

# Gregory Stephanopoulos

## List of Publications by Year in descending order

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354  
papers

37,692  
citations

3159

92  
h-index

3732

179  
g-index

435  
all docs

435  
docs citations

435  
times ranked

32986  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reductive glutamine metabolism by IDH1 mediates lipogenesis under hypoxia. <i>Nature</i> , 2012, 481, 380-384.	27.8	1,470
2	Isoprenoid Pathway Optimization for Taxol Precursor Overproduction in <i>Escherichia coli</i> . <i>Science</i> , 2010, 330, 70-74.	12.6	1,426
3	Phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis. <i>Nature Genetics</i> , 2011, 43, 869-874.	21.4	945
4	Tuning genetic control through promoter engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 12678-12683.	7.1	775
5	Engineering Yeast Transcription Machinery for Improved Ethanol Tolerance and Production. <i>Science</i> , 2006, 314, 1565-1568.	12.6	730
6	Challenges in Engineering Microbes for Biofuels Production. <i>Science</i> , 2007, 315, 801-804.	12.6	655
7	Transcriptional control of autophagy/lysosome function drives pancreatic cancer metabolism. <i>Nature</i> , 2015, 524, 361-365.	27.8	624
8	Pyruvate kinase M2 activators promote tetramer formation and suppress tumorigenesis. <i>Nature Chemical Biology</i> , 2012, 8, 839-847.	8.0	614
9	Engineering the push and pull of lipid biosynthesis in oleaginous yeast <i>Yarrowia lipolytica</i> for biofuel production. <i>Metabolic Engineering</i> , 2013, 15, 1-9.	7.0	573
10	Distributing a metabolic pathway among a microbial consortium enhances production of natural products. <i>Nature Biotechnology</i> , 2015, 33, 377-383.	17.5	561
11	Metabolic Fluxes and Metabolic Engineering. <i>Metabolic Engineering</i> , 1999, 1, 1-11.	7.0	522
12	Elementary metabolite units (EMU): A novel framework for modeling isotopic distributions. <i>Metabolic Engineering</i> , 2007, 9, 68-86.	7.0	514
13	A roadmap for interpreting <sup>13</sup> C metabolite labeling patterns from cells. <i>Current Opinion in Biotechnology</i> , 2015, 34, 189-201.	6.6	513
14	The mTORC1 Pathway Stimulates Glutamine Metabolism and Cell Proliferation by Repressing SIRT4. <i>Cell</i> , 2013, 153, 840-854.	28.9	505
15	Metabolic flux distributions in <i>Corynebacterium glutamicum</i> during growth and lysine overproduction. <i>Biotechnology and Bioengineering</i> , 1993, 41, 633-646.	3.3	484
16	Determination of confidence intervals of metabolic fluxes estimated from stable isotope measurements. <i>Metabolic Engineering</i> , 2006, 8, 324-337.	7.0	423
17	Improving fatty acids production by engineering dynamic pathway regulation and metabolic control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11299-11304.	7.1	423
18	Compartmentalization of metabolic pathways in yeast mitochondria improves the production of branched-chain alcohols. <i>Nature Biotechnology</i> , 2013, 31, 335-341.	17.5	412

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19	Construction of lycopene-overproducing <i>E. coli</i> strains by combining systematic and combinatorial gene knockout targets. <i>Nature Biotechnology</i> , 2005, 23, 612-616.	17.5	406
20	Oncogenic Kâ€Ras decouples glucose and glutamine metabolism to support cancer cell growth. <i>Molecular Systems Biology</i> , 2011, 7, 523.	7.2	404
21	Global transcription machinery engineering: A new approach for improving cellular phenotype. <i>Metabolic Engineering</i> , 2007, 9, 258-267.	7.0	398
22	Hepatic Insulin Resistance Is Sufficient to Produce Dyslipidemia and Susceptibility to Atherosclerosis. <i>Cell Metabolism</i> , 2008, 7, 125-134.	16.2	383
23	A compendium of gene expression in normal human tissues. <i>Physiological Genomics</i> , 2001, 7, 97-104.	2.3	376
24	Lipid production in <i>Yarrowia lipolytica</i> is maximized by engineering cytosolic redox metabolism. <i>Nature Biotechnology</i> , 2017, 35, 173-177.	17.5	366
25	Terpenoids: Opportunities for Biosynthesis of Natural Product Drugs Using Engineered Microorganisms. <i>Molecular Pharmaceutics</i> , 2008, 5, 167-190.	4.6	363
26	Engineering <i>Yarrowia lipolytica</i> as a platform for synthesis of drop-in transportation fuels and oleochemicals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10848-10853.	7.1	362
27	Engineering for biofuels: exploiting innate microbial capacity or importing biosynthetic potential?. <i>Nature Reviews Microbiology</i> , 2009, 7, 715-723.	28.6	352
28	Selection and optimization of microbial hosts for biofuels production. <i>Metabolic Engineering</i> , 2008, 10, 295-304.	7.0	343
29	Mapping photoautotrophic metabolism with isotopically nonstationary <sup>13</sup> C flux analysis. <i>Metabolic Engineering</i> , 2011, 13, 656-665.	7.0	307
30	Combining metabolic and protein engineering of a terpenoid biosynthetic pathway for overproduction and selectivity control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13654-13659.	7.1	304
31	Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014, 32, 473-478.	17.5	298
32	Engineering lipid overproduction in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2015, 29, 56-65.	7.0	291
33	Reductive glutamine metabolism is a function of the $\alpha$ -ketoglutarate to citrate ratio in cells. <i>Nature Communications</i> , 2013, 4, 2236.	12.8	290
34	Effects of substratum morphology on cell physiology. <i>Biotechnology and Bioengineering</i> , 1994, 43, 764-771.	3.3	282
35	InÂVivo HIF-Mediated Reductive Carboxylation Is Regulated by Citrate Levels and Sensitizes VHL-Deficient Cells to Glutamine Deprivation. <i>Cell Metabolism</i> , 2013, 17, 372-385.	16.2	280
36	The future of metabolic engineering and synthetic biology: Towards a systematic practice. <i>Metabolic Engineering</i> , 2012, 14, 233-241.	7.0	277

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37	Optimization of a heterologous pathway for the production of flavonoids from glucose. <i>Metabolic Engineering</i> , 2011, 13, 392-400.	7.0	276
38	Stabilized gene duplication enables long-term selection-free heterologous pathway expression. <i>Nature Biotechnology</i> , 2009, 27, 760-765.	17.5	272
39	Engineering <i>Escherichia coli</i> coculture systems for the production of biochemical products. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 8266-8271.	7.1	268
40	Studies on on-line bioreactor identification. I. Theory. <i>Biotechnology and Bioengineering</i> , 1984, 26, 1176-1188.	3.3	265
41	Quantifying Reductive Carboxylation Flux of Glutamine to Lipid in a Brown Adipocyte Cell Line. <i>Journal of Biological Chemistry</i> , 2008, 283, 20621-20627.	3.4	265
42	Direct evidence for cancer-cell-autonomous extracellular protein catabolism in pancreatic tumors. <i>Nature Medicine</i> , 2017, 23, 235-241.	30.7	263
43	Evaluation of <sup>13</sup> C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Journal of Biotechnology</i> , 2009, 144, 167-174.	3.8	257
44	Metabolic Engineering: Past and Future. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2013, 4, 259-288.	6.8	254
45	Xylose isomerase overexpression along with engineering of the pentose phosphate pathway and evolutionary engineering enable rapid xylose utilization and ethanol production by <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2012, 14, 611-622.	7.0	250
46	The oxidative pentose phosphate pathway is the primary source of NADPH for lipid overproduction from glucose in <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2015, 30, 27-39.	7.0	249
47	Accurate Assessment of Amino Acid Mass Isotopomer Distributions for Metabolic Flux Analysis. <i>Analytical Chemistry</i> , 2007, 79, 7554-7559.	6.5	247
48	An elementary metabolite unit (EMU) based method of isotopically nonstationary flux analysis. <i>Biotechnology and Bioengineering</i> , 2008, 99, 686-699.	3.3	241
49	Application of macroscopic balances to the identification of gross measurement errors. <i>Biotechnology and Bioengineering</i> , 1983, 25, 2177-2208.	3.3	220
50	Metabolic flux analysis in a nonstationary system: Fed-batch fermentation of a high yielding strain of <i>E. coli</i> producing 1,3-propanediol. <i>Metabolic Engineering</i> , 2007, 9, 277-292.	7.0	217
51	A linguistic model for the rational design of antimicrobial peptides. <i>Nature</i> , 2006, 443, 867-869.	27.8	214
52	Synthetic Biology and Metabolic Engineering. <i>ACS Synthetic Biology</i> , 2012, 1, 514-525.	3.8	212
53	Diffusion coefficients of glucose and ethanol in cell-free and cell-occupied calcium alginate membranes. <i>Biotechnology and Bioengineering</i> , 1986, 28, 829-835.	3.3	211
54	Pyruvate Kinase Isoform Expression Alters Nucleotide Synthesis to Impact Cell Proliferation. <i>Molecular Cell</i> , 2015, 57, 95-107.	9.7	209

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55	Engineering of Promoter Replacement Cassettes for Fine-Tuning of Gene Expression in <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , 2006, 72, 5266-5273.	3.1	200
56	Engineering alcohol tolerance in yeast. <i>Science</i> , 2014, 346, 71-75.	12.6	193
57	Overcoming heterologous protein interdependency to optimize P450-mediated Taxol precursor synthesis in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3209-3214.	7.1	193
58	Metformin Decreases Glucose Oxidation and Increases the Dependency of Prostate Cancer Cells on Reductive Glutamine Metabolism. <i>Cancer Research</i> , 2013, 73, 4429-4438.	0.9	178
59	Intracellular flux analysis in hybridomas using mass balances and in vitro <sup>13</sup> C nmr. <i>Biotechnology and Bioengineering</i> , 1995, 45, 292-303.	3.3	174
60	L-Tyrosine production by deregulated strains of <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2007, 75, 103-110.	3.6	172
61	Exploiting biological complexity for strain improvement through systems biology. <i>Nature Biotechnology</i> , 2004, 22, 1261-1267.	17.5	166
62	Combinatorial engineering of microbes for optimizing cellular phenotype. <i>Current Opinion in Chemical Biology</i> , 2008, 12, 168-176.	6.1	162
63	Erk regulation of pyruvate dehydrogenase flux through PDK4 modulates cell proliferation. <i>Genes and Development</i> , 2011, 25, 1716-1733.	5.9	162
64	Engineering oxidative stress defense pathways to build a robust lipid production platform in <i>Yarrowia lipolytica</i> . <i>Biotechnology and Bioengineering</i> , 2017, 114, 1521-1530.	3.3	162
65	Two-step pathway for isoprenoid synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 506-511.	7.1	160
66	Relative potential of biosynthetic pathways for biofuels and bio-based products. <i>Nature Biotechnology</i> , 2011, 29, 1074-1078.	17.5	158
67	Metabolic engineering in the host <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2018, 50, 192-208.	7.0	157
68	Integrated bioprocess for conversion of gaseous substrates to liquids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3773-3778.	7.1	156
69	Linking high-resolution metabolic flux phenotypes and transcriptional regulation in yeast modulated by the global regulator Gcn4p. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 6477-6482.	7.1	154
70	Metabolic engineering of <i>Escherichia coli</i> for biosynthesis of hyaluronic acid. <i>Metabolic Engineering</i> , 2008, 10, 24-32.	7.0	150
71	High-throughput metabolic state analysis: the missing link in integrated functional genomics of yeasts. <i>Biochemical Journal</i> , 2005, 388, 669-677.	3.7	147
72	The Phosphoinositide 3-Kinase Regulatory Subunit p85 $\beta$ Can Exert Tumor Suppressor Properties through Negative Regulation of Growth Factor Signaling. <i>Cancer Research</i> , 2010, 70, 5305-5315.	0.9	140

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73	Molecular signature of late-stage human ALS revealed by expression profiling of postmortem spinal cord gray matter. <i>Physiological Genomics</i> , 2004, 16, 229-239.	2.3	137
74	Computer-aided synthesis of biochemical pathways. <i>Biotechnology and Bioengineering</i> , 1990, 36, 1119-1132.	3.3	134
75	Multi-dimensional gene target search for improving lycopene biosynthesis in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2007, 9, 337-347.	7.0	134
76	Metabolic flux analysis of hybridoma continuous culture steady state multiplicity. , 1999, 63, 675-683.		133
77	Improvement of Xylose Uptake and Ethanol Production in Recombinant <i>Saccharomyces cerevisiae</i> through an Inverse Metabolic Engineering Approach. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8249-8256.	3.1	133
78	Rational, combinatorial, and genomic approaches for engineering L-tyrosine production in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13538-13543.	7.1	133
79	Interactive Exploration of Microarray Gene Expression Patterns in a Reduced Dimensional Space. <i>Genome Research</i> , 2002, 12, 1112-1120.	5.5	131
80	Engineering of a high lipid producing <i>Yarrowia lipolytica</i> strain. <i>Biotechnology for Biofuels</i> , 2016, 9, 77.	6.2	126
81	Metabolic engineering of microbial competitive advantage for industrial fermentation processes. <i>Science</i> , 2016, 353, 583-586.	12.6	119
82	Metabolism of peptide amino acids by Chinese hamster ovary cells grown in a complex medium. , 1999, 62, 324-335.		115
83	Determination of minimum sample size and discriminatory expression patterns in microarray data. <i>Bioinformatics</i> , 2002, 18, 1184-1193.	4.1	114
84	Metabolic engineering " methodologies and future prospects. <i>Trends in Biotechnology</i> , 1993, 11, 392-396.	9.3	113
85	Metabolic effects on recombinant interferon- $\gamma$ glycosylation in continuous culture of Chinese hamster ovary cells. , 1999, 62, 336-347.		111
86	Nontargeted Elucidation of Metabolic Pathways Using Stable-Isotope Tracers and Mass Spectrometry. <i>Analytical Chemistry</i> , 2010, 82, 6621-6628.	6.5	111
87	Measuring Deuterium Enrichment of Glucose Hydrogen Atoms by Gas Chromatography/Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 3211-3216.	6.5	111
88	Optimization of fed-batch penicillin fermentation: A case of singular optimal control with state constraints. <i>Biotechnology and Bioengineering</i> , 1989, 34, 72-78.	3.3	107
89	Engineering microbial cell factories for biosynthesis of isoprenoid molecules: beyond lycopene. <i>Trends in Biotechnology</i> , 2007, 25, 417-424.	9.3	107
90	Holistic Approaches in Lipid Production by <i>Yarrowia lipolytica</i> . <i>Trends in Biotechnology</i> , 2018, 36, 1157-1170.	9.3	104

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91	Genome-Wide Dynamic Transcriptional Profiling of the Light-to-Dark Transition in <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2002, 184, 3671-3681.	2.2	101
92	Cofactor Balance by Nicotinamide Nucleotide Transhydrogenase (NNT) Coordinates Reductive Carboxylation and Glucose Catabolism in the Tricarboxylic Acid (TCA) Cycle. <i>Journal of Biological Chemistry</i> , 2013, 288, 12967-12977.	3.4	101
93	Improving Metabolic Pathway Efficiency by Statistical Model-Based Multivariate Regulatory Metabolic Engineering. <i>ACS Synthetic Biology</i> , 2017, 6, 148-158.	3.8	101
94	Metabolic requirements for cancer cell proliferation. <i>Cancer &amp; Metabolism</i> , 2016, 4, 16.	5.0	99
95	Elucidation of Gene Interaction Networks Through Time-Lagged Correlation Analysis of Transcriptional Data. <i>Genome Research</i> , 2004, 14, 1654-1663.	5.5	96
96	Metabolic engineering by genome shuffling. <i>Nature Biotechnology</i> , 2002, 20, 666-668.	17.5	95
97	Engineering metabolism and product formation in <i>Corynebacterium glutamicum</i> by coordinated gene overexpression. <i>Metabolic Engineering</i> , 2003, 5, 32-41.	7.0	94
98	Strain improvement by metabolic engineering: lysine production as a case study for systems biology. <i>Current Opinion in Biotechnology</i> , 2005, 16, 361-366.	6.6	92
99	Combinatorial pathway analysis for improved L-tyrosine production in <i>Escherichia coli</i> : Identification of enzymatic bottlenecks by systematic gene overexpression. <i>Metabolic Engineering</i> , 2008, 10, 69-77.	7.0	92
100	Perspectives of biotechnological production of L-tyrosine and its applications. <i>Applied Microbiology and Biotechnology</i> , 2007, 77, 751-762.	3.6	91
101	Feedback Inhibition of Chorismate Mutase/Prephenate Dehydrogenase (TyrA) of <i>Escherichia coli</i> : Generation and Characterization of Tyrosine-Insensitive Mutants. <i>Applied and Environmental Microbiology</i> , 2005, 71, 7224-7228.	3.1	89
102	Carboxyl-Terminated Dendrimer-Coated Bioactive Interface for Protein Microarray: High-Sensitivity Detection of Antigen in Complex Biological Samples. <i>Langmuir</i> , 2007, 23, 5670-5677.	3.5	89
103	Systematic quantification of complex metabolic flux networks using stable isotopes and mass spectrometry. <i>FEBS Journal</i> , 2003, 270, 3525-3542.	0.2	88
104	Melanin-Based High-Throughput Screen for <i>Escherichia coli</i> -Tyrosine Production in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2008, 74, 1190-1197.	3.1	86
105	Flux amplification in complex metabolic networks. <i>Chemical Engineering Science</i> , 1997, 52, 2607-2627.	3.8	85
106	Functional overexpression and characterization of lipogenesis-related genes in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 3781-3798.	3.6	85
107	Coculture engineering for microbial biosynthesis of 3-aminobenzoic acid in <i>Escherichia coli</i> . <i>Biotechnology Journal</i> , 2016, 11, 981-987.	3.5	84
108	Assessing the potential of mutational strategies to elicit new phenotypes in industrial strains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 2319-2324.	7.1	83

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109	Induction of mammalian cell death by simple shear and extensional flows. <i>Biotechnology and Bioengineering</i> , 2009, 104, 360-370.	3.3	83
110	Metabolite Profiling Identified Methylerythritol Cyclodiphosphate Efflux as a Limiting Step in Microbial Isoprenoid Production. <i>PLoS ONE</i> , 2012, 7, e47513.	2.5	83
111	Review of methods to probe single cell metabolism and bioenergetics. <i>Metabolic Engineering</i> , 2015, 27, 115-135.	7.0	82
112	Efficient utilization of pentoses for bioproduction of the renewable two-carbon compounds ethylene glycol and glycolate. <i>Metabolic Engineering</i> , 2016, 34, 80-87.	7.0	82
113	Studies on on-line bioreactor identification. II. Numerical and experimental results. <i>Biotechnology and Bioengineering</i> , 1984, 26, 1189-1197.	3.3	81
114	Loss of RBF1 changes glutamine catabolism. <i>Genes and Development</i> , 2013, 27, 182-196.	5.9	81
115	Redirecting carbon flux in <i>Clostridium ljungdahlii</i> using CRISPR interference (CRISPRi). <i>Metabolic Engineering</i> , 2018, 48, 243-253.	7.0	80
116	BLOSUM62 miscalculations improve search performance. <i>Nature Biotechnology</i> , 2008, 26, 274-275.	17.5	79
117	Identification and Analysis of the Polyhydroxyalkanoate-Specific $\beta$ -Ketothiolase and Acetoacetyl Coenzyme A Reductase Genes in the Cyanobacterium <i>Synechocystis</i> sp. Strain PCC6803. <i>Applied and Environmental Microbiology</i> , 2000, 66, 4440-4448.	3.1	78
118	Engineering <i>E. coli</i> – <i>E. coli</i> cocultures for production of muconic acid from glycerol. <i>Microbial Cell Factories</i> , 2015, 14, 134.	4.0	78
119	Mutagenesis of the Bacterial RNA Polymerase Alpha Subunit for Improvement of Complex Phenotypes. <i>Applied and Environmental Microbiology</i> , 2009, 75, 2705-2711.	3.1	77
120	Optimization of amorphaadiene synthesis in <i>Bacillus subtilis</i> via transcriptional, translational, and media modulation. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2556-2561.	3.3	77
121	Engineering <i>E. coli</i> for caffeic acid biosynthesis from renewable sugars. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 3333-3341.	3.6	77
122	Metabolite and isotopomer balancing in the analysis of metabolic cycles: I. Theory. , 1999, 62, 375-391.		76
123	Improving formaldehyde consumption drives methanol assimilation in engineered <i>E. coli</i> . <i>Nature Communications</i> , 2018, 9, 2387.	12.8	76
124	Enhancing isoprenoid synthesis in <i>Yarrowia lipolytica</i> by expressing the isopentenol utilization pathway and modulating intracellular hydrophobicity. <i>Metabolic Engineering</i> , 2020, 61, 344-351.	7.0	75
125	Characterization of lycopene-overproducing <i>E. coli</i> strains in high cell density fermentations. <i>Applied Microbiology and Biotechnology</i> , 2006, 72, 968-974.	3.6	74
126	The p85 $\beta$ Regulatory Subunit of Phosphoinositide 3-Kinase Potentiates c-Jun N-Terminal Kinase-Mediated Insulin Resistance. <i>Molecular and Cellular Biology</i> , 2007, 27, 2830-2840.	2.3	74

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127	Metabolic characterization of aL-lysine-producing strain by continuous culture. <i>Biotechnology and Bioengineering</i> , 1992, 39, 565-574.	3.3	73
128	Metabolomic and <sup>13</sup> C metabolic flux analysis of a xylose-consuming <i>Saccharomyces cerevisiae</i> strain expressing xylose isomerase. <i>Biotechnology and Bioengineering</i> , 2015, 112, 470-483.	3.3	73
129	Optimization of <sup>13</sup> C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Metabolic Engineering</i> , 2012, 14, 162-171.	7.0	72
130	Application of metabolic controls for the maximization of lipid production in semicontinuous fermentation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5308-E5316.	7.1	72
131	Glutaminase and poly(ADP-ribose) polymerase inhibitors suppress pyrimidine synthesis and VHL-deficient renal cancers. <i>Journal of Clinical Investigation</i> , 2017, 127, 1631-1645.	8.2	72
132	The effect of intraparticle convection on nutrient transport in porous biological pellets. <i>Chemical Engineering Science</i> , 1989, 44, 2031-2039.	3.8	71
133	Carbon Flux Distributions at the Glucose 6-Phosphate Branch Point in <i>Corynebacterium glutamicum</i> during Lysine Overproduction. <i>Biotechnology Progress</i> , 1994, 10, 327-334.	2.6	71
134	Efflux transporter engineering markedly improves amorphadiene production in <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2016, 113, 1755-1763.	3.3	71
135	Engineering <i>Corynebacterium glutamicum</i> for high-titer biosynthesis of hyaluronic acid. <i>Metabolic Engineering</i> , 2019, 55, 276-289.	7.0	71
136	Synergistic substrate cofeeding stimulates reductive metabolism. <i>Nature Metabolism</i> , 2019, 1, 643-651.	11.9	71
137	Removal of lycopene substrate inhibition enables high carotenoid productivity in <i>Yarrowia lipolytica</i> . <i>Nature Communications</i> , 2022, 13, 572.	12.8	70
138	The growth of competing microbial populations in a CSTR with periodically varying inputs. <i>AIChE Journal</i> , 1979, 25, 863-872.	3.6	69
139	A Functional Protein Chip for Pathway Optimization and in Vitro Metabolic Engineering. <i>Science</i> , 2004, 304, 428-431.	12.6	68
140	<sup>13</sup> C Metabolic Flux Analysis of acetate conversion to lipids by <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2016, 38, 86-97.	7.0	68
141	Aldehyde dehydrogenase 3a2 protects AML cells from oxidative death and the synthetic lethality of ferroptosis inducers. <i>Blood</i> , 2020, 136, 1303-1316.	1.4	68
142	Metabolic activity control of the L-lysine fermentation by restrained growth fed-batch strategies. <i>Biotechnology Progress</i> , 1991, 7, 501-509.	2.6	67
143	Engineering promoter regulation. <i>Biotechnology and Bioengineering</i> , 2007, 96, 550-558.	3.3	67
144	Simple glycolipids of microbes: Chemistry, biological activity and metabolic engineering. <i>Synthetic and Systems Biotechnology</i> , 2018, 3, 3-19.	3.7	65

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145	Carbon Flux Distributions at the Pyruvate Branch Point in <i>Corynebacterium glutamicum</i> during Lysine Overproduction. <i>Biotechnology Progress</i> , 1994, 10, 320-326.	2.6	64
146	High-titer biosynthesis of hyaluronic acid by recombinant <i>Corynebacterium glutamicum</i> . <i>Biotechnology Journal</i> , 2016, 11, 574-584.	3.5	63
147	Metabolic engineering of <i>Escherichia coli</i> for the production of isoprenoids. <i>FEMS Microbiology Letters</i> , 2018, 365, .	1.8	63
148	Mixed carbon substrates: a necessary nuisance or a missed opportunity?. <i>Current Opinion in Biotechnology</i> , 2020, 62, 15-21.	6.6	63
149	Targeting pathway expression to subcellular organelles improves astaxanthin synthesis in <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2021, 68, 152-161.	7.0	63
150	Metabolic and physiological studies of <i>Corynebacterium glutamicum</i> mutants. , 1997, 55, 864-879.		61
151	A review of cellulosic microbial fuel cells: Performance and challenges. <i>Biomass and Bioenergy</i> , 2013, 56, 179-188.	5.7	61
152	Phage-Assisted Evolution of <i>Bacillus methanolicus</i> Methanol Dehydrogenase 2. <i>ACS Synthetic Biology</i> , 2019, 8, 796-806.	3.8	61
153	Effect of Anaplerotic Fluxes and Amino Acid Availability on Hepatic Lipoapoptosis. <i>Journal of Biological Chemistry</i> , 2009, 284, 33425-33436.	3.4	60
154	Merkel Cell Polyomavirus Small T Antigen Promotes Pro-Glycolytic Metabolic Perturbations Required for Transformation. <i>PLoS Pathogens</i> , 2016, 12, e1006020.	4.7	60
155	A stochastic analysis of the growth of competing microbial populations in a continuous biochemical reactor. <i>Mathematical Biosciences</i> , 1979, 45, 99-135.	1.9	59
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