Hiroshi Shimizu

List of Publications by Citations

241 papers	4,920 citations	39 h-index	56 g-index
255 ext. papers	5,658 ext. citations	4.6 avg, IF	5.72 L-index

#	Paper	IF	Citations
241	Comprehensive phenotypic analysis for identification of genes affecting growth under ethanol stress in Saccharomyces cerevisiae. *FEMS Yeast Research*, **2009**, 9, 32-44	3.1	171
240	Identification of target genes conferring ethanol stress tolerance to Saccharomyces cerevisiae based on DNA microarray data analysis. *Journal of Biotechnology*, **2007**, 131, 34-44	3.7	158
239	Agarose for a bioartificial pancreas. *Journal of Biomedical Materials Research Part B*, **1992**, 26, 967-77		121
238	Transcriptome analysis of parallel-evolved Escherichia coli strains under ethanol stress. *BMC Genomics*, **2010**, 11, 579	4.5	104
237	Development and experimental verification of a genome-scale metabolic model for Corynebacterium glutamicum. *Microbial Cell Factories*, **2009**, 8, 43	6.4	92
236	Comprehensive phenotypic analysis of single-gene deletion and overexpression strains of Saccharomyces cerevisiae. *Yeast*, **2011**, 28, 349-61	3.4	90
235	Flux analysis and metabolomics for systematic metabolic engineering of microorganisms. *Biotechnology Advances*, **2013**, 31, 818-26	17.8	84
234	Differential importance of trehalose accumulation in Saccharomyces cerevisiae in response to various environmental stresses. *Journal of Bioscience and Bioengineering*, **2010**, 109, 262-6	3.3	80
233	Recent advances in amino acid production by microbial cells. *Current Opinion in Biotechnology*, **2016**, 42, 133-146	11.4	75
232	OpenMebius: an open source software for isotopically nonstationary 13C-based metabolic flux analysis. *BioMed Research International*, **2014**, 2014, 627014	3	72
231	Enhanced kefiran production by mixed culture of Lactobacillus kefiranofaciens and Saccharomyces cerevisiae. *Journal of Biotechnology*, **2003**, 100, 43-53	3.7	72
230	Distinct roles of two anaplerotic pathways in glutamate production induced by biotin limitation in Corynebacterium glutamicum. *Journal of Bioscience and Bioengineering*, **2008**, 106, 51-8	3.3	69
229	Optimal production of glutathione by controlling the specific growth rate of yeast in fed-batch culture. *Biotechnology and Bioengineering*, **1991**, 38, 196-205	4.9	69
228	Beer volatile compounds and their application to low-malt beer fermentation. *Journal of Bioscience and Bioengineering*, **2008**, 106, 317-23	3.3	66
227	Study on roles of anaplerotic pathways in glutamate overproduction of Corynebacterium glutamicum by metabolic flux analysis. *Microbial Cell Factories*, **2007**, 6, 19	6.4	65
226	Nisin production by a mixed-culture system consisting of Lactococcus lactis and Kluyveromyces marxianus. *Applied and Environmental Microbiology*, **1999**, 65, 3134-41	4.8	64
225	Interactions between Lactobacillus kefiranofaciens and Saccharomyces cerevisiae in mixed culture for kefiran production. *Journal of Bioscience and Bioengineering*, **2003**, 96, 279-84	3.3	63

224	Integrated metabolic flux and omics analysis of Synechocystis sp. PCC 6803 under mixotrophic and photoheterotrophic conditions. *Plant and Cell Physiology*, **2014**, 55, 1605-12	4.9	60
223	Comparative analysis of transcriptional responses to saline stress in the laboratory and brewing strains of Saccharomyces cerevisiae with DNA microarray. *Applied Microbiology and Biotechnology*, **2006**, 70, 346-57	5.7	60
222	Effect of amino acids on glutathione production by Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **1992**, 36, 538	5.7	59
221	Fuzzy control of ethanol concentration its application to maximum glutathione production in yeast fed-batch culture. *Biotechnology and Bioengineering*, **1993**, 41, 493-501	4.9	58
220	Effect of odhA overexpression and odhA antisense RNA expression on Tween-40-triggered glutamate production by Corynebacterium glutamicum. *Applied Microbiology and Biotechnology*, **2009**, 81, 1097-106	5.7	57
219	Adaptation of Saccharomyces cerevisiae cells to high ethanol concentration and changes in fatty acid composition of membrane and cell size. *PLoS ONE*, **2008**, 3, e2623	3.7	57
218	Cysteine addition strategy for maximum glutathione production in fed-batch culture of Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **1992**, 37, 141	5.7	57
217	Requirement of de novo synthesis of the OdhI protein in penicillin-induced glutamate production by Corynebacterium glutamicum. *Applied Microbiology and Biotechnology*, **2010**, 86, 911-20	5.7	56
216	Comparative study of flux redistribution of metabolic pathway in glutamate production by two coryneform bacteria. *Metabolic Engineering*, **2005**, 7, 59-69	9.7	56
215	An on-line physiological state recognition system for the lysine fermentation process based on a metabolic reaction model. *Biotechnology and Bioengineering*, **1997**, 55, 170-81	4.9	55
214	Increased 3-hydroxypropionic acid production from glycerol, by modification of central metabolism in Escherichia coli. *Microbial Cell Factories*, **2014**, 13, 64	6.4	53
213	Reconstruction and verification of a genome-scale metabolic model for Synechocystis sp. PCC6803. *Applied Microbiology and Biotechnology*, **2011**, 92, 347-58	5.7	53
212	Effect of trehalose accumulation on response to saline stress in Saccharomyces cerevisiae. *Yeast*, **2009**, 26, 17-30	3.4	53
211	Comparative studies of in vitro and in vivo function of three different shaped bioartificial pancreases made of agarose hydrogel. *Biomaterials*, **1994**, 15, 113-20	15.6	53
210	An algorithmic approach to constructing the on-line estimation system for the specific growth rate. *Biotechnology and Bioengineering*, **1989**, 33, 354-64	4.9	53
209	Integrated transcriptomic and metabolomic analysis of the central metabolism of Synechocystis sp. PCC 6803 under different trophic conditions. *Biotechnology Journal*, **2013**, 8, 571-80	5.6	44
208	Metabolic engineering of Saccharomyces cerevisiae to improve succinic acid production based on metabolic profiling. *Bioscience, Biotechnology and Biochemistry*, **2014**, 78, 151-9	2.1	40
207	Investigating the effects of perturbations to pgi and eno gene expression on central carbon metabolism in Escherichia coli using (13)C metabolic flux analysis. *Microbial Cell Factories*, **2012**, 11, 87	6.4	40

206	Combinatorial deletions of glgC and phaCE enhance ethanol production in Synechocystis sp. PCC 6803. *Journal of Biotechnology*, **2016**, 239, 13-19	3.7	40
205	Stable disruption of ethanol production by deletion of the genes encoding alcohol dehydrogenase isozymes in Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2012**, 113, 192-5	3.3	39
204	Kinetic study of poly-d(−)-3-hydroxybutyric acid (PHB) production and its molecular weight distribution control in a fed-batch culture of Alcaligenes eutrophus. *Journal of Bioscience and Bioengineering*, **1993**, 76, 465-469		39
203	Metabolic Adaptation to Nutritional Stress in Human Colorectal Cancer. *Scientific Reports*, **2016**, 6, 38415	4.9	39
202	Engineering strategy of yeast metabolism for higher alcohol production. *Microbial Cell Factories*, **2011**, 10, 70	6.4	38
201	An improved physico-chemical model of hybridization on high-density oligonucleotide microarrays. *Bioinformatics*, **2008**, 24, 1278-85	7.2	38
200	Characterization of new isolated Ralstonia eutropha strain A-04 and kinetic study of biodegradable copolyester poly(3-hydroxybutyrate-co-4-hydroxybutyrate) production. *Journal of Industrial Microbiology and Biotechnology*, **2008**, 35, 1205-15	4.2	38
199	C-metabolic flux analysis for mevalonate-producing strain of Escherichia coli. *Journal of Bioscience and Bioengineering*, **2017**, 123, 177-182	3.3	35
198	Image analysis of mycelial morphology in virginiamycin production by batch culture of Streptomyces virginiae. *Journal of Bioscience and Bioengineering*, **1996**, 81, 7-12		34
197	Modelling and optimization of environmental conditions for kefiran production by Lactobacillus kefiranofaciens. *Applied Microbiology and Biotechnology*, **2001**, 57, 639-46	5.7	33
196	FastPros: screening of reaction knockout strategies for metabolic engineering. *Bioinformatics*, **2014** , 30, 981-7	7.2	32
195	Metabolic engineering Integrating methodologies of molecular breeding and bioprocess systems engineering. *Journal of Bioscience and Bioengineering*, **2002**, 94, 563-573	3.3	32
194	Metabolic engineering of Synechocystis sp. PCC 6803 for enhanced ethanol production based on flux balance analysis. *Bioprocess and Biosystems Engineering*, **2017**, 40, 791-796	3.7	31
193	Investigation of phosphorylation status of OdhI protein during penicillin- and Tween 40-triggered glutamate overproduction by Corynebacterium glutamicum. *Applied Microbiology and Biotechnology*, **2011**, 91, 143-51	5.7	31
192	Analysis of adaptation to high ethanol concentration in Saccharomyces cerevisiae using DNA microarray. *Bioprocess and Biosystems Engineering*, **2009**, 32, 681-8	3.7	31
191	13 C-metabolic flux analysis in heterologous cellulase production by Bacillus subtilis genome-reduced strain. *Journal of Biotechnology*, **2014**, 179, 42-9	3.7	30
190	Identification of alcohol stress tolerance genes of sp. PCC 6803 using adaptive laboratory evolution. *Biotechnology for Biofuels*, **2017**, 10, 307	7.8	29
189	Metabolomic analysis of acid stress response in Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2015**, 120, 396-404	3.3	29

188	Metabolic flux control analysis of branch points: an improved approach to obtain flux control coefficients from large perturbation data. *Metabolic Engineering*, **2004**, 6, 391-400	9.7	29
187	Maximizing yellow pigment production in fed-batch culture of Monascus sp. *Journal of Bioscience and Bioengineering*, **2000**, 90, 363-7	3.3	29
186	Optimization of agitation and aeration conditions for maximum virginiamycin production. *Applied Microbiology and Biotechnology*, **1999**, 51, 164-9	5.7	29
185	A vector library for silencing central carbon metabolism genes with antisense RNAs in Escherichia coli. *Applied and Environmental Microbiology*, **2014**, 80, 564-73	4.8	28
184	Maximum production strategy for biodegradable copolymer P(HB-co-HV) in fed-batch culture of Alcaligenes eutrophus **1999**, 62, 518-525		28
183	Genome-wide expression analysis of Saccharomyces pastorianus orthologous genes using oligonucleotide microarrays. *Journal of Bioscience and Bioengineering*, **2010**, 110, 602-7	3.3	27
182	Comparison of transcriptional responses to osmotic stresses induced by NaCl and sorbitol additions in Saccharomyces cerevisiae using DNA microarray. *Journal of Bioscience and Bioengineering*, **2006**, 102, 568-71	3.3	27
181	Mining of biological data II: assessing data structure and class homogeneity by cluster analysis. *Metabolic Engineering*, **2000**, 2, 228-38	9.7	27
180	On-line state recognition in a yeast fed-batch culture using error vectors. *Biotechnology and Bioengineering*, **1995**, 47, 165-73	4.9	27
179	(13)C-metabolic flux analysis in S-adenosyl-L-methionine production by Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2015**, 120, 532-8	3.3	26
178	Enhanced acetic acid and succinic acid production under microaerobic conditions by Corynebacterium glutamicum harboring Escherichia coli transhydrogenase gene pntAB. *Journal of General and Applied Microbiology*, **2014**, 60, 112-8	1.5	25
177	Development of an automated culture system for laboratory evolution. *Journal of the Association for Laboratory Automation*, **2014**, 19, 478-82		25
176	The RB-IL-6 axis controls self-renewal and endocrine therapy resistance by fine-tuning mitochondrial activity. *Oncogene*, **2017**, 36, 5145-5157	9.2	24
175	Utilization of Saccharomyces cerevisiae recombinant strain incapable of both ethanol and glycerol biosynthesis for anaerobic bioproduction. *Applied Microbiology and Biotechnology*, **2013**, 97, 4811-9	5.7	24
174	Experimental determination of group flux control coefficients in metabolic networks. *Biotechnology and Bioengineering*, **1998**, 58, 149-53	4.9	24
173	Evaluating (13)C enrichment data of free amino acids for precise metabolic flux analysis. *Biotechnology Journal*, **2011**, 6, 1377-87	5.6	23
172	Mole fraction control of poly(3-hydroxybutyric-co-3-hydroxyvaleric) acid in fed-batch culture of Alcaligenes eutrophus. *Journal of Bioscience and Bioengineering*, **1996**, 81, 422-428		23
171	Absolute quantitation of glycolytic intermediates reveals thermodynamic shifts in Saccharomyces cerevisiae strains lacking PFK1 or ZWF1 genes. *Journal of Bioscience and Bioengineering*, **2015**, 120, 280-6	3.3	22

170	Saccharomyces cerevisiae and DNA microarray analyses: what did we learn from it for a better understanding and exploitation of yeast biotechnology?. *Applied Microbiology and Biotechnology*, **2010**, 87, 391-400	5.7	22
169	Optimum autoregulator addition strategy for maximum virginiamycin production in batch culture of Streptomyces virginiae. *Biotechnology and Bioengineering*, **1995**, 46, 437-42	4.9	22
168	Prediction of Cross-resistance and Collateral Sensitivity by Gene Expression profiles and Genomic Mutations. *Scientific Reports*, **2017**, 7, 14009	4.9	21
167	Production of Glutamate and Glutamate-Related Amino Acids: Molecular Mechanism Analysis and Metabolic Engineering **2006**, 1-38		21
166	Precise metabolic flux analysis of coryneform bacteria by gas chromatography-mass spectrometry and verification by nuclear magnetic resonance. *Journal of Bioscience and Bioengineering*, **2006**, 102, 413-24	3.3	21
165	Clustering gene expression pattern and extracting relationship in gene network based on artificial neural networks. *Journal of Bioscience and Bioengineering*, **2003**, 96, 421-8	3.3	21
164	Optogenetic switch for controlling the central metabolic flux of Escherichia coli. *Metabolic Engineering*, **2019**, 55, 68-75	9.7	20
163	High-yielding rice Takanari has superior photosynthetic response to a commercial rice Koshihikari under fluctuating light. *Journal of Experimental Botany*, **2019**, 70, 5287-5297	7	20
162	Phenotypic convergence in bacterial adaptive evolution to ethanol stress. *BMC Evolutionary Biology* , **2015**, 15, 180	3	20
161	In silico screening of triple reaction knockout Escherichia coli strains for overproduction of useful metabolites. *Journal of Bioscience and Bioengineering*, **2013**, 115, 221-8	3.3	20
160	Improving protein secretion of a transglutaminase-secreting Corynebacterium glutamicum recombinant strain on the basis of 13C metabolic flux analysis. *Journal of Bioscience and Bioengineering*, **2011**, 112, 595-601	3.3	20
159	Extracting the hidden features in saline osmotic tolerance in Saccharomyces cerevisiae from DNA microarray data using the self-organizing map: biosynthesis of amino acids. *Applied Microbiology and Biotechnology*, **2007**, 75, 415-26	5.7	20
158	Mining of biological data I: identifying discriminating features via mean hypothesis testing. *Metabolic Engineering*, **2000**, 2, 218-27	9.7	20
157	Construction of a Genome-Scale Metabolic Model of Arthrospira platensis NIES-39 and Metabolic Design for Cyanobacterial Bioproduction. *PLoS ONE*, **2015**, 10, e0144430	3.7	20
156	Transomics data-driven, ensemble kinetic modeling for system-level understanding and engineering of the cyanobacteria central metabolism. *Metabolic Engineering*, **2019**, 52, 273-283	9.7	20
155	An in silico platform for the design of heterologous pathways in nonnative metabolite production. *BMC Bioinformatics*, **2012**, 13, 93	3.6	19
154	Understanding the mechanism of heat stress tolerance caused by high trehalose accumulation in Saccharomyces cerevisiae using DNA microarray. *Journal of Bioscience and Bioengineering*, **2012**, 113, 526-8	3.3	18
153	Learning from quantitative data to understand central carbon metabolism. *Biotechnology Advances*, **2017**, 35, 971-980	17.8	18

152	On-line fault diagnosis for optimal rice □amylase production process of a temperature-sensitive mutant of Saccharomyces cerevisiae by an autoassociative neural network. *Journal of Bioscience and Bioengineering*, **1997**, 83, 435-442		18
151	Multivariable control of alcohol concentrations in the production of polyhydroxyalkanoates (PHAs) by Paracoccus denitrificans. *Biotechnology and Bioengineering*, **2001**, 74, 116-24	4.9	18
150	Application of adaptive laboratory evolution to overcome a flux limitation in an Escherichia coli production strain. *Biotechnology and Bioengineering*, **2018**, 115, 1542-1551	4.9	17
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145	□C-based metabolic flux analysis of Saccharomyces cerevisiae with a reduced Crabtree effect. *Journal of Bioscience and Bioengineering*, **2015**, 120, 140-4	3.3	16
144	Model-based analysis of non-specific binding for background correction of high-density oligonucleotide microarrays. *Bioinformatics*, **2009**, 25, 36-41	7.2	16
143	Investigating the effectiveness of DNA microarray analysis for identifying the genes involved in l-lactate production by Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2009**, 84, 1149-59	5.7	16
142	Bioprocess fault detection by nonlinear multivariate analysis: application of an artificial autoassociative neural network and wavelet filter bank. *Biotechnology Progress*, **1998**, 14, 79-87	2.8	16
141	Application of a mathematical model and Differential Evolution algorithm approach to optimization of bacteriocin production by Lactococcus lactis C7. *Bioprocess and Biosystems Engineering*, **2005**, 28, 15-26	3.7	16
140	Maximum virginiamycin production by optimization of cultivation conditions in batch culture with autoregulator addition. *Biotechnology and Bioengineering*, **1996**, 49, 437-44	4.9	16
139	Metabolic engineering of mevalonate-producing Escherichia coli strains based on thermodynamic analysis. *Metabolic Engineering*, **2018**, 47, 1-9	9.7	15
138	Transcriptome analysis of the cyanobacterium Synechocystis sp. PCC 6803 and mechanisms of photoinhibition tolerance under extreme high light conditions. *Journal of Bioscience and Bioengineering*, **2018**, 126, 596-602	3.3	15
137	Metabolic engineering of isopropyl alcohol-producing Escherichia coli strains with C-metabolic flux analysis. *Biotechnology and Bioengineering*, **2017**, 114, 2782-2793	4.9	15
136	Molecular mechanisms and metabolic engineering of glutamate overproduction in Corynebacterium glutamicum. *Sub-Cellular Biochemistry*, **2012**, 64, 261-81	5.5	15
135	Proteomic analysis of responses to osmotic stress in laboratory and sake-brewing strains of Saccharomyces cerevisiae. *Process Biochemistry*, **2009**, 44, 647-653	4.8	15

134	Improvement of L-lactate production by CYB2 gene disruption in a recombinant Saccharomyces cerevisiae strain under low pH condition. *Bioscience, Biotechnology and Biochemistry*, **2008**, 72, 3063-6	2.1	15
133	Physiological analysis of yeast cells by flow cytometry during serial-repitching of low-malt beer fermentation. *Journal of Bioscience and Bioengineering*, **2007**, 103, 451-6	3.3	15
132	Characterization and enzymatic degradation of microbial copolyester P(3HB-co-3HV)s produced by metabolic reaction model-based system. *Polymer Degradation and Stability*, **2006**, 91, 2941-2950	4.7	15
131	Metabolic flux of the oxidative pentose phosphate pathway under low light conditions in Synechocystis sp. PCC 6803. *Journal of Bioscience and Bioengineering*, **2018**, 126, 38-43	3.3	14
130	Metabolic Flux Analysis of the Synechocystis sp. PCC 6803 ΔrtABCD Mutant Reveals a Mechanism for Metabolic Adaptation to Nitrogen-Limited Conditions. *Plant and Cell Physiology*, **2017**, 58, 537-545	4.9	14
129	Reliable Metabolic Flux Estimation in Escherichia coli Central Carbon Metabolism Using Intracellular Free Amino Acids. *Metabolites*, **2014**, 4, 408-20	5.6	14
128	Systems metabolic engineering: the creation of microbial cell factories by rational metabolic design and evolution. *Advances in Biochemical Engineering/Biotechnology*, **2013**, 131, 1-23	1.7	14
127	Simultaneous control of apparent extract and volatile compounds concentrations in low-malt beer fermentation. *Applied Microbiology and Biotechnology*, **2006**, 73, 549-58	5.7	14
126	Magnesium starvation improves production of malonyl-CoA-derived metabolites in Escherichia coli. *Metabolic Engineering*, **2019**, 52, 215-223	9.7	14
125	Effect of malic enzyme on ethanol production by Synechocystis sp. PCC 6803. *Journal of Bioscience and Bioengineering*, **2015**, 119, 82-4	3.3	13
124	Effect of Carbon and Nitrogen Additions on Consumption Activity of Apparent Extract of Yeast Cells in a Brewing Process. *Journal of the American Society of Brewing Chemists*, **2002**, 60, 163-169	1.9	13
123	A maximum production strategy of lysine based on a simplified model derived from a metabolic reaction network. *Metabolic Engineering*, **1999**, 1, 299-308	9.7	13
122	Targeted proteome analysis of single-gene deletion strains of Saccharomyces cerevisiae lacking enzymes in the central carbon metabolism. *PLoS ONE*, **2017**, 12, e0172742	3.7	13
121	Heterologous expression of bacterial phosphoenol pyruvate carboxylase and Entner-Doudoroff pathway in Saccharomyces cerevisiae for improvement of isobutanol production. *Journal of Bioscience and Bioengineering*, **2017**, 124, 263-270	3.3	12
120	Nano-scale liquid chromatography coupled to tandem mass spectrometry using the multiple reaction monitoring mode based quantitative platform for analyzing multiple enzymes associated with central metabolic pathways of Saccharomyces cerevisiae using ultra fast mass spectrometry. *Journal of Bioscience and Bioengineering*, **2015**, 119, 117-20	3.3	12
119	Data preprocessing and output evaluation of an autoassociative neural network model for online fault detection in virginiamycin production. *Journal of Bioscience and Bioengineering*, **2002**, 94, 70-77	3.3	12
118	Enhancement of 1,5-diaminopentane production in a recombinant strain of Corynebacterium glutamicum by Tween 40 addition. *Journal of General and Applied Microbiology*, **2016**, 62, 42-5	1.5	12
117	Investigation of useful carbon tracers for C-metabolic flux analysis of by considering five experimentally determined flux distributions. *Metabolic Engineering Communications*, **2016**, 3, 187-195	6.5	12

116	Flux balance analysis of cyanobacteria reveals selective use of photosynthetic electron transport components under different spectral light conditions. *Photosynthesis Research*, **2020**, 143, 31-43	3.7	12
115	Metabolic impact of nutrient starvation in mevalonate-producing Escherichia coli. *Bioresource Technology*, **2017**, 245, 1634-1640	11	11
114	Classification of fermentation performance by multivariate analysis based on mean hypothesis testing. *Journal of Bioscience and Bioengineering*, **2002**, 94, 251-257	3.3	11
113	Integrated Analysis of the Transcriptome and Metabolome of Corynebacterium glutamicum during Penicillin-Induced Glutamic Acid Production. *Biotechnology Journal*, **2018**, 13, e1700612	5.6	10
112	Dynamic change in promoter activation during lysine biosynthesis in Escherichia coli cells. *Molecular BioSystems*, **2008**, 4, 128-34		10
111	Model predictive controller for biodegradable polyhydroxyalkanoate production in fed-batch culture. *Journal of Biotechnology*, **2002**, 95, 157-69	3.7	10
110	GC-MS/MS survey of collision-induced dissociation of tert-butyldimethylsilyl-derivatized amino acids and its application to (13)C-metabolic flux analysis of Escherichia coli central metabolism. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 6133-40	4.4	10
109	Metabolic characterization of cultured mammalian cells by mass balance analysis, tracer labeling experiments and computer-aided simulations. *Journal of Bioscience and Bioengineering*, **2015**, 120, 725-31	3.3	9
108	Enhanced dipicolinic acid production during the stationary phase in Bacillus subtilis by blocking acetoin synthesis. *Bioscience, Biotechnology and Biochemistry*, **2015**, 79, 2073-80	2.1	9
107	SSDesign: Computational metabolic pathway design based on flux variability using elementary flux modes. *Biotechnology and Bioengineering*, **2015**, 112, 759-68	4.9	9
106	Robustness of cascade pH and dissolved oxygen control in symbiotic nisin production process system of Lactococcus lactis and Kluyveromyces marxianus. *Journal of Bioscience and Bioengineering*, **2006**, 101, 274-6	3.3	9
105	Computational prediction of impact of rerouting the carbon flux in metabolic pathway on cell growth and nisin production by Lactococcus lactis. *Biochemical Engineering Journal*, **2006**, 28, 220-230	4.2	9
104	Effect of precise control of flux ratio between the glycolytic pathways on mevalonate production in Escherichia coli. *Biotechnology and Bioengineering*, **2019**, 116, 1080-1088	4.9	9
103	Comparison of metabolic profiles of yeasts based on the difference of the Crabtree positive and negative. *Journal of Bioscience and Bioengineering*, **2020**, 129, 52-58	3.3	9
102	C-metabolic flux analysis of ethanol-assimilating Saccharomyces cerevisiae for S-adenosyl-L-methionine production. *Microbial Cell Factories*, **2018**, 17, 82	6.4	9
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98	Comparative Targeted Proteomics of the Central Metabolism and Photosystems in SigE Mutant Strains of sp. PCC 6803. *Molecules*, **2018**, 23,	4.8	8
97	Treatment of Retinoblastoma 1-Intact Hepatocellular Carcinoma With Cyclin-Dependent Kinase 4/6 Inhibitor Combination Therapy. *Hepatology*, **2021**, 74, 1971-1993	11.2	8
96	Maximum virginiamycin production by optimization of cultivation conditions in batch culture with autoregulator addition **1996**, 49, 437		8
95	Flux controlling technology for central carbon metabolism for efficient microbial bio-production. *Current Opinion in Biotechnology*, **2020**, 64, 169-174	11.4	7
94	Light-inducible flux control of triosephosphate isomerase on glycolysis in Escherichia coli. *Biotechnology and Bioengineering*, **2019**, 116, 3292-3300	4.9	7
93	Systems metabolic engineering for the production of bio-nylon precursor. *Biotechnology Journal*, **2013**, 8, 513-4	5.6	7
92	Method of Corynebacterium glutamicum fermentation time extension with high lysine production rate by leucine addition. *Journal of Bioscience and Bioengineering*, **1998**, 86, 180-184		7
91	Kinetic modeling of kefiran production in mixed culture of Lactobacillus kefiranofaciens and Saccharomyces cerevisiae. *Process Biochemistry*, **2007**, 42, 570-579	4.8	7
90	Nonisothermal Crystallization Kinetics of Biodegradable Random Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and Block One. *Journal of Chemical Engineering of Japan*, **2003**, 36, 639-646	0.8	7
89	Assessment of Protein Content and Phosphorylation Level in sp. PCC 6803 under Various Growth Conditions Using Quantitative Phosphoproteomic Analysis. *Molecules*, **2020**, 25,	4.8	7
88	Characterization of oil-producing yeast Lipomyces starkeyi on glycerol carbon source based on metabolomics and C-labeling. *Applied Microbiology and Biotechnology*, **2018**, 102, 8909-8920	5.7	7
87	Pulmonary Tumor Thrombotic Microangiopathy - Antemortem Diagnosis With Pulmonary Artery Wedge Blood Cell Sampling in a Recurrent Breast Cancer Patient. *Circulation Journal*, **2017**, 81, 1959-1960	2.9	6
86	Prediction of Hopeless Peptides Unlikely to be Selected for Targeted Proteome Analysis. *Mass Spectrometry*, **2017**, 6, A0056	1.7	6
85	On-Line Estimation and Control of Apparent Extract Concentration in Low-Malt Beer Fermentation. *Journal of the Institute of Brewing*, **2005**, 111, 128-136	2	6
84	Glutamic Acid Fermentation: Discovery of Glutamic Acid-Producing Microorganisms, Analysis of the Production Mechanism, Metabolic Engineering, and Industrial Production Process **2016**, 339-360		6
83	Sclerotherapy for Rectal Varices by a Small-Bore Needle Puncture Through the Greater Sciatic Foramen. *CardioVascular and Interventional Radiology*, **2018**, 41, 317-322	2.7	5
82	ArtPathDesign: rational heterologous pathway design system for the production of nonnative metabolites. *Journal of Bioscience and Bioengineering*, **2013**, 116, 524-7	3.3	5
81	Analysis of metabolic network based on conservation of molecular structure. *BioSystems*, **2009**, 95, 175-8	1.9	5

80	Roles of glucose and acetate as carbon sources inl-histidine production withBrevibacterium flavum FERM1564 revealed by metabolic flux analysis. *Biotechnology and Bioprocess Engineering*, **2002**, 7, 171-177	2.1	5
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78	Development of a physical model-based algorithm for the detection of single-nucleotide substitutions by using tiling microarrays. *PLoS ONE*, **2013**, 8, e54571	3.7	5
77	Data preprocessing and output evaluation of an autoassociative neural network model for online fault detection in virginiamycin production. *Journal of Bioscience and Bioengineering*, **2002**, 94, 70-7	3.3	5
76	Data science-based modeling of the lysine fermentation process. *Journal of Bioscience and Bioengineering*, **2020**, 130, 409-415	3.3	5
75	Time-resolved analysis of short term metabolic adaptation at dark transition in Synechocystis sp. PCC 6803. *Journal of Bioscience and Bioengineering*, **2019**, 128, 424-428	3.3	4
74	Theophylline-inducible riboswitch accurately regulates protein expression at low level in Escherichia coli. *Biotechnology Letters*, **2019**, 41, 743-751	3	4
73	Effects of mutations of GID protein-coding genes on malate production and enzyme expression profiles in Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2020**, 104, 4971-4983	5.7	4
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