
88	Microbial Technologies in Advanced Biofuels Production. , 2012, , .		20
89	Engineering <i>Escherichia coli</i> for Biotransformation of Biomass into Fatty Acid Derived Fuels. <i>Current Chemical Biology</i> , 2012, 6, 7-13.	0.2	1
90	Engineering synthetic recursive pathways to generate non-natural small molecules. <i>Nature Chemical Biology</i> , 2012, 8, 518-526.	3.9	51
91	Heterologous Co-expression of <i>accA</i> , <i>fabD</i> , and Thioesterase Genes for Improving Long-Chain Fatty Acid Production in <i>Pseudomonas aeruginosa</i> and <i>Escherichia coli</i> . <i>Applied Biochemistry and Biotechnology</i> , 2012, 167, 24-38.	1.4	11
92	An analysis of the concentration change of intermediate metabolites by gene manipulation in fatty acid biosynthesis. <i>Enzyme and Microbial Technology</i> , 2012, 51, 95-99.	1.6	5
93	Biosynthesis of long chain hydroxyfatty acids from glucose by engineered <i>Escherichia coli</i> . <i>Bioresource Technology</i> , 2012, 114, 561-566.	4.8	31
94	Isolation of improved free fatty acid overproducing strains of <i>Escherichia coli</i> via Nile red based high-throughput screening. <i>Environmental Progress and Sustainable Energy</i> , 2012, 31, 17-23.	1.3	16
95	Improving fatty acid production in <i>Escherichia coli</i> through the overexpression of malonyl coA-acyl carrier protein transacylase. <i>Biotechnology Progress</i> , 2012, 28, 60-65.	1.3	44
96	Physiological studies on microalgal culture additives to optimize growth rate and oil content. <i>Bioprocess and Biosystems Engineering</i> , 2012, 35, 135-143.	1.7	2
97	Overexpression of malic enzyme (ME) of <i>Mucor circinelloides</i> improved lipid accumulation in engineered <i>Rhodotorula glutinis</i> . <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 4927-4936.	1.7	86

#	ARTICLE	IF	CITATIONS
98	Increased production of fatty acids and triglycerides in <i>Aspergillus oryzae</i> by enhancing expressions of fatty acid synthesis-related genes. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 269-281.	1.7	67
99	Advancing oleaginous microorganisms to produce lipid via metabolic engineering technology. <i>Progress in Lipid Research</i> , 2013, 52, 395-408.	5.3	325
100	Screening for Enhanced Triacetic Acid Lactone Production by Recombinant <i>Escherichia coli</i> Expressing a Designed Triacetic Acid Lactone Reporter. <i>Journal of the American Chemical Society</i> , 2013, 135, 10099-10103.	6.6	182
101	Borrowing genes from <i>Chlamydomonas reinhardtii</i> for free fatty acid production in engineered cyanobacteria. <i>Journal of Applied Phycology</i> , 2013, 25, 1495-1507.	1.5	37
102	Free fatty acid production in <i>Escherichia coli</i> under phosphate-limited conditions. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5149-5159.	1.7	26
103	Biofuels of the Present and the Future. , 2013, , 325-370.		2
104	Correlations Between FAS Elongation Cycle Genes Expression and Fatty Acid Production for Improvement of Long-Chain Fatty Acids in <i>Escherichia coli</i> . <i>Applied Biochemistry and Biotechnology</i> , 2013, 169, 1606-1619.	1.4	10
105	Fatty alcohol production in engineered <i>E. coli</i> expressing <i>Marinobacter</i> fatty acyl-CoA reductases. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 7061-7071.	1.7	65
106	Synthesis of medium chain length fatty acid ethyl esters in engineered <i>Escherichia coli</i> using endogenously produced medium chain fatty acids. <i>Enzyme and Microbial Technology</i> , 2013, 53, 128-133.	1.6	31
107	RNA-Seq analysis and targeted mutagenesis for improved free fatty acid production in an engineered cyanobacterium. <i>Biotechnology for Biofuels</i> , 2013, 6, 113.	6.2	50
108	Biodiesel from microalgae: Ways for increasing the effectiveness of lipid accumulation by genetic engineering methods. <i>Cytology and Genetics</i> , 2013, 47, 349-358.	0.2	5
109	Identification of Transport Proteins Involved in Free Fatty Acid Efflux in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2013, 195, 135-144.	1.0	116
110	Microbial oil production from various carbon sources and its use for biodiesel preparation. <i>Biofuels, Bioproducts and Biorefining</i> , 2013, 7, 65-77.	1.9	75
111	Integration of sewage sludge digestion with advanced biofuel synthesis. <i>Bioresource Technology</i> , 2013, 132, 166-170.	4.8	19
112	Enhancement of Long-Chain Fatty Acid Production in <i>Escherichia coli</i> by Coexpressing Genes, Including <i>fabF</i> , Involved in the Elongation Cycle of Fatty Acid Biosynthesis. <i>Applied Biochemistry and Biotechnology</i> , 2013, 169, 462-476.	1.4	12
113	Metabolic engineering for enhanced fatty acids synthesis in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2013, 16, 95-102.	3.6	95
114	Synthetic Biology and Metabolic Engineering Approaches To Produce Biofuels. <i>Chemical Reviews</i> , 2013, 113, 4611-4632.	23.0	155
115	Recent progress in metabolic engineering for the production of biofuels and biochemicals from renewable sources with particular emphasis on catabolite regulation and its modulation. <i>Process Biochemistry</i> , 2013, 48, 1409-1417.	1.8	30

#	ARTICLE	IF	CITATIONS
116	Single cell oil production from low-cost substrates: The possibility and potential of its industrialization. <i>Biotechnology Advances</i> , 2013, 31, 129-139.	6.0	253
117	Solid-phase extraction of long-chain fatty acids from aqueous solution. <i>Separation and Purification Technology</i> , 2013, 106, 1-7.	3.9	6
118	Modular optimization of multi-gene pathways for fatty acids production in <i>E. coli</i> . <i>Nature Communications</i> , 2013, 4, 1409.	5.8	405
119	Engineering <i>E. coli</i> for triglyceride accumulation through native and heterologous metabolic reactions. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 2753-2759.	1.7	17
120	Production of advanced biofuels in engineered <i>E. coli</i> . <i>Current Opinion in Chemical Biology</i> , 2013, 17, 472-479.	2.8	49
121	Engineering <i>Escherichia coli</i> to convert acetic acid to free fatty acids. <i>Biochemical Engineering Journal</i> , 2013, 76, 60-69.	1.8	52
122	Biocommodities from photosynthetic microorganisms. <i>Environmental Progress and Sustainable Energy</i> , 2013, 32, 989-1001.	1.3	20
123	Transcriptional Regulation of Fatty Acid Biosynthesis in <i>Lactococcus lactis</i> . <i>Journal of Bacteriology</i> , 2013, 195, 1081-1089.	1.0	30
124	Metabolic Engineering of Hydrocarbon Biosynthesis for Biofuel Production. , 0, , .		3
125	Genetic engineering of microorganisms for biodiesel production. <i>Bioengineered</i> , 2013, 4, 292-304.	1.4	41
126	Structure, Activity, and Substrate Selectivity of the Orf6 Thioesterase from <i>Photobacterium profundum</i> . <i>Journal of Biological Chemistry</i> , 2013, 288, 10841-10848.	1.6	15
127	Enzymatic and physiological characterization of fatty acid activation in <i>Synechocystis</i> sp. PCC6803. <i>Journal of Basic Microbiology</i> , 2013, 53, 848-855.	1.8	3
128	Overexpression of Peanut Diacylglycerol Acyltransferase 2 in <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2013, 8, e61363.	1.1	14
129	A Comprehensive Evaluation of Performance and Emissions from UltraCleanâ„¢ Diesel in Medium Duty Engines. , 0, , .		0
130	Near-Real-Time Analysis of the Phenotypic Responses of <i>Escherichia coli</i> to 1-Butanol Exposure Using Raman Spectroscopy. <i>Journal of Bacteriology</i> , 2014, 196, 3983-3991.	1.0	33
131	Engineering pathways to biofuels in photoautotrophic microorganisms. <i>Biofuels</i> , 2014, 5, 67-78.	1.4	5
132	Engineering <i>Escherichia coli</i> for odd straight medium chain free fatty acid production. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 8145-8154.	1.7	18
133	New Frontiers in the Production of Biodiesel: Biodiesel Derived from Macro and Microorganisms. <i>Lecture Notes in Energy</i> , 2014, , 205-225.	0.2	0

#	ARTICLE	IF	CITATIONS
134	Efficient odd straight medium chain free fatty acid production by metabolically engineered <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2014, 111, 2209-2219.	1.7	34
135	A review of metabolic and enzymatic engineering strategies for designing and optimizing performance of microbial cell factories. <i>Computational and Structural Biotechnology Journal</i> , 2014, 11, 91-99.	1.9	56
136	Expression of <i>Arabidopsis thaliana</i> S-ACP-DES3 in <i>Escherichia coli</i> for high-performance biodiesel production. <i>RSC Advances</i> , 2014, 4, 63387-63392.	1.7	1
137	Microbial Oil Production from Lignocellulosic Biomass – Recent Development and Prospect. <i>Applied Mechanics and Materials</i> , 0, 541-542, 397-403.	0.2	0
138	Fermentative production of short-chain fatty acids in <i>Escherichia coli</i> . <i>Microbiology (United Kingdom)</i> 150, 582-589.	0.7	34
139	Production and characterization of biodiesel from carbon dioxide concentrating chemolithotrophic bacteria, <i>Serratia</i> sp. ISTD04. <i>Bioresource Technology</i> , 2014, 153, 189-197.	4.8	71
140	Cloning, characterization, and expression analysis of acyl-acyl carrier protein (ACP)-thioesterase B from seeds of Chinese Spicehush (<i>Lindera communis</i>). <i>Gene</i> , 2014, 542, 16-22.	1.0	12
141	Hybrid processing strategies for expanding and improving the synthesis of renewable bioproducts. <i>Current Opinion in Biotechnology</i> , 2014, 30, 17-23.	3.3	9
142	Metabolic engineering of <i>Saccharomyces cerevisiae</i> for production of fatty acid-derived biofuels and chemicals. <i>Metabolic Engineering</i> , 2014, 21, 103-113.	3.6	338
143	Engineering of <i>Saccharomyces cerevisiae</i> for the synthesis of short chain fatty acids. <i>Biotechnology and Bioengineering</i> , 2014, 111, 347-358.	1.7	81
144	Latest trends in feedstocks for biodiesel production. <i>Biofuels, Bioproducts and Biorefining</i> , 2014, 8, 126-143.	1.9	138
145	Systems metabolic engineering design: Fatty acid production as an emerging case study. <i>Biotechnology and Bioengineering</i> , 2014, 111, 849-857.	1.7	69
146	Fatty acid from the renewable sources: A promising feedstock for the production of biofuels and biobased chemicals. <i>Biotechnology Advances</i> , 2014, 32, 382-389.	6.0	43
147	Engineering biofuel tolerance in non-native producing microorganisms. <i>Biotechnology Advances</i> , 2014, 32, 541-548.	6.0	71
148	Fatty acid synthesis in <i>Escherichia coli</i> and its applications towards the production of fatty acid based biofuels. <i>Biotechnology for Biofuels</i> , 2014, 7, 7.	6.2	239
149	An Oleaginous Bacterium That Intrinsically Accumulates Long-Chain Free Fatty Acids in its Cytoplasm. <i>Applied and Environmental Microbiology</i> , 2014, 80, 1126-1131.	1.4	17
150	Overproduction of fatty acids in engineered <i>Saccharomyces cerevisiae</i> . <i>Biotechnology and Bioengineering</i> , 2014, 111, 1841-1852.	1.7	82
151	Metabolic engineering of <i>Escherichia coli</i> for production of fatty acid short-chain esters through combination of the fatty acid and 2-keto acid pathways. <i>Metabolic Engineering</i> , 2014, 22, 69-75.	3.6	55

#	ARTICLE	IF	CITATIONS
152	Expression of dehydratase domains from a polyunsaturated fatty acid synthase increases the production of fatty acids in <i>Escherichia coli</i> . <i>Enzyme and Microbial Technology</i> , 2014, 55, 133-139.	1.6	12
153	Constraint-based modeling of heterologous pathways: Application and experimental demonstration for overproduction of fatty acids in <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2014, 111, 2056-2066.	1.7	12
154	Harnessing <i>Yarrowia lipolytica</i> lipogenesis to create a platform for lipid and biofuel production. <i>Nature Communications</i> , 2014, 5, 3131.	5.8	488
155	Functional Screening and <i>In Vitro</i> Analysis Reveal Thioesterases with Enhanced Substrate Specificity Profiles That Improve Short-Chain Fatty Acid Production in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2014, 80, 1042-1050.	1.4	54
156	<i>Microalgae</i> , 2014, , 171-184.		4
157	Microbial synthesis of biodiesel and its prospects. <i>Applied Biochemistry and Microbiology</i> , 2014, 50, 789-801.	0.3	3
158	Production of anteiso-branched fatty acids in <i>Escherichia coli</i> ; next generation biofuels with improved cold-flow properties. <i>Metabolic Engineering</i> , 2014, 26, 111-118.	3.6	55
159	Enhanced free fatty acid production by codon-optimized <i>Lactococcus lactis</i> acyl-ACP thioesterase gene expression in <i>Escherichia coli</i> using crude glycerol. <i>Enzyme and Microbial Technology</i> , 2014, 67, 8-16.	1.6	10
160	Metabolic engineering of <i>Escherichia coli</i> for efficient free fatty acid production from glycerol. <i>Metabolic Engineering</i> , 2014, 25, 82-91.	3.6	49
161	Efficient free fatty acid production from woody biomass hydrolysate using metabolically engineered <i>Escherichia coli</i> . <i>Bioresource Technology</i> , 2014, 169, 119-125.	4.8	33
162	Use of pantothenate as a metabolic switch increases the genetic stability of farnesene producing <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2014, 25, 215-226.	3.6	53
163	Fine-Tuning of the Fatty Acid Pathway by Synthetic Antisense RNA for Enhanced (2 <i>S</i>)-Naringenin Production from <i>Scp1</i> -Tyrosine in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2014, 80, 7283-7292.	1.4	67
164	Liquid Biofuels: Emergence, Development and Prospects. <i>Lecture Notes in Energy</i> , 2014, , .	0.2	1
165	Enhancement of free fatty acid production in <i>Saccharomyces cerevisiae</i> by control of fatty acyl-CoA metabolism. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 6739-6750.	1.7	52
166	Central metabolic responses to the overproduction of fatty acids in <i>Escherichia coli</i> based on ¹³ C metabolic flux analysis. <i>Biotechnology and Bioengineering</i> , 2014, 111, 575-585.	1.7	112
167	Hydrogen peroxide-independent production of \pm -alkenes by OleTJE P450 fatty acid decarboxylase. <i>Biotechnology for Biofuels</i> , 2014, 7, 28.	6.2	128
168	Production of free monounsaturated fatty acids by metabolically engineered <i>Escherichia coli</i> . <i>Biotechnology for Biofuels</i> , 2014, 7, 59.	6.2	81
169	Improving the tolerance of <i>Escherichia coli</i> to medium-chain fatty acid production. <i>Metabolic Engineering</i> , 2014, 25, 1-7.	3.6	67

#	ARTICLE	IF	CITATIONS
170	Improving Production of Malonyl Coenzyme A-Derived Metabolites by Abolishing Snf1-Dependent Regulation of Acc1. <i>MBio</i> , 2014, 5, e01130-14.	1.8	194
171	Metabolic engineering of fatty acyl-ACP reductase-dependent pathway to improve fatty alcohol production in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2014, 22, 10-21.	3.6	95
172	Expanding the chemical diversity of natural esters by engineering a polyketide-derived pathway into <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2014, 24, 97-106.	3.6	23
173	Metabolic engineering of <i>Saccharomyces cerevisiae</i> for production of fatty acid ethyl esters, an advanced biofuel, by eliminating non-essential fatty acid utilization pathways. <i>Applied Energy</i> , 2014, 115, 226-232.	5.1	99
174	ePathOptimize: A Combinatorial Approach for Transcriptional Balancing of Metabolic Pathways. <i>Scientific Reports</i> , 2015, 5, 11301.	1.6	126
175	Efficient production of free fatty acids from soybean meal carbohydrates. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2324-2333.	1.7	16
176	Functional replacement of the <i>Saccharomyces cerevisiae</i> fatty acid synthase with a bacterial type II system allows flexible product profiles. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2618-2623.	1.7	23
177	Lauric Acid Production in a Glycogen-Less Strain of <i>Synechococcus</i> sp. PCC 7002. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 48.	2.0	25
179	Towards lignin consolidated bioprocessing: simultaneous lignin depolymerization and product generation by bacteria. <i>Green Chemistry</i> , 2015, 17, 4951-4967.	4.6	298
180	The production of 1%-hydroxy palmitic acid using fatty acid metabolism and cofactor optimization in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 6667-6676.	1.7	31
181	Metabolic engineering of microbes for branched-chain biodiesel production with low-temperature property. <i>Biotechnology for Biofuels</i> , 2015, 8, 92.	6.2	45
182	Perspectives on Algal Engineering for Enhanced Biofuel Production. , 2015, , 73-101.		0
183	Negative Feedback Regulation of Fatty Acid Production Based on a Malonyl-CoA Sensor-Actuator. <i>ACS Synthetic Biology</i> , 2015, 4, 132-140.	1.9	138
184	Metabolic engineering strategies for microbial synthesis of oleochemicals. <i>Metabolic Engineering</i> , 2015, 29, 1-11.	3.6	152
185	Using Modern Tools To Probe the Structure-Function Relationship of Fatty Acid Synthases. <i>ChemBioChem</i> , 2015, 16, 528-547.	1.3	60
186	Targeted engineering and scale up of lycopene overproduction in <i>Escherichia coli</i> . <i>Process Biochemistry</i> , 2015, 50, 341-346.	1.8	67
187	Use of a genetically encoded hydrogen peroxide sensor for whole cell screening of enzyme activity. <i>Protein Engineering, Design and Selection</i> , 2015, 28, 79-83.	1.0	14
188	Engineering lipid overproduction in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2015, 29, 56-65.	3.6	291

#	ARTICLE	IF	CITATIONS
189	How to direct the fatty acid biosynthesis towards polyhydroxyalkanoates production?. <i>Biomass and Bioenergy</i> , 2015, 74, 268-279.	2.9	45
190	Metabolic engineering of <i>Escherichia coli</i> for production of biodiesel from fatty alcohols and acetyl-CoA. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 7805-7812.	1.7	21
191	Sustainable production of liquid biofuels from renewable microalgae biomass. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 24-31.	2.9	88
192	Transcription activator-like effector nucleases mediated metabolic engineering for enhanced fatty acids production in <i>Saccharomyces cerevisiae</i> . <i>Journal of Bioscience and Bioengineering</i> , 2015, 120, 364-371.	1.1	23
193	Assembly of lipase and P450 fatty acid decarboxylase to constitute a novel biosynthetic pathway for production of 1-alkenes from renewable triacylglycerols and oils. <i>Biotechnology for Biofuels</i> , 2015, 8, 34.	6.2	27
194	New biorefineries and sustainable agriculture: Increased food, biofuels, and ecosystem security. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 47, 117-132.	8.2	93
195	Biosynthesis of odd-chain fatty alcohols in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2015, 29, 113-123.	3.6	67
196	Synthesis of chemicals by metabolic engineering of microbes. <i>Chemical Society Reviews</i> , 2015, 44, 3760-3785.	18.7	97
197	Assessment of bacterial acyltransferases for an efficient lipid production in metabolically engineered strains of <i>E. coli</i> . <i>Metabolic Engineering</i> , 2015, 32, 195-206.	3.6	48
198	Engineering <i>Yarrowia lipolytica</i> for production of medium-chain fatty acids. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 7359-7368.	1.7	51
199	Algal Biorefinery: An Integrated Approach. , 2015, , .		32
200	Diel light:dark cycles significantly reduce FFA accumulation in FFA producing mutants of <i>Synechocystis sp. PCC 6803</i> compared to continuous light. <i>Algal Research</i> , 2015, 12, 487-496.	2.4	5
201	Microbial acetyl-CoA metabolism and metabolic engineering. <i>Metabolic Engineering</i> , 2015, 28, 28-42.	3.6	237
202	Comparing in situ removal strategies for improving styrene bioproduction. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 165-174.	1.7	41
203	Fatty acid biosynthesis revisited: structure elucidation and metabolic engineering. <i>Molecular BioSystems</i> , 2015, 11, 38-59.	2.9	158
204	Systems biology in biofuel. <i>ChemistrySelect</i> , 2016, 1, .	0.7	0
205	Can Microbially Derived Advanced Biofuels Ever Compete with Conventional Bioethanol? A Critical Review. <i>BioResources</i> , 2016, 11, .	0.5	3
206	¹³ C-Metabolic Flux Analysis: An Accurate Approach to Demystify Microbial Metabolism for Biochemical Production. <i>Bioengineering</i> , 2016, 3, 3.	1.6	16

#	ARTICLE	IF	CITATIONS
207	Systems and Synthetic Biology for the Microbial Production of Biofuels. <i>Current Metabolomics</i> , 2016, 4, 5-13.	0.5	6
208	Production Strategies and Applications of Microbial Single Cell Oils. <i>Frontiers in Microbiology</i> , 2016, 7, 1539.	1.5	199
209	The dilemma for lipid productivity in green microalgae: importance of substrate provision in improving oil yield without sacrificing growth. <i>Biotechnology for Biofuels</i> , 2016, 9, 255.	6.2	116
210	Structure-oriented substrate specificity engineering of aldehyde-deformylating oxygenase towards aldehydes carbon chain length. <i>Biotechnology for Biofuels</i> , 2016, 9, 185.	6.2	34
211	Production of FAME biodiesel in <i>E. coli</i> by direct methylation with an insect enzyme. <i>Scientific Reports</i> , 2016, 6, 24239.	1.6	31
212	Fuelling the future: microbial engineering for the production of sustainable biofuels. <i>Nature Reviews Microbiology</i> , 2016, 14, 288-304.	13.6	476
213	Absolute quantification of proteins in the fatty acid biosynthetic pathway using protein standard absolute quantification. <i>Synthetic and Systems Biotechnology</i> , 2016, 1, 150-157.	1.8	9
214	The Techno-Economic Basis for Coproduct Manufacturing To Enable Hydrocarbon Fuel Production from Lignocellulosic Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3196-3211.	3.2	121
215	Microalgae Isolation and Selection for Prospective Biodiesel Production. , 2016, , 285-304.		1
216	Direct bioconversion of sorghum extract sugars to free fatty acids using metabolically engineered <i>Escherichia coli</i> strains: Value addition to the sorghum bioenergy crop. <i>Biomass and Bioenergy</i> , 2016, 93, 217-226.	2.9	3
217	Improvement of free fatty acid production using a mutant acyl-CoA thioesterase I with high specific activity in <i>Escherichia coli</i> . <i>Biotechnology for Biofuels</i> , 2016, 9, 208.	6.2	15
218	Toward glycerol biorefinery: metabolic engineering for the production of biofuels and chemicals from glycerol. <i>Biotechnology for Biofuels</i> , 2016, 9, 205.	6.2	97
219	In depth understanding the molecular response to the enhanced secretion of fatty acids in <i>Saccharomyces cerevisiae</i> due to one-step gene deletion of acyl-CoA synthetases. <i>Process Biochemistry</i> , 2016, 51, 1162-1174.	1.8	6
220	Combining infrared and mode synthesizing atomic force microscopy: Application to the study of lipid vesicles inside <i>Streptomyces</i> bacteria. <i>Nano Research</i> , 2016, 9, 1674-1681.	5.8	29
221	Metabolic engineering <i>Corynebacterium glutamicum</i> to produce triacylglycerols. <i>Metabolic Engineering</i> , 2016, 33, 86-97.	3.6	27
222	Exploiting nongenetic cell-to-cell variation for enhanced biosynthesis. <i>Nature Chemical Biology</i> , 2016, 12, 339-344.	3.9	209
223	Biosynthesis of chain-specific alkanes by metabolic engineering in <i>Escherichia coli</i> . <i>Engineering in Life Sciences</i> , 2016, 16, 53-59.	2.0	16
224	Microbial production of bi-functional molecules by diversification of the fatty acid pathway. <i>Metabolic Engineering</i> , 2016, 35, 9-20.	3.6	12

#	ARTICLE	IF	CITATIONS
225	Escherichia coli as a fatty acid and biodiesel factory: current challenges and future directions. Environmental Science and Pollution Research, 2016, 23, 12007-12018.	2.7	11
226	<i>In Vitro</i> Reconstitution and Optimization of the Entire Pathway to Convert Glucose into Fatty Acid. ACS Synthetic Biology, 2017, 6, 701-709.	1.9	37
227	Malonyl-CoA pathway: a promising route for 3-hydroxypropionate biosynthesis. Critical Reviews in Biotechnology, 2017, 37, 933-941.	5.1	36
228	Molecular challenges in microalgae towards cost-effective production of quality biodiesel. Renewable and Sustainable Energy Reviews, 2017, 74, 139-144.	8.2	50
229	Expression of the heterologous Dunaliella tertiolecta fatty acyl-ACP thioesterase leads to increased lipid production in Chlamydomonas reinhardtii. Journal of Biotechnology, 2017, 247, 60-67.	1.9	55
230	Efficient production of free fatty acids from ionic liquid-based acid- or enzyme-catalyzed bamboo hydrolysate. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 419-430.	1.4	5
231	Computational Redesign of Acyl-ACP Thioesterase with Improved Selectivity toward Medium-Chain-Length Fatty Acids. ACS Catalysis, 2017, 7, 3837-3849.	5.5	77
232	Synergizing ¹³ C Metabolic Flux Analysis and Metabolic Engineering for Biochemical Production. Advances in Biochemical Engineering/Biotechnology, 2017, 162, 265-299.	0.6	7
233	Recent advances in the production of value added chemicals and lipids utilizing biodiesel industry generated crude glycerol as a substrate – Metabolic aspects, challenges and possibilities: An overview. Bioresource Technology, 2017, 239, 507-517.	4.8	121
234	Reversal of β -oxidative pathways for the microbial production of chemicals and polymer building blocks. Metabolic Engineering, 2017, 42, 33-42.	3.6	48
235	Introduction of an acetyl-CoA carboxylation bypass into Escherichia coli for enhanced free fatty acid production. Bioresource Technology, 2017, 245, 1627-1633.	4.8	21
236	Evaluation of thioesterases from <i>Acinetobacter baylyi</i> for production of free fatty acids. Canadian Journal of Microbiology, 2017, 63, 321-329.	0.8	7
237	Coordination of metabolic pathways: Enhanced carbon conservation in 1,3-propanediol production by coupling with optically pure lactate biosynthesis. Metabolic Engineering, 2017, 41, 102-114.	3.6	46
238	Divergent mechanisms of iron-containing enzymes for hydrocarbon biosynthesis. Journal of Biological Inorganic Chemistry, 2017, 22, 221-235.	1.1	20
239	AFM-IR: Technology and Applications in Nanoscale Infrared Spectroscopy and Chemical Imaging. Chemical Reviews, 2017, 117, 5146-5173.	23.0	713
240	Genetic engineering of medium-chain-length fatty acid synthesis in Dunaliella tertiolecta for improved biodiesel production. Journal of Applied Phycology, 2017, 29, 2811-2819.	1.5	33
241	Switch of metabolic status: redirecting metabolic flux for acetoin production from glycerol by activating a silent glycerol catabolism pathway. Metabolic Engineering, 2017, 39, 90-101.	3.6	36
242	Enhancing fatty acid production in <i>Escherichia coli</i> by <i>Vitreoscilla</i> hemoglobin overexpression. Biotechnology and Bioengineering, 2017, 114, 463-467.	1.7	32

#	ARTICLE	IF	CITATIONS
243	Enhancing microbial production of biofuels by expanding microbial metabolic pathways. <i>Biotechnology and Applied Biochemistry</i> , 2017, 64, 606-619.	1.4	7
244	Increased fatty acid accumulation following overexpression of glycerol 3-phosphate dehydrogenase and suppression of β -oxidation in oleaginous fungus <i>Mortierella alpina</i> . <i>European Journal of Lipid Science and Technology</i> , 2017, 119, 1600113.	1.0	4
245	Enhanced Fatty Acid Production in <i>Escherichia coli</i> by Over-Expression of NADPH Generating Enzymes. <i>American Journal of Biochemistry and Biotechnology</i> , 2017, 13, 167-175.	0.1	0
246	Monitoring of nutrient limitation in growing <i>E. coli</i> : a mathematical model of a ppGpp-based biosensor. <i>BMC Systems Biology</i> , 2017, 11, 106.	3.0	3
247	Production of cis-Vaccenic Acid-oriented Unsaturated Fatty Acid in <i>Escherichia coli</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2018, 23, 100-107.	1.4	5
248	The role of acyl-CoA thioesterase ACOT8I in mediating intracellular lipid metabolism in oleaginous fungus <i>Mortierella alpina</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018, 45, 281-291.	1.4	5
249	Elucidating the substrate specificities of acyl-lipid thioesterases from diverse plant taxa. <i>Plant Physiology and Biochemistry</i> , 2018, 127, 104-118.	2.8	7
250	DCEO Biotechnology: Tools To Design, Construct, Evaluate, and Optimize the Metabolic Pathway for Biosynthesis of Chemicals. <i>Chemical Reviews</i> , 2018, 118, 4-72.	23.0	141
251	Synthetic Biology – Metabolic Engineering. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2018, , .	0.6	4
252	Electrochemical aptasensor for multi-antibiotics detection based on endonuclease and exonuclease assisted dual recycling amplification strategy. <i>Talanta</i> , 2018, 179, 28-36.	2.9	44
253	From medium chain fatty alcohol to jet fuel: Rational integration of selective dehydration and hydro-processing. <i>Applied Catalysis A: General</i> , 2018, 550, 160-167.	2.2	19
254	A metabolic engineering strategy for producing free fatty acids by the <i>Yarrowia lipolytica</i> yeast based on impairment of glycerol metabolism. <i>Biotechnology and Bioengineering</i> , 2018, 115, 433-443.	1.7	21
255	Characterization of an Unusual Glycerate Esterification Process in Vioprolide Biosynthesis. <i>ACS Chemical Biology</i> , 2018, 13, 3123-3130.	1.6	17
256	Production of value-added chemicals from glycerol using in vitro enzymatic cascades. <i>Communications Chemistry</i> , 2018, 1, .	2.0	37
257	Green Chemistry in Environmental Sustainability and Chemical Education. , 2018, , .		3
258	Optimization of cultural conditions for lipid accumulation by <i>Aspergillus wentii</i> Ras101 and its transesterification to biodiesel: application of response surface methodology. <i>3 Biotech</i> , 2018, 8, 417.	1.1	12
259	Dioxygen Activation by the Biofuel-Generating Cytochrome P450 OleT. <i>ACS Catalysis</i> , 2018, 8, 9342-9352.	5.5	28
260	Acyl-coenzyme A:(holo-acyl carrier protein) transacylase enzymes as templates for engineering. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 6333-6341.	1.7	4

#	ARTICLE	IF	CITATIONS
261	Highly Active C ₈ -Acyl-ACP Thioesterase Variant Isolated by a Synthetic Selection Strategy. ACS Synthetic Biology, 2018, 7, 2205-2215.	1.9	60
262	Metabolic engineering of <i>Saccharomyces cerevisiae</i> by using the CRISPR-Cas9 system for enhanced fatty acid production. Process Biochemistry, 2018, 73, 23-28.	1.8	9
263	Engineering of <i>E. coli</i> inherent fatty acid biosynthesis capacity to increase octanoic acid production. Biotechnology for Biofuels, 2018, 11, 87.	6.2	24
264	A systematic optimization of styrene biosynthesis in <i>Escherichia coli</i> BL21(DE3). Biotechnology for Biofuels, 2018, 11, 14.	6.2	39
265	Impact of Microbial Diversity on Environmental Stability. , 2018, , 81-91.		1
266	Integrated diesel production from lignocellulosic sugars via oleaginous yeast. Green Chemistry, 2018, 20, 4349-4365.	4.6	48
267	Discovery of potential genes contributing to the biosynthesis of short-chain fatty acids and lactate in gut microbiota from systematic investigation in <i>E. coli</i> . Npj Biofilms and Microbiomes, 2019, 5, 19.	2.9	39
268	Engineering <i>Escherichia coli</i> FAB system using synthetic plant genes for the production of long chain fatty acids. Microbial Cell Factories, 2019, 18, 163.	1.9	19
269	Modular enzyme assembly for enhanced cascade biocatalysis and metabolic flux. Nature Communications, 2019, 10, 4248.	5.8	158
270	Engineering of an oleaginous bacterium for the production of fatty acids and fuels. Nature Chemical Biology, 2019, 15, 721-729.	3.9	76
271	Identification of novel 3-ketoacyl-acyl carrier protein synthase involved in producing medium chain fatty acids from microalgae. Bioresource Technology Reports, 2019, 7, 100184.	1.5	1
272	Approaches to Improve the Quality of Microalgae Biodiesel: Challenges and Future Prospects. , 2019, , 89-103.		1
273	Fatty Acid Biosynthesis: Chain Length Regulation and Control. ChemBioChem, 2019, 20, 2298-2321.	1.3	79
274	Microbial Production of Fatty Acid via Metabolic Engineering and Synthetic Biology. Biotechnology and Bioprocess Engineering, 2019, 24, 23-40.	1.4	16
275	Conversion of Crude Glycerol to Lipid and Biodiesel. , 2019, , 305-339.		1
276	Bio-energy production by contribution of effective and suitable microbial system. Materials Science for Energy Technologies, 2019, 2, 308-318.	1.0	35
277	Rewiring metabolic network by chemical modulator based laboratory evolution doubles lipid production in <i>Cryptocodium cohnii</i> . Metabolic Engineering, 2019, 51, 88-98.	3.6	47
278	Revisiting metabolic engineering strategies for microbial synthesis of oleochemicals. Metabolic Engineering, 2020, 58, 35-46.	3.6	80

#	ARTICLE	IF	CITATIONS
279	Bacterial production of fatty acid and biodiesel: opportunity and challenges. , 2020, , 21-49.		12
280	Enhancement of fatty acid biosynthesis by exogenous acetyl-CoA carboxylase and pantothenate kinase in <i>Escherichia coli</i> . <i>Biotechnology Letters</i> , 2020, 42, 2595-2605.	1.1	20
281	Wax ester production in nitrogen-rich conditions by metabolically engineered <i>Acinetobacter baylyi</i> ADP1. <i>Metabolic Engineering Communications</i> , 2020, 10, e00128.	1.9	16
282	Metabolic engineering for glyco-glycerolipids production in <i>E. coli</i> : Tuning phosphatidic acid and UDP-glucose pathways. <i>Metabolic Engineering</i> , 2020, 61, 106-119.	3.6	6
283	Present status and future prospect of genetic and metabolic engineering for biofuels from lignocellulosic biomass. , 2020, , 37-46.		1
284	An Overview of Potential Oleaginous Microorganisms and Their Role in Biodiesel and Omega-3 Fatty Acid-Based Industries. <i>Microorganisms</i> , 2020, 8, 434.	1.6	155
285	Introducing Porosity in Colloidal Biocoatings to Increase Bacterial Viability. <i>Biomacromolecules</i> , 2020, 21, 4545-4558.	2.6	12
286	Microbial synthesis of functional odd-chain fatty acids: a review. <i>World Journal of Microbiology and Biotechnology</i> , 2020, 36, 35.	1.7	42
287	Photosynthetic Conversion of Carbon Dioxide to Oleochemicals by Cyanobacteria: Recent Advances and Future Perspectives. <i>Frontiers in Microbiology</i> , 2020, 11, 634.	1.5	20
288	Structure-guided reshaping of the acyl binding pocket of ϵ -TesA thioesterase enhances octanoic acid production in <i>E. coli</i> . <i>Metabolic Engineering</i> , 2020, 61, 24-32.	3.6	31
289	Benzyl Amino Purine and Gibberellic Acid Coupled to Nitrogen-Limited Stress Induce Fatty Acids, Biomass Accumulation, and Gene Expression in <i>Scenedesmus Obliquus</i> . <i>Phyton</i> , 2021, 90, 515-531.	0.4	3
290	Identification of tung tree FATB as a promoter of 18:3 fatty acid accumulation through hydrolyzing 18:0-ACP. <i>Plant Cell, Tissue and Organ Culture</i> , 2021, 145, 143-154.	1.2	1
291	Production of Ethylene Glycol from Glycerol Using an In Vitro Enzymatic Cascade. <i>Catalysts</i> , 2021, 11, 214.	1.6	6
293	Maximization of saturated fatty acids through the production of P450BM3 monooxygenase in the engineered <i>Escherichia coli</i> . <i>Food and Bioprocess Technology</i> , 2021, 126, 130-142.	1.8	1
295	Structure and Mechanistic Analyses of the Gating Mechanism of Elongating Ketosynthases. <i>ACS Catalysis</i> , 2021, 11, 6787-6799.	5.5	12
296	Crystal structure of human brain-type fatty acid-binding protein FABP7 complexed with palmitic acid. <i>Acta Crystallographica Section D: Structural Biology</i> , 2021, 77, 954-965.	1.1	10
297	Acetate as a potential feedstock for the production of value-added chemicals: Metabolism and applications. <i>Biotechnology Advances</i> , 2021, 49, 107736.	6.0	59
298	<i>Escherichia coli</i> as a platform microbial host for systems metabolic engineering. <i>Essays in Biochemistry</i> , 2021, 65, 225-246.	2.1	22

#	ARTICLE	IF	CITATIONS
299	Recent developments in microalgal genome editing for enhancing lipid accumulation and biofuel recovery. <i>Biomass and Bioenergy</i> , 2021, 150, 106093.	2.9	16
300	Genome-scale target identification in <i>Escherichia coli</i> for high-titer production of free fatty acids. <i>Nature Communications</i> , 2021, 12, 4976.	5.8	44
301	Biodiesel Production From Lignocellulosic Biomass Using Oleaginous Microbes: Prospects for Integrated Biofuel Production. <i>Frontiers in Microbiology</i> , 2021, 12, 658284.	1.5	56
302	A Review on the Efficient Catalysts for Algae Transesterification to Biodiesel. <i>Sustainability</i> , 2021, 13, 10479.	1.6	12
303	Shedding Light on the Volatile Composition of Broa, a Traditional Portuguese Maize Bread. <i>Biomolecules</i> , 2021, 11, 1396.	1.8	2
304	Climate Change: Challenges to Reduce Global Warming and Role of Biofuels. , 2020, , 13-54.		4
306	De novo Biosynthesis of Biodiesel by <i>Escherichia coli</i> in Optimized Fed-Batch Cultivation. <i>PLoS ONE</i> , 2011, 6, e20265.	1.1	63
307	Modulating Membrane Composition Alters Free Fatty Acid Tolerance in <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2013, 8, e54031.	1.1	68
308	Improving Fatty Acid Availability for Bio-Hydrocarbon Production in <i>Escherichia coli</i> by Metabolic Engineering. <i>PLoS ONE</i> , 2013, 8, e78595.	1.1	23
309	Characterization of Halophilic Acyl-CoA Thioesterase from <i>Chromohalobacter salexigens</i> for Use in Biofuel Production. <i>Current Biotechnology</i> , 2013, 2, 275-283.	0.2	3
311	Production of fatty acids in <i>Ralstonia eutropha</i> H16 by engineering β -oxidation and carbon storage. <i>PeerJ</i> , 2015, 3, e1468.	0.9	36
312	Overexpression of <i>lipA</i> or <i>glpD</i> RuBisCO in the <i>Synechocystis</i> sp. PCC 6803 Mutant Lacking the <i>Aas</i> Gene Enhances Free Fatty-Acid Secretion and Intracellular Lipid Accumulation. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11468.	1.8	6
313	Methods for Trans Fatty Acid Analysis. , 2017, , 203-236.		0
315	Microbes: The Next-Generation Bioenergy Producers. , 2020, , 29-60.		0
316	Enhancing microbial lipids yield for biodiesel production by oleaginous yeast <i>Lipomyces starkeyi</i> fermentation: A review. <i>Bioresource Technology</i> , 2022, 344, 126294.	4.8	26
317	Expanded roles of pyruvate-sensing PdhR in transcription regulation of the <i>Escherichia coli</i> K-12 genome: fatty acid catabolism and cell motility. <i>Microbial Genomics</i> , 2020, 6, .	1.0	10
318	Oleaginous microbes: potential and challenges from waste-to-energy conversion. , 2022, , 221-244.		0
319	Kinetically guided, ratiometric tuning of fatty acid biosynthesis. <i>Metabolic Engineering</i> , 2022, 69, 209-220.	3.6	7

#	ARTICLE	IF	CITATIONS
321	Biodiesel from oleaginous fungi, bacteria, and yeast produced using waste substrates. , 2022, , 73-91.		0
322	Whole cell enzyme catalyst production using waste substrate for application in production of biodiesel. , 2022, , 163-191.		0
323	iTRAQ-Based Quantitative Proteomic Analysis of Antibacterial Mechanism of Milk-Derived Peptide BCp12 against <i>Escherichia coli</i> . <i>Foods</i> , 2022, 11, 672.	1.9	4
324	Comparative structural analysis provides new insights into the function of R2â€like ligandâ€binding oxidase. <i>FEBS Letters</i> , 2022, 596, 1600-1610.	1.3	2
328	Fatty Acid Production by Enhanced Malonyl-CoA Supply in <i>Escherichia coli</i> . <i>Current Microbiology</i> , 2022, 79, .	1.0	3
329	Microbial Biosynthesis of Straight-Chain Aliphatic Carboxylic Acids. <i>Microbiology Monographs</i> , 2022, , 23-45.	0.3	0
330	Combinatorial Metabolic Engineering Strategies for the Enhanced Production of Free Fatty Acids in <i>Escherichia coli</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 13913-13921.	2.4	5
331	Reconstruction and optimization of a <i>Pseudomonas putida</i> - <i>Escherichia coli</i> microbial consortium for mcl-PHA production from lignocellulosic biomass. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	7
332	Using the inner membrane of <i>Escherichia coli</i> as a scaffold to anchor enzymes for metabolic flux enhancement. <i>Engineering in Life Sciences</i> , 2023, 23, .	2.0	1
333	Production of Fatty Acids and Derivatives Using Cyanobacteria. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2022, , .	0.6	0
334	Strategies to Enhance the Biosynthesis of Monounsaturated Fatty Acids in <i>Escherichia coli</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2023, 28, 36-50.	1.4	2
336	State-of-art engineering approaches for ameliorated production of microbial lipid. <i>Systems Microbiology and Biomanufacturing</i> , 0, , .	1.5	0
339	Wood Biomass Valorization for Value-added Chemicals. , 2023, , 202-215.		0
341	Lipid metabolism in cyanobacteria: biosynthesis and utilization. , 2024, , 85-116.		0