Global transcription machinery engineering: A new app phenotype

Metabolic Engineering

9, 258-267

DOI: 10.1016/j.ymben.2006.12.002

Citation Report

#	Article	IF	Citations
1	Engineering microbial cell factories for biosynthesis of isoprenoid molecules: beyond lycopene. Trends in Biotechnology, 2007, 25, 417-424.	4.9	107
2	Expanding the metabolic engineering toolbox: more options to engineer cells. Trends in Biotechnology, 2007, 25, 132-137.	4.9	200
3	A semi-quantitative high-throughput screening method for microbial l-tyrosine production in microtiter plates. Journal of Industrial Microbiology and Biotechnology, 2007, 34, 807-811.	1.4	10
4	Towards systems metabolic engineering of microorganisms for amino acid production. Current Opinion in Biotechnology, 2008, 19, 454-460.	3.3	163
5	Uncovering the gene knockout landscape for improved lycopene production in E. coli. Applied Microbiology and Biotechnology, 2008, 78, 801-810.	1.7	54
6	Current status, strategies, and potential for the metabolic engineering of heterologous polyketides in Escherichia coli. Biotechnology Letters, 2008, 30, 1323-1330.	1.1	31
7	Egr1 and Gas6 facilitate the adaptation of HEKâ€293 cells to serumâ€free media by conferring enhanced viability and higher growth rates. Biotechnology and Bioengineering, 2008, 99, 1443-1452.	1.7	14
8	A highâ€throughput screen for hyaluronic acid accumulation in recombinant Escherichia coli transformed by libraries of engineered sigma factors. Biotechnology and Bioengineering, 2008, 101, 788-796.	1.7	53
9	Importance of systems biology in engineering microbes for biofuel production. Current Opinion in Biotechnology, 2008, 19, 228-234.	3.3	119
10	Combinatorial engineering of microbes for optimizing cellular phenotype. Current Opinion in Chemical Biology, 2008, 12, 168-176.	2.8	162
11	A genomics approach to improve the analysis and design of strain selections. Metabolic Engineering, 2008, 10, 154-165.	3.6	43
12	Screening of Bacillus subtilis transposon mutants with altered riboflavin production. Metabolic Engineering, 2008, 10, 216-226.	3.6	53
13	Selection and optimization of microbial hosts for biofuels production. Metabolic Engineering, 2008, 10, 295-304.	3.6	343
14	Strategies for systemsâ€level metabolic engineering. Biotechnology Journal, 2008, 3, 612-623.	1.8	59
15	Engineering Complex Phenotypes in Industrial Strains. Biotechnology Progress, 2008, 24, 38-47.	1.3	96
16	Advancing Biocatalysis through Enzyme, Cellular, and Platform Engineering. Biotechnology Progress, 2008, 24, 515-519.	1.3	16
17	Biofuel alternatives to ethanol: pumping the microbial well. Trends in Biotechnology, 2008, 26, 375-381.	4.9	338
18	Application of systems biology for bioprocess development. Trends in Biotechnology, 2008, 26, 404-412.	4.9	169

#	Article	IF	Citations
19	Synthetic Biology for Synthetic Chemistry. ACS Chemical Biology, 2008, 3, 64-76.	1.6	383
21	Systems biology of cyanobacterial secondary metabolite production and its role in drug discovery. Expert Opinion on Drug Discovery, 2008, 3, 903-929.	2.5	46
22	Phenotypic engineering by reprogramming gene transcription using novel artificial transcription factors in Escherichia coli. Nucleic Acids Research, 2008, 36, e102.	6.5	69
23	Assessing the potential of mutational strategies to elicit new phenotypes in industrial strains. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2319-2324.	3.3	83
24	Mutagenesis of the Bacterial RNA Polymerase Alpha Subunit for Improvement of Complex Phenotypes. Applied and Environmental Microbiology, 2009, 75, 2705-2711.	1.4	77
25	Systems Metabolic Engineering of E. coli. , 2009, , 441-453.		2
26	Genetic analysis of G proteinâ€coupled receptor expression in Escherichia coli: Inhibitory role of DnaJ on the membrane integration of the human central cannabinoid receptor. Biotechnology and Bioengineering, 2009, 102, 357-367.	1.7	42
27	Toward systematic metabolic engineering based on the analysis of metabolic regulation by the integration of different levels of information. Biochemical Engineering Journal, 2009, 46, 235-251.	1.8	44
28	Cellulosic hydrolysate toxicity and tolerance mechanisms in Escherichia coli. Biotechnology for Biofuels, 2009, 2, 26.	6.2	283
29	Engineering for biofuels: exploiting innate microbial capacity or importing biosynthetic potential?. Nature Reviews Microbiology, 2009, 7, 715-723.	13.6	352
30	Regulation by transcription factors in bacteria: beyond description. FEMS Microbiology Reviews, 2009, 33, 133-151.	3.9	185
31	Metabolic engineering ofSaccharomyces cerevisiaeÃ¢Â€Âƒfor production of carboxylic acids: current status and challenges. FEMS Yeast Research, 2009, 9, 1123-1136.	1.1	134
32	Engineering alternative butanol production platforms in heterologous bacteria. Metabolic Engineering, 2009, 11, 262-273.	3.6	350
33	Application of a double-reporter-guided mutant selection method to improve clavulanic acid production in Streptomyces clavuligerus. Metabolic Engineering, 2009, 11, 310-318.	3.6	43
34	Impact of yeast systems biology on industrial biotechnology. Journal of Biotechnology, 2009, 144, 204-211.	1.9	24
35	Synthetic Metabolism: Engineering Biology at the Protein and Pathway Scales. Chemistry and Biology, 2009, 16, 277-286.	6.2	71
36	Protein engineering in designing tailored enzymes and microorganisms for biofuels production. Current Opinion in Biotechnology, 2009, 20, 412-419.	3.3	108
37	Metabolic and evolutionary engineering research in Turkey and beyond. Biotechnology Journal, 2009, 4, 992-1002.	1.8	10

#	Article	IF	Citations
38	Escherichia coli Allows Efficient Modular Incorporation of Newly Isolated Quinomycin Biosynthetic Enzyme into Echinomycin Biosynthetic Pathway for Rational Design and Synthesis of Potent Antibiotic Unnatural Natural Product. Journal of the American Chemical Society, 2009, 131, 9347-9353.	6.6	55
39	Genomics enabled approaches in strain engineering. Current Opinion in Microbiology, 2009, 12, 223-230.	2.3	45
41	Systems Biology and Biotechnology of Escherichia coli. , 2009, , .		22
42	Biosynthesis of Plant Isoprenoids: Perspectives for Microbial Engineering. Annual Review of Plant Biology, 2009, 60, 335-355.	8.6	428
43	Systematic engineering of microorganisms to improve alcohol tolerance. Engineering in Life Sciences, 2010, 10, 422-429.	2.0	38
44	Advanced biofuel production in microbes. Biotechnology Journal, 2010, 5, 147-162.	1.8	331
45	Systems metabolic engineering: Genomeâ€scale models and beyond. Biotechnology Journal, 2010, 5, 647-659.	1.8	122
46	Global transcription engineering of brewerâ€™s yeast enhances the fermentation performance under high-gravity conditions. Applied Microbiology and Biotechnology, 2010, 87, 1821-1827.	1.7	9
47	Trends and challenges in the microbial production of lignocellulosic bioalcohol fuels. Applied Microbiology and Biotechnology, 2010, 87, 1303-1315.	1.7	296
48	Assessment of heterologous butyrate and butanol pathway activity by measurement of intracellular pathway intermediates in recombinant Escherichia coli. Applied Microbiology and Biotechnology, 2010, 88, 265-275.	1.7	36
49	Rational design for over-production of desirable microbial metabolites by precision engineering. Antonie Van Leeuwenhoek, 2010, 98, 151-163.	0.7	5
50	gTME for Improved Xylose Fermentation of Saccharomyces cerevisiae. Applied Biochemistry and Biotechnology, 2010, 160, 574-582.	1.4	50
51	RNA: state memory and mediator of cellular phenotype. Trends in Cell Biology, 2010, 20, 311-318.	3.6	62
52	Utilizing elementary mode analysis, pathway thermodynamics, and a genetic algorithm for metabolic flux determination and optimal metabolic network design. BMC Systems Biology, 2010, 4, 49.	3.0	33
53	Computational analysis of phenotypic space in heterologous polyketide biosynthesisâ€”Applications to Escherichia coli, Bacillus subtilis, and Saccharomyces cerevisiae. Journal of Theoretical Biology, 2010, 262, 197-207.	0.8	16
54	Metabolic flux analysis and pharmaceutical production. Metabolic Engineering, 2010, 12, 81-95.	3.6	101
55	Rapid dissection of a complex phenotype through genomic-scale mapping of fitness altering genes. Metabolic Engineering, 2010, 12, 241-250.	3.6	47
56	A comparative view of metabolite and substrate stress and tolerance in microbial bioprocessing: From biofuels and chemicals, to biocatalysis and bioremediation. Metabolic Engineering, 2010, 12, 307-331.	3.6	478

#	Article	IF	Citations
57	Engineering in complex systems. Current Opinion in Biotechnology, 2010, 21, 586-591.	3.3	25
58	Biology by Design: From Top to Bottom and Back. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-11.	3.0	25
59	Method for Designing and Optimizing Random-Search Libraries for Strain Improvement. Applied and Environmental Microbiology, 2010, 76, 5541-5546.	1.4	9
60	irrE, an Exogenous Gene from Deinococcus radiodurans, improves the Growth of and Ethanol Production by a Zymomonas mobilis Strain under Ethanol and Acid Stresses. Journal of Microbiology and Biotechnology, 2010, 20, 1156-1162.	0.9	44
61	Integration of Systems Biology with Bioprocess Engineering: l-Threonine Production by Systems Metabolic Engineering of Escherichia Coli. , 2010, 120, 1-19.		10
62	Reverse biological engineering of hrdB to enhance the production of avermectins in an industrial strain of Streptomyces avermitilis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11250-11254.	3.3	81
63	Synthetic Biology: Tools to Design, Build, and Optimize Cellular Processes. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-12.	3.0	54
64	Metabolic Engineering for Production of Biorenewable Fuels and Chemicals: Contributions of Synthetic Biology. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-18.	3.0	125
65	Toward Engineering Synthetic Microbial Metabolism. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-10.	3.0	23
66	Better Yeast for Better Wine â€" Genetic Improvement of Saccharomyces Cerevisiae Wine Strains. , 2010, , 1-49.		10
67	Biofuels: Biomolecular Engineering Fundamentals and Advances. Annual Review of Chemical and Biomolecular Engineering, 2010, 1, 19-36.	3.3	61
68	Manufacturing Molecules Through Metabolic Engineering. Science, 2010, 330, 1355-1358.	6.0	725
69	Systems biology approaches for the microbial production of biofuels. Biofuels, 2010, 1, 291-310.	1.4	21
70	Enhancing Stress Resistance and Production Phenotypes Through Transcriptome Engineering. Methods in Enzymology, 2010, 470, 509-532.	0.4	14
71	Synthetic biology in the analysis and engineering of signaling processes. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.6	11
72	Metabolic engineering ofEscherichia colifor biofuel production. Biofuels, 2010, 1, 493-504.	1.4	33
73	Role of <i>CcpA</i> in Polyhydroxybutyrate Biosynthesis in a Newly Isolated <i>Bacillus</i> sp. MA3.3. Journal of Molecular Microbiology and Biotechnology, 2011, 20, 63-69.	1.0	5
75	Global Strain Engineering by Mutant Transcription Factors. Methods in Molecular Biology, 2011, 765, 253-274.	0.4	22

#	Article	IF	Citations
76	Using a microorganism consortium for consolidated bioprocessing cellulosic ethanol production. Biofuels, 2011, 2, 569-575.	1.4	3
77	Styrene biosynthesis from glucose by engineered E. coli. Metabolic Engineering, 2011, 13, 544-554.	3.6	222
78	Microbial 2,3-butanediol production: A state-of-the-art review. Biotechnology Advances, 2011, 29, 351-364.	6.0	592
79	Opportunities for yeast metabolic engineering: Lessons from synthetic biology. Biotechnology Journal, 2011, 6, 262-276.	1.8	101
80	gTME for Improved Adaptation of Saccharomyces cerevisiae to Corn Cob Acid Hydrolysate. Applied Biochemistry and Biotechnology, 2011, 164, 1150-1159.	1.4	29
81	Bioconversion of Lignocellulose into Bioethanol: Process Intensification and Mechanism Research. Bioenergy Research, 2011, 4, 225-245.	2.2	117
82	Using microorganisms to brew biofuels. In Vitro Cellular and Developmental Biology - Plant, 2011, 47, 637-649.	0.9	6
83	Evolution combined with genomic study elucidates genetic bases of isobutanol tolerance in Escherichia coli. Microbial Cell Factories, 2011, 10, 18.	1.9	160
84	Strain engineering for improved expression of recombinant proteins in bacteria. Microbial Cell Factories, 2011, 10, 32.	1.9	160
85	Saccharomyces cerevisiae engineered for xylose metabolism requires gluconeogenesis and the oxidative branch of the pentose phosphate pathway for aerobic xylose assimilation. Yeast, 2011, 28, 645-660.	0.8	42
87	Engineering butanolâ€tolerance in escherichia coli with artificial transcription factor libraries. Biotechnology and Bioengineering, 2011, 108, 742-749.	1.7	63
88	Engineering genomes in multiplex. Current Opinion in Biotechnology, 2011, 22, 576-583.	3.3	28
89	Microbial production of farnesol (FOH): Current states and beyond. Process Biochemistry, 2011, 46, 1221-1229.	1.8	36
90	Elucidating acetate tolerance in E. coli using a genome-wide approach. Metabolic Engineering, 2011, 13, 214-224.	3.6	60
91	Metabolic Design and Control for Production in Prokaryotes. , 2011, , 243-255.		5
92	From Pathways to Genomes and Beyond: The Metabolic Engineering Toolbox and Its Place in Biofuels Production. Green, 2011, 1, .	0.4	3
93	Laboratory-Evolved Mutants of an Exogenous Global Regulator, IrrE from Deinococcus radiodurans, Enhance Stress Tolerances of Escherichia coli. PLoS ONE, 2011, 6, e16228.	1.1	67
94	Systems Metabolic Engineering for the Production of Non-innate Chemical Compounds. , 2011, , 471-482.		0

#	Article	IF	Citations
95	9 Process development and metabolic engineering for bioethanol production from lignocellulosic biomass. , 2012, , 207-230.		0
96	Engineering naturally occurring trans -acting non-coding RNAs to sense molecular signals. Nucleic Acids Research, 2012, 40, 5775-5786.	6.5	87
97	Significant Rewiring of the Transcriptome and Proteome of an Escherichia coli Strain Harboring a Tailored Exogenous Global Regulator IrrE. PLoS ONE, 2012, 7, e37126.	1.1	22
98	Bridging Omics Technologies with Synthetic Biology in Yeast Industrial Biotechnology. , 2012, , 271-327.		2
99	Engineering of Rhodococcus cell catalysts for tolerance improvement by sigma factor mutation and active plasmid partition. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 1421-1430.	1.4	24
100	Harnessing recombination to speed adaptive evolution in Escherichia coli. Metabolic Engineering, 2012, 14, 487-495.	3.6	23
101	Citrobacter werkmanii, a new candidate for the production of 1,3-propanediol: strain selection and carbon source optimization. Green Chemistry, 2012, 14, 2168.	4.6	30
102	Customized optimization of metabolic pathways by combinatorial transcriptional engineering. Nucleic Acids Research, 2012, 40, e142-e142.	6.5	207
103	IMPORTANCE OF UNDERSTANDING THE MAIN METABOLIC REGULATION IN RESPONSE TO THE SPECIFIC PATHWAY MUTATION FOR METABOLIC ENGINEERING OF ESCHERICHIA COLI. Computational and Structural Biotechnology Journal, 2012, 3, e201210018.	1.9	12
104	COMBINATORIAL APPROACHES FOR INVERSE METABOLIC ENGINEERING APPLICATIONS. Computational and Structural Biotechnology Journal, 2012, 3, e201210021.	1.9	14
105	ENGINEERING MICROBES FOR PLANT POLYKETIDE BIOSYNTHESIS. Computational and Structural Biotechnology Journal, 2012, 3, e201210020.	1.9	30
106	Engineering the robustness of industrial microbes through synthetic biology. Trends in Microbiology, 2012, 20, 94-101.	3.5	65
107	Rational, combinatorial, and genomic approaches for engineering L-tyrosine production in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13538-13543.	3.3	133
108	Exploring the combinatorial genomic space in Escherichia coli for ethanol tolerance. Biotechnology Journal, 2012, 7, 1337-1345.	1.8	27
109	Metabolic engineering: enabling technology for biofuels production. Wiley Interdisciplinary Reviews: Energy and Environment, 2012, 1, 165-172.	1.9	3
110	Transcriptome profiling of Zymomonas mobilis under ethanol stress. Biotechnology for Biofuels, 2012, 5, 75.	6.2	76
111	Towards a Synthetic Biology of the Stress-Response and the Tolerance Phenotype: Systems Understanding and Engineering of the Clostridium acetobutylicum Stress-Response and Tolerance to Toxic Metabolites. , 2012, , 193-219.		1
112	Systems biology of yeast: enabling technology for development of cell factories for production of advanced biofuels. Current Opinion in Biotechnology, 2012, 23, 624-630.	3.3	83

#	Article	IF	Citations
113	Increased ethanol production from glycerol by Saccharomyces cerevisiae strains with enhanced stress tolerance from the overexpression of SAGA complex components. Enzyme and Microbial Technology, 2012, 51, 237-243.	1.6	17
114	Error-prone PCR of global transcription factor cyclic AMP receptor protein for enhanced organic solvent (toluene) tolerance. Process Biochemistry, 2012, 47, 2152-2158.	1.8	17
115	Control of Stress Tolerance in Bacterial Host Organisms for Bioproduction of Fuels. Microbiology Monographs, 2012, , 209-238.	0.3	1
116	Evolutionary Engineering for Industrial Microbiology. Sub-Cellular Biochemistry, 2012, 64, 43-71.	1.0	4
117	Synthetic Gene Networks. Methods in Molecular Biology, 2012, , .	0.4	2
118	Toward a Semisynthetic Stress Response System To Engineer Microbial Solvent Tolerance. MBio, 2012, 3, .	1.8	73
119	Using Transcription Machinery Engineering to Elicit Complex Cellular Phenotypes. Methods in Molecular Biology, 2012, 813, 229-248.	0.4	11
120	Microbial Stress Tolerance for Biofuels. Microbiology Monographs, 2012, , .	0.3	8
121	Tunable Promoters in Synthetic and Systems Biology. Sub-Cellular Biochemistry, 2012, 64, 181-201.	1.0	23
122	Systems Metabolic Engineering. , 2012, , .		11
123	Reprogramming Microbial Metabolic Pathways. Sub-Cellular Biochemistry, 2012, , .	1.0	11
124	Computational identification of adaptive mutants using the VERT system. Journal of Biological Engineering, 2012, 6, 3.	2.0	8
125	Enhancing E. coli Tolerance towards Oxidative Stress via Engineering Its Global Regulator cAMP Receptor Protein (CRP). PLoS ONE, 2012, 7, e51179.	1.1	52
126	Systems Metabolic Engineering of Escherichia coli for Chemicals, Materials, Biofuels, and Pharmaceuticals. , 2012, , 117-149.		4
127	Global regulator engineering significantly improved Escherichia coli tolerances toward inhibitors of lignocellulosic hydrolysates. Biotechnology and Bioengineering, 2012, 109, 3133-3142.	1.7	43
128	Advances and Developments in Strategies to Improve Strains of Saccharomyces cerevisiae and Processes to Obtain the Lignocellulosic Ethanolâ^'A Review. Applied Biochemistry and Biotechnology, 2012, 166, 1908-1926.	1.4	97
129	Engineering global transcription factor cyclic AMP receptor protein of Escherichia coli for improved 1-butanol tolerance. Applied Microbiology and Biotechnology, 2012, 94, 1107-1117.	1.7	64
130	Parts plus pipes: Synthetic biology approaches to metabolic engineering. Metabolic Engineering, 2012, 14, 223-232.	3.6	119

#	Article	IF	Citations
131	Synthetic biology: New strategies for directing design. Metabolic Engineering, 2012, 14, 205-211.	3.6	34
132	Synthetic biology and the development of tools for metabolic engineering. Metabolic Engineering, 2012, 14, 189-195.	3.6	363
133	The future of metabolic engineering and synthetic biology: Towards a systematic practice. Metabolic Engineering, 2012, 14, 233-241.	3.6	277
134	Isolation of improved free fatty acid overproducing strains of Escherichia coli via nile red based highâ€throughput screening. Environmental Progress and Sustainable Energy, 2012, 31, 17-23.	1.3	16
135	Examining the feasibility of bulk commodity production in Escherichia coli. Biotechnology Letters, 2012, 34, 585-596.	1.1	43
136	Expanding the metabolic engineering toolbox with directed evolution. Biotechnology Journal, 2013, 8, 1397-1410.	1.8	43
137	Analysis and Design of a Genetic Circuit for Dynamic Metabolic Engineering. ACS Synthetic Biology, 2013, 2, 442-452.	1.9	59
138	Directed evolution of a cellobiose utilization pathway in Saccharomyces cerevisiae by simultaneously engineering multiple proteins. Microbial Cell Factories, 2013, 12, 61.	1.9	54
139	Metabolic engineering of Escherichia coli to minimize byproduct formate and improving succinate productivity through increasing NADH availability by heterologous expression of NAD+-dependent formate dehydrogenase. Metabolic Engineering, 2013, 20, 1-8.	3.6	93
140	Programming adaptive control to evolve increased metabolite production. Nature Communications, 2013, 4, 2595.	5.8	153
141	Microbial engineering strategies to improve cell viability for biochemical production. Biotechnology Advances, 2013, 31, 903-914.	6.0	58
142	Dissecting the assays to assess microbial tolerance to toxic chemicals in bioprocessing. Trends in Biotechnology, 2013, 31, 643-653.	4.9	36
143	Engineering of transcriptional regulators enhances microbial stress tolerance. Biotechnology Advances, 2013, 31, 986-991.	6.0	69
144	Genome replication engineering assisted continuous evolution (GREACE) to improve microbial tolerance for biofuels production. Biotechnology for Biofuels, 2013, 6, 137.	6.2	50
145	Multiplex Iterative Plasmid Engineering for Combinatorial Optimization of Metabolic Pathways and Diversification of Protein Coding Sequences. ACS Synthetic Biology, 2013, 2, 651-661.	1.9	19
146	Bioengineering of plant (tri)terpenoids: from metabolic engineering of plants to synthetic biology inÂvivo and inÂvitro. New Phytologist, 2013, 200, 27-43.	3.5	194
147	Metabolic engineering of muconic acid production in Saccharomyces cerevisiae. Metabolic Engineering, 2013, 15, 55-66.	3.6	251
148	Building synthetic gene circuits from combinatorial libraries: screening and selection strategies. Molecular BioSystems, 2013, 9, 1559.	2.9	32

#	Article	IF	Citations
149	Combinatorial genetic perturbation to refine metabolic circuits for producing biofuels and biochemicals. Biotechnology Advances, 2013, 31, 976-985.	6.0	22
150	Genome-scale identification and characterization of ethanol tolerance genes in Escherichia coli. Metabolic Engineering, 2013, 15, 124-133.	3.6	52
151	Directed evolution as a powerful synthetic biology tool. Methods, 2013, 60, 81-90.	1.9	92
152	Genomeâ€scale engineering for systems and synthetic biology. Molecular Systems Biology, 2013, 9, 641.	3.2	294
153	Engineering improved ethanol production in Escherichia coli with a genome-wide approach. Metabolic Engineering, 2013, 17, 1-11.	3.6	46
154	Towards a metabolic engineering strain â€œcommonsâ€: An Escherichia coli platform strain for ethanol production. Biotechnology and Bioengineering, 2013, 110, 1520-1526.	1.7	24
155	GroESL overexpression imparts Escherichia coli tolerance to i-, n-, and 2-butanol, 1,2,4-butanetriol and ethanol with complex and unpredictable patterns. Metabolic Engineering, 2013, 15, 196-205.	3.6	109
156	Quantitative trait analysis of yeast biodiversity yields novel gene tools for metabolic engineering. Metabolic Engineering, 2013, 17, 68-81.	3.6	59
157	Metabolic Engineering: Past and Future. Annual Review of Chemical and Biomolecular Engineering, 2013, 4, 259-288.	3.3	254
158	Customized Optimization of Metabolic Pathways by Combinatorial Transcriptional Engineering. Methods in Molecular Biology, 2013, 985, 177-209.	0.4	10
159	Synthetic biology: Tools to design microbes for the production of chemicals and fuels. Biotechnology Advances, 2013, 31, 811-817.	6.0	56
160	Protein engineering for metabolic engineering: Current and nextâ€generation tools. Biotechnology Journal, 2013, 8, 545-555.	1.8	37
161	Developing Bacillus spp. as a cell factory for production of microbial enzymes and industrially important biochemicals in the context of systems and synthetic biology. Applied Microbiology and Biotechnology, 2013, 97, 6113-6127.	1.7	121
162	Transcription Factor-Based Screens and Synthetic Selections for Microbial Small-Molecule Biosynthesis. ACS Synthetic Biology, 2013, 2, 47-58.	1.9	176
163	Genetic Determinants for n -Butanol Tolerance in Evolved Escherichia coli Mutants: Cross Adaptation and Antagonistic Pleiotropy between n -Butanol and Other Stressors. Applied and Environmental Microbiology, 2013, 79, 5313-5320.	1.4	53
164	Microbial Production of Isoprenoids Enabled by Synthetic Biology. Frontiers in Microbiology, 2013, 4, 75.	1.5	46
165	Metabolic engineering: Use of system-level approaches and application to fuel production in Escherichia coli. Electronic Journal of Biotechnology, 2013, 16, .	1.2	4
166	Industrial Robustness: Understanding the Mechanism of Tolerance for the Populus Hydrolysate-Tolerant Mutant Strain of Clostridium thermocellum. PLoS ONE, 2013, 8, e78829.	1.1	21

#	Article	IF	Citations
167	Genome-Wide Mapping of Furfural Tolerance Genes in Escherichia coli. PLoS ONE, 2014, 9, e87540.	1.1	30
168	Bacterial Sigma Factors as Targets for Engineered or Synthetic Transcriptional Control. Frontiers in Bioengineering and Biotechnology, 2014, 2, 33.	2.0	34
169	Genetic improvement of microorganisms for applications in biorefineries. Chemical and Biological Technologies in Agriculture, 2014, 1, .	1.9	11
170	Engineering Escherichia coli to overproduce aromatic amino acids and derived compounds. Microbial Cell Factories, 2014, 13, 126.	1.9	126
171	A Transcriptional Regulator Sll0794 Regulates Tolerance to Biofuel Ethanol in Photosynthetic Synechocystis sp. PCC 6803. Molecular and Cellular Proteomics, 2014, 13, 3519-3532.	2.5	37
172	Improving Microbial Biogasoline Production in Escherichia coli Using Tolerance Engineering. MBio, 2014, 5, e01932.	1.8	113
173	Zymomonas mobilis: a novel platform for future biorefineries. Biotechnology for Biofuels, 2014, 7, 101.	6.2	183
174	Overexpression of sigma factor SigB improves temperature and butanol tolerance of Synechocystis sp. PCC6803. Journal of Biotechnology, 2014, 182-183, 54-60.	1.9	60
175	Engineering biofuel tolerance in non-native producing microorganisms. Biotechnology Advances, 2014, 32, 541-548.	6.0	71
176	Small RNA regulators in bacteria: powerful tools for metabolic engineering and synthetic biology. Applied Microbiology and Biotechnology, 2014, 98, 3413-3424.	1.7	59
177	Rational selection and engineering of exogenous principal sigma factor (ÏƒHrdB) to increase teicoplanin production in an industrial strain of Actinoplanes teichomyceticus. Microbial Cell Factories, 2014, 13, 10.	1.9	18
179	Correcting direct effects of ethanol on translation and transcription machinery confers ethanol tolerance in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2576-85.	3.3	126
180	Enhancing E. coli isobutanol tolerance through engineering its global transcription factor cAMP receptor protein (CRP). Biotechnology and Bioengineering, 2014, 111, 700-708.	1.7	47
181	Combinatorial Strategies for Improving Multiple-Stress Resistance in Industrially Relevant Escherichia coli Strains. Applied and Environmental Microbiology, 2014, 80, 6223-6242.	1.4	29
182	An orphan two-component response regulator Slr1588 involves salt tolerance by directly regulating synthesis of compatible solutes in photosynthetic Synechocystis sp. PCC 6803. Molecular BioSystems, 2014, 10, 1765-1774.	2.9	29
183	Transcriptomic analysis of Clostridium thermocellum Populus hydrolysate-tolerant mutant strain shows increased cellular efficiency in response to Populus hydrolysate compared to the wild type strain. BMC Microbiology, 2014, 14, 215.	1.3	9
184	Complex regulation of hydrolytic enzyme genes for cellulosic biomass degradation in filamentous fungi. Applied Microbiology and Biotechnology, 2014, 98, 4829-4837.	1.7	112
185	Improvement of oxidative stress tolerance in Saccharomyces cerevisiae through global transcription machinery engineering. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 869-878.	1.4	32

#	Article	IF	Citations
186	Current development in genetic engineering strategies of Bacillus species. Microbial Cell Factories, 2014, 13, 63.	1.9	103
187	Construction of a metabolome library for transcription factor-related single gene mutants of Saccharomyces cerevisiae. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2014, 966, 83-92.	1.2	14
188	Improving Microbial Robustness Using Systems Biology. , 0, , 605-620.		0
189	Genome Replication Engineering Assisted Continuous Evolution (GREACE) to Improve Microbial Tolerance for Biofuels Production. , 2015, , 313-335.		1
190	A synthetic growth switch based on controlled expression of RNA polymerase. Molecular Systems Biology, 2015, 11, 840.	3.2	76
191	Significantly improved solvent tolerance of Escherichia coli by global transcription machinery engineering. Microbial Cell Factories, 2015, 14, 175.	1.9	40
192	Engineering transcription factors to improve tolerance against alkane biofuels in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2015, 8, 231.	6.2	21
193	Genetic Engineering and Improvement of a Zymomonas mobilis for Arabinose Utilization and Its Performance on Pretreated Corn Stover Hydrolyzate. Journal of Biotechnology & Biomaterials, 2015, 05, .	0.3	2
195	Engineering of global regulator cAMP receptor protein (CRP) in Escherichia coli for improved lycopene production. Journal of Biotechnology, 2015, 199, 55-61.	1.9	29
196	Metabolomic analysis reveals functional overlapping of three signal transduction proteins in regulating ethanol tolerance in cyanobacterium Synechocystis sp. PCC 6803. Molecular BioSystems, 2015, 11, 770-782.	2.9	33
197	Construction of Escherichia Coli Cell Factories for Production of Organic Acids and Alcohols. Advances in Biochemical Engineering/Biotechnology, 2015, 155, 107-140.	0.6	11
198	Combinatorial and high-throughput screening approaches for strain engineering. Applied Microbiology and Biotechnology, 2015, 99, 2093-2104.	1.7	28
199	Elucidating butanol tolerance mediated by a response regulator Sll0039 in Synechocystis sp. PCC 6803 using a metabolomic approach. Applied Microbiology and Biotechnology, 2015, 99, 1845-1857.	1.7	28
200	Advances in de novo strain design using integrated systems and synthetic biology tools. Current Opinion in Chemical Biology, 2015, 28, 105-114.	2.8	30
201	Remaining Challenges in the Metabolic Engineering of Yeasts for Biofuels. , 2015, , 209-237.		0
202	Improving furfural tolerance of Zymomonas mobilis by rewiring a sigma factor RpoD protein. Applied Microbiology and Biotechnology, 2015, 99, 5363-5371.	1.7	44
203	Rational design of a synthetic Entnerâ€“Doudoroff pathway for improved and controllable NADPH regeneration. Metabolic Engineering, 2015, 29, 86-96.	3.6	142
204	cAMP receptor protein (CRP)-mediated resistance/tolerance in bacteria: mechanism and utilization in biotechnology. Applied Microbiology and Biotechnology, 2015, 99, 4533-4543.	1.7	28

#	Article	IF	Citations
205	5. Microbial strain selection and development for the production of second-generation bioethanol. , 2015, , 109-140.		1
206	Metabolic engineering of Escherichia coli for the production of phenylalanine and related compounds. Applied Biochemistry and Microbiology, 2015, 51, 733-750.	0.3	8
207	Lysate of engineered Escherichia coli supports high-level conversion of glucose to 2,3-butanediol. Metabolic Engineering, 2015, 32, 133-142.	3.6	91
208	Comparison of genomeâ€wide selection strategies to identify furfural tolerance genes in Escherichia coli. Biotechnology and Bioengineering, 2015, 112, 129-140.	1.7	30
209	Rapid prototyping of microbial cell factories via genome-scale engineering. Biotechnology Advances, 2015, 33, 1420-1432.	6.0	39
210	Systems biology in biofuel. ChemistrySelect, 2016, 1, .	0.7	0
211	Can Microbially Derived Advanced Biofuels Ever Compete with Conventional Bioethanol? A Critical Review. BioResources, 2016, 11, .	0.5	3
212	Evolutionary Methods for Improving the Production of Biorenewable Fuels and Chemicals. , 2016, , 265-290.		9
213	Quantification and Classification of E. coli Proteome Utilization and Unused Protein Costs across Environments. PLoS Computational Biology, 2016, 12, e1004998.	1.5	100
214	Regulatory mechanisms related to biofuel tolerance in producing microbes. Journal of Applied Microbiology, 2016, 121, 320-332.	1.4	7
216	DNA microarray of global transcription factor mutant reveals membrane-related proteins involved in n-butanol tolerance in Escherichia coli. Biotechnology for Biofuels, 2016, 9, 114.	6.2	35
218	Understanding Sugar Catabolism in Unicellular Cyanobacteria Toward the Application in Biofuel and Biomaterial Production. Sub-Cellular Biochemistry, 2016, 86, 511-523.	1.0	1
219	Microfluidic Methods for Molecular Biology. , 2016, , .		4
220	Single-Cell Phenotypic Screening in Inverse Metabolic Engineering. , 2016, , 189-204.		0
221	Engineering microbial hosts for production of bacterial natural products. Natural Product Reports, 2016, 33, 963-987.	5.2	117
222	Using global transcription machinery engineering (gTME) to improve ethanol tolerance of Zymomonas mobilis. Microbial Cell Factories, 2016, 15, 4.	1.9	63
223	Enhanced Promoter Activity by Replenishment of Sigma Factor rpoE in Klebsiella pneumoniae. Indian Journal of Microbiology, 2016, 56, 190-197.	1.5	2
224	Microbial Chassis Assisting Retrosynthesis. , 2016, , 1-10.		1

#	Article	IF	Citations
225	Engineering an ABC Transporter for Enhancing Resistance to Caffeine in Saccharomyces cerevisiae. Journal of Agricultural and Food Chemistry, 2016, 64, 7973-7978.	2.4	4
226	Metabolomics-based prediction models of yeast strains for screening of metabolites contributing to ethanol stress tolerance. IOP Conference Series: Earth and Environmental Science, 2016, 36, 012046.	0.2	3
227	Extending CRISPR-Cas9 Technology from Genome Editing to Transcriptional Engineering in the Genus Clostridium. Applied and Environmental Microbiology, 2016, 82, 6109-6119.	1.4	60
228	Systems Metabolic Engineering of Escherichia coli. EcoSal Plus, 2016, 7, .	2.1	31
229	The Resistome: A Comprehensive Database ofEscherichia coliResistance Phenotypes. ACS Synthetic Biology, 2016, 5, 1566-1577.	1.9	17
230	Engineering Microbes to Synthesize Plant Isoprenoids. Methods in Enzymology, 2016, 575, 225-245.	0.4	4
231	High yield 1,3-propanediol production by rational engineering of the 3-hydroxypropionaldehyde bottleneck in Citrobacter werkmanii. Microbial Cell Factories, 2016, 15, 23.	1.9	30
232	Recent progress in biobutanol tolerance in microbial systems with an emphasis onClostridium. FEMS Microbiology Letters, 2016, 363, fnw017.	0.7	25
233	Microfungi in Biofuel and Bioenergy Research. Fungal Biology, 2016, , 543-571.	0.3	0
234	Tailoring of global transcription sigma D factor by random mutagenesis to improve Escherichia coli tolerance towards low-pHs. Journal of Biotechnology, 2016, 224, 55-63.	1.9	27
235	Engineering Cellular Metabolism. Cell, 2016, 164, 1185-1197.	13.5	953
237	Programming Biology: Expanding the Toolset for the Engineering of Transcription. , 2016, , 1-64.		2
238	Synthetic Biology for Cellular Remodelling to Elicit Industrially Relevant Microbial Phenotypes. , 2016, , 211-228.		1
239	Synthetic Biology. , 2016, , .		2
240	Resource Reallocation in Bacteria by Reengineering the Gene Expression Machinery. Trends in Microbiology, 2017, 25, 480-493.	3.5	19
241	Overexpression of the primary sigma factor gene sigA improved carotenoid production by Corynebacterium glutamicum : Application to production of Î²-carotene and the non-native linear C50 carotenoid bisanhydrobacterioruberin. Metabolic Engineering Communications, 2017, 4, 1-11.	1.9	36
242	ARTP mutation and genome shuffling of ABE fermentation symbiotic system for improvement of butanol production. Applied Microbiology and Biotechnology, 2017, 101, 2189-2199.	1.7	28
243	Strain Development by Whole-Cell Directed Evolution. , 2017, , 173-200.		2

#	Article	IF	Citations
244	Directed Enzyme Evolution: Advances and Applications. , 2017, , .		18
245	Accumulation of heme biosynthetic intermediates contributes to the antibacterial action of the metalloid tellurite. Nature Communications, 2017, 8, 15320.	5.8	36
246	Metabolic engineering of Escherichia coli for higher alcohols production: An environmentally friendly alternative to fossil fuels. Renewable and Sustainable Energy Reviews, 2017, 77, 580-589.	8.2	18
247	Biosensor-assisted transcriptional regulator engineering for Methylobacterium extorquens AM1 to improve mevalonate synthesis by increasing the acetyl-CoA supply. Metabolic Engineering, 2017, 39, 159-168.	3.6	49
248	A novel constructed SPT15 mutagenesis library of Saccharomyces cerevisiae by using gTME technique for enhanced ethanol production. AMB Express, 2017, 7, 111.	1.4	13
249	Synthetic biology: Emerging bioengineering in Indonesia. AIP Conference Proceedings, 2017, , .	0.3	0
250	Genome-wide mapping of mutations at single-nucleotide resolution for protein, metabolic and genome engineering. Nature Biotechnology, 2017, 35, 48-55.	9.4	298
251	An experimental modeling of trinomial bioengineering- crp, rDNA, and transporter engineering within single cell factory for maximizing two-phase bioreduction. International Journal of Biological Macromolecules, 2017, 95, 818-825.	3.6	21
252	Development of a Transcription Factor-Based Lactam Biosensor. ACS Synthetic Biology, 2017, 6, 439-445.	1.9	56
253	Engineering Robustness of Microbial Cell Factories. Biotechnology Journal, 2017, 12, 1700014.	1.8	80
254	Double promoter expression systems for recombinant protein production by industrial microorganisms. Applied Microbiology and Biotechnology, 2017, 101, 7459-7475.	1.7	54
255	Fundamental CRISPR-Cas9 tools and current applications in microbial systems. Synthetic and Systems Biotechnology, 2017, 2, 219-225.	1.8	30
256	Dynamic cell responses in Thermoanaerobacterium sp. under hyperosmotic stress. Scientific Reports, 2017, 7, 10088.	1.6	4
257	Combinatorial pathway optimization for streamlined metabolic engineering. Current Opinion in Biotechnology, 2017, 47, 142-151.	3.3	78
258	Improving Saccharomyces cerevisiae ethanol production and tolerance via RNA polymerase II subunit Rpb7. Biotechnology for Biofuels, 2017, 10, 125.	6.2	58
259	Effects of global transcription factor NtcA on photosynthetic production of ethylene in recombinant Synechocystis sp. PCC 6803. Biotechnology for Biofuels, 2017, 10, 145.	6.2	21
260	Assignment of sigma factors of RNA polymerase to promoters in Corynebacterium glutamicum. AMB Express, 2017, 7, 133.	1.4	20
261	Escherichia coli as a host for metabolic engineering. Metabolic Engineering, 2018, 50, 16-46.	3.6	250

#	Article	IF	Citations
262	Evolutionary engineering of industrial microorganisms-strategies and applications. Applied Microbiology and Biotechnology, 2018, 102, 4615-4627.	1.7	51
263	Advances and prospects in metabolic engineering of Zymomonas mobilis. Metabolic Engineering, 2018, 50, 57-73.	3.6	114
264	Development of cyclic AMP receptor protein-based artificial transcription factor for intensifying gene expression. Applied Microbiology and Biotechnology, 2018, 102, 1673-1685.	1.7	7
265	Tailoring cyanobacterial cell factory for improved industrial properties. Biotechnology Advances, 2018, 36, 430-442.	6.0	66
266	Prospects and progress in the production of valuable carotenoids: Insights from metabolic engineering, synthetic biology, and computational approaches. Journal of Biotechnology, 2018, 266, 89-101.	1.9	35
267	Systematic and synthetic approaches to rewire regulatory networks. Current Opinion in Systems Biology, 2018, 8, 90-96.	1.3	9
268	Progress and perspective on lignocellulosic hydrolysate inhibitor tolerance improvement in Zymomonas mobilis. Bioresources and Bioprocessing, 2018, 5, .	2.0	42
269	Vanillin Resistance Induced by BssS Overexpression in Escherichia coli. Applied Biochemistry and Microbiology, 2018, 54, 21-25.	0.3	4
270	Metabolic engineering and enzyme-mediated processing: A biotechnological venture towards biofuel production â€“ A review. Renewable and Sustainable Energy Reviews, 2018, 82, 436-447.	8.2	73
271	Genetically Modified Microorganisms: Harmful or Helpful?. , 2018, , 143-175.		7
273	Improved xylose tolerance and 2,3-butanediol production of Klebsiella pneumoniae by directed evolution of rpoD and the mechanisms revealed by transcriptomics. Biotechnology for Biofuels, 2018, 11, 307.	6.2	18
274	Understanding and engineering alcohol-tolerant bacteria using OMICS technology. World Journal of Microbiology and Biotechnology, 2018, 34, 157.	1.7	33
276	CRISPR Gene Perturbations Provide Insights for Improving Bacterial Biofuel Tolerance. Frontiers in Bioengineering and Biotechnology, 2018, 6, 122.	2.0	19
277	Engineering TATA-binding protein Spt15 to improve ethanol tolerance and production in Kluyveromyces marxianus. Biotechnology for Biofuels, 2018, 11, 207.	6.2	34
278	IrrE Improves Organic Solvent Tolerance and Î”¹-Dehydrogenation Productivity of Arthrobacter simplex. Journal of Agricultural and Food Chemistry, 2018, 66, 5210-5220.	2.4	18
279	Cell-Free Synthetic Biology for Pathway Prototyping. Methods in Enzymology, 2018, 608, 31-57.	0.4	45
280	Engineered global regulator H-NS improves the acid tolerance of E. coli. Microbial Cell Factories, 2018, 17, 118.	1.9	31
281	Engineering global transcription to tune lipophilic properties in Yarrowia lipolytica. Biotechnology for Biofuels, 2018, 11, 115.	6.2	12

#	Article	IF	Citations
282	Boosting heterologous protein production yield by adjusting global nitrogen and carbon metabolic regulatory networks in Bacillus subtilis. Metabolic Engineering, 2018, 49, 143-152.	3.6	32
283	Integrated whole-genome and transcriptome sequence analysis reveals the genetic characteristics of a riboflavin-overproducing Bacillus subtilis. Metabolic Engineering, 2018, 48, 138-149.	3.6	45
284	Synthetic biology strategies toward heterologous phytochemical production. Natural Product Reports, 2018, 35, 902-920.	5.2	45
285	Improvement of butanol production by the development and co-culture of C. acetobutylicum TSH1 and B. cereus TSH2. Applied Microbiology and Biotechnology, 2018, 102, 6753-6763.	1.7	12
286	Towards a fully automated algorithm driven platform for biosystems design. Nature Communications, 2019, 10, 5150.	5.8	95
287	Metabolic Engineering of Bacteria for Renewable Bioethanol Production from Cellulosic Biomass. Biotechnology and Bioprocess Engineering, 2019, 24, 713-733.	1.4	30
288	Biogenesis of Medium-Chain-Length Polyhydroxyalkanoates. , 2019, , 457-481.		9
289	Synthetic evolution. Nature Biotechnology, 2019, 37, 730-743.	9.4	63
290	Bioengineering of Secondary Metabolites. , 2019, , 55-68.		28
291	Genomic and transcriptional changes in response to pinene tolerance and overproduction in evolved Escherichia coli. Synthetic and Systems Biotechnology, 2019, 4, 113-119.	1.8	21
292	Evolutionary Approaches for Engineering Industrially Relevant Phenotypes in Bacterial Cell Factories. Biotechnology Journal, 2019, 14, e1800439.	1.8	41
293	Metabolic Engineering of Main Transcription Factors in Carbon, Nitrogen, and Phosphorus Metabolisms for Enhanced Production of Bacitracin in Bacillus licheniformis. ACS Synthetic Biology, 2019, 8, 866-875.	1.9	49
294	Resistance mechanisms and reprogramming of microorganisms for efficient biorefinery under multiple environmental stresses. Synthetic and Systems Biotechnology, 2019, 4, 92-98.	1.8	16
295	Exploiting tandem repetitive promoters for high-level production of 3-hydroxypropionic acid. Applied Microbiology and Biotechnology, 2019, 103, 4017-4031.	1.7	32
296	Kick-starting evolution efficiency with an autonomous evolution mutation system. Metabolic Engineering, 2019, 54, 127-136.	3.6	20
297	Synthetic Biology Approaches for the Production of Isoprenoids in Escherichia coli. , 2019, , 311-329.		6
298	Basics and Roots of Synthetic Biology. , 2019, , 3-22.		1
299	Metabolic engineering and synthetic biology employing Lactococcus lactis and Bacillus subtilis cell factories. Current Opinion in Biotechnology, 2019, 59, 1-7.	3.3	31

#	Article	IF	Citations
300	Engineered sigma factors increase full-length antibody expression in Escherichia coli. Metabolic Engineering, 2019, 52, 315-323.	3.6	15
301	<scp>CRISPR</scp>/Casâ€based screening of a gene activation library in Saccharomyces cerevisiae identifies a crucial role of <scp>OLE</scp>1 in thermotolerance. Microbial Biotechnology, 2019, 12, 1154-1163.	2.0	34
302	Regulatory non-coding sRNAs in bacterial metabolic pathway engineering. Metabolic Engineering, 2019, 52, 190-214.	3.6	53
303	Physiological effects of overexpressed sigma factors on fermentative stress response of Zymomonas mobilis. Brazilian Journal of Microbiology, 2020, 51, 65-75.	0.8	6
304	Enabling technologies for utilization of maize as a bioenergy feedstock. Biofuels, Bioproducts and Biorefining, 2020, 14, 402-416.	1.9	18
305	Biofuels Production â€“ Sustainability and Advances in Microbial Bioresources. Biofuel and Biorefinery Technologies, 2020, , .	0.1	14
306	Construction of a Robust Sphingomonas sp. Strain for Welan Gum Production via the Expression of Global Transcriptional Regulator IrrE. Frontiers in Bioengineering and Biotechnology, 2020, 8, 674.	2.0	9
307	Systems biology, synthetic biology, and metabolic engineering. , 2020, , 1-31.		2
308	The era of big data: Genome-scale modelling meets machine learning. Computational and Structural Biotechnology Journal, 2020, 18, 3287-3300.	1.9	47
309	Using Global Transcription Machinery Engineering (GTME) and Site-Saturation Mutagenesis Technique to Improve Ethanol Yield of Saccharomyces cerevisiae. Applied Biochemistry and Microbiology, 2020, 56, 563-568.	0.3	7
310	Creation of a Low-Alcohol-Production Yeast by a Mutated SPT15 Transcription Regulator Triggers Transcriptional and Metabolic Changes During Wine Fermentation. Frontiers in Microbiology, 2020, 11, 597828.	1.5	7
311	Engineering prokaryotic regulator IrrE to enhance stress tolerance in budding yeast. Biotechnology for Biofuels, 2020, 13, 193.	6.2	13
312	Research Progress of the Biosynthesis of Natural Bio-Antibacterial Agent Pulcherriminic Acid in Bacillus. Molecules, 2020, 25, 5611.	1.7	16
313	Next Generation Winemakers: Genetic Engineering in Saccharomyces cerevisiae for Trendy Challenges. Bioengineering, 2020, 7, 128.	1.6	8
314	Application of combinatorial optimization strategies in synthetic biology. Nature Communications, 2020, 11, 2446.	5.8	80
315	Metabolic pathway engineering: Perspectives and applications. Computer Methods and Programs in Biomedicine, 2020, 192, 105436.	2.6	18
316	Metabolic engineering to improve the biomanufacturing efficiency of acetic acid bacteria: advances and prospects. Critical Reviews in Biotechnology, 2020, 40, 522-538.	5.1	24
317	Genetic engineering of non-native hosts for 1-butanol production and its challenges: a review. Microbial Cell Factories, 2020, 19, 79.	1.9	30

#	Article	IF	Citations
318	Cyanobacterial sigma factors: Current and future applications for biotechnological advances. Biotechnology Advances, 2020, 40, 107517.	6.0	28
319	Prokaryotic sigma factors and their transcriptional counterparts in Archaea and Eukarya. Applied Microbiology and Biotechnology, 2020, 104, 4289-4302.	1.7	13
320	How to outwit nature: Omics insight into butanol tolerance. Biotechnology Advances, 2021, 46, 107658.	6.0	12
321	Sigma Factor Modulation for Cyanobacterial Metabolic Engineering. Trends in Microbiology, 2021, 29, 266-277.	3.5	12
322	Ethanol Tolerance and Production by Yeasts. , 2021, , 447-457.		0
323	Characterizing Escherichia coliâ€™s transcriptional response to different styrene exposure modes reveals novel toxicity and tolerance insights. Journal of Industrial Microbiology and Biotechnology, 2021, 48, .	1.4	6
324	A cold shock protein promotes high-temperature microbial growth through binding to diverse RNA species. Cell Discovery, 2021, 7, 15.	3.1	15
325	Mastering the control of the Rho transcription factor for biotechnological applications. Applied Microbiology and Biotechnology, 2021, 105, 4053-4071.	1.7	2
326	Advanced strategies and tools to facilitate and streamline microbial adaptive laboratory evolution. Trends in Biotechnology, 2022, 40, 38-59.	4.9	49
327	Chemical-genetic interrogation of RNA polymerase mutants reveals structure-function relationships and physiological tradeoffs. Molecular Cell, 2021, 81, 2201-2215.e9.	4.5	10
328	Biosynthesis pathways and strategies for improving 3-hydroxypropionic acid production in bacteria. World Journal of Microbiology and Biotechnology, 2021, 37, 117.	1.7	21
329	Genetic Diversity for Accelerating Microbial Adaptive Laboratory Evolution. ACS Synthetic Biology, 2021, 10, 1574-1586.	1.9	13
331	Modular optimization in metabolic engineering. Critical Reviews in Biochemistry and Molecular Biology, 2021, 56, 1-16.	2.3	4
332	Charting the landscape of RNA polymerases to unleash their potential in strain improvement. Biotechnology Advances, 2021, 54, 107792.	6.0	0
334	Current status and future prospective of bio-ethanol industry in China. Renewable and Sustainable Energy Reviews, 2021, 145, 111079.	8.2	43
335	Development and optimization of a microbial co-culture system for heterologous indigo biosynthesis. Microbial Cell Factories, 2021, 20, 154.	1.9	12
336	Systematic dissection of Ïƒ70 sequence diversity and function in bacteria. Cell Reports, 2021, 36, 109590.	2.9	2
337	Improve isobutanol tolerance and production by engineering of TATAâ€‘binding protein Spt15 in Saccharomyces cerevisiae. Letters in Applied Microbiology, 2021, 73, 694-707.	1.0	0

#	Article	IF	Citations
338	pCAT vectors overcome inefficient electroporation of Cupriavidus necator H16. New Biotechnology, 2021, 65, 20-30.	2.4	3
339	Increasing Solvent Tolerance to Improve Microbial Production of Alcohols, Terpenoids and Aromatics. Microorganisms, 2021, 9, 249.	1.6	8
340	Biogenesis of Medium-Chain-Length Polyhydroxyalkanoates. , 2017, , 1-25.		3
341	Genomics on Pretreatment Inhibitor Tolerance of Zymomonas mobilis. Microbiology Monographs, 2012, , 161-175.	0.3	3
342	Recent Advances in Microbial Cell Growth Regulation Strategies for Metabolic Engineering. Biotechnology and Bioprocess Engineering, 2020, 25, 810-828.	1.4	15
344	Consolidated Bioprocessing of Cellulosic Biomass to Ethanol Using Thermophilic Bacteria. , 0, , 55-74.		8
346	Improving Ethanol Tolerance of Escherichia coli by Rewiring Its Global Regulator cAMP Receptor Protein (CRP). PLoS ONE, 2013, 8, e57628.	1.1	61
347	Improving Acetate Tolerance of Escherichia coli by Rewiring Its Global Regulator cAMP Receptor Protein (CRP). PLoS ONE, 2013, 8, e77422.	1.1	35
349	Current Status and Applications of Adaptive Laboratory Evolution in Industrial Microorganisms. Journal of Microbiology and Biotechnology, 2020, 30, 793-803.	0.9	56
350	Intelligent host engineering for metabolic flux optimisation in biotechnology. Biochemical Journal, 2021, 478, 3685-3721.	1.7	8
351	Metabolic Design and Control for Production in Prokaryotes. , 2011, , 217-230.		0
353	Overproduction of Lycopene by Metabolic Engineering Escherichia coli. Bioprocess, 2012, 02, 51-57.	0.1	1
355	Systems Biology and Metabolic Engineering in Bacteria. Springer Series in Biophysics, 2014, , 351-367.	0.4	0
356	Systems Metabolic Engineering for the Production of Noninnate Chemical Compounds. , 2014, , 456-467.		0
357	The Improved Stress Tolerance of Escherichia coli by Directed Evolution of IrrE. Lecture Notes in Electrical Engineering, 2015, , 53-65.	0.3	0
358	Engineering Bacterial Sugar Catabolism and Tolerance Toward Lignocellulose Conversion. , 2017, , 147-180.		1
360	System metabolic engineering strategies for cell factories construction. , 2020, , 125-151.		1
361	Microbial Technologies for Biorefineries: Current Research and Future Applications. Biofuel and Biorefinery Technologies, 2020, , 229-250.	0.1	0

#	Article	IF	Citations
362	Engineering Escherichia coli biofilm to increase contact surface for shikimate and L-malate production. Bioresources and Bioprocessing, 2021, 8, .	2.0	6
363	High-throughput navigation of the sequence space. , 2022, , 123-146.		0
364	Synthetic biology tools: Engineering microbes for biotechnological applications. , 2022, , 369-398.		0
365	Inhibitor tolerance and bioethanol fermentability of levoglucosan-utilizing Escherichia coli were enhanced by overexpression of stress-responsive gene ycfR: The proteomics-guided metabolic engineering. Synthetic and Systems Biotechnology, 2021, 6, 384-395.	1.8	5
375	Synthetic acid stress-tolerance modules improve growth robustness and lysine productivity of industrial Escherichia coli in fermentation at low pH. Microbial Cell Factories, 2022, 21, 68.	1.9	3
377	The role of hexose transporter-like sensor hxs1 and transcription activator involved in carbohydrate sensing azf1 in xylose and glucose fermentation in the thermotolerant yeast Ogataea polymorpha. Microbial Cell Factories, 2022, 21, .	1.9	3
378	Towards next-generation cell factories by rational genome-scale engineering. Nature Catalysis, 2022, 5, 751-765.	16.1	15
379	Engineering the Plant Microbiome for Biotic Stress Tolerance: Biotechnological Advances. Microorganisms for Sustainability, 2022, , 133-151.	0.4	4
380	Genetics and Genomics of Abiotic Stress in Rubber Tree (Hevea Brasiliensis). , 2022, , 245-298.		0
381	Recent progress in adaptive laboratory evolution of industrial microorganisms. Journal of Industrial Microbiology and Biotechnology, 2023, 50, .	1.4	11
382	Engineering of global transcription factors in Bacillus, a genetic tool for increasing product yields: a bioprocess overview. World Journal of Microbiology and Biotechnology, 2023, 39, .	1.7	10
383	Engineering global regulators for enhanced tolerance to multiple inhibitors by <scp>CRISPR</scp>â€enabled trackable genome engineering. AICHE Journal, 2023, 69, .	1.8	0
384	Metabolic Engineering: Methodologies and Applications. Chemical Reviews, 2023, 123, 5521-5570.	23.0	32
388	PicoShells: Hollow Hydrogel Microparticles for High-Throughput Screening of Clonal Libraries. Methods in Molecular Biology, 2023, , 53-64.	0.4	0