Akihiko Kondo

List of Publications by Citations

244 papers	7,119 citations	43 h-index	71 g-index
256 ext. papers	8,602 ext. citations	6.7 avg, IF	6.34 L-index

#	Paper	IF	Citations
244	Targeted nucleotide editing using hybrid prokaryotic and vertebrate adaptive immune systems. *Science*, **2016**, 353,	10	694
243	Perspectives on engineering strategies for improving biofuel production from microalgae--a critical review. *Biotechnology Advances*, **2014**, 32, 1448-59	5	220
242	Metabolic pathway engineering based on metabolomics confers acetic and formic acid tolerance to a recombinant xylose-fermenting strain of Saccharomyces cerevisiae. *Microbial Cell Factories*, **2011**, 10, 2	2.1	186
241	Ethanol fermentation from lignocellulosic hydrolysate by a recombinant xylose- and cellooligosaccharide-assimilating yeast strain. *Applied Microbiology and Biotechnology*, **2006**, 72, 1136-43	1.7	182
240	Bioprocessing of bio-based chemicals produced from lignocellulosic feedstocks. *Current Opinion in Biotechnology*, **2016**, 42, 30-39	2.7	153
239	Recent insights into biohydrogen production by microalgae - From biophotolysis to dark fermentation. *Bioresource Technology*, **2016**, 227, 373-373	4.8	151
238	Genetic engineering to enhance the Ehrlich pathway and alter carbon flux for increased isobutanol production from glucose by Saccharomyces cerevisiae. *Journal of Biotechnology*, **2012**, 159, 32-7	1.5	131
237	Dynamic metabolic profiling of cyanobacterial glycogen biosynthesis under conditions of nitrate depletion. *Journal of Experimental Botany*, **2013**, 64, 2943-54	1.9	105
236	PCR-mediated seamless gene deletion and marker recycling in Saccharomyces cerevisiae. *Yeast*, **2006**, 23, 399-405	0.8	101
235	Dynamic metabolic profiling together with transcription analysis reveals salinity-induced starch-to-lipid biosynthesis in alga Chlamydomonas sp. JSC4. *Scientific Reports*, **2017**, 7, 45471	1.5	90
234	Optimizing biodiesel production in marine Chlamydomonas sp. JSC4 through metabolic profiling and an innovative salinity-gradient strategy. *Biotechnology for Biofuels*, **2014**, 7, 97	2.5	89
233	Display of cellulases on the cell surface of Saccharomyces cerevisiae for high yield ethanol production from high-solid lignocellulosic biomass. *Bioresource Technology*, **2012**, 108, 128-33	4.8	88
232	Direct conversion of Spirulina to ethanol without pretreatment or enzymatic hydrolysis processes. *Energy and Environmental Science*, **2013**, 6, 1844	10.7	85
231	Widely targeted metabolic profiling analysis of yeast central metabolites. *Journal of Bioscience and Bioengineering*, **2012**, 113, 665-73	1	81
230	A simple and immediate method for simultaneously evaluating expression level and plasmid maintenance in yeast. *Journal of Biochemistry*, **2009**, 145, 701-8	0.8	81
229	Current advances on fermentative biobutanol production using third generation feedstock. *Biotechnology Advances*, **2017**, 35, 1049-1059	5	80
228	Metabolic design of a platform Escherichia coli strain producing various chorismate derivatives. *Metabolic Engineering*, **2016**, 33, 119-129	2.9	76

227	Microbial conversion of biomass into bio-based polymers. *Bioresource Technology*, **2017**, 245, 1664-1673	4.8	76
226	Direct production of L-lysine from raw corn starch by Corynebacterium glutamicum secreting Streptococcus bovis alpha-amylase using cspB promoter and signal sequence. *Applied Microbiology and Biotechnology*, **2007**, 77, 533-41	1.7	76
225	Efficient yeast cell-surface display of exo- and endo-cellulase using the SED1 anchoring region and its original promoter. *Biotechnology for Biofuels*, **2014**, 7, 8	2.5	73
224	Repeated-batch fermentation of lignocellulosic hydrolysate to ethanol using a hybrid Saccharomyces cerevisiae strain metabolically engineered for tolerance to acetic and formic acids. *Bioresource Technology*, **2011**, 102, 7917-24	4.8	73
223	Development of lipid productivities under different CO2 conditions of marine microalgae Chlamydomonas sp. JSC4. *Bioresource Technology*, **2014**, 152, 247-52	4.8	69
222	Recent Advances in Microbial Production of Aromatic Chemicals and Derivatives. *Trends in Biotechnology*, **2017**, 35, 785-796	4.2	66
221	Base editors for simultaneous introduction of C-to-T and A-to-G mutations. *Nature Biotechnology*, **2020**, 38, 865-869	10.2	63
220	Glycogen production for biofuels by the euryhaline cyanobacteria Synechococcus sp. strain PCC 7002 from an oceanic environment. *Biotechnology for Biofuels*, **2014**, 7, 88	2.5	60
219	Production of d-lactic acid from hardwood pulp by mechanical milling followed by simultaneous saccharification and fermentation using metabolically engineered Lactobacillus plantarum. *Bioresource Technology*, **2015**, 187, 167-172	4.8	59
218	Direct bioethanol production from cellulose by the combination of cellulase-displaying yeast and ionic liquid pretreatment. *Green Chemistry*, **2011**, 13, 2948	3.4	58
217	Engineering cell factories for producing building block chemicals for bio-polymer synthesis. *Microbial Cell Factories*, **2016**, 15, 19	2.1	58
216	Electrical-biological hybrid system for CO reduction. *Metabolic Engineering*, **2018**, 47, 211-218	2.9	56
215	Co-expression of TAL1 and ADH1 in recombinant xylose-fermenting Saccharomyces cerevisiae improves ethanol production from lignocellulosic hydrolysates in the presence of furfural. *Journal of Bioscience and Bioengineering*, **2014**, 117, 165-169	1	55
214	Titanium peroxide nanoparticles enhanced cytotoxic effects of X-ray irradiation against pancreatic cancer model through reactive oxygen species generation in vitro and in vivo. *Radiation Oncology*, **2016**, 11, 91	1	55
213	Beyond Native Cas9: Manipulating Genomic Information and Function. *Trends in Biotechnology*, **2017**, 35, 983-996	4.2	54
212	Dynamic metabolic profiling of the marine microalga Chlamydomonas sp. JSC4 and enhancing its oil production by optimizing light intensity. *Biotechnology for Biofuels*, **2015**, 8, 48	2.5	51
211	Genetic manipulation of a metabolic enzyme and a transcriptional regulator increasing succinate excretion from unicellular cyanobacterium. *Frontiers in Microbiology*, **2015**, 6, 1064	1.5	51
210	Recent advances in yeast cell-surface display technologies for waste biorefineries. *Bioresource Technology*, **2016**, 215, 324-333	4.8	51

209	Enhanced D-lactic acid production from renewable resources using engineered Lactobacillus plantarum. *Applied Microbiology and Biotechnology*, **2016**, 100, 279-88	1.7	50
208	Disruption of pknG enhances production of gamma-aminobutyric acid by Corynebacterium glutamicum expressing glutamate decarboxylase. *AMB Express*, **2014**, 4, 20	1.2	50
207	ATP regulation in bioproduction. *Microbial Cell Factories*, **2015**, 14, 198	2.1	50
206	Effect of inoculum size on single-cell oil production from glucose and xylose using oleaginous yeast Lipomyces starkeyi. *Journal of Bioscience and Bioengineering*, **2018**, 125, 695-702	1	48
205	Cell surface engineering of industrial microorganisms for biorefining applications. *Biotechnology Advances*, **2015**, 33, 1403-11	5	46
204	Development of microbial cell factories for bio-refinery through synthetic bioengineering. *Journal of Biotechnology*, **2013**, 163, 204-16	1.5	46
203	Organosolv pretreatment of sorghum bagasse using a low concentration of hydrophobic solvents such as 1-butanol or 1-pentanol. *Biotechnology for Biofuels*, **2016**, 9, 27	2.5	45
202	Future insights in fungal metabolic engineering. *Bioresource Technology*, **2017**, 245, 1314-1326	4.8	43
201	Combined cell-surface display- and secretion-based strategies for production of cellulosic ethanol with Saccharomyces cerevisiae. *Biotechnology for Biofuels*, **2015**, 8, 162	2.5	43
200	Production of protocatechuic acid by Corynebacterium glutamicum expressing chorismate-pyruvate lyase from Escherichia coli. *Applied Microbiology and Biotechnology*, **2016**, 100, 135-45	1.7	42
199	Feasibility of CO mitigation and carbohydrate production by microalga CNW-N used for bioethanol fermentation under outdoor conditions: effects of seasonal changes. *Biotechnology for Biofuels*, **2017**, 10, 27	2.5	42
198	Expression of varied GFPs in Saccharomyces cerevisiae: codon optimization yields stronger than expected expression and fluorescence intensity. *Scientific Reports*, **2016**, 6, 35932	1.5	42
197	Lipase cocktail for efficient conversion of oils containing phospholipids to biodiesel. *Bioresource Technology*, **2016**, 211, 224-30	4.8	41
196	Cell surface engineering of Saccharomyces cerevisiae combined with membrane separation technology for xylitol production from rice straw hydrolysate. *Applied Microbiology and Biotechnology*, **2016**, 100, 3477-87	1.7	40
195	Development of a comprehensive set of tools for genome engineering in a cold- and thermo-tolerant Kluyveromyces marxianus yeast strain. *Scientific Reports*, **2017**, 7, 8993	1.5	38
194	Temperature enhanced succinate production concurrent with increased central metabolism turnover in the cyanobacterium Synechocystis sp. PCC 6803. *Metabolic Engineering*, **2018**, 48, 109-120	2.9	38
193	Evolutionary engineering of salt-resistant Chlamydomonas sp. strains reveals salinity stress-activated starch-to-lipid biosynthesis switching. *Bioresource Technology*, **2017**, 245, 1484-1490	4.8	37
192	Improved ethanol production from xylose in the presence of acetic acid by the overexpression of the HAA1 gene in Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2015**, 119, 297-302	1	37

191	Improved sugar-free succinate production by sp. PCC 6803 following identification of the limiting steps in glycogen catabolism. *Metabolic Engineering Communications*, **2016**, 3, 130-141	2.1	37
190	Complete Genome Sequence of Kluyveromyces marxianus NBRC1777, a Nonconventional Thermotolerant Yeast. *Genome Announcements*, **2015**, 3,		36
189	Aspergillus oryzae-based cell factory for direct kojic acid production from cellulose. *Microbial Cell Factories*, **2014**, 13, 71	2.1	36
188	Enhanced cell-surface display and secretory production of cellulolytic enzymes with Saccharomyces cerevisiae Sed1 signal peptide. *Biotechnology and Bioengineering*, **2016**, 113, 2358-66	1.3	36
187	Engineering metabolic pathways in Escherichia coli for constructing a "microbial chassis" for biochemical production. *Bioresource Technology*, **2017**, 245, 1362-1368	4.8	35
186	Engineering of a novel cellulose-adherent cellulolytic Saccharomyces cerevisiae for cellulosic biofuel production. *Scientific Reports*, **2016**, 6, 24550	1.5	34
185	Direct Ethanol Production from Ionic Liquid-Pretreated Lignocellulosic Biomass by Cellulase-Displaying Yeasts. *Applied Biochemistry and Biotechnology*, **2017**, 182, 229-237	1.1	34
184	Eliminating the isoleucine biosynthetic pathway to reduce competitive carbon outflow during isobutanol production by Saccharomyces cerevisiae. *Microbial Cell Factories*, **2015**, 14, 62	2.1	34
183	Expression of Cyanobacterial Acyl-ACP Reductase Elevates the Triacylglycerol Level in the Red Alga Cyanidioschyzon merolae. *Plant and Cell Physiology*, **2015**, 56, 1962-80	1.2	33
182	Characterization of cellulose nanofiber sheets from different refining processes. *Cellulose*, **2016**, 23, 403-414	2.1	33
181	Optimization of cellulolytic enzyme components through engineering and on-site fermentation using the soluble inducer for cellulosic ethanol production from corn stover. *Biotechnology for Biofuels*, **2018**, 11, 49	2.5	33
180	Development of bio-based fine chemical production through synthetic bioengineering. *Microbial Cell Factories*, **2014**, 13, 173	2.1	33
179	d-lactic acid production from renewable lignocellulosic biomass via genetically modified Lactobacillus plantarum. *Biotechnology Progress*, **2016**, 32, 271-8	1	33
178	Improvement of ethanol production from crystalline cellulose via optimizing cellulase ratios in cellulolytic Saccharomyces cerevisiae. *Biotechnology and Bioengineering*, **2017**, 114, 1201-1207	1.3	32
177	Rational design and evolutional fine tuning of Saccharomyces cerevisiae for biomass breakdown. *Current Opinion in Chemical Biology*, **2015**, 29, 1-9	2.4	32
176	Overexpression of flv3 improves photosynthesis in the cyanobacterium Synechocystis sp. PCC6803 by enhancement of alternative electron flow. *Biotechnology for Biofuels*, **2014**, 7, 493	2.5	32
175	Enhancing lutein production with mixotrophic cultivation of Chlorella sorokiniana MB-1-M12 using different bioprocess operation strategies. *Bioresource Technology*, **2019**, 278, 17-25	4.8	32
174	A display of pH-sensitive fusogenic GALA peptide facilitates endosomal escape from a Bio-nanocapsule via an endocytic uptake pathway. *Journal of Nanobiotechnology*, **2014**, 12, 11	3.2	31

173	Improvement of glutathione production by metabolic engineering the sulfate assimilation pathway of Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2012**, 94, 1313-9	1.7	31
172	Enhancement of astaxanthin production in Xanthophyllomyces dendrorhous by efficient method for the complete deletion of genes. *Microbial Cell Factories*, **2016**, 15, 155	2.1	29
171	L-lactic acid production from starch by simultaneous saccharification and fermentation in a genetically engineered Aspergillus oryzae pure culture. *Bioresource Technology*, **2014**, 173, 376-383	4.8	29
170	Efficient direct ethanol production from cellulose by cellulase- and cellodextrin transporter-co-expressing Saccharomyces cerevisiae. *AMB Express*, **2013**, 3, 34	1.2	29
169	Gene expression cross-profiling in genetically modified industrial Saccharomyces cerevisiae strains during high-temperature ethanol production from xylose. *Journal of Biotechnology*, **2013**, 163, 50-60	1.5	29
168	Versatility of a Dilute Acid/Butanol Pretreatment Investigated on Various Lignocellulosic Biomasses to Produce Lignin, Monosaccharides and Cellulose in Distinct Phases. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11069-11079	3.1	28
167	Improving polyglucan production in cyanobacteria and microalgae via cultivation design and metabolic engineering. *Biotechnology Journal*, **2015**, 10, 886-98	1.6	28
166	GH-10 and GH-11 Endo-1,4-□xylanase enzymes from Kitasatospora sp. produce xylose and xylooligosaccharides from sugarcane bagasse with no xylose inhibition. *Bioresource Technology*, **2019**, 272, 315-325	4.8	28
165	Disruption of PHO13 improves ethanol production via the xylose isomerase pathway. *AMB Express*, **2016**, 6, 4	1.2	27
164	Overexpressing enzymes of the Ehrlich pathway and deleting genes of the competing pathway in Saccharomyces cerevisiae for increasing 2-phenylethanol production from glucose. *Journal of Bioscience and Bioengineering*, **2016**, 122, 34-9	1	27
163	Direct cadaverine production from cellobiose using □glucosidase displaying Escherichia coli. *AMB Express*, **2013**, 3, 67	1.2	27
162	Mechanical milling and membrane separation for increased ethanol production during simultaneous saccharification and co-fermentation of rice straw by xylose-fermenting Saccharomyces cerevisiae. *Bioresource Technology*, **2015**, 185, 263-8	4.8	26
161	Effective usage of sorghum bagasse: Optimization of organosolv pretreatment using 25% 1-butanol and subsequent nanofiltration membrane separation. *Bioresource Technology*, **2018**, 252, 157-164	4.8	26
160	Particle size for photocatalytic activity of anatase TiO2 nanosheets with highly exposed {001} facets. *RSC Advances*, **2013**, 3, 19268	1.3	26
159	Rre37 stimulates accumulation of 2-oxoglutarate and glycogen under nitrogen starvation in Synechocystis sp. PCC 6803. *FEBS Letters*, **2014**, 588, 466-71	1.1	26
158	Improved ethanol production at high temperature by consolidated bioprocessing using Saccharomyces cerevisiae strain engineered with artificial zinc finger protein. *Bioresource Technology*, **2017**, 245, 1447-1454	4.8	25
157	M-path: a compass for navigating potential metabolic pathways. *Bioinformatics*, **2015**, 31, 905-11	1.7	25
156	Development of a multi-gene expression system in Xanthophyllomyces dendrorhous. *Microbial Cell Factories*, **2014**, 13, 175	2.1	25

155	Phenyllactic acid production by simultaneous saccharification and fermentation of pretreated sorghum bagasse. *Bioresource Technology*, **2015**, 182, 169-178	4.8	24
154	Direct production of organic acids from starch by cell surface-engineered Corynebacterium glutamicum in anaerobic conditions. *AMB Express*, **2013**, 3, 72	1.2	24
153	3-Amino-4-hydroxybenzoic acid production from sweet sorghum juice by recombinant Corynebacterium glutamicum. *Bioresource Technology*, **2015**, 198, 410-7	4.8	23
152	Electrochemical biotechnologies minimizing the required electrode assemblies. *Current Opinion in Biotechnology*, **2018**, 50, 182-188	2.7	23
151	Biofunctional TiO2 nanoparticle-mediated photokilling of cancer cells using UV irradiation. *MedChemComm*, **2010**, 1, 209	4.8	23
150	Inheritance of co-edited genes by CRISPR-based targeted nucleotide substitutions in rice. *Plant Physiology and Biochemistry*, **2018**, 131, 78-83	2.1	22
149	Identification of a novel hedycaryol synthase gene isolated from Camellia brevistyla flowers and floral scent of Camellia cultivars. *Planta*, **2016**, 243, 959-72	1.3	22
148	Development and evaluation of consolidated bioprocessing yeast for ethanol production from ionic liquid-pretreated bagasse. *Bioresource Technology*, **2017**, 245, 1413-1420	4.8	21
147	Improving the odorant sensitivity of olfactory receptor-expressing yeast with accessory proteins. *Analytical Biochemistry*, **2015**, 471, 1-8	1	21
146	Characterization of d-amino acid aminotransferase from Lactobacillus salivarius. *Journal of Molecular Catalysis B: Enzymatic*, **2013**, 94, 15-22		21
145	Changes in Lignin and Polysaccharide Components in 13 Cultivars of Rice Straw following Dilute Acid Pretreatment as Studied by Solution-State 2D 1H-13C NMR. *PLoS ONE*, **2015**, 10, e0128417	1.2	21
144	A pilot-scale floating closed culture system for the multicellular cyanobacterium NIES-39. *Journal of Applied Phycology*, **2015**, 27, 2191-2202	1.2	20
143	Precipitate obtained following membrane separation of hydrothermally pretreated rice straw liquid revealed by 2D NMR to have high lignin content. *Biotechnology for Biofuels*, **2015**, 8, 88	2.5	20
142	Inverse metabolic engineering based on transient acclimation of yeast improves acid-containing xylose fermentation and tolerance to formic and acetic acids. *Applied Microbiology and Biotechnology*, **2016**, 100, 1027-38	1.7	20
141	Applications of yeast-based signaling sensor for characterization of antagonist and analysis of site-directed mutants of the human serotonin 1A receptor. *Biotechnology and Bioengineering*, **2015**, 112, 1906-15	1.3	20
140	Changes in primary metabolism under light and dark conditions in response to overproduction of a response regulator RpaA in the unicellular cyanobacterium Synechocystis sp. PCC 6803. *Frontiers in Microbiology*, **2015**, 6, 888	1.5	19
139	Development of a GIN11/FRT-based multiple-gene integration technique affording inhibitor-tolerant, hemicellulolytic, xylose-utilizing abilities to industrial Saccharomyces cerevisiae strains for ethanol production from undetoxified lignocellulosic hemicelluloses. *Microbial Cell Factories*, **2014**, 13, 145	2.1	19
138	Improving carbohydrate production of Chlorella sorokiniana NIES-2168 through semi-continuous process coupled with mixotrophic cultivation. *Biotechnology Journal*, **2016**, 11, 1072-81	1.6	19

137	DNA-duplex linker for AFM-SELEX of DNA aptamer against human serum albumin. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 954-957	0.8	18
136	Characterization of titanium dioxide nanoparticles modified with polyacrylic acid and HO for use as a novel radiosensitizer. *Free Radical Research*, **2016**, 50, 1319-1328	0.9	18
135	Green synthesis of Au, Pd and Au@Pd core–shell nanoparticles via a tryptophan induced supramolecular interface. *RSC Advances*, **2013**, 3, 18367	1.3	18
134	Ethanol fermentation by xylose-assimilating Saccharomyces cerevisiae using sugars in a rice straw liquid hydrolysate concentrated by nanofiltration. *Bioresource Technology*, **2013**, 147, 84-88	4.8	18
133	Engineering hepatitis B virus core particles for targeting HER2 receptors in vitro and in vivo. *Biomaterials*, **2017**, 120, 126-138	4.5	17
132	Repeated ethanol production from sweet sorghum juice concentrated by membrane separation. *Bioresource Technology*, **2015**, 186, 351-355	4.8	17
131	Energy Transfer in Cyanobacteria and Red Algae: Confirmation of Spillover in Intact Megacomplexes of Phycobilisome and Both Photosystems. *Journal of Physical Chemistry Letters*, **2016**, 7, 3567-71	1.7	17
130	5-Aminolevulinic acid fermentation using engineered Saccharomyces cerevisiae. *Microbial Cell Factories*, **2019**, 18, 194	2.1	17
129	Increased biomass production and glycogen accumulation in apcE gene deleted Synechocystis sp. PCC 6803. *AMB Express*, **2014**, 4, 17	1.2	17
128	Efficient and direct glutathione production from raw starch using engineered Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2011**, 89, 1417-22	1.7	17
127	Disruption of poly (3-hydroxyalkanoate) depolymerase gene and overexpression of three poly (3-hydroxybutyrate) biosynthetic genes improve poly (3-hydroxybutyrate) production from nitrogen rich medium by Rhodobacter sphaeroides. *Microbial Cell Factories*, **2019**, 18, 40	2.1	16
126	A pyruvate carbon flux tugging strategy for increasing 2,3-butanediol production and reducing ethanol subgeneration in the yeast. *Biotechnology for Biofuels*, **2018**, 11, 180	2.5	16
125	A novel process for the mixotrophic production of lutein with Chlorella sorokiniana MB-1-M12 using aquaculture wastewater. *Bioresource Technology*, **2019**, 290, 121786	4.8	16
124	Single-Stage Astaxanthin Production Enhances the Nonmevalonate Pathway and Photosynthetic Central Metabolism in sp. PCC 7002. *ACS Synthetic Biology*, **2019**, 8, 2701-2709	1.7	16
123	Electro-catalytically active Au@Pt nanoparticles for hydrogen evolution reaction: an insight into a tryptophan mediated supramolecular interface towards a universal core–shell synthesis approach. *RSC Advances*, **2014**, 4, 48458-48464	1.3	16
122	Cell-surface display of enzymes by the yeast Saccharomyces cerevisiae for synthetic biology. *FEMS Yeast Research*, **2015**, 15, 1-9	1.1	16
121	Efficient hydrogen production from acetate through isolated Rhodobacter sphaeroides. *Journal of Bioscience and Bioengineering*, **2011**, 112, 602-5	1	16
120	Thermoadaptation-directed enzyme evolution in an error-prone thermophile derived from Geobacillus kaustophilus HTA426. *Applied and Environmental Microbiology*, **2015**, 81, 149-58	1.4	15

119	Ethanol production from N-acetyl-D-glucosamine by Scheffersomyces stipitis strains. *AMB Express*, **2016**, 6, 83	1.2	15
118	Metabolome analysis-based design and engineering of a metabolic pathway in Corynebacterium glutamicum to match rates of simultaneous utilization of D-glucose and L-arabinose. *Microbial Cell Factories*, **2018**, 17, 76	2.1	15
117	Production of 1,2,4-butanetriol from xylose by Saccharomyces cerevisiae through Fe metabolic engineering. *Metabolic Engineering*, **2019**, 56, 17-27	2.9	15
116	Optimized membrane process to increase hemicellulosic ethanol production from pretreated rice straw by recombinant xylose-fermenting Saccharomyces cerevisiae. *Bioresource Technology*, **2014**, 169, 380-386	4.8	15
115	Increase in lactate yield by growing Corynebacterium glutamicum in a bioelectrochemical reactor. *Journal of Bioscience and Bioengineering*, **2014**, 117, 598-601	1	15
114	Sequence diversity and gene expression analyses of expansin-related proteins in the white-rot basidiomycete, Phanerochaete carnosa. *Fungal Genetics and Biology*, **2014**, 72, 115-123	1	15
113	Oxidized glutathione fermentation using Saccharomyces cerevisiae engineered for glutathione metabolism. *Applied Microbiology and Biotechnology*, **2013**, 97, 7399-404	1.7	15
112	Novel strategy for anchorage position control of GPI-attached proteins in the yeast cell wall using different GPI-anchoring domains. *Metabolic Engineering*, **2020**, 57, 110-117	2.9	15
111	Improvement of ectoine productivity by using sugar transporter-overexpressing Halomonas elongata. *Enzyme and Microbial Technology*, **2016**, 89, 63-8	1.3	15
110	Automatic Redirection of Carbon Flux between Glycolysis and Pentose Phosphate Pathway Using an Oxygen-Responsive Metabolic Switch in. *ACS Synthetic Biology*, **2020**, 9, 814-826	1.7	14
109	Metabolic engineering of the 2-ketobutyrate biosynthetic pathway for 1-propanol production in Saccharomyces cerevisiae. *Microbial Cell Factories*, **2018**, 17, 38	2.1	14
108	FudC, a protein primarily responsible for furfural detoxification in Corynebacterium glutamicum. *Applied Microbiology and Biotechnology*, **2016**, 100, 2685-92	1.7	14
107	A thiostrepton resistance gene and its mutants serve as selectable markers in Geobacillus kaustophilus HTA426. *Bioscience, Biotechnology and Biochemistry*, **2016**, 80, 368-75	0.5	14
106	Microbial fluorescence sensing for human neurotensin receptor type 1 using G□engineered yeast cells. *Analytical Biochemistry*, **2014**, 446, 37-43	1	14
105	Increased ethanol production from sweet sorghum juice concentrated by a membrane separation process. *Bioresource Technology*, **2014**, 169, 821-825	4.8	14
104	Pretreatment of Japanese cedar by ionic liquid solutions in combination with acid and metal ion and its application to high solid loading. *Biotechnology for Biofuels*, **2014**, 7, 120	2.5	14
103	4-Vinylphenol biosynthesis from cellulose as the sole carbon source using phenolic acid decarboxylase- and tyrosine ammonia lyase-expressing Streptomyces lividans. *Bioresource Technology*, **2015**, 180, 59-65	4.8	14
102	Advances in metabolic engineering of Corynebacterium glutamicum to produce high-value active ingredients for food, feed, human health, and well-being. *Essays in Biochemistry*, **2021**, 65, 197-212	1.8	14

101	d-Amino Acids and Lactic Acid Bacteria. *Microorganisms*, **2019**, 7,	1.7	14
100	Enhanced cell-surface display of a heterologous protein using SED1 anchoring system in SED1-disrupted Saccharomyces cerevisiae strain. *Journal of Bioscience and Bioengineering*, **2018**, 125, 306-310	1	14
99	Lutein production with Chlorella sorokiniana MB-1-M12 using novel two-stage cultivation strategies - metabolic analysis and process improvement. *Bioresource Technology*, **2021**, 334, 125200	4.8	14
98	Streptavidin-hydrogel prepared by sortase A-assisted click chemistry for enzyme immobilization on an electrode. *Biosensors and Bioelectronics*, **2018**, 99, 56-61	5.1	13
97	Simultaneous conversion of free fatty acids and triglycerides to biodiesel by immobilized Aspergillus oryzae expressing Fusarium heterosporum lipase. *Biotechnology Journal*, **2017**, 12, 1600400	1.6	13
96	Phospholipase D production using immobilized cells of Streptoverticillium cinnamoneum. *Biotechnology Letters*, **1996**, 18, 951-956	0.9	13
95	Selection of yeast Saccharomyces cerevisiae promoters available for xylose cultivation and fermentation. *Journal of Bioscience and Bioengineering*, **2018**, 125, 76-86	1	12
94	Short-term light adaptation of a cyanobacterium, Synechocystis sp. PCC 6803, probed by time-resolved fluorescence spectroscopy. *Plant Physiology and Biochemistry*, **2014**, 81, 149-54	2.1	12
93	Comparison of metabolomic profiles of microbial communities between stable and deteriorated methanogenic processes. *Bioresource Technology*, **2014**, 172, 83-90	4.8	12
92	Fermentation of pigment-extracted microalgal residue using yeast cell-surface display: direct high-density ethanol production with competitive life cycle impacts. *Green Chemistry*, **2020**, 22, 153-162	3.4	12
91	Dynamic Metabolomics for Engineering Biology: Accelerating Learning Cycles for Bioproduction. *Trends in Biotechnology*, **2020**, 38, 68-82	4.2	12
90	Glutathione production from mannan-based bioresource by mannanase/mannosidase expressing Saccharomyces cerevisiae. *Bioresource Technology*, **2017**, 245, 1400-1406	4.8	11
89	Improvement of oxidized glutathione fermentation by thiol redox metabolism engineering in Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2015**, 99, 9771-8	1.7	11
88	Enhanced Phenyllactic Acid Production in Escherichia coli Via Oxygen Limitation and Shikimate Pathway Gene Expression. *Biotechnology Journal*, **2019**, 14, e1800478	1.6	11
87	Challenges of non-flocculating Saccharomyces cerevisiae haploid strain against inhibitory chemical complex for ethanol production. *Bioresource Technology*, **2017**, 245, 1436-1446	4.8	10
86	High-throughput de novo screening of receptor agonists with an automated single-cell analysis and isolation system. *Scientific Reports*, **2014**, 4, 4242	1.5	10
85	Improvement of enzymatic activity of β-glucosidase from Thermotoga maritima by 1-butyl-3-methylimidazolium acetate. *Journal of Molecular Catalysis B: Enzymatic*, **2014**, 104, 17-22		10
84	Applications of yeast cell-surface display in bio-refinery. *Recent Patents on Biotechnology*, **2010**, 4, 226-34	0.6	10

83	Styrene production from a biomass-derived carbon source using a coculture system of phenylalanine ammonia lyase and phenylacrylic acid decarboxylase-expressing Streptomyces lividans transformants. *Journal of Bioscience and Bioengineering*, **2016**, 122, 730-735	1	10
82	Lipid production by Lipomyces starkeyi using sap squeezed from felled old oil palm trunks. *Journal of Bioscience and Bioengineering*, **2019**, 127, 726-731	1	10
81	Variety in excitation energy transfer processes from phycobilisomes to photosystems I and II. *Photosynthesis Research*, **2017**, 133, 235-243	0.9	9
80	Yield Optimisation of Hepatitis B Virus Core Particles in E. coli Expression System for Drug Delivery Applications. *Scientific Reports*, **2017**, 7, 43160	1.5	9
79	Positive Feedback Genetic Circuit Incorporating a Constitutively Active Mutant Gal3 into Yeast GAL Induction System. *ACS Synthetic Biology*, **2017**, 6, 928-935	1.7	9
78	Unique plasmids generated via pUC replicon mutagenesis in an error-prone thermophile derived from Geobacillus kaustophilus HTA426. *Applied and Environmental Microbiology*, **2015**, 81, 7625-32	1.4	9
77	In□vivo tissue distribution and safety of polyacrylic acid-modified titanium peroxide nanoparticles as novel radiosensitizers. *Journal of Bioscience and Bioengineering*, **2018**, 126, 119-125	1	9
76	Antibiotic resistance mutations induced in growing cells of Bacillus-related thermophiles. *Journal of Antibiotics*, **2018**, 71, 382-389	1.1	9
75	Saccharification behavior of cellulose acetate during enzymatic processing for microbial ethanol production. *Bioresource Technology*, **2014**, 157, 1-5	4.8	9
74	Development of a glutathione production process from proteinaceous biomass resources using protease-displaying Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2012**, 93, 1495-502	1.7	9
73	Continuous crossbreeding of sake yeasts using growth selection systems for a-type and □type cells. *AMB Express*, **2016**, 6, 45	1.2	9
72	Widespread effect of N-acetyl-D-glucosamine assimilation on the metabolisms of amino acids, purines, and pyrimidines in Scheffersomyces stipitis. *Microbial Cell Factories*, **2018**, 17, 153	2.1	9
71	Sucrose purification and repeated ethanol production from sugars remaining in sweet sorghum juice subjected to a membrane separation process. *Applied Microbiology and Biotechnology*, **2017**, 101, 6007-6014	1.7	8
70	2,3-Butanediol production from cellobiose using exogenous beta-glucosidase-expressing Bacillus subtilis. *Applied Microbiology and Biotechnology*, **2016**, 100, 5781-9	1.7	8
69	Repeated ethanol fermentation from membrane-concentrated sweet sorghum juice using the flocculating yeast Saccharomyces cerevisiae F118 strain. *Bioresource Technology*, **2018**, 265, 542-547	4.8	8
68	A new screening method for recombinant Saccharomyces cerevisiae strains based on their xylose fermentation ability measured by near infrared spectroscopy. *Analytical Methods*, **2014**, 6, 6628	1.2	8
67	Twigged streptavidin polymer as a scaffold for protein assembly. *Journal of Biotechnology*, **2016**, 225, 61-6	1.5	8
66	Sortase A-Mediated Metabolic Enzyme Ligation in Escherichia coli. *ACS Synthetic Biology*, **2016**, 5, 1284-1289	4.7	8

65	Metabolic design for selective production of nicotinamide mononucleotide from glucose and nicotinamide. *Metabolic Engineering*, **2021**, 65, 167-177	2.9	8
64	Multi-functional glycoside hydrolase: Blon_0625 from Bifidobacterium longum subsp. infantis ATCC 15697. *Enzyme and Microbial Technology*, **2015**, 68, 10-4	1.3	7
63	Xylanase and feruloyl esterase from actinomycetes cultures could enhance sugarcane bagasse hydrolysis in the production of fermentable sugars. *Bioscience, Biotechnology and Biochemistry*, **2018**, 1-12	0.5	7
62	Genetic and physiological basis for antibody production by Kluyveromyces marxianus. *AMB Express*, **2018**, 8, 56	1.2	7
61	C-Terminal-oriented Immobilization of Enzymes Using Sortase A-mediated Technique. *Macromolecular Bioscience*, **2015**, 15, 1375-80	1.5	7
60	Metabolic pathway engineering by plastid transformation is a powerful tool for production of compounds in higher plants. *Plant Biotechnology*, **2009**, 26, 39-46	0.4	7
59	Preparation of Thermus thermophilus holo-chaperonin-immobilized microspheres with high ability to facilitate protein refolding **2000**, 68, 184-190		7
58	Enhancing carbohydrate repartitioning into lipid and carotenoid by disruption of microalgae starch debranching enzyme. *Communications Biology*, **2021**, 4, 450	1.9	7
57	Four-carbon dicarboxylic acid production through the reductive branch of the open cyanobacterial tricarboxylic acid cycle in Synechocystis sp. PCC 6803. *Metabolic Engineering*, **2021**, 65, 88-98	2.9	7
56	Ultrahigh Thermoresistant Lightweight Bioplastics Developed from Fermentation Products of Cellulosic Feedstock. *Advanced Sustainable Systems*, **2021**, 5, 2000193	2.2	7
55	Titanium oxide nano-radiosensitizers for hydrogen peroxide delivery into cancer cells. *Colloids and Surfaces B: Biointerfaces*, **2021**, 198, 111451	2.1	7
54	High Enzymatic Recovery and Purification of Xylooligosaccharides from Empty Fruit Bunch via Nanofiltration. *Processes*, **2020**, 8, 619	1.2	6
53	Engineering Human Epidermal Growth Receptor 2-Targeting Hepatitis B Virus Core Nanoparticles for siRNA Delivery and. *ACS Applied Nano Materials*, **2018**, 1, 3269-3282	2.1	6
52	Green synthesis of thiolated graphene nanosheets by alliin (garlic) and its effect on the deposition of gold nanoparticles. *RSC Advances*, **2014**, 4, 5986	1.3	6
51	Sustainable production of glutathione from lignocellulose-derived sugars using engineered Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2019**, 103, 1243-1254	1.7	6
50	CRISPR-derived genome editing technologies for metabolic engineering. *Metabolic Engineering*, **2021**, 63, 141-147	2.9	6
49	Affibody-displaying bio-nanocapsules effective in EGFR, typical biomarker, expressed in various cancer cells. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 336-341	0.8	5
48	Evaluation of genes involved in oxidative phosphorylation in yeast by developing a simple and rapid method to measure mitochondrial ATP synthetic activity. *Microbial Cell Factories*, **2015**, 14, 56	2.1	5

47	Pyruvate metabolism redirection for biological production of commodity chemicals in aerobic fungus Aspergillus oryzae. *Metabolic Engineering*, **2020**, 61, 225-237	2.9	5
46	Nanofiltration concentration of extracellular glutathione produced by engineered Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2016**, 121, 96-100	1	5
45	Expression of aldehyde dehydrogenase gene increases hydrogen production from low concentration of acetate by Rhodobacter sphaeroides. *International Journal of Hydrogen Energy*, **2012**, 37, 9602-9609	2.5	5
44	Metabolomics-based engineering for biofuel and bio-based chemical production in microalgae and cyanobacteria: A review. *Bioresource Technology*, **2022**, 344, 126196	4.8	5
43	4-Vinylphenol production from glucose using recombinant Streptomyces mobaraense expressing a tyrosine ammonia lyase from Rhodobacter sphaeroides. *Biotechnology Letters*, **2016**, 38, 1543-9	0.9	5
42	Heterologous production of free dihomo-Ɣlinolenic acid by Aspergillus oryzae and its extracellular release via surfactant supplementation. *Journal of Bioscience and Bioengineering*, **2019**, 127, 451-457	1	5
41	An ion-pair free LC-MS/MS method for quantitative metabolite profiling of microbial bioproduction systems. *Talanta*, **2021**, 222, 121625	2.5	5
40	Deletion of DNA ligase IV homolog confers higher gene targeting efficiency on homologous recombination in Komagataella phaffii. *FEMS Yeast Research*, **2018**, 18,	1.1	4
39	High-Speed Scanning for the Quantitative Evaluation of Glycogen Concentration in Bioethanol Feedstock Synechocystis sp. PCC6803 Using a Near-Infrared Hyperspectral Imaging System with a New Near-Infrared Spectral Camera. *Applied Spectroscopy*, **2017**, 71, 463-471	1.4	4
38	Desired alteration of protein affinities: competitive selection of protein variants using yeast signal transduction machinery. *PLoS ONE*, **2014**, 9, e108229	1.2	4
37	Mapping of endoglucanases displayed on yeast cell surface using atomic force microscopy. *Colloids and Surfaces B: Biointerfaces*, **2017**, 151, 134-142	2.1	3
36	Secretory production of tetrameric native full-length streptavidin with thermostability using Streptomyces lividans as a host. *Microbial Cell Factories*, **2015**, 14, 5	2.1	3
35	Mutation of arginine residues to avoid non-specific cellular uptakes for hepatitis B virus core particles. *Journal of Nanobiotechnology*, **2015**, 13, 15	3.2	3
34	Whole Cell Biocatalysts Using Enzymes Displayed on Yeast Cell Surface **2018**, 81-92		3
33	Dual-color reporter switching system to discern dimer formations of G-protein-coupled receptors using Cre/loxP site-specific recombination in yeast. *Biotechnology and Bioengineering*, **2016**, 113, 2178-90	1.3	3
32	Natural variation in the glucose content of dilute sulfuric acid-pretreated rice straw liquid hydrolysates: implications for bioethanol production. *Bioscience, Biotechnology and Biochemistry*, **2016**, 80, 863-9	0.5	3
31	Efficient and Supplementary Enzyme Cocktail from Actinobacteria and Plant Biomass Induction. *Biotechnology Journal*, **2019**, 14, e1700744	1.6	3
30	Repression of mitochondrial metabolism for cytosolic pyruvate-derived chemical production in Saccharomyces cerevisiae. *Microbial Cell Factories*, **2019**, 18, 177	2.1	3

29	Recent advances in lignocellulosic biomass white biotechnology for bioplastics. *Bioresource Technology*, **2022**, 344, 126165	4.8	3
28	Utilizing palm oil mill effluent (POME) for the immobilization of Aspergillus oryzae whole-cell lipase strains for biodiesel synthesis. *Biofuels, Bioproducts and Biorefining*, **2021**, 15, 804-814	1.7	3
27	Incorporation of electric fields to ionic liquids-based aqueous biphasic system for enhanced recovery of extracellular Kytococcus sedentarius TWHKC01 keratinase. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 125, 35-40	2.3	3
26	Salinity-induced microalgal-based mariculture wastewater treatment combined with biodiesel production. *Bioresource Technology*, **2021**, 340, 125638	4.8	3
25	Energy transfer in Anabaena variabilis filaments adapted to nitrogen-depleted and nitrogen-enriched conditions studied by time-resolved fluorescence. *Photosynthesis Research*, **2017**, 133, 317-326	0.9	2
24	Enzymatic improvement of mitochondrial thiol oxidase Erv1 for oxidized glutathione fermentation by Saccharomyces cerevisiae. *Microbial Cell Factories*, **2017**, 16, 44	2.1	2
23	Overexpression of CO2-responsive CCT protein, a key regulator of starch synthesis strikingly increases the glucose yield from rice straw for bioethanol production. *Plant Production Science*, **2017**, 20, 441-447	1	2
22	G□recruitment systems specifically select PPI and affinity-enhanced candidate proteins that interact with membrane protein targets. *Scientific Reports*, **2015**, 5, 16723	1.5	2
21	Characterization of Lactobacillus salivarius alanine racemase: short-chain carboxylate-activation and the role of A131. *SpringerPlus*, **2015**, 4, 639		2
20	Protein-protein interactions and selection. *FEBS Journal*, **2010**, 277, 1981	1.7	2
19	Development of Efficient Protein Refolding Systems Using Chaperonins. *Progress in Biotechnology*, **2000**, 16, 119-124		2
18	Current Techniques for Studying Oligomer Formations of G-Protein-Coupled Receptors Using Mammalian and Yeast Cells. *Current Medicinal Chemistry*, **2016**, 23, 1638-56	1.3	2
17	Future trends in synthetic biology in Asia. *Genetics & Genomics Next*, **2021**, 2, e10038	0.3	2
16	Concentration of Lipase from Aspergillus oryzae Expressing Fusarium heterosporum by Nanofiltration to Enhance Transesterification. *Processes*, **2020**, 8, 450	1.2	2
15	Accelerated glucose metabolism in hyphae-dispersed Aspergillus oryzae is suitable for biological production. *Journal of Bioscience and Bioengineering*, **2021**, 132, 140-147	1	2
14	Evaluation of Brachypodium distachyon L-Tyrosine Decarboxylase Using L-Tyrosine Over-Producing Saccharomyces cerevisiae. *PLoS ONE*, **2015**, 10, e0125488	1.2	1
13	Resveratrol production from several types of saccharide sources by a recombinant strain. *Metabolic Engineering Communications*, **2021**, 13, e00188	2.1	1
12	A Procedure for Precise Determination of Glutathione Produced by. *Bio-protocol*, **2018**, 8, e2887	0.2	1

List of Publications

11	Complete and Draft Genome Sequences of Amino Acid-Producing Corynebacterium glutamicum Strains ATCC 21799 and ATCC 31831 and Their Genomic Islands. *Microbiology Resource Announcements*, **2020**, 9,	0.4	1
10	Manno-Oligosaccharide Production from Biomass Hydrolysis by Using Endo-1,4-Mannanase (ManNj6-379) from Nonomuraea jabiensis ID06-379. *Processes*, **2022**, 10, 269	1.2	0
9	Extractive fermentation of Kytococcus sedentarius TWHKC01 using the aqueous biphasic system for direct recovery of keratinase. *Journal of the Taiwan Institute of Chemical Engineers*, **2022**, 104232	2.3	0
8	Resveratrol production of a recombinant Scheffersomyces stipitis strain from molasses. *Biotechnology Notes*, **2022**, 3, 1-7	1	0
7	Transversion Expansion of Base Editing. *CRISPR Journal*, **2021**, 4, 462-463	1	0
6	Pretreatment of extruded Napier grass byhydrothermal process with dilute sulfuric acid and fermentation using a cellulose-hydrolyzing and xylose-assimilating yeast for ethanol production. *Bioresource Technology*, **2022**, 343, 126071	4.8	0
5	Development of Metabolically Engineered Yeast Strains for Efficient Ethanol Production from Lignocellulose. *Oleoscience*, **2014**, 14, 95-101	0	
4	Case study on the environmental monitoring for biological manufacturing using Time-lapse Shadow Image Analysis. *Biologicals*, **2020**, 66, 1-8	0.7	
3	Production of Fuels and Chemicals from Biomass by Integrated Bioprocesses **2016**, 159-186		
2	Comparative analyses of site-directed mutagenesis of human melatonin MTNR1A and MTNR1B receptors using a yeast fluorescent biosensor. *Biotechnology and Bioengineering*, **2021**, 118, 863-876	1.3	
1	Enhanced production of amino acid 3-amino-4-hydroxybenzoic acid by recombinant Corynebacterium glutamicum under oxygen limitation.. *Microbial Cell Factories*, **2021**, 20, 228	2.1	