Zihe Liu

List of Publications by Year
in descending order

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387 papers	37,602 citations	5876 81 h-index	4628 170 g-index
460 all docs	460 docs citations	460 times ranked	51695 citing authors

#	Article	IF	Citations
1	Tissue-based map of the human proteome. Science, 2015, 347, 1260419.	6.0	10,802
2	Engineering Cellular Metabolism. Cell, 2016, 164, 1185-1197.	13.5	953
3	Minimum Information about a Biosynthetic Gene cluster. Nature Chemical Biology, 2015, 11, 625-631.	3.9	715
4	Roux-en-Y Gastric Bypass and Vertical Banded Gastroplasty Induce Long-Term Changes on the Human Gut Microbiome Contributing to Fat Mass Regulation. Cell Metabolism, 2015, 22, 228-238.	7.2	638
5	Voluntary Running Suppresses Tumor Growth through Epinephrine- and IL-6-Dependent NK Cell Mobilization and Redistribution. Cell Metabolism, 2016, 23, 554-562.	7.2	572
6	Genome-scale metabolic modelling of hepatocytes reveals serine deficiency in patients with non-alcoholic fatty liver disease. Nature Communications, 2014, 5, 3083.	5.8	461
7	Altered sterol composition renders yeast thermotolerant. Science, 2014, 346, 75-78.	6.0	368
8	Improving the phenotype predictions of a yeast genomeâ€scale metabolic model by incorporating enzymatic constraints. Molecular Systems Biology, 2017, 13, 935.	3.2	367
9	Quantifying Diet-Induced Metabolic Changes of the Human Gut Microbiome. Cell Metabolism, 2015, 22, 320-331.	7.2	345
10	An Integrated Understanding of the Rapid Metabolic Benefits of a Carbohydrate-Restricted Diet on Hepatic Steatosis in Humans. Cell Metabolism, 2018, 27, 559-571.e5.	7.2	321
11	In silico aided metabolic engineering of Saccharomyces cerevisiae for improved bioethanol production. Metabolic Engineering, 2006, 8, 102-111.	3.6	311
12	Production of fatty acid-derived oleochemicals and biofuels by synthetic yeast cell factories. Nature Communications, 2016, 7, 11709.	5.8	306
13	The gut microbiota modulates host amino acid and glutathione metabolism in mice. Molecular Systems Biology, 2015, 11, 834.	3.2	291
14	Statin therapy is associated with lower prevalence of gut microbiota dysbiosis. Nature, 2020, 581, 310-315.	13.7	283
15	Establishing a platform cell factory through engineering of yeast acetyl-CoA metabolism. Metabolic Engineering, 2013, 15, 48-54.	3.6	268
16	Metabolic engineering of yeast for production of fuels and chemicals. Current Opinion in Biotechnology, 2013, 24, 398-404.	3.3	263
17	The human secretome. Science Signaling, 2019, 12, .	1.6	259
18	Lipid engineering combined with systematic metabolic engineering of Saccharomyces cerevisiae for high-yield production of lycopene. Metabolic Engineering, 2019, 52, 134-142.	3.6	251

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19	Third-generation biorefineries as the means to produce fuels and chemicals from CO2. Nature Catalysis, 2020, 3, 274-288.	16.1	245
20	De novo production of resveratrol from glucose or ethanol by engineered Saccharomyces cerevisiae. Metabolic Engineering, 2015, 32, 1-11.	3.6	242
21	Kinetic models in industrial biotechnology â€“ Improving cell factory performance. Metabolic Engineering, 2014, 24, 38-60.	3.6	238
22	Microbial acetyl-CoA metabolism and metabolic engineering. Metabolic Engineering, 2015, 28, 28-42.	3.6	237
23	RAVEN 2.0: A versatile toolbox for metabolic network reconstruction and a case study on Streptomyces coelicolor. PLoS Computational Biology, 2018, 14, e1006541.	1.5	228
24	An atlas of human metabolism. Science Signaling, 2020, 13, .	1.6	223
25	Glucose repression inSaccharomyces cerevisiae. FEMS Yeast Research, 2015, 15, fov068.	1.1	220
26	A consensus S. cerevisiae metabolic model Yeast8 and its ecosystem for comprehensively probing cellular metabolism. Nature Communications, 2019, 10, 3586.	5.8	217
27	Reprogramming Yeast Metabolism from Alcoholic Fermentation to Lipogenesis. Cell, 2018, 174, 1549-1558.e14.	13.5	215
28	Establishment of a yeast platform strain for production of p-coumaric acid through metabolic engineering of aromatic amino acid biosynthesis. Metabolic Engineering, 2015, 31, 181-188.	3.6	213
29	Global analysis of biosynthetic gene clusters reveals vast potential of secondary metabolite production in Penicillium species. Nature Microbiology, 2017, 2, 17044.	5.9	198
30	High-throughput screening for industrial enzyme production hosts by droplet microfluidics. Lab on A Chip, 2014, 14, 806-813.	3.1	195
31	Impact of synthetic biology and metabolic engineering on industrial production of fine chemicals. Biotechnology Advances, 2015, 33, 1395-1402.	6.0	195
32	Establishing a synthetic pathway for high-level production of 3-hydroxypropionic acid in Saccharomyces cerevisiae via Î²-alanine. Metabolic Engineering, 2015, 27, 57-64.	3.6	185
33	Absolute Quantification of Protein and mRNA Abundances Demonstrate Variability in Gene-Specific Translation Efficiency in Yeast. Cell Systems, 2017, 4, 495-504.e5.	2.9	178
34	Rewiring carbon metabolism in yeast for high level production of aromatic chemicals. Nature Communications, 2019, 10, 4976.	5.8	177
35	Systems Biology of Metabolism. Annual Review of Biochemistry, 2017, 86, 245-275.	5.0	173
36	Production of natural products through metabolic engineering of Saccharomyces cerevisiae. Current Opinion in Biotechnology, 2015, 35, 7-15.	3.3	170

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37	A gRNA-tRNA array for CRISPR-Cas9 based rapid multiplexed genome editing in Saccharomyces cerevisiae. Nature Communications, 2019, 10, 1053.	5.8	164
38	Guidelines and recommendations on yeast cell death nomenclature. Microbial Cell, 2018, 5, 4-31.	1.4	158
39	Metabolic engineering of recombinant protein secretion by Saccharomyces cerevisiae. FEMS Yeast Research, 2012, 12, 491-510.	1.1	157
40	Harnessing Yeast Peroxisomes for Biosynthesis of Fatty-Acid-Derived Biofuels and Chemicals with Relieved Side-Pathway Competition. Journal of the American Chemical Society, 2016, 138, 15368-15377.	6.6	157
41	Metabolic engineering strategies for microbial synthesis of oleochemicals. Metabolic Engineering, 2015, 29, 1-11.	3.6	152
42	Human gut microbiota and healthy aging: Recent developments and future prospective. Nutrition and Healthy Aging, 2016, 4, 3-16.	0.5	150
43	Metabolic network-based stratification of hepatocellular carcinoma reveals three distinct tumor subtypes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11874-E11883.	3.3	149
44	Engineering synergy in biotechnology. Nature Chemical Biology, 2014, 10, 319-322.	3.9	147
45	Fatty acid synthesis is required for breast cancer brain metastasis. Nature Cancer, 2021, 2, 414-428.	5.7	147
46	Barriers and opportunities in bio-based production of hydrocarbons. Nature Energy, 2018, 3, 925-935.	19.8	146
47	The role of biofuels in the future energy supply. Energy and Environmental Science, 2013, 6, 1077.	15.6	145
48	Regulation of amino-acid metabolism controls flux to lipid accumulation in Yarrowia lipolytica. Npj Systems Biology and Applications, 2016, 2, 16005.	1.4	141
49	DCEO Biotechnology: Tools To Design, Construct, Evaluate, and Optimize the Metabolic Pathway for Biosynthesis of Chemicals. Chemical Reviews, 2018, 118, 4-72.	23.0	141
50	Microfluidic screening and whole-genome sequencing identifies mutations associated with improved protein secretion by yeast. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4689-96.	3.3	138
51	Succinate dehydrogenase inhibition leads to epithelial-mesenchymal transition and reprogrammed carbon metabolism. Cancer & Metabolism, 2014, 2, 21.	2.4	137
52	Integrated Network Analysis Reveals an Association between Plasma Mannose Levels and Insulin Resistance. Cell Metabolism, 2016, 24, 172-184.	7.2	133
53	Systems Biology of Metabolism: A Driver for Developing Personalized and Precision Medicine. Cell Metabolism, 2017, 25, 572-579.	7.2	132
54	Transcriptomics resources of human tissues andÂorgans. Molecular Systems Biology, 2016, 12, 862.	3.2	130

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55	Biobased organic acids production by metabolically engineered microorganisms. Current Opinion in Biotechnology, 2016, 37, 165-172.	3.3	130
56	Metabolic engineering of yeast for fermentative production of flavonoids. Bioresource Technology, 2017, 245, 1645-1654.	4.8	129
57	Different expression systems for production of recombinant proteins in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2012, 109, 1259-1268.	1.7	128
58	Coupled incremental precursor and co-factor supply improves 3-hydroxypropionic acid production in Saccharomyces cerevisiae. Metabolic Engineering, 2014, 22, 104-109.	3.6	123
59	Imidazole propionate is increased in diabetes and associated with dietary patterns and altered microbial ecology. Nature Communications, 2020, 11, 5881.	5.8	122
60	Metabolic Trade-offs in Yeast are Caused by F1F0-ATP synthase. Scientific Reports, 2016, 6, 22264.	1.6	121
61	Complete genomic and transcriptional landscape analysis using third-generation sequencing: a case study of Saccharomyces cerevisiae CEN.PK113-7D. Nucleic Acids Research, 2018, 46, e38-e38.	6.5	116
62	Improved production of fatty acid ethyl esters in Saccharomyces cerevisiae through up-regulation of the ethanol degradation pathway and expression of the heterologous phosphoketolase pathway. Microbial Cell Factories, 2014, 13, 39.	1.9	115
63	Modelling approaches for studying the microbiome. Nature Microbiology, 2019, 4, 1253-1267.	5.9	114
64	Stratification of Hepatocellular Carcinoma Patients Based on Acetate Utilization. Cell Reports, 2015, 13, 2014-2026.	2.9	113
65	Proteome- and Transcriptome-Driven Reconstruction of the Human Myocyte Metabolic Network and Its Use for Identification of Markers for Diabetes. Cell Reports, 2015, 11, 921-933.	2.9	112
66	Rapid Quantification of Yeast Lipid using Microwave-Assisted Total Lipid Extraction and HPLC-CAD. Analytical Chemistry, 2013, 85, 4912-4919.	3.2	110
67	Thermotolerant Yeast Strains Adapted by Laboratory Evolution Show Trade-Off at Ancestral Temperatures and Preadaptation to Other Stresses. MBio, 2015, 6, e00431.	1.8	108
68	Production of farnesene and santalene by Saccharomyces cerevisiae using fedâ€batch cultivations with RQâ€controlled feed. Biotechnology and Bioengineering, 2016, 113, 72-81.	1.7	102
69	Combinatorial, additive and dose-dependent drugâ€“microbiome associations. Nature, 2021, 600, 500-505.	13.7	102
70	Microbiome and metabolome features of the cardiometabolic disease spectrum. Nature Medicine, 2022, 28, 303-314.	15.2	102
71	Longâ€chain alkane production by the yeast Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2015, 112, 1275-1279.	1.7	101
72	Profiling of Cytosolic and Peroxisomal Acetyl-CoA Metabolism in Saccharomyces cerevisiae. PLoS ONE, 2012, 7, e42475.	1.1	100

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73	Machine Learning Applied to Predicting Microorganism Growth Temperatures and Enzyme Catalytic Optima. ACS Synthetic Biology, 2019, 8, 1411-1420.	1.9	100
74	From next-generation sequencing to systematic modeling of the gut microbiome. Frontiers in Genetics, 2015, 6, 219.	1.1	99
75	Engineering of synthetic, stress-responsive yeast promoters. Nucleic Acids Research, 2016, 44, e136-e136.	6.5	99
76	Systems biology of lipid metabolism: From yeast to human. FEBS Letters, 2009, 583, 3905-3913.	1.3	97
77	Engineering of vesicle trafficking improves heterologous protein secretion in Saccharomyces cerevisiae. Metabolic Engineering, 2012, 14, 120-127.	3.6	97
78	Modular pathway rewiring of Saccharomyces cerevisiae enables high-level production of L-ornithine. Nature Communications, 2015, 6, 8224.	5.8	97
79	Expanding the product portfolio of fungal type I fatty acid synthases. Nature Chemical Biology, 2017, 13, 360-362.	3.9	97
80	Improving biobutanol production in engineered Saccharomyces cerevisiae by manipulation of acetyl-CoA metabolism. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 1051-1056.	1.4	96
81	Energy metabolism controls phenotypes by protein efficiency and allocation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17592-17597.	3.3	96
82	Flux balance analysis predicts essential genes in clear cell renal cell carcinoma metabolism. Scientific Reports, 2015, 5, 10738.	1.6	95
83	Yeast mitochondria: an overview of mitochondrial biology and the potential of mitochondrial systems biology. FEMS Yeast Research, 2018, 18, .	1.1	94
84	Modifying Yeast Tolerance to Inhibitory Conditions of Ethanol Production Processes. Frontiers in Bioengineering and Biotechnology, 2015, 3, 184.	2.0	93
85	Metabolic Needs and Capabilities of Toxoplasma gondii through Combined Computational and Experimental Analysis. PLoS Computational Biology, 2015, 11, e1004261.	1.5	92
86	Advancing metabolic engineering through systems biology of industrial microorganisms. Current Opinion in Biotechnology, 2015, 36, 8-15.	3.3	92
87	Absolute yeast mitochondrial proteome quantification reveals trade-off between biosynthesis and energy generation during diauxic shift. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7524-7535.	3.3	92
88	Synthetic Biology for Engineering Acetyl Coenzyme A Metabolism in Yeast. MBio, 2014, 5, e02153.	1.8	88
89	Genome-scale metabolic reconstructions of Bifidobacterium adolescentis L2-32 and Faecalibacterium prausnitzii A2-165 and their interaction. BMC Systems Biology, 2014, 8, 41.	3.0	88
90	Recent trends in metabolic engineering of microbial chemical factories. Current Opinion in Biotechnology, 2019, 60, 188-197.	3.3	88

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91	Genome scale metabolic modeling of cancer. Metabolic Engineering, 2017, 43, 103-112.	3.6	87
92	Engineering yeast metabolism for production of terpenoids for use as perfume ingredients, pharmaceuticals and biofuels. FEMS Yeast Research, 2017, 17, .	1.1	87
93	New paradigms for metabolic modeling of human cells. Current Opinion in Biotechnology, 2015, 34, 91-97.	3.3	86
94	Drug Repositioning for Effective Prostate Cancer Treatment. Frontiers in Physiology, 2018, 9, 500.	1.3	85
95	Meta-analysis of the gut microbiota in predicting response to cancer immunotherapy in metastatic melanoma. JCI Insight, 2020, 5, .	2.3	85
96	Engineering of acetyl-CoA metabolism for the improved production of polyhydroxybutyrate in Saccharomyces cerevisiae. AMB Express, 2012, 2, 52.	1.4	83
97	Exploring the potential of Saccharomyces cerevisiae for biopharmaceutical protein production. Current Opinion in Biotechnology, 2017, 48, 77-84.	3.3	83
98	Deep learning suggests that gene expression is encoded in all parts of a co-evolving interacting gene regulatory structure. Nature Communications, 2020, 11, 6141.	5.8	83
99	Metabolic engineering of Saccharomyces cerevisiae for production of very long chain fatty acid-derived chemicals. Nature Communications, 2017, 8, 15587.	5.8	82
100	Multiplexed CRISPR/Cas9 Genome Editing and Gene Regulation Using Csy4 in Saccharomyces cerevisiae. ACS Synthetic Biology, 2018, 7, 10-15.	1.9	82
101	Metagenomic analysis of microbe-mediated vitamin metabolism in the human gut microbiome. BMC Genomics, 2019, 20, 208.	1.2	81
102	Efficient protein production by yeast requires global tuning of metabolism. Nature Communications, 2017, 8, 1131.	5.8	80
103	Engineering Robustness of Microbial Cell Factories. Biotechnology Journal, 2017, 12, 1700014.	1.8	80
104	Evolutionary engineering reveals divergent paths when yeast is adapted to different acidic environments. Metabolic Engineering, 2017, 39, 19-28.	3.6	80
105	Multidimensional engineering of Saccharomyces cerevisiae for efficient synthesis of medium-chain fatty acids. Nature Catalysis, 2020, 3, 64-74.	16.1	80
106	Global rewiring of cellular metabolism renders Saccharomyces cerevisiae Crabtree negative. Nature Communications, 2018, 9, 3059.	5.8	79
107	Engineering central metabolism â€“ a grand challenge for plant biologists. Plant Journal, 2017, 90, 749-763.	2.8	78
108	Compositional and functional differences of the mucosal microbiota along the intestine of healthy individuals. Scientific Reports, 2020, 10, 14977.	1.6	78

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109	Biobased production of alkanes and alkenes through metabolic engineering of microorganisms. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 613-622.	1.4	77
110	Current Status of COVID-19 Therapies and Drug Repositioning Applications. IScience, 2020, 23, 101303.	1.9	77
111	Human metabolic atlas: an online resource for human metabolism. Database: the Journal of Biological Databases and Curation, 2015, 2015, bav068.	1.4	76
112	Evolution reveals a glutathione-dependent mechanism of 3-hydroxypropionic acid tolerance. Metabolic Engineering, 2014, 26, 57-66.	3.6	74
113	Genome-scale reconstructions of the mammalian secretory pathway predict metabolic costs and limitations of protein secretion. Nature Communications, 2020, 11, 68.	5.8	74
114	The human liverâ€specific proteome defined by transcriptomics and antibodyâ€based profiling. FASEB Journal, 2014, 28, 2901-2914.	0.2	73
115	Imbalance of heterologous protein folding and disulfide bond formation rates yields runaway oxidative stress. BMC Biology, 2012, 10, 16.	1.7	72
116	Elucidating the interactions between the human gut microbiota and its host through metabolic modeling. Frontiers in Genetics, 2014, 5, 86.	1.1	72
117	Engineering the protein secretory pathway of Saccharomyces cerevisiae enables improved protein production. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11025-E11032.	3.3	72
118	Production of Î²-ionone by combined expression of carotenogenic and plant CCD1 genes in Saccharomyces cerevisiae. Microbial Cell Factories, 2015, 14, 84.	1.9	71
119	Metabolic Models of Protein Allocation Call for the Kinetome. Cell Systems, 2017, 5, 538-541.	2.9	71
120	Harnessing xylose pathways for biofuels production. Current Opinion in Biotechnology, 2019, 57, 56-65.	3.3	71
121	Structural basis of ubiquitin modification by the Legionella effector SdeA. Nature, 2018, 557, 674-678.	13.7	69
122	Do genomeâ€scale models need exact solvers or clearer standards?. Molecular Systems Biology, 2015, 11, 831.	3.2	68
123	The Impact of Systems Biology on Bioprocessing. Trends in Biotechnology, 2017, 35, 1156-1168.	4.9	67
124	Affibody Scaffolds Improve Sesquiterpene Production in Saccharomyces cerevisiae. ACS Synthetic Biology, 2017, 6, 19-28.	1.9	66
125	Metabolite secretion in microorganisms: the theory of metabolic overflow put to the test. Metabolomics, 2018, 14, 43.	1.4	66
126	Fatty Acid-Derived Biofuels and Chemicals Production in Saccharomyces cerevisiae. Frontiers in Bioengineering and Biotechnology, 2014, 2, 32.	2.0	65

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127	Gut microbiota dysbiosis is associated with malnutrition and reduced plasma amino acid levels: Lessons from genome-scale metabolic modeling. Metabolic Engineering, 2018, 49, 128-142.	3.6	65
128	Balanced globin protein expression and heme biosynthesis improve production of human hemoglobin in Saccharomyces cerevisiae. Metabolic Engineering, 2014, 21, 9-16.	3.6	64
129	Metabolic engineering of Saccharomyces cerevisiae for overproduction of triacylglycerols. Metabolic Engineering Communications, 2018, 6, 22-27.	1.9	63
130	Adaptive laboratory evolution of tolerance to dicarboxylic acids in Saccharomyces cerevisiae. Metabolic Engineering, 2019, 56, 130-141.	3.6	63
131	Extensive weight loss reveals distinct gene expression changes in human subcutaneous and visceral adipose tissue. Scientific Reports, 2015, 5, 14841.	1.6	62
132	Molecular Mechanism of Flocculation Self-Recognition in Yeast and Its Role in Mating and Survival. MBio, 2015, 6, .	1.8	62
133	Yeast cell factories on the horizon. Science, 2015, 349, 1050-1051.	6.0	62
134	A molecular genetic toolbox for Yarrowia lipolytica. Biotechnology for Biofuels, 2017, 10, 2.	6.2	62
135	Enabling the synthesis of medium chain alkanes and 1-alkenes in yeast. Metabolic Engineering, 2017, 44, 81-88.	3.6	62
136	De novo biosynthesis of bioactive isoflavonoids by engineered yeast cell factories. Nature Communications, 2021, 12, 6085.	5.8	62
137	Proteome analysis of xylose metabolism in Rhodotorula toruloides during lipid production. Biotechnology for Biofuels, 2019, 12, 137.	6.2	61
138	Simplified Intestinal Microbiota to Study Microbe-Diet-Host Interactions in a Mouse Model. Cell Reports, 2019, 26, 3772-3783.e6.	2.9	61
139	Identifying anti-growth factors for human cancer cell lines through genome-scale metabolic modeling. Scientific Reports, 2015, 5, 8183.	1.6	60
140	Cocoa butter-like lipid production ability of non-oleaginous and oleaginous yeasts under nitrogen-limited culture conditions. Applied Microbiology and Biotechnology, 2017, 101, 3577-3585.	1.7	60
141	Changes in lipid metabolism convey acid tolerance in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2018, 11, 297.	6.2	60
142	Adaptation to different types of stress converge on mitochondrial metabolism. Molecular Biology of the Cell, 2016, 27, 2505-2514.	0.9	59
143	Engineering 1-Alkene Biosynthesis and Secretion by Dynamic Regulation in Yeast. ACS Synthetic Biology, 2018, 7, 584-590.	1.9	59
144	Cancer Metabolism: A Modeling Perspective. Frontiers in Physiology, 2015, 6, 382.	1.3	58

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145	The human cardiac and skeletal muscle proteomes defined by transcriptomics and antibody-based profiling. BMC Genomics, 2015, 16, 475.	1.2	58
146	Heterologous transporter expression for improved fatty alcohol secretion in yeast. Metabolic Engineering, 2018, 45, 51-58.	3.6	57
147	A Systematic Investigation of the Malignant Functions and Diagnostic Potential of the Cancer Secretome. Cell Reports, 2019, 26, 2622-2635.e5.	2.9	57
148	Engineering Saccharomyces cerevisiae cells for production of fatty acid-derived biofuels and chemicals. Open Biology, 2019, 9, 190049.	1.5	56
149	Metagenomic Data Utilization and Analysis (MEDUSA) and Construction of a Global Gut Microbial Gene Catalogue. PLoS Computational Biology, 2014, 10, e1003706.	1.5	55
150	Glycosaminoglycan Profiling in Patientsâ€™ Plasma and Urine Predicts the Occurrence of Metastatic Clear Cell Renal Cell Carcinoma. Cell Reports, 2016, 15, 1822-1836.	2.9	55
151	In Vivo Analysis of the Viable Microbiota and Helicobacter pylori Transcriptome in Gastric Infection and Early Stages of Carcinogenesis. Infection and Immunity, 2017, 85, .	1.0	55
152	Genomeâ€scale model of Rhodotorula toruloides metabolism. Biotechnology and Bioengineering, 2019, 116, 3396-3408.	1.7	55
153	RNAi expression tuning, microfluidic screening, and genome recombineering for improved protein production in Saccharomyces cerevisiae. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9324-9332.	3.3	54
154	Systems biology based drug repositioning for development of cancer therapy. Seminars in Cancer Biology, 2021, 68, 47-58.	4.3	54
155	Targeting <scp>CDK</scp> 2 overcomes melanoma resistance against <scp>BRAF</scp> and Hsp90 inhibitors. Molecular Systems Biology, 2018, 14, e7858.	3.2	53
156	Impairment of gut microbial biotin metabolism and host biotin status in severe obesity: effect of biotin and prebiotic supplementation on improved metabolism. Gut, 2022, 71, 2463-2480.	6.1	53
157	Recent advances in combinatorial biosynthesis for drug discovery. Drug Design, Development and Therapy, 2015, 9, 823.	2.0	52
158	Improving the flux distributions simulated with genome-scale metabolic models of Saccharomyces cerevisiae. Metabolic Engineering Communications, 2016, 3, 153-163.	1.9	51
159	Comparison of the metabolic response to over-production of p-coumaric acid in two yeast strains. Metabolic Engineering, 2017, 44, 265-272.	3.6	51
160	Redirection of lipid flux toward phospholipids in yeast increases fatty acid turnover and secretion. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1262-1267.	3.3	51
161	Nitrogen limitation reveals large reserves in metabolic and translational capacities of yeast. Nature Communications, 2020, 11, 1881.	5.8	51
162	Metabolic engineering of a synergistic pathway for n-butanol production in Saccharomyces cerevisiae. Scientific Reports, 2016, 6, 25675.	1.6	50

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163	Versatile biomanufacturing through stimulus-responsive cellâ€“material feedback. Nature Chemical Biology, 2019, 15, 1017-1024.	3.9	50
164	Evolution from adherent to suspension: systems biology of HEK293 cell line development. Scientific Reports, 2020, 10, 18996.	1.6	49
165	Combined Metabolic Activators Accelerates Recovery in Mildâ€toâ€Moderate COVIDâ€19. Advanced Science, 2021, 8, e2101222.	5.6	49
166	Genome-scale metabolic network reconstruction of model animals as a platform for translational research. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	48
167	Perspective: Metabotypingâ€”A Potential Personalized Nutrition Strategy for Precision Prevention of Cardiometabolic Disease. Advances in Nutrition, 2020, 11, 524-532.	2.9	46
168	Proteome constraints reveal targets for improving microbial fitness in nutrientâ€rich environments. Molecular Systems Biology, 2021, 17, e10093.	3.2	46
169	Heat shock response improves heterologous protein secretion in Saccharomyces cerevisiae. Applied Microbiology and Biotechnology, 2013, 97, 3559-3568.	1.7	45
170	Screening of 2A peptides for polycistronic gene expression in yeast. FEMS Yeast Research, 2018, 18, .	1.1	45
171	Quantitative analysis of amino acid metabolism in liver cancer links glutamate excretion to nucleotide synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10294-10304.	3.3	45
172	Expanding the Dynamic Range of a Transcription Factor-Based Biosensor in Saccharomyces cerevisiae. ACS Synthetic Biology, 2019, 8, 1968-1975.	1.9	44
173	FadR-Based Biosensor-Assisted Screening for Genes Enhancing Fatty Acyl-CoA Pools in Saccharomyces cerevisiae. ACS Synthetic Biology, 2019, 8, 1788-1800.	1.9	44
174	Metagenomic analysis of bile salt biotransformation in the human gut microbiome. BMC Genomics, 2019, 20, 517.	1.2	44
175	Proteome reallocation from amino acid biosynthesis to ribosomes enables yeast to grow faster in rich media. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21804-21812.	3.3	44
176	Logical transformation of genome-scale metabolic models for gene level applications and analysis. Bioinformatics, 2015, 31, 2324-2331.	1.8	43
177	Genomeâ€scale metabolic model of Pichia pastoris with native and humanized glycosylation of recombinant proteins. Biotechnology and Bioengineering, 2016, 113, 961-969.	1.7	43
178	Moderate Expression of SEC16 Increases Protein Secretion by Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2017, 83, .	1.4	43
179	Metabolic engineering of Saccharomyces cerevisiae for production of germacrene A, a precursor of beta-elemene. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 1065-1072.	1.4	43
180	Establishing very longâ€chain fatty alcohol and wax ester biosynthesis in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2017, 114, 1025-1035.	1.7	43

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181	SLIMEr: probing flexibility of lipid metabolism in yeast with an improved constraint-based modeling framework. BMC Systems Biology, 2019, 13, 4.	3.0	43
182	Correlation of cell growth and heterologous protein production by Saccharomyces cerevisiae. Applied Microbiology and Biotechnology, 2013, 97, 8955-8962.	1.7	41
183	In vitro co-cultures of human gut bacterial species as predicted from co-occurrence network analysis. PLoS ONE, 2018, 13, e0195161.	1.1	41
184	BioMet Toolbox 2.0: genome-wide analysis of metabolism and omics data. Nucleic Acids Research, 2014, 42, W175-W181.	6.5	40
185	Industrial systems biology and its impact on synthetic biology of yeast cell factories. Biotechnology and Bioengineering, 2016, 113, 1164-1170.	1.7	40
186	A New Era of Genome Integrationâ€”Simply Cut and Paste!. ACS Synthetic Biology, 2017, 6, 601-609.	1.9	40
187	Twin-primer non-enzymatic DNA assembly: an efficient and accurate multi-part DNA assembly method. Nucleic Acids Research, 2017, 45, e94-e94.	6.5	40
188	Elucidating aromatic acid tolerance at low pH in Saccharomyces cerevisiae using adaptive laboratory evolution. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27954-27961.	3.3	40
189	Adaptations in metabolism and protein translation give rise to the Crabtree effect in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	40
190	Functional expression and evaluation of heterologous phosphoketolases in Saccharomyces cerevisiae. AMB Express, 2016, 6, 115.	1.4	39
191	Model-Assisted Fine-Tuning of Central Carbon Metabolism in Yeast through dCas9-Based Regulation. ACS Synthetic Biology, 2019, 8, 2457-2463.	1.9	39
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