Huimin Zhao

List of Publications by Year
in descending order

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214 papers	16,234 citations	15504 65 h-index	19749 117 g-index
225 all docs	225 docs citations	225 times ranked	13891 citing authors

#	Article	IF	Citations
1	Engineering robust microorganisms for organic acid production. Journal of Industrial Microbiology and Biotechnology, 2022, 49, .	3.0	9
2	Directed Evolution of Replication-Competent Double-Stranded DNA Bacteriophage toward New Host Specificity. ACS Synthetic Biology, 2022, 11, 634-643.	3.8	7
3	Metabolic engineering of Rhodotorula toruloides IFO0880 improves C16 and C18 fatty alcohol production from synthetic media. Microbial Cell Factories, 2022, 21, 26.	4.0	15
4	Photobiocatalysis for Abiological Transformations. Accounts of Chemical Research, 2022, 55, 1087-1096.	15.6	73
5	CUT&RUN identifies centromeric DNA regions of Rhodotorula toruloides IFO0880. FEMS Yeast Research, 2022, 21, .	2.3	3
6	Identification and Characterization of the Biosynthetic Pathway of the Sulfonolipid Capnine. Biochemistry, 2022, 61, 2861-2869.	2.5	4
7	Photoinduced chemomimetic biocatalysis for enantioselective intermolecular radical conjugate addition. Nature Catalysis, 2022, 5, 586-593.	34.4	50
8	PlasmidMaker is a versatile, automated, and high throughput end-to-end platform for plasmid construction. Nature Communications, 2022, 13, 2697.	12.8	26
9	Anaerobic Hydroxyproline Degradation Involving Câ€“N Cleavage by a Glycyl Radical Enzyme. Journal of the American Chemical Society, 2022, 144, 9715-9722.	13.7	1
10	Metabolic engineering of oleaginous yeastÂRhodotorula toruloides for overproduction of triacetic acid lactone. Biotechnology and Bioengineering, 2022, 119, 2529-2540.	3.3	20
11	Profiling of <scp>d</scp> â€alanine production by the microbial isolates of rat gut microbiota. FASEB Journal, 2022, 36, .	0.5	5
12	TALEN outperforms Cas9 in editing heterochromatin target sites. Nature Communications, 2021, 12, 606.	12.8	69
13	Development of Hostâ€Orthogonal Genetic Systems for Synthetic Biology. Advanced Biology, 2021, 5, 2000252.	2.5	7
14	Can Deep Learning Solve the Cas9 Dilemma?. CRISPR Journal, 2021, 4, 13-15.	2.9	2
15	Cas12a-assisted precise targeted cloning using in vivo Cre-lox recombination. Nature Communications, 2021, 12, 1171.	12.8	43
16	Expanding the Potential of Mammalian Genome Engineering via Targeted DNA Integration. ACS Synthetic Biology, 2021, 10, 429-446.	3.8	11
17	Thomas Ward Selected to Receive the 2021 ACS Catalysis Lectureship. ACS Catalysis, 2021, 11, 1816-1817.	11.2	0
18	A widespread pathway for substitution of adenine by diaminopurine in phage genomes. Science, 2021, 372, 512-516.	12.6	55

#	Article	IF	Citations
19	The Glycyl Radical Enzyme Arylacetate Decarboxylase from Olsenella scatoligenes. ACS Catalysis, 2021, 11, 5789-5794.	11.2	4
20	Replication timing maintains the global epigenetic state in human cells. Science, 2021, 372, 371-378.	12.6	103
21	macroMS: Image-Guided Analysis of Random Objects by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 1180-1188.	2.8	10
22	Engineering oleaginous yeast Rhodotorula toruloides for overproduction of fatty acid ethyl esters. Biotechnology for Biofuels, 2021, 14, 115.	6.2	25
23	Precise Regulation of Cas9-Mediated Genome Engineering by Anti-CRISPR-Based Inducible CRISPR Controllers. ACS Synthetic Biology, 2021, 10, 1320-1327.	3.8	10
24	A rapid, accurate, scalable, and portable testing system for COVID-19 diagnosis. Nature Communications, 2021, 12, 2905.	12.8	96
25	Structural and Biochemical Investigation of UTP Cyclohydrolase. ACS Catalysis, 2021, 11, 8895-8901.	11.2	3
26	Cloning and characterization of a panel of mitochondrial targeting sequences for compartmentalization engineering in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2021, 118, 4269-4277.	3.3	10
27	Identification of novel metabolic engineering targets for S-adenosyl-L-methionine production in Saccharomyces cerevisiae via genome-scale engineering. Metabolic Engineering, 2021, 66, 319-327.	7.0	17
28	Directed Evolution: Methodologies and Applications. Chemical Reviews, 2021, 121, 12384-12444.	47.7	220
29	Biochemical Investigation of 3â€Sulfopropionaldehyde Reductase HpfD. ChemBioChem, 2021, 22, 2862-2866.	2.6	0
30	ECNet is an evolutionary context-integrated deep learning framework for protein engineering. Nature Communications, 2021, 12, 5743.	12.8	66
31	Promoter-proximal CTCF binding promotes distal enhancer-dependent gene activation. Nature Structural and Molecular Biology, 2021, 28, 152-161.	8.2	172
32	Sustainable Production of Acrylic Acid via 3-Hydroxypropionic Acid from Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2021, 9, 16659-16669.	6.7	33
33	Mechanistically Diverse Pathways for Sulfoquinovose Degradation in Bacteria. ACS Catalysis, 2021, 11, 14740-14750.	11.2	21
34	TriGORank: A Gene Ontology Enriched Learning-to-Rank Framework for Trigenic Fitness Prediction. , 2021, , .		0
35	Biosystems design by directed evolution. AICHE Journal, 2020, 66, e16716.	3.6	23
36	Emerging molecular biology tools and strategies for engineering natural product biosynthesis. Metabolic Engineering Communications, 2020, 10, e00108.	3.6	36

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37	Identification and Characterization of Citrus Peel Uronic Acid Oxidase. ChemBioChem, 2020, 21, 797-800.	2.6	5
38	Computational Tools for Discovering and Engineering Natural Product Biosynthetic Pathways. IScience, 2020, 23, 100795.	4.1	44
39	Biosynthetic engineering of the antifungal, anti-MRSA auroramycin. Microbial Cell Factories, 2020, 19, 3.	4.0	6
40	An efficient gene knock-in strategy using 5â€²-modified double-stranded DNA donors with short homology arms. Nature Chemical Biology, 2020, 16, 387-390.	8.0	43
41	Nano-Apples and Orange-Zymes. ACS Catalysis, 2020, 10, 14315-14317.	11.2	33
42	Stereoconvergent Reduction of Activated Alkenes by a Nicotinamide Free Synergistic Photobiocatalytic System. ACS Catalysis, 2020, 10, 9431-9437.	11.2	13
43	Photoenzymatic enantioselective intermolecular radical hydroalkylation. Nature, 2020, 584, 69-74.	27.8	171
44	Unlocking natureâ€™s biosynthetic potential by directed genome evolution. Current Opinion in Biotechnology, 2020, 66, 95-104.	6.6	25
45	A transaldolase-dependent sulfoglycolysis pathway in Bacillus megaterium DSM 1804. Biochemical and Biophysical Research Communications, 2020, 533, 1109-1114.	2.1	19
46	Two-Color Imaging of Nonrepetitive Endogenous Loci in Human Cells. ACS Synthetic Biology, 2020, 9, 2502-2514.	3.8	5
47	Genome-scale metabolic reconstruction of the non-model yeast Issatchenkia orientalis SD108 and its application to organic acids production. Metabolic Engineering Communications, 2020, 11, e00148.	3.6	20
48	Fine-tuning the regulation of Cas9 expression levels for efficient CRISPR-Cas9 mediated recombination in Streptomyces. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 413-423.	3.0	34
49	Optically guided mass spectrometry to screen microbial colonies for directed enzyme evolution. Methods in Enzymology, 2020, 644, 255-273.	1.0	2
50	Biosystems Design by Machine Learning. ACS Synthetic Biology, 2020, 9, 1514-1533.	3.8	76
51	Two radical-dependent mechanisms for anaerobic degradation of the globally abundant organosulfur compound dihydroxypropanesulfonate. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15599-15608.	7.1	29
52	Excellence versus Diversity? Not an Either/Or Choice. ACS Catalysis, 2020, 10, 7310-7311.	11.2	4
53	Unraveling the iterative type I polyketide synthases hidden in Streptomyces. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8449-8454.	7.1	34
54	A mass spectrometryâ€based highâ€throughput screening method for engineering fatty acid synthases with improved production of mediumâ€chain fatty acids. Biotechnology and Bioengineering, 2020, 117, 2131-2138.	3.3	22

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55	Integrating biocatalysis with chemocatalysis for selective transformations. Current Opinion in Chemical Biology, 2020, 55, 161-170.	6.1	62
56	A New Biosensor for Stilbenes and a Cannabinoid Enabled by Genome Mining of a Transcriptional Regulator. ACS Synthetic Biology, 2020, 9, 698-705.	3.8	28
57	Unleashing the power of energy storage: Engineering Î²-oxidation pathways for polyketide production. Synthetic and Systems Biotechnology, 2020, 5, 21-22.	3.7	3
58	A Pathway for Degradation of Uracil to Acetyl Coenzyme A in Bacillus megaterium. Applied and Environmental Microbiology, 2020, 86, .	3.1	12
59	A genetic toolbox for metabolic engineering of Issatchenkia orientalis. Metabolic Engineering, 2020, 59, 87-97.	7.0	30
60	Discovery and Characterization of a Class IV Lanthipeptide with a Nonoverlapping Ring Pattern. ACS Chemical Biology, 2020, 15, 1642-1649.	3.4	26
61	DNA punch cards for storing data on native DNA sequences via enzymatic nicking. Nature Communications, 2020, 11, 1742.	12.8	70
62	Recent advances in domesticating nonâ€model microorganisms. Biotechnology Progress, 2020, 36, e3008.	2.6	32
63	Reconstruction of Lead Acid Battery Negative Electrodes after Hard Sulfation Using Controlled Chelation Chemistry. Journal of the Electrochemical Society, 2020, 167, 120537.	2.9	5
64	Activation of Silent Natural Product Biosynthetic Gene Clusters Using Synthetic Biology Tools. , 2020, , 113-135.		2
65	A ferredoxin-dependent dihydropyrimidine dehydrogenase in Clostridium chromiireducens. Bioscience Reports, 2020, 40, .	2.4	0
66	Development of a CRISPR/Cas9-Based Tool for Gene Deletion in Issatchenkia orientalis. MSphere, 2019, 4, .	2.9	35
67	Towards a fully automated algorithm driven platform for biosystems design. Nature Communications, 2019, 10, 5150.	12.8	95
68	An extended bacterial reductive pyrimidine degradation pathway that enables nitrogen release from Î²-alanine. Journal of Biological Chemistry, 2019, 294, 15662-15671.	3.4	14
69	A comprehensive genome-scale model for Rhodosporidium toruloides IFO0880 accounting for functional genomics and phenotypic data. Metabolic Engineering Communications, 2019, 9, e00101.	3.6	55
70	A Continuing Career in Biocatalysis: Frances H. Arnold. ACS Catalysis, 2019, 9, 9775-9788.	11.2	26
71	A gene cluster for taurine sulfur assimilation in an anaerobic human gut bacterium. Biochemical Journal, 2019, 476, 2271-2279.	3.7	7
72	Biochemical and structural investigation of sulfoacetaldehyde reductase from Klebsiella oxytoca. Biochemical Journal, 2019, 476, 733-746.	3.7	11

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73	A Pathway for Isethionate Dissimilation in Bacillus krulwichiae. Applied and Environmental Microbiology, 2019, 85, .	3.1	5
74	Identification and characterization of a new sulfoacetaldehyde reductase from the human gut bacterium Bifidobacterium kashiwanohense. Bioscience Reports, 2019, 39, .	2.4	7
75	Building a global alliance of biofoundries. Nature Communications, 2019, 10, 2040.	12.8	167
76	Characterization of Cas proteins for CRISPRâ€Cas editing in streptomycetes. Biotechnology and Bioengineering, 2019, 116, 2330-2338.	3.3	27
77	Biochemical and structural investigation of taurine:2-oxoglutarate aminotransferase from Bifidobacterium kashiwanohense. Biochemical Journal, 2019, 476, 1605-1619.	3.7	7
78	Highly Efficient Single-Pot Scarless Golden Gate Assembly. ACS Synthetic Biology, 2019, 8, 1047-1054.	3.8	29
79	Development of a CRISPR/Cas9 system for high efficiency multiplexed gene deletion in Rhodosporidium toruloides. Biotechnology and Bioengineering, 2019, 116, 2103-2109.	3.3	40
80	Radical-mediated C-S bond cleavage in C2 sulfonate degradation by anaerobic bacteria. Nature Communications, 2019, 10, 1609.	12.8	46
81	Multi-functional genome-wide CRISPR system for high throughput genotypeâ€“phenotype mapping. Nature Communications, 2019, 10, 5794.	12.8	104
82	Activation of silent biosynthetic gene clusters using transcription factor decoys. Nature Chemical Biology, 2019, 15, 111-114.	8.0	77
83	Engineered CRISPR/Cas9 system for multiplex genome engineering of polyploid industrial yeast strains. Biotechnology and Bioengineering, 2018, 115, 1630-1635.	3.3	52
84	RNAi assisted genome evolution unveils yeast mutants with improved xylose utilization. Biotechnology and Bioengineering, 2018, 115, 1552-1560.	3.3	17
85	Recent advances in metabolic engineering of Saccharomyces cerevisiae: New tools and their applications. Metabolic Engineering, 2018, 50, 85-108.	7.0	228
86	In vivo biosensors: mechanisms, development, and applications. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 491-516.	3.0	57
87	Expanding the boundary of biocatalysis: design and optimization of in vitro tandem catalytic reactions for biochemical production. Critical Reviews in Biochemistry and Molecular Biology, 2018, 53, 115-129.	5.2	37
88	Advancing Metabolic Engineering of Saccharomyces cerevisiae Using the CRISPR/Cas System. Biotechnology Journal, 2018, 13, e1700601.	3.5	41
89	Genome-wide identification of natural RNA aptamers in prokaryotes and eukaryotes. Nature Communications, 2018, 9, 1289.	12.8	37
90	Biocatalysis for the synthesis of pharmaceuticals and pharmaceutical intermediates. Bioorganic and Medicinal Chemistry, 2018, 26, 1275-1284.	3.0	158

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91	Quantifying the effects of pollen nutrition on honey bee queen egg laying with a new laboratory system. PLoS ONE, 2018, 13, e0203444.	2.5	30
92	Indoleacetate decarboxylase is a glycyl radical enzyme catalysing the formation of malodorant skatole. Nature Communications, 2018, 9, 4224.	12.8	37
93	Insights into Cell-Free Conversion of CO₂ to Chemicals by a Multienzyme Cascade Reaction. ACS Catalysis, 2018, 8, 11085-11093.	11.2	87
94	Rapid Discovery of Glycocins through Pathway Refactoring in Escherichia coli. ACS Chemical Biology, 2018, 13, 2966-2972.	3.4	35
95	Rapid Screening of Lanthipeptide Analogs via In-Colony Removal of Leader Peptides in Escherichia coli. Journal of the American Chemical Society, 2018, 140, 11884-11888.	13.7	25
96	Metabolic Engineering of Saccharomyces cerevisiae Using a Trifunctional CRISPR/Cas System for Simultaneous Gene Activation, Interference, and Deletion. Methods in Enzymology, 2018, 608, 265-276.	1.0	6
97	Auroramycin: A Potent Antibiotic from Streptomyces roseosporus by CRISPRâ€Cas9 Activation. ChemBioChem, 2018, 19, 1716-1719.	2.6	41
98	A coupled chlorinaseâ€“fluorinase system with a high efficiency oftrans-halogenation and a shared substrate tolerance. Chemical Communications, 2018, 54, 9458-9461.	4.1	13
99	Genome-scale engineering of Saccharomyces cerevisiae with single-nucleotide precision. Nature Biotechnology, 2018, 36, 505-508.	17.5	149
100	Visualizing Spatiotemporal Dynamics of Intercellular Mechanotransmission upon Wounding. ACS Photonics, 2018, 5, 3565-3574.	6.6	7
101	Cooperative asymmetric reactions combining photocatalysis and enzymatic catalysis. Nature, 2018, 560, 355-359.	27.8	230
102	CRISPR/Cas9-mediated knock-in of an optimized TetO repeat for live cell imaging of endogenous loci. Nucleic Acids Research, 2018, 46, e100-e100.	14.5	45
103	Synthetic biology advances and applications in the biotechnology industry: a perspective. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 449-461.	3.0	57
104	Fully Automated One-Step Synthesis of Single-Transcript TALEN Pairs Using a Biological Foundry. ACS Synthetic Biology, 2017, 6, 678-685.	3.8	46
105	Orthogonal Genetic Regulation in Human Cells Using Chemically Induced CRISPR/Cas9 Activators. ACS Synthetic Biology, 2017, 6, 686-693.	3.8	37
106	A New Era of Genome Integrationâ€”Simply Cut and Paste!. ACS Synthetic Biology, 2017, 6, 601-609.	3.8	40
107	Discovery of a Phosphonoacetic Acid Derived Natural Product by Pathway Refactoring. ACS Synthetic Biology, 2017, 6, 217-223.	3.8	21
108	Probing the molecular determinants of fluorinase specificity. Chemical Communications, 2017, 53, 2559-2562.	4.1	18

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109	A Scalable Epitope Tagging Approach for High Throughput ChIP-Seq Analysis. ACS Synthetic Biology, 2017, 6, 1034-1042.	3.8	19
110	Combining Rh-Catalyzed Diazocoupling and Enzymatic Reduction To Efficiently Synthesize Enantioenriched 2-Substituted Succinate Derivatives. ACS Catalysis, 2017, 7, 2548-2552.	11.2	32
111	Programmable DNA-Guided Artificial Restriction Enzymes. ACS Synthetic Biology, 2017, 6, 752-757.	3.8	93
112	Inducible Control of mRNA Transport Using Reprogrammable RNA-Binding Proteins. ACS Synthetic Biology, 2017, 6, 950-956.	3.8	11
113	Using natural products for drug discovery: the impact of the genomics era. Expert Opinion on Drug Discovery, 2017, 12, 475-487.	5.0	74
114	CRISPRâ€“Cas9 strategy for activation of silent Streptomyces biosynthetic gene clusters. Nature Chemical Biology, 2017, 13, 607-609.	8.0	227
115	A plugâ€andâ€play pathway refactoring workflow for natural product research in Escherichia coli and Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2017, 114, 1847-1854.	3.3	36
116	Automated multiplex genome-scale engineering in yeast. Nature Communications, 2017, 8, 15187.	12.8	162
117	Engineering biological systems using automated biofoundries. Metabolic Engineering, 2017, 42, 98-108.	7.0	140
118	Twin-primer non-enzymatic DNA assembly: an efficient and accurate multi-part DNA assembly method. Nucleic Acids Research, 2017, 45, e94-e94.	14.5	40
119	Breaking the silence: new strategies for discovering novel natural products. Current Opinion in Biotechnology, 2017, 48, 21-27.	6.6	97
120	Targeting Specificity of the CRISPR/Cas9 System. ACS Synthetic Biology, 2017, 6, 1609-1613.	3.8	19
121	Profiling of Microbial Colonies for High-Throughput Engineering of Multistep Enzymatic Reactions via Optically Guided Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry. Journal of the American Chemical Society, 2017, 139, 12466-12473.	13.7	57
122	Combinatorial metabolic engineering using an orthogonal tri-functional CRISPR system. Nature Communications, 2017, 8, 1688.	12.8	244
123	Discovery and engineering of a 1-butanol biosensor in Saccharomyces cerevisiae. Bioresource Technology, 2017, 245, 1343-1351.	9.6	36
124	Tandem Reactions Combining Biocatalysts and Chemical Catalysts for Asymmetric Synthesis. Catalysts, 2016, 6, 194.	3.5	51
125	Construction of plasmids with tunable copy numbers in Saccharomyces cerevisiae and their applications in pathway optimization and multiplex genome integration. Biotechnology and Bioengineering, 2016, 113, 2462-2473.	3.3	61
126	Combinatorial pathway engineering for optimized production of the antiâ€malarial FR900098. Biotechnology and Bioengineering, 2016, 113, 384-392.	3.3	20

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127	Engineering microbial hosts for production of bacterial natural products. Natural Product Reports, 2016, 33, 963-987.	10.3	117
128	Characterization of Bacillus subtilis Colony Biofilms via Mass Spectrometry and Fluorescence Imaging. Journal of Proteome Research, 2016, 15, 1955-1962.	3.7	36
129	Directed Evolution of a Fluorinase for Improved Fluorination Efficiency with a Nonâ€native Substrate. Angewandte Chemie - International Edition, 2016, 55, 14277-14280.	13.8	38
130	Accelerated genome engineering through multiplexing. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 5-21.	6.6	16
131	TALE proteins search DNA using a rotationally decoupled mechanism. Nature Chemical Biology, 2016, 12, 831-837.	8.0	46
132	Directed Evolution of a Fluorinase for Improved Fluorination Efficiency with a Nonâ€native Substrate. Angewandte Chemie, 2016, 128, 14489-14492.	2.0	13
133	Pathway Design, Engineering, and Optimization. Advances in Biochemical Engineering/Biotechnology, 2016, 162, 77-116.	1.1	7
134	A brief overview of synthetic biology research programs and roadmap studies in the United States. Synthetic and Systems Biotechnology, 2016, 1, 258-264.	3.7	38
135	High-Efficiency Genome Editing of Streptomyces Species by an Engineered CRISPR/Cas System. Methods in Enzymology, 2016, 575, 271-284.	1.0	24
136	Metabolic engineering of a synergistic pathway for n-butanol production in Saccharomyces cerevisiae. Scientific Reports, 2016, 6, 25675.	3.3	50
137	Identification of an important motif that controls the activity and specificity of sugar transporters. Biotechnology and Bioengineering, 2016, 113, 1460-1467.	3.3	23
138	CRISPR/Cas9 mediated targeted mutagenesis of the fast growing cyanobacterium Synechococcus elongatus UTEX 2973. Microbial Cell Factories, 2016, 15, 115.	4.0	181
139	Production of Adipic Acid from Sugar Beet Residue by Combined Biological and Chemical Catalysis. ChemCatChem, 2016, 8, 1500-1506.	3.7	49
140	Functional Reconstitution of a Pyruvate Dehydrogenase in the Cytosol of Saccharomyces cerevisiae through Lipoylation Machinery Engineering. ACS Synthetic Biology, 2016, 5, 689-697.	3.8	19
141	Design and engineering of intracellularâ€metaboliteâ€sensing/regulation gene circuits in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2016, 113, 206-215.	3.3	63
142	A highly efficient single-step, markerless strategy for multi-copy chromosomal integration of large biochemical pathways in Saccharomyces cerevisiae. Metabolic Engineering, 2016, 33, 19-27.	7.0	177
143	Flexible and Versatile Strategy for the Construction of Large Biochemical Pathways. ACS Synthetic Biology, 2016, 5, 46-52.	3.8	17
144	A Rewritable, Random-Access DNA-Based Storage System. Scientific Reports, 2015, 5, 14138.	3.3	214

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145	Building biological foundries for next-generation synthetic biology. Science China Life Sciences, 2015, 58, 658-665.	4.9	20
146	DNA-Based Storage: Trends and Methods. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2015, 1, 230-248.	2.1	157
147	Orthogonal Fatty Acid Biosynthetic Pathway Improves Fatty Acid Ethyl Ester Production in Saccharomyces cerevisiae. ACS Synthetic Biology, 2015, 4, 808-814.	3.8	35
148	Improving and repurposing biocatalysts via directed evolution. Current Opinion in Chemical Biology, 2015, 25, 55-64.	6.1	219
149	Direct observation of TALE protein dynamics reveals a two-state search mechanism. Nature Communications, 2015, 6, 7277.	12.8	63
150	Development of a Synthetic Malonyl-CoA Sensor in Saccharomyces cerevisiae for Intracellular Metabolite Monitoring and Genetic Screening. ACS Synthetic Biology, 2015, 4, 1308-1315.	3.8	136
151	Development of a One-Pot Tandem Reaction Combining Ruthenium-Catalyzed Alkene Metathesis and Enantioselective Enzymatic Oxidation To Produce Aryl Epoxides. ACS Catalysis, 2015, 5, 3817-3822.	11.2	61
152	Recent advances in combinatorial biosynthesis for drug discovery. Drug Design, Development and Therapy, 2015, 9, 823.	4.3	52
153	Regulatory RNA-assisted genome engineering in microorganisms. Current Opinion in Biotechnology, 2015, 36, 85-90.	6.6	19
154	Recent advances in biosynthesis of fatty acids derived products in Saccharomyces cerevisiae via enhanced supply of precursor metabolites. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 437-451.	3.0	39
155	High-Efficiency Multiplex Genome Editing of Streptomyces Species Using an Engineered CRISPR/Cas System. ACS Synthetic Biology, 2015, 4, 723-728.	3.8	473
156	Rapid prototyping of microbial cell factories via genome-scale engineering. Biotechnology Advances, 2015, 33, 1420-1432.	11.7	39
157	RNAi-Assisted Genome Evolution in Saccharomyces cerevisiae for Complex Phenotype Engineering. ACS Synthetic Biology, 2015, 4, 283-291.	3.8	71
158	High Throughput Screening and Selection Methods for Directed Enzyme Evolution. Industrial & Engineering Chemistry Research, 2015, 54, 4011-4020.	3.7	160
159	Reversal of the Î²-Oxidation Cycle in Saccharomyces cerevisiae for Production of Fuels and Chemicals. ACS Synthetic Biology, 2015, 4, 332-341.	3.8	82
160	Homology-Integrated CRISPRâ€“Cas (HI-CRISPR) System for One-Step Multigene Disruption in Saccharomyces cerevisiae. ACS Synthetic Biology, 2015, 4, 585-594.	3.8	308
161	Directed evolution of a cellodextrin transporter for improved biofuel production under anaerobic conditions in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2014, 111, 1521-1531.	3.3	40
162	Metabolic engineering of a Saccharomyces cerevisiae strain capable of simultaneously utilizing glucose and galactose to produce enantiopure (2R,3R)-butanediol. Metabolic Engineering, 2014, 23, 92-99.	7.0	91

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163	SunnyTALEN: A secondâ€generation TALEN system for human genome editing. Biotechnology and Bioengineering, 2014, 111, 683-691.	3.3	22
164	Cooperative Tandem Catalysis by an Organometallic Complex and a Metalloenzyme. Angewandte Chemie - International Edition, 2014, 53, 465-469.	13.8	132
165	DNA assembly techniques for next-generation combinatorial biosynthesis of natural products. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 469-477.	3.0	51
166	Exploiting Issatchenkia orientalis SD108 for succinic acid production. Microbial Cell Factories, 2014, 13, 121.	4.0	74
167	Tandem Catalytic Conversion of Glucose to 5-Hydroxymethylfurfural with an Immobilized Enzyme and a Solid Acid. ACS Catalysis, 2014, 4, 2165-2168.	11.2	102
168	Modular assembly of designer PUF proteins for specific post-transcriptional regulation of endogenous RNA. Journal of Biological Engineering, 2014, 8, 7.	4.7	51
169	Genome-wide RNAi screen reveals the E3 SUMO-protein ligase gene SIZ1 as a novel determinant of furfural tolerance in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2014, 7, 78.	6.2	32
170	FairyTALE: A High-Throughput TAL Effector Synthesis Platform. ACS Synthetic Biology, 2014, 3, 67-73.	3.8	39
171	Recent advances in DNA assembly technologies. FEMS Yeast Research, 2014, 15, n/a-n/a.	2.3	142
172	Design and construction of acetyl-CoA overproducing Saccharomyces cerevisiae strains. Metabolic Engineering, 2014, 24, 139-149.	7.0	199
173	Directed evolution of a highly efficient cellobiose utilizing pathway in an industrial Saccharomyces cerevisiae strain. Biotechnology and Bioengineering, 2013, 110, 2874-2881.	3.3	40
174	Directed evolution of a cellobiose utilization pathway in Saccharomyces cerevisiae by simultaneously engineering multiple proteins. Microbial Cell Factories, 2013, 12, 61.	4.0	54
175	Refactoring the Silent Spectinabilin Gene Cluster Using a Plug-and-Play Scaffold. ACS Synthetic Biology, 2013, 2, 662-669.	3.8	146
176	Multistep One-Pot Reactions Combining Biocatalysts and Chemical Catalysts for Asymmetric Synthesis. ACS Catalysis, 2013, 3, 2856-2864.	11.2	207
177	Investigating xylose metabolism in recombinant Saccharomyces cerevisiae via 13C metabolic flux analysis. Microbial Cell Factories, 2013, 12, 114.	4.0	50
178	Combinatorial Design of a Highly Efficient Xylose-Utilizing Pathway in Saccharomyces cerevisiae for the Production of Cellulosic Biofuels. Applied and Environmental Microbiology, 2013, 79, 931-941.	3.1	76
179	Directed evolution as a powerful synthetic biology tool. Methods, 2013, 60, 81-90.	3.8	92
180	Customized Optimization of Metabolic Pathways by Combinatorial Transcriptional Engineering. Methods in Molecular Biology, 2013, 985, 177-209.	0.9	10

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181	Transcription activatorâ€like effector nucleases (TALENs): A highly efficient and versatile tool for genome editing. Biotechnology and Bioengineering, 2013, 110, 1811-1821.	3.3	210
182	Activation and characterization of a cryptic polycyclic tetramate macrolactam biosynthetic gene cluster. Nature Communications, 2013, 4, 2894.	12.8	206
183	Directed evolution: Past, present, and future. AICHE Journal, 2013, 59, 1432-1440.	3.6	144
184	Customized optimization of metabolic pathways by combinatorial transcriptional engineering. Nucleic Acids Research, 2012, 40, e142-e142.	14.5	207
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