

List of Publications by Year in
Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

254 papers	9,435 citations	52 h-index	92 g-index
271 ext. papers	11,711 ext. citations	8.8 avg, IF	6.89 L-index

#	Paper	IF	Citations
254	Metabolic engineering of threonine catabolism enables <i>Saccharomyces cerevisiae</i> to produce propionate under aerobic conditions.. <i>Biotechnology Journal</i> , 2022 , e2100579	5.6	8
253	Design and characterization of a salicylic acid-inducible gene expression system for Jurkat cells.. <i>Journal of Biotechnology</i> , 2022 , 346, 11-11	3.7	
252	Engineering <i>Escherichia coli</i> for anaerobic alkane activation: Biosynthesis of (1-methylalkyl)succinates. <i>Biotechnology and Bioengineering</i> , 2022 , 119, 315-320	4.9	0
251	Metabolic engineering of <i>Rhodotorula toruloides</i> IFO0880 improves C16 and C18 fatty alcohol production from synthetic media.. <i>Microbial Cell Factories</i> , 2022 , 21, 26	6.4	1
250	PlasmidMaker is a versatile, automated, and high throughput end-to-end platform for plasmid construction.. <i>Nature Communications</i> , 2022 , 13, 2697	17.4	0
249	Replication timing maintains the global epigenetic state in human cells. <i>Science</i> , 2021 , 372, 371-378	33.3	24
248	macroMS: Image-Guided Analysis of Random Objects by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2021 , 32, 1180-1188	3.5	2
247	Engineering oleaginous yeast <i>Rhodotorula toruloides</i> for overproduction of fatty acid ethyl esters. <i>Biotechnology for Biofuels</i> , 2021 , 14, 115	7.8	8
246	Precise Regulation of Cas9-Mediated Genome Engineering by Anti-CRISPR-Based Inducible CRISPR Controllers. <i>ACS Synthetic Biology</i> , 2021 , 10, 1320-1327	5.7	3
245	A rapid, accurate, scalable, and portable testing system for COVID-19 diagnosis. <i>Nature Communications</i> , 2021 , 12, 2905	17.4	18
244	Structural and Biochemical Investigation of UTP Cyclohydrolase. <i>ACS Catalysis</i> , 2021 , 11, 8895-8901	13.1	1
243	Cloning and characterization of a panel of mitochondrial targeting sequences for compartmentalization engineering in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology and Bioengineering</i> , 2021 , 118, 4269-4277	4.9	0
242	Identification of novel metabolic engineering targets for S-adenosyl-L-methionine production in <i>Saccharomyces cerevisiae</i> via genome-scale engineering. <i>Metabolic Engineering</i> , 2021 , 66, 319-327	9.7	3
241	TALEN outperforms Cas9 in editing heterochromatin target sites. <i>Nature Communications</i> , 2021 , 12, 60617.4	17.4	23
240	Development of Host-Orthogonal Genetic Systems for Synthetic Biology. <i>Advanced Biology</i> , 2021 , 5, e2000252		3
239	Can Deep Learning Solve the Cas9 Dilemma?. <i>CRISPR Journal</i> , 2021 , 4, 13-15	2.5	1
238	Cas12a-assisted precise targeted cloning using in vivo Cre-lox recombination. <i>Nature Communications</i> , 2021 , 12, 1171	17.4	8

237	Expanding the Potential of Mammalian Genome Engineering Targeted DNA Integration. <i>ACS Synthetic Biology</i> , 2021 , 10, 429-446	5.7	1
236	Directed Evolution: Methodologies and Applications. <i>Chemical Reviews</i> , 2021 , 121, 12384-12444	68.1	37
235	Protein Engineering by Efficient Sequence Space Exploration Through Combination of Directed Evolution and Computational Design Methodologies 2021 , 153-176		1
234	Data-driven Protein Engineering 2021 , 133-151		0
233	Programming Novel Cancer Therapeutics: Design Principles for Chimeric Antigen Receptors 2021 , 353-375		
232	Development of Novel Cellular Imaging Tools Using Protein Engineering 2021 , 377-402		
231	Iterative Saturation Mutagenesis for Semi-rational Enzyme Design 2021 , 105-132		2
230	High-Throughput Mass Spectrometry Complements Protein Engineering 2021 , 57-79		0
229	Recent Advances in Cell Surface Display Technologies for Directed Protein Evolution 2021 , 81-103		
228	Two evolutionarily duplicated domains individually and post-transcriptionally control SWEET expression for phloem transport. <i>New Phytologist</i> , 2021 , 232, 1793-1807	9.8	6
227	ECNet is an evolutionary context-integrated deep learning framework for protein engineering. <i>Nature Communications</i> , 2021 , 12, 5743	17.4	6
226	ARHGEF3 Regulates Skeletal Muscle Regeneration and Strength through Autophagy. <i>Cell Reports</i> , 2021 , 34, 108594	10.6	11
225	Promoter-proximal CTCF binding promotes distal enhancer-dependent gene activation. <i>Nature Structural and Molecular Biology</i> , 2021 , 28, 152-161	17.6	43
224	Genome-scale metabolic reconstruction of the non-model yeast SD108 and its application to organic acids production. <i>Metabolic Engineering Communications</i> , 2020 , 11, e00148	6.5	5
223	Fine-tuning the regulation of Cas9 expression levels for efficient CRISPR-Cas9 mediated recombination in Streptomyces. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020 , 47, 413-423	4.2	13
222	Optically guided mass spectrometry to screen microbial colonies for directed enzyme evolution. <i>Methods in Enzymology</i> , 2020 , 644, 255-273	1.7	
221	Unraveling the iterative type I polyketide synthases hidden in. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 8449-8454	11.5	15
220	A mass spectrometry-based high-throughput screening method for engineering fatty acid synthases with improved production of medium-chain fatty acids. <i>Biotechnology and Bioengineering</i> , 2020 , 117, 2131-2138	4.9	13

219	Integrating biocatalysis with chemocatalysis for selective transformations. <i>Current Opinion in Chemical Biology</i> , 2020 , 55, 161-170	9.7	44
218	Commemorating Frances Arnold. <i>AIChE Journal</i> , 2020 , 66, e16924	3.6	
217	Unleashing the power of energy storage: Engineering oxidation pathways for polyketide production. <i>Synthetic and Systems Biotechnology</i> , 2020 , 5, 21-22	4.2	1
216	A genetic toolbox for metabolic engineering of <i>Issatchenkia orientalis</i> . <i>Metabolic Engineering</i> , 2020 , 59, 87-97	9.7	14
215	Discovery and Characterization of a Class IV Lanthipeptide with a Nonoverlapping Ring Pattern. <i>ACS Chemical Biology</i> , 2020 , 15, 1642-1649	4.9	10
214	Towards oilcane: Engineering hyperaccumulation of triacylglycerol into sugarcane stems. <i>GCB Bioenergy</i> , 2020 , 12, 476-490	5.6	30
213	Recent advances in domesticating non-model microorganisms. <i>Biotechnology Progress</i> , 2020 , 36, e3008	2.8	10
212	Engineering sensitivity and specificity of AraC-based biosensors responsive to triacetic acid lactone and orsellinic acid. <i>Protein Engineering, Design and Selection</i> , 2020 , 33,	1.9	1
211	Computational Tools for Discovering and Engineering Natural Product Biosynthetic Pathways. <i>IScience</i> , 2020 , 23, 100795	6.1	21
210	Biosynthetic engineering of the antifungal, anti-MRSA auroramycin. <i>Microbial Cell Factories</i> , 2020 , 19, 3	6.4	2
209	An efficient gene knock-in strategy using 5Smodified double-stranded DNA donors with short homology arms. <i>Nature Chemical Biology</i> , 2020 , 16, 387-390	11.7	22
208	Unlocking nature's biosynthetic potential by directed genome evolution. <i>Current Opinion in Biotechnology</i> , 2020 , 66, 95-104	11.4	13
207	A transaldolase-dependent sulfoglycolysis pathway in <i>Bacillus megaterium</i> DSM 1804. <i>Biochemical and Biophysical Research Communications</i> , 2020 , 533, 1109-1114	3.4	10
206	Two-Color Imaging of Nonrepetitive Endogenous Loci in Human Cells. <i>ACS Synthetic Biology</i> , 2020 , 9, 2502-2514	5.7	1
205	Biosystems design by directed evolution. <i>AIChE Journal</i> , 2020 , 66, e16716	3.6	17
204	A comprehensive genome-scale model for IFO0880 accounting for functional genomics and phenotypic data. <i>Metabolic Engineering Communications</i> , 2019 , 9, e00101	6.5	26
203	A Continuing Career in Biocatalysis: Frances H. Arnold. <i>ACS Catalysis</i> , 2019 , 9, 9775-9788	13.1	17
202	Biosensor-guided improvements in salicylate production by recombinant <i>Escherichia coli</i> . <i>Microbial Cell Factories</i> , 2019 , 18, 18	6.4	14

201	Highly Efficient Single-Pot Scarless Golden Gate Assembly. <i>ACS Synthetic Biology</i> , 2019 , 8, 1047-1054	5.7	17
200	Development of a CRISPR/Cas9 system for high efficiency multiplexed gene deletion in <i>Rhodospiridium toruloides</i> . <i>Biotechnology and Bioengineering</i> , 2019 , 116, 2103-2109	4.9	22
199	Construction and Screening of an Antigen-Derived Peptide Library Displayed on Yeast Cell Surface for CD4+ T Cell Epitope Identification. <i>Methods in Molecular Biology</i> , 2019 , 2024, 213-234	1.4	3
198	Development of a CRISPR/Cas9-Based Tool for Gene Deletion in. <i>MSphere</i> , 2019 , 4,	5	16
197	Towards a fully automated algorithm driven platform for biosystems design. <i>Nature Communications</i> , 2019 , 10, 5150	17.4	45
196	Multi-functional genome-wide CRISPR system for high throughput genotype-phenotype mapping. <i>Nature Communications</i> , 2019 , 10, 5794	17.4	57
195	Activation of silent biosynthetic gene clusters using transcription factor decoys. <i>Nature Chemical Biology</i> , 2019 , 15, 111-114	11.7	51
194	Engineered CRISPR/Cas9 system for multiplex genome engineering of polyploid industrial yeast strains. <i>Biotechnology and Bioengineering</i> , 2018 , 115, 1630-1635	4.9	32
193	RNAi assisted genome evolution unveils yeast mutants with improved xylose utilization. <i>Biotechnology and Bioengineering</i> , 2018 , 115, 1552-1560	4.9	10
192	Recent advances in metabolic engineering of <i>Saccharomyces cerevisiae</i> : New tools and their applications. <i>Metabolic Engineering</i> , 2018 , 50, 85-108	9.7	147
191	Directed Evolution to Engineer Monobody for FRET Biosensor Assembly and Imaging at Live-Cell Surface. <i>Cell Chemical Biology</i> , 2018 , 25, 370-379.e4	8.2	16
190	Expanding the boundary of biocatalysis: design and optimization of in vitro tandem catalytic reactions for biochemical production. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2018 , 53, 115-129	8.7	28
189	Advancing Metabolic Engineering of <i>Saccharomyces cerevisiae</i> Using the CRISPR/Cas System. <i>Biotechnology Journal</i> , 2018 , 13, e1700601	5.6	34
188	Applying Advanced DNA Assembly Methods to Generate Pathway Libraries 2018 , 331-347		1
187	Biocatalysis for the synthesis of pharmaceuticals and pharmaceutical intermediates. <i>Bioorganic and Medicinal Chemistry</i> , 2018 , 26, 1275-1284	3.4	115
186	Design and characterization of new β glucuronidase active site variants with altered substrate specificity. <i>Biotechnology Letters</i> , 2018 , 40, 111-118	3	
185	Level of Fimbriation Alters the Adhesion of <i>Escherichia coli</i> Bacteria to Interfaces. <i>Langmuir</i> , 2018 , 34, 1133-1142	4	22
184	Pathway Design, Engineering, and Optimization. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2018 , 162, 77-116	1.7	7

183	Engineering Escherichia coli to increase triacetic acid lactone (TAL) production using an optimized TAL sensor-reporter system. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018 , 45, 789-793	4.2	14
182	Genome-scale engineering of Saccharomyces cerevisiae with single-nucleotide precision. <i>Nature Biotechnology</i> , 2018 , 36, 505-508	44.5	97
181	Cooperative asymmetric reactions combining photocatalysis and enzymatic catalysis. <i>Nature</i> , 2018 , 560, 355-359	50.4	140
180	CRISPR/Cas9-mediated knock-in of an optimized TetO repeat for live cell imaging of endogenous loci. <i>Nucleic Acids Research</i> , 2018 , 46, e100	20.1	29
179	Recent developments in the application of P450 based biocatalysts. <i>Current Opinion in Chemical Biology</i> , 2018 , 43, 1-7	9.7	59
178	Quantifying the effects of pollen nutrition on honey bee queen egg laying with a new laboratory system. <i>PLoS ONE</i> , 2018 , 13, e0203444	3.7	18
177	Rapid Screening of Lanthipeptide Analogs via In-Colony Removal of Leader Peptides in Escherichia coli. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11884-11888	16.4	13
176	Metabolic Engineering of Saccharomyces cerevisiae Using a Trifunctional CRISPR/Cas System for Simultaneous Gene Activation, Interference, and Deletion. <i>Methods in Enzymology</i> , 2018 , 608, 265-276	1.7	2
175	Fully Automated One-Step Synthesis of Single-Transcript TALEN Pairs Using a Biological Foundry. <i>ACS Synthetic Biology</i> , 2017 , 6, 678-685	5.7	27
174	Orthogonal Genetic Regulation in Human Cells Using Chemically Induced CRISPR/Cas9 Activators. <i>ACS Synthetic Biology</i> , 2017 , 6, 686-693	5.7	29
173	Discovery of a Phosphonoacetic Acid Derived Natural Product by Pathway Refactoring. <i>ACS Synthetic Biology</i> , 2017 , 6, 217-223	5.7	15
172	A Scalable Epitope Tagging Approach for High Throughput ChIP-Seq Analysis. <i>ACS Synthetic Biology</i> , 2017 , 6, 1034-1042	5.7	12
171	Combining Rh-Catalyzed Diazocoupling and Enzymatic Reduction To Efficiently Synthesize Enantioenriched 2-Substituted Succinate Derivatives. <i>ACS Catalysis</i> , 2017 , 7, 2548-2552	13.1	27
170	Programmable DNA-Guided Artificial Restriction Enzymes. <i>ACS Synthetic Biology</i> , 2017 , 6, 752-757	5.7	50
169	Inducible Control of mRNA Transport Using Reprogrammable RNA-Binding Proteins. <i>ACS Synthetic Biology</i> , 2017 , 6, 950-956	5.7	7
168	A plug-and-play pathway refactoring workflow for natural product research in Escherichia coli and Saccharomyces cerevisiae. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 1847-1854	4.9	22
167	Automated multiplex genome-scale engineering in yeast. <i>Nature Communications</i> , 2017 , 8, 15187	17.4	114
166	Engineering biological systems using automated biofoundries. <i>Metabolic Engineering</i> , 2017 , 42, 98-108	9.7	97

165	Breaking the silence: new strategies for discovering novel natural products. <i>Current Opinion in Biotechnology</i> , 2017 , 48, 21-27	11.4	76
164	Targeting Specificity of the CRISPR/Cas9 System. <i>ACS Synthetic Biology</i> , 2017 , 6, 1609-1613	5.7	15
163	Combinatorial metabolic engineering using an orthogonal tri-functional CRISPR system. <i>Nature Communications</i> , 2017 , 8, 1688	17.4	164
162	Discovery and engineering of a 1-butanol biosensor in <i>Saccharomyces cerevisiae</i> . <i>Bioresource Technology</i> , 2017 , 245, 1343-1351	11	31
161	SynV and SynX: A story more than DNA synthesis. <i>Science China Life Sciences</i> , 2017 , 60, 558-560	8.5	1
160	Flexible and Versatile Strategy for the Construction of Large Biochemical Pathways. <i>ACS Synthetic Biology</i> , 2016 , 5, 46-52	5.7	13
159	TALE proteins search DNA using a rotationally decoupled mechanism. <i>Nature Chemical Biology</i> , 2016 , 12, 831-7	11.7	37
158	Members of the Rusc protein family interact with Sufu and inhibit vertebrate Hedgehog signaling. <i>Development (Cambridge)</i> , 2016 , 143, 3944-3955	6.6	7
157	A brief overview of synthetic biology research programs and roadmap studies in the United States. <i>Synthetic and Systems Biotechnology</i> , 2016 , 1, 258-264	4.2	18
156	Directed evolution of xylose specific transporters to facilitate glucose-xylose co-utilization. <i>Biotechnology and Bioengineering</i> , 2016 , 113, 484-91	4.9	37
155	Identification of an important motif that controls the activity and specificity of sugar transporters. <i>Biotechnology and Bioengineering</i> , 2016 , 113, 1460-7	4.9	13
154	New and improved tools and methods for enhanced biosynthesis of natural products in microorganisms. <i>Current Opinion in Biotechnology</i> , 2016 , 42, 159-168	11.4	18
153	Standardization for natural product synthetic biology. <i>Natural Product Reports</i> , 2016 , 33, 920-4	15.1	11
152	CRISPR/Cas9 mediated targeted mutagenesis of the fast growing cyanobacterium <i>Synechococcus elongatus</i> UTEX 2973. <i>Microbial Cell Factories</i> , 2016 , 15, 115	6.4	136
151	Use of genome-editing tools to treat sickle cell disease. <i>Human Genetics</i> , 2016 , 135, 1011-28	6.3	18
150	High-Throughput Screening or Selection Methods for Evolutionary Enzyme Engineering 2016 , 707-744		
149	Metabolic engineering of <i>Saccharomyces cerevisiae</i> to produce 1-hexadecanol from xylose. <i>Microbial Cell Factories</i> , 2016 , 15, 24	6.4	37
148	Production of Adipic Acid from Sugar Beet Residue by Combined Biological and Chemical Catalysis. <i>ChemCatChem</i> , 2016 , 8, 1500-1506	5.2	38

147	New tools for reconstruction and heterologous expression of natural product biosynthetic gene clusters. <i>Natural Product Reports</i> , 2016 , 33, 174-82	15.1	77
146	Functional Reconstitution of a Pyruvate Dehydrogenase in the Cytosol of <i>Saccharomyces cerevisiae</i> through Lipoylation Machinery Engineering. <i>ACS Synthetic Biology</i> , 2016 , 5, 689-97	5.7	14
145	Design and engineering of intracellular-metabolite-sensing/regulation gene circuits in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology and Bioengineering</i> , 2016 , 113, 206-15	4.9	52
144	A highly efficient single-step, markerless strategy for multi-copy chromosomal integration of large biochemical pathways in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2016 , 33, 19-27	9.7	134
143	Biocatalysis for Drug Discovery and Development 2016 , 421-455		
142	Construction of plasmids with tunable copy numbers in <i>Saccharomyces cerevisiae</i> and their applications in pathway optimization and multiplex genome integration. <i>Biotechnology and Bioengineering</i> , 2016 , 113, 2462-73	4.9	40
141	Analysis of amino acid substitutions in AraC variants that respond to triacetic acid lactone. <i>Protein Science</i> , 2016 , 25, 804-14	6.3	8
140	Combinatorial pathway engineering for optimized production of the anti-malarial FR900098. <i>Biotechnology and Bioengineering</i> , 2016 , 113, 384-92	4.9	14
139	Rapid and efficient galactose fermentation by engineered <i>Saccharomyces cerevisiae</i> . <i>Journal of Biotechnology</i> , 2016 , 229, 13-21	3.7	14
138	Characterization of <i>Bacillus subtilis</i> Colony Biofilms via Mass Spectrometry and Fluorescence Imaging. <i>Journal of Proteome Research</i> , 2016 , 15, 1955-62	5.6	22
137	Combined and Iterative Use of Computational Design and Directed Evolution for Protein-Ligand Binding Design. <i>Methods in Molecular Biology</i> , 2016 , 1414, 139-53	1.4	2
136	RNAi-Assisted Genome Evolution (RAGE) in <i>Saccharomyces cerevisiae</i> . <i>Methods in Molecular Biology</i> , 2016 , 1470, 183-98	1.4	2
135	Accelerated genome engineering through multiplexing. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2016 , 8, 5-21	6.6	15
134	Alginate lyases from alginate-degrading <i>Vibrio splendidus</i> 12B01 are endolytic. <i>Applied and Environmental Microbiology</i> , 2015 , 81, 1865-73	4.8	56
133	Chromatin architecture reorganization during stem cell differentiation. <i>Nature</i> , 2015 , 518, 331-6	50.4	988
132	Direct observation of TALE protein dynamics reveals a two-state search mechanism. <i>Nature Communications</i> , 2015 , 6, 7277	17.4	56
131	Development of a Synthetic Malonyl-CoA Sensor in <i>Saccharomyces cerevisiae</i> for Intracellular Metabolite Monitoring and Genetic Screening. <i>ACS Synthetic Biology</i> , 2015 , 4, 1308-15	5.7	106
130	Selective elimination of mitochondrial mutations in the germline by genome editing. <i>Cell</i> , 2015 , 161, 459-469	56.2	187

129	Development of a One-Pot Tandem Reaction Combining Ruthenium-Catalyzed Alkene Metathesis and Enantioselective Enzymatic Oxidation To Produce Aryl Epoxides. <i>ACS Catalysis</i> , 2015 , 5, 3817-3822	13.1	54
128	Recent advances in combinatorial biosynthesis for drug discovery. <i>Drug Design, Development and Therapy</i> , 2015 , 9, 823-33	4.4	40
127	Systematic Identification of a Panel of Strong Constitutive Promoters from <i>Streptomyces albus</i> . <i>ACS Synthetic Biology</i> , 2015 , 4, 1001-10	5.7	101
126	Regulatory RNA-assisted genome engineering in microorganisms. <i>Current Opinion in Biotechnology</i> , 2015 , 36, 85-90	11.4	16
125	High-efficiency multiplex genome editing of <i>Streptomyces</i> species using an engineered CRISPR/Cas system. <i>ACS Synthetic Biology</i> , 2015 , 4, 723-8	5.7	355
124	Rapid prototyping of microbial cell factories via genome-scale engineering. <i>Biotechnology Advances</i> , 2015 , 33, 1420-32	17.8	30
123	RNAi-assisted genome evolution in <i>Saccharomyces cerevisiae</i> for complex phenotype engineering. <i>ACS Synthetic Biology</i> , 2015 , 4, 283-91	5.7	63
122	High Throughput Screening and Selection Methods for Directed Enzyme Evolution. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4011-4020	3.9	109
121	Metabolic engineering of <i>Saccharomyces cerevisiae</i> to improve 1-hexadecanol production. <i>Metabolic Engineering</i> , 2015 , 27, 10-19	9.7	86
120	Reversal of the TCA cycle in <i>Saccharomyces cerevisiae</i> for production of fuels and chemicals. <i>ACS Synthetic Biology</i> , 2015 , 4, 332-41	5.7	64
119	Homology-integrated CRISPR-Cas (HI-CRISPR) system for one-step multigene disruption in <i>Saccharomyces cerevisiae</i> . <i>ACS Synthetic Biology</i> , 2015 , 4, 585-94	5.7	231
118	Recent advances in DNA assembly technologies. <i>FEMS Yeast Research</i> , 2015 , 15, 1-9	3.1	85
117	Functional enrichment by direct plasmid recovery after fluorescence activated cell sorting. <i>BioTechniques</i> , 2015 , 59, 157-61	2.5	5
116	Orthogonal Fatty Acid Biosynthetic Pathway Improves Fatty Acid Ethyl Ester Production in <i>Saccharomyces cerevisiae</i> . <i>ACS Synthetic Biology</i> , 2015 , 4, 808-14	5.7	30
115	Improving and repurposing biocatalysts via directed evolution. <i>Current Opinion in Chemical Biology</i> , 2015 , 25, 55-64	9.7	199
114	Recent advances in engineering proteins for biocatalysis. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 1273-87	4.9	71
113	Characterization and Engineering of the Adenylation Domain of a NRPS-Like Protein: A Potential Biocatalyst for Aldehyde Generation. <i>ACS Catalysis</i> , 2014 , 4, 1219-1225	13.1	29
112	Recent advances in natural product discovery. <i>Current Opinion in Biotechnology</i> , 2014 , 30, 230-7	11.4	100

111	Engineered pentafunctional minicellulosome for simultaneous saccharification and ethanol fermentation in <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , 2014 , 80, 6677-84	4.8	47
110	Characterization of the N-oxygenase AurF from <i>Streptomyces thioletus</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 5569-77	3.4	23
109	Exploiting <i>Issatchenkia orientalis</i> SD108 for succinic acid production. <i>Microbial Cell Factories</i> , 2014 , 13, 121	6.4	46
108	Manipulating natural product biosynthetic pathways via DNA assembler. <i>Current Protocols in Chemical Biology</i> , 2014 , 6, 65-100	1.8	21
107	Comparative biochemical characterization of three exolytic oligoalginate lyases from <i>Vibrio splendidus</i> reveals complementary substrate scope, temperature, and pH adaptations. <i>Applied and Environmental Microbiology</i> , 2014 , 80, 4207-14	4.8	68
106	Modular assembly of designer PUF proteins for specific post-transcriptional regulation of endogenous RNA. <i>Journal of Biological Engineering</i> , 2014 , 8, 7	6.3	40
105	Genome-wide RNAi screen reveals the E3 SUMO-protein ligase gene SIZ1 as a novel determinant of furfural tolerance in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology for Biofuels</i> , 2014 , 7, 78	7.8	29
104	Cloning and characterization of a galactitol 2-dehydrogenase from <i>Rhizobium leguminosarum</i> and its application in D-tagatose production. <i>Enzyme and Microbial Technology</i> , 2014 , 58-59, 44-51	3.8	19
103	Utilizing an endogenous pathway for 1-butanol production in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2014 , 22, 60-8	9.7	69
102	Design and construction of acetyl-CoA overproducing <i>Saccharomyces cerevisiae</i> strains. <i>Metabolic Engineering</i> , 2014 , 24, 139-49	9.7	154
101	Protein design for pathway engineering. <i>Journal of Structural Biology</i> , 2014 , 185, 234-42	3.4	49
100	Scale-Up of Microbial Fermentation Process 2014 , 669-675		3
99	Tools for Enzyme Discovery 2014 , 441-452		1
98	Glycosylation of Secondary Metabolites To Produce Novel Compounds 2014 , 347-363		
97	Insect Cell Culture 2014 , 212-222		3
96	Plant Cell Culture 2014 , 196-211		
95	Raw Materials Selection and Medium Development for Industrial Fermentation Processes 2014 , 659-668		4
94	Genetic Engineering Tools for <i>Saccharomyces cerevisiae</i> 2014 , 287-301		0

- 93 Enzyme Promiscuity and Evolution of New Protein Functions **2014**, 524-538
- 92 Microalgal Culture as a Feedstock for Bioenergy, Chemicals, and Nutrition **2014**, 577-590
- 91 Heterologous Protein Expression in Yeasts and Filamentous Fungi **2014**, 145-156 1
- 90 Continuous Culture **2014**, 685-699 1
- 89 Improving Microbial Robustness Using Systems Biology **2014**, 605-620
- 88 Genetic Manipulation of Myxobacteria **2014**, 262-272
- 87 Strain Improvement of Escherichia coli To Enhance Recombinant Protein Production **2014**, 273-286
- 86 Genetic Engineering of Acidic Lipopeptide Antibiotics **2014**, 391-410
- 85 Genetic Engineering To Regulate Production of Secondary Metabolites in Streptomyces clavuligerus **2014**, 411-425
- 84 Genetic Engineering of Myxobacterial Natural Product Biosynthetic Genes **2014**, 426-437
- 83 Enzyme Production in Escherichia coli **2014**, 539-548
- 82 Bioprocess Development **2014**, 549-562
- 81 Accessing Microbial Communities Relevant to Biofuels Production **2014**, 565-576
- 80 Bioethanol Production from Lignocellulosics: Some Process Considerations and Procedures **2014**, 621-633
- 79 Genetics, Genetic Manipulation, and Approaches to Strain Improvement of Filamentous Fungi **2014**, 318-329 16
- 78 Purification and Characterization of Proteins **2014**, 731-742
- 77 Cell Culture Bioreactors: Controls, Measurements, and Scale-Down Model **2014**, 676-684
- 76 Protein Expression in Nonconventional Yeasts **2014**, 302-317

75	Metabolic Engineering of <i>Escherichia coli</i> for the Production of a Precursor to Artemisinin, an Antimalarial Drug 2014 , 364-379		
74	Enzyme Engineering: Combining Computational Approaches with Directed Evolution 2014 , 453-465		
73	Bioreactor Automation 2014 , 719-730		2
72	Mammalian Cell Culture for Biopharmaceutical Production 2014 , 157-178		6
71	Cooperative Tandem Catalysis by an Organometallic Complex and a Metalloenzyme. <i>Angewandte Chemie</i> , 2014 , 126, 475-479	3.6	38
70	Genetic Engineering of <i>Corynebacteria</i> 2014 , 225-237		
69	The Use of Enzymes for Nonaqueous Organic Transformations 2014 , 509-523		
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