

# Gregory Stephanopoulos

## List of Publications by Citations

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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.

386

papers

30,813

citations

89

h-index

166

g-index

435

ext. papers

34,620

ext. citations

8.9

avg, IF

7.57

L-index

#	Paper	IF	Citations
386	Isoprenoid pathway optimization for Taxol precursor overproduction in Escherichia coli. <i>Science</i> , <b>2010</b> , 330, 70-4	33.3	1203
385	Reductive glutamine metabolism by IDH1 mediates lipogenesis under hypoxia. <i>Nature</i> , <b>2011</b> , 481, 380-4	50.4	1165
384	Phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis. <i>Nature Genetics</i> , <b>2011</b> , 43, 869-74	36.3	788
383	Tuning genetic control through promoter engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 12678-83	11.5	679
382	Engineering yeast transcription machinery for improved ethanol tolerance and production. <i>Science</i> , <b>2006</b> , 314, 1565-8	33.3	638
381	Challenges in engineering microbes for biofuels production. <i>Science</i> , <b>2007</b> , 315, 801-4	33.3	591
380	Pyruvate kinase M2 activators promote tetramer formation and suppress tumorigenesis. <i>Nature Chemical Biology</i> , <b>2012</b> , 8, 839-47	11.7	476
379	Transcriptional control of autophagy-lysosome function drives pancreatic cancer metabolism. <i>Nature</i> , <b>2015</b> , 524, 361-5	50.4	475
378	Engineering the push and pull of lipid biosynthesis in oleaginous yeast <i>Yarrowia lipolytica</i> for biofuel production. <i>Metabolic Engineering</i> , <b>2013</b> , 15, 1-9	9.7	473
377	Metabolic fluxes and metabolic engineering. <i>Metabolic Engineering</i> , <b>1999</b> , 1, 1-11	9.7	439
376	Metabolic flux distributions in <i>Corynebacterium glutamicum</i> during growth and lysine overproduction. <i>Biotechnology and Bioengineering</i> , <b>1993</b> , 41, 633-46	4.9	437
375	Elementary metabolite units (EMU): a novel framework for modeling isotopic distributions. <i>Metabolic Engineering</i> , <b>2007</b> , 9, 68-86	9.7	426
374	The mTORC1 pathway stimulates glutamine metabolism and cell proliferation by repressing SIRT4. <i>Cell</i> , <b>2013</b> , 153, 840-54	56.2	402
373	Distributing a metabolic pathway among a microbial consortium enhances production of natural products. <i>Nature Biotechnology</i> , <b>2015</b> , 33, 377-83	44.5	397
372	Construction of lycopene-overproducing <i>E. coli</i> strains by combining systematic and combinatorial gene knockout targets. <i>Nature Biotechnology</i> , <b>2005</b> , 23, 612-6	44.5	383
371	A roadmap for interpreting (13)C metabolite labeling patterns from cells. <i>Current Opinion in Biotechnology</i> , <b>2015</b> , 34, 189-201	11.4	368
370	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> , <b>2014</b> , 111, 11299-304	11.5	357

369	Global transcription machinery engineering: a new approach for improving cellular phenotype. <i>Metabolic Engineering</i> , <b>2007</b> , 9, 258-67	9.7	357
368	Determination of confidence intervals of metabolic fluxes estimated from stable isotope measurements. <i>Metabolic Engineering</i> , <b>2006</b> , 8, 324-37	9.7	349
367	Oncogenic K-Ras decouples glucose and glutamine metabolism to support cancer cell growth. <i>Molecular Systems Biology</i> , <b>2011</b> , 7, 523	12.2	342
366	Hepatic insulin resistance is sufficient to produce dyslipidemia and susceptibility to atherosclerosis. <i>Cell Metabolism</i> , <b>2008</b> , 7, 125-34	24.6	337
365	Compartmentalization of metabolic pathways in yeast mitochondria improves the production of branched-chain alcohols. <i>Nature Biotechnology</i> , <b>2013</b> , 31, 335-41	44.5	332
364	A compendium of gene expression in normal human tissues. <i>Physiological Genomics</i> , <b>2001</b> , 7, 97-104	3.6	321
363	Engineering for biofuels: exploiting innate microbial capacity or importing biosynthetic potential?. <i>Nature Reviews Microbiology</i> , <b>2009</b> , 7, 715-23	22.2	306
362	Terpenoids: opportunities for biosynthesis of natural product drugs using engineered microorganisms. <i>Molecular Pharmaceutics</i> , <b>2008</b> , 5, 167-90	5.6	302
361	Selection and optimization of microbial hosts for biofuels production. <i>Metabolic Engineering</i> , <b>2008</b> , 10, 295-304	9.7	297
360	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> , <b>2016</b> , 113, 10848-53	11.5	276
359	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> , <b>2010</b> , 107, 13654-9	11.5	267
358	Mapping photoautotrophic metabolism with isotopically nonstationary ( <sup>13</sup> C) flux analysis. <i>Metabolic Engineering</i> , <b>2011</b> , 13, 656-65	9.7	264
357	Lipid production in <i>Yarrowia lipolytica</i> is maximized by engineering cytosolic redox metabolism. <i>Nature Biotechnology</i> , <b>2017</b> , 35, 173-177	44.5	263
356	Effects of substratum morphology on cell physiology. <i>Biotechnology and Bioengineering</i> , <b>1994</b> , 43, 764-71	4.9	258
355	Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , <b>2014</b> , 32, 473-8	44.5	247
354	The future of metabolic engineering and synthetic biology: towards a systematic practice. <i>Metabolic Engineering</i> , <b>2012</b> , 14, 233-41	9.7	240
353	Reductive glutamine metabolism is a function of the $\alpha$ -ketoglutarate to citrate ratio in cells. <i>Nature Communications</i> , <b>2013</b> , 4, 2236	17.4	240
352	Studies on on-line bioreactor identification. I. Theory. <i>Biotechnology and Bioengineering</i> , <b>1984</b> , 26, 1176-88	8.9	238

351	Engineering lipid overproduction in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , <b>2015</b> , 29, 56-65	9.7	233
350	Stabilized gene duplication enables long-term selection-free heterologous pathway expression. <i>Nature Biotechnology</i> , <b>2009</b> , 27, 760-5	44.5	230
349	Quantifying reductive carboxylation flux of glutamine to lipid in a brown adipocyte cell line. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 20621-7	5.4	230
348	Optimization of a heterologous pathway for the production of flavonoids from glucose. <i>Metabolic Engineering</i> , <b>2011</b> , 13, 392-400	9.7	229
347	Evaluation of <sup>13</sup> C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Journal of Biotechnology</i> , <b>2009</b> , 144, 167-74	3.7	224
346	In vivo HIF-mediated reductive carboxylation is regulated by citrate levels and sensitizes VHL-deficient cells to glutamine deprivation. <i>Cell Metabolism</i> , <b>2013</b> , 17, 372-85	24.6	219
345	Metabolic engineering: past and future. <i>Annual Review of Chemical and Biomolecular Engineering</i> , <b>2013</b> , 4, 259-88	8.9	218
344	Accurate assessment of amino acid mass isotopomer distributions for metabolic flux analysis. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 7554-9	7.8	208
343	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> , <b>2012</b> , 14, 611-22	9.7	206
342	Application of macroscopic balances to the identification of gross measurement errors. <i>Biotechnology and Bioengineering</i> , <b>1983</b> , 25, 2177-208	4.9	205
341	An elementary metabolite unit (EMU) based method of isotopically nonstationary flux analysis. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 99, 686-99	4.9	203
340	Direct evidence for cancer-cell-autonomous extracellular protein catabolism in pancreatic tumors. <i>Nature Medicine</i> , <b>2017</b> , 23, 235-241	50.5	199
339	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> , <b>2007</b> , 9, 277-92	9.7	197
338	Diffusion coefficients of glucose and ethanol in cell-free and cell-occupied calcium alginate membranes. <i>Biotechnology and Bioengineering</i> , <b>1986</b> , 28, 829-35	4.9	193
337	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> , <b>2015</b> , 112, 8266-71	11.5	192
336	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> , <b>2015</b> , 30, 27-39	9.7	186
335	Engineering of promoter replacement cassettes for fine-tuning of gene expression in <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , <b>2006</b> , 72, 5266-73	4.8	181
334	Synthetic biology and metabolic engineering. <i>ACS Synthetic Biology</i> , <b>2012</b> , 1, 514-25	5.7	177

333	A linguistic model for the rational design of antimicrobial peptides. <i>Nature</i> , <b>2006</b> , 443, 867-9	50.4	174
332	Pyruvate kinase isoform expression alters nucleotide synthesis to impact cell proliferation. <i>Molecular Cell</i> , <b>2015</b> , 57, 95-107	17.6	164
331	Intracellular flux analysis in hybridomas using mass balances and in vitro (13)C nmr. <i>Biotechnology and Bioengineering</i> , <b>1995</b> , 45, 292-303	4.9	160
330	Metformin decreases glucose oxidation and increases the dependency of prostate cancer cells on reductive glutamine metabolism. <i>Cancer Research</i> , <b>2013</b> , 73, 4429-38	10.1	151
329	Combinatorial engineering of microbes for optimizing cellular phenotype. <i>Current Opinion in Chemical Biology</i> , <b>2008</b> , 12, 168-76	9.7	151
328	Exploiting biological complexity for strain improvement through systems biology. <i>Nature Biotechnology</i> , <b>2004</b> , 22, 1261-7	44.5	150
327	Biofuels. Engineering alcohol tolerance in yeast. <i>Science</i> , <b>2014</b> , 346, 71-5	33.3	142
326	Overcoming heterologous protein interdependency to optimize P450-mediated Taxol precursor synthesis in Escherichia coli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 3209-14	11.5	139
325	L-tyrosine production by deregulated strains of Escherichia coli. <i>Applied Microbiology and Biotechnology</i> , <b>2007</b> , 75, 103-10	5.7	137
324	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> , <b>2009</b> , 106, 6477-82	11.5	134
323	High-throughput metabolic state analysis: the missing link in integrated functional genomics of yeasts. <i>Biochemical Journal</i> , <b>2005</b> , 388, 669-77	3.8	134
322	Erk regulation of pyruvate dehydrogenase flux through PDK4 modulates cell proliferation. <i>Genes and Development</i> , <b>2011</b> , 25, 1716-33	12.6	132
321	Engineering oxidative stress defense pathways to build a robust lipid production platform in <i>Yarrowia lipolytica</i> . <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 1521-1530	4.9	125
320	Relative potential of biosynthetic pathways for biofuels and bio-based products. <i>Nature Biotechnology</i> , <b>2011</b> , 29, 1074-8	44.5	125
319	Multi-dimensional gene target search for improving lycopene biosynthesis in Escherichia coli. <i>Metabolic Engineering</i> , <b>2007</b> , 9, 337-47	9.7	124
318	Metabolic engineering of Escherichia coli for biosynthesis of hyaluronic acid. <i>Metabolic Engineering</i> , <b>2008</b> , 10, 24-32	9.7	122
317	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> , <b>2005</b> , 71, 8249-56	4.8	122
316	Computer-aided synthesis of biochemical pathways. <i>Biotechnology and Bioengineering</i> , <b>1990</b> , 36, 1119-32	32.9	121

315	Molecular signature of late-stage human ALS revealed by expression profiling of postmortem spinal cord gray matter. <i>Physiological Genomics</i> , <b>2004</b> , 16, 229-39	3.6	118
314	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> , <b>2012</b> , 109, 13538-43	11.5	113
313	Interactive exploration of microarray gene expression patterns in a reduced dimensional space. <i>Genome Research</i> , <b>2002</b> , 12, 1112-20	9.7	111
312	Metabolic flux analysis of hybridoma continuous culture steady state multiplicity. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 63, 675-83	4.9	111
311	Integrated bioprocess for conversion of gaseous substrates to liquids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 3773-8	11.5	107
310	Engineering of a high lipid producing <i>Yarrowia lipolytica</i> strain. <i>Biotechnology for Biofuels</i> , <b>2016</b> , 9, 77	7.8	106
309	The phosphoinositide 3-kinase regulatory subunit p85alpha can exert tumor suppressor properties through negative regulation of growth factor signaling. <i>Cancer Research</i> , <b>2010</b> , 70, 5305-15	10.1	105
308	Determination of minimum sample size and discriminatory expression patterns in microarray data. <i>Bioinformatics</i> , <b>2002</b> , 18, 1184-93	7.2	103
307	Metabolic effects on recombinant interferon-gamma glycosylation in continuous culture of Chinese hamster ovary cells. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 62, 336-47	4.9	98
306	Engineering microbial cell factories for biosynthesis of isoprenoid molecules: beyond lycopene. <i>Trends in Biotechnology</i> , <b>2007</b> , 25, 417-24	15.1	97
305	Optimization of fed-batch penicillin fermentation: a case of singular optimal control with state constraints. <i>Biotechnology and Bioengineering</i> , <b>1989</b> , 34, 72-8	4.9	97
304	Nontargeted elucidation of metabolic pathways using stable-isotope tracers and mass spectrometry. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 6621-8	7.8	96
303	Metabolic engineering in the host <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , <b>2018</b> , 50, 192-208	9.7	95
302	Genome-wide dynamic transcriptional profiling of the light-to-dark transition in <i>Synechocystis</i> sp. strain PCC 6803. <i>Journal of Bacteriology</i> , <b>2002</b> , 184, 3671-81	3.5	95
301	Metabolic engineering--methodologies and future prospects. <i>Trends in Biotechnology</i> , <b>1993</b> , 11, 392-6	15.1	95
300	Metabolism of peptide amino acids by Chinese hamster ovary cells grown in a complex medium <b>1999</b> , 62, 324-335		93
299	Metabolic engineering of microbial competitive advantage for industrial fermentation processes. <i>Science</i> , <b>2016</b> , 353, 583-6	33.3	92
298	Measuring deuterium enrichment of glucose hydrogen atoms by gas chromatography/mass spectrometry. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 3211-6	7.8	89

297	Two-step pathway for isoprenoid synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 506-511	11.5	88
296	Engineering metabolism and product formation in <i>Corynebacterium glutamicum</i> by coordinated gene overexpression. <i>Metabolic Engineering</i> , <b>2003</b> , 5, 32-41	9.7	87
295	Carboxyl-terminated dendrimer-coated bioactive interface for protein microarray: high-sensitivity detection of antigen in complex biological samples. <i>Langmuir</i> , <b>2007</b> , 23, 5670-7	4	86
294	Flux amplification in complex metabolic networks. <i>Chemical Engineering Science</i> , <b>1997</b> , 52, 2607-2627	4.4	83
293	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> , <b>2008</b> , 10, 69-77	9.7	83
292	Improving Metabolic Pathway Efficiency by Statistical Model-Based Multivariate Regulatory Metabolic Engineering. <i>ACS Synthetic Biology</i> , <b>2017</b> , 6, 148-158	5.7	82
291	Strain improvement by metabolic engineering: lysine production as a case study for systems biology. <i>Current Opinion in Biotechnology</i> , <b>2005</b> , 16, 361-6	11.4	82
290	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> , <b>2013</b> , 288, 12967-77	5.4	80
289	Melanin-based high-throughput screen for L-tyrosine production in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , <b>2008</b> , 74, 1190-7	4.8	80
288	Perspectives of biotechnological production of L-tyrosine and its applications. <i>Applied Microbiology and Biotechnology</i> , <b>2007</b> , 77, 751-62	5.7	79
287	Systematic quantification of complex metabolic flux networks using stable isotopes and mass spectrometry. <i>FEBS Journal</i> , <b>2003</b> , 270, 3525-42		78
286	Elucidation of gene interaction networks through time-lagged correlation analysis of transcriptional data. <i>Genome Research</i> , <b>2004</b> , 14, 1654-63	9.7	77
285	Metabolic requirements for cancer cell proliferation. <i>Cancer &amp; Metabolism</i> , <b>2016</b> , 4, 16	5.4	75
284	Loss of RBF1 changes glutamine catabolism. <i>Genes and Development</i> , <b>2013</b> , 27, 182-96	12.6	73
283	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> , <b>2008</b> , 105, 2319-24	11.5	73
282	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> , <b>2000</b> , 66, 4440-8	4.8	73
281	Studies on on-line bioreactor identification. II. Numerical and experimental results. <i>Biotechnology and Bioengineering</i> , <b>1984</b> , 26, 1189-97	4.9	71
280	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> , <b>2005</b> , 71, 7224-8	4.8	70

279	Review of methods to probe single cell metabolism and bioenergetics. <i>Metabolic Engineering</i> , <b>2015</b> , 27, 115-135	9.7	69
278	Metabolite profiling identified methylerythritol cyclodiphosphate efflux as a limiting step in microbial isoprenoid production. <i>PLoS ONE</i> , <b>2012</b> , 7, e47513	3.7	69
277	Functional overexpression and characterization of lipogenesis-related genes in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 3781-98	5.7	67
276	Characterization of lycopene-overproducing <i>E. coli</i> strains in high cell density fermentations. <i>Applied Microbiology and Biotechnology</i> , <b>2006</b> , 72, 968-74	5.7	67
275	Engineering <i>E. coli</i> - <i>E. coli</i> cocultures for production of muconic acid from glycerol. <i>Microbial Cell Factories</i> , <b>2015</b> , 14, 134	6.4	66
274	The p85alpha regulatory subunit of phosphoinositide 3-kinase potentiates c-Jun N-terminal kinase-mediated insulin resistance. <i>Molecular and Cellular Biology</i> , <b>2007</b> , 27, 2830-40	4.8	66
273	Holistic Approaches in Lipid Production by <i>Yarrowia lipolytica</i> . <i>Trends in Biotechnology</i> , <b>2018</b> , 36, 1157-1170	11.5	65
272	Optimization of <sup>13</sup> C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Metabolic Engineering</i> , <b>2012</b> , 14, 162-71	9.7	65
271	Optimization of amorphadiene synthesis in <i>Bacillus subtilis</i> via transcriptional, translational, and media modulation. <i>Biotechnology and Bioengineering</i> , <b>2013</b> , 110, 2556-61	4.9	65
270	Engineering <i>E. coli</i> for caffeic acid biosynthesis from renewable sugars. <i>Applied Microbiology and Biotechnology</i> , <b>2013</b> , 97, 3333-41	5.7	65
269	Induction of mammalian cell death by simple shear and extensional flows. <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 104, 360-70	4.9	65
268	Efficient utilization of pentoses for bioproduction of the renewable two-carbon compounds ethylene glycol and glycolate. <i>Metabolic Engineering</i> , <b>2016</b> , 34, 80-87	9.7	64
267	Metabolite and isotopomer balancing in the analysis of metabolic cycles: I. Theory. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 62, 375-391	4.9	64
266	Metabolic characterization of a L-lysine-producing strain by continuous culture. <i>Biotechnology and Bioengineering</i> , <b>1992</b> , 39, 565-74	4.9	64
265	The effect of intraparticle convection on nutrient transport in porous biological pellets. <i>Chemical Engineering Science</i> , <b>1989</b> , 44, 2031-2039	4.4	64
264	Mutagenesis of the bacterial RNA polymerase alpha subunit for improvement of complex phenotypes. <i>Applied and Environmental Microbiology</i> , <b>2009</b> , 75, 2705-11	4.8	63
263	BLOSUM62 miscalculations improve search performance. <i>Nature Biotechnology</i> , <b>2008</b> , 26, 274-5	44.5	63
262	Carbon Flux Distributions at the Glucose 6-Phosphate Branch Point in <i>Corynebacterium glutamicum</i> during Lysine Overproduction. <i>Biotechnology Progress</i> , <b>1994</b> , 10, 327-334	2.8	63

261	A functional protein chip for pathway optimization and in vitro metabolic engineering. <i>Science</i> , <b>2004</b> , 304, 428-31	33.3	61
260	Metabolomic and (13)C-metabolic flux analysis of a xylose-consuming <i>Saccharomyces cerevisiae</i> strain expressing xylose isomerase. <i>Biotechnology and Bioengineering</i> , <b>2015</b> , 112, 470-83	4.9	59
259	Engineering promoter regulation. <i>Biotechnology and Bioengineering</i> , <b>2007</b> , 96, 550-8	4.9	59
258	Carbon Flux Distributions at the Pyruvate Branch Point in <i>Corynebacterium glutamicum</i> during Lysine Overproduction. <i>Biotechnology Progress</i> , <b>1994</b> , 10, 320-326	2.8	58
257	Metabolic Activity Control of the L-Lysine Fermentation by Restrained Growth Fed-Batch Strategies. <i>Biotechnology Progress</i> , <b>1991</b> , 7, 501-509	2.8	58
256	Metabolic and physiological studies of <i>Corynebacterium glutamicum</i> mutants. <i>Biotechnology and Bioengineering</i> , <b>1997</b> , 55, 864-79	4.9	55
255	Co-culture engineering for microbial biosynthesis of 3-amino-benzoic acid in <i>Escherichia coli</i> . <i>Biotechnology Journal</i> , <b>2016</b> , 11, 981-7	5.6	55
254	Redirecting carbon flux in <i>Clostridium ljungdahlii</i> using CRISPR interference (CRISPRi). <i>Metabolic Engineering</i> , <b>2018</b> , 48, 243-253	9.7	54
253	The growth of competing microbial populations in a CSTR with periodically varying inputs. <i>AIChE Journal</i> , <b>1979</b> , 25, 863-872	3.6	54
252	Glutaminase and poly(ADP-ribose) polymerase inhibitors suppress pyrimidine synthesis and VHL-deficient renal cancers. <i>Journal of Clinical Investigation</i> , <b>2017</b> , 127, 1631-1645	15.9	54
251	Efflux transporter engineering markedly improves amorphadiene production in <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , <b>2016</b> , 113, 1755-63	4.9	53
250	Effect of anaplerotic fluxes and amino acid availability on hepatic lipoapoptosis. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 33425-36	5.4	53
249	Studies on on-line bioreactor identification. IV. Utilization of pH measurements for product estimation. <i>Biotechnology and Bioengineering</i> , <b>1984</b> , 26, 1209-18	4.9	52
248	Combinatorial engineering of 1-deoxy-D-xylulose 5-phosphate pathway using cross-lapping in vitro assembly (CLIVA) method. <i>PLoS ONE</i> , <b>2013</b> , 8, e79557	3.7	52
247	Uncovering the gene knockout landscape for improved lycopene production in <i>E. coli</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2008</b> , 78, 801-10	5.7	51
246	Packed bed bioreactor with porous ceramic beads for animal cell culture. <i>Biotechnology and Bioengineering</i> , <b>1993</b> , 41, 25-34	4.9	51
245	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> , <b>2017</b> , 114, E5308-E5316	11.5	50
244	Effect of reversible reactions on isotope label redistribution--analysis of the pentose phosphate pathway. <i>FEBS Journal</i> , <b>1998</b> , 252, 360-71		50

243	Chemostat dynamics of plasmid-bearing, plasmid-free mixed recombinant cultures. <i>Chemical Engineering Science</i> , <b>1988</b> , 43, 49-57	4.4	50
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