Xin-Hui Xing

List of Publications by Citations

163 papers	4,727 citations	41 h-index	62 g-index
178 ext. papers	5,580 ext. citations	5.6 avg, IF	5.53 L-index

#	Paper	IF	Citations
163	Atmospheric and room temperature plasma (ARTP) as a new powerful mutagenesis tool. *Applied Microbiology and Biotechnology*, **2014**, 98, 5387-96	5.7	183
162	States and challenges for high-value biohythane production from waste biomass by dark fermentation technology. *Bioresource Technology*, **2013**, 135, 292-303	11	164
161	Progress and perspectives of sludge ozonation as a powerful pretreatment method for minimization of excess sludge production. *Water Research*, **2009**, 43, 1811-22	12.5	163
160	Methanotrophs: Multifunctional bacteria with promising applications in environmental bioengineering. *Biochemical Engineering Journal*, **2010**, 49, 277-288	4.2	134
159	Enhanced ozonation of simulated dyestuff wastewater by microbubbles. *Chemosphere*, **2007**, 68, 1854-60	8.4	131
158	Enhanced sludge solubilization by microbubble ozonation. *Chemosphere*, **2008**, 72, 205-12	8.4	121
157	Genetic effects of radio-frequency, atmospheric-pressure glow discharges with helium. *Applied Physics Letters*, **2008**, 92, 221504	3.4	95
156	Enhanced treatment of practical textile wastewater by microbubble ozonation. *Chemical Engineering Research and Design*, **2008**, 86, 389-393	5.5	93
155	Pooled CRISPR interference screening enables genome-scale functional genomics study in bacteria with superior performance. *Nature Communications*, **2018**, 9, 2475	17.4	91
154	High-rate conversion of methane to methanol by Methylosinus trichosporium OB3b. *Bioresource Technology*, **2011**, 102, 7349-53	11	89
153	Characteristics of hydrogen and methane production from cornstalks by an augmented two- or three-stage anaerobic fermentation process. *Bioresource Technology*, **2009**, 100, 2889-95	11	83
152	Succession of bacterial community and enzymatic activities of activated sludge by heat-treatment for reduction of excess sludge. *Biochemical Engineering Journal*, **2008**, 39, 598-603	4.2	82
151	Enhanced coagulation of ferric chloride aided by tannic acid for phosphorus removal from wastewater. *Chemosphere*, **2008**, 72, 290-8	8.4	80
150	Effects of packing rates of cubic-shaped polyurethane foam carriers on the microbial community and the removal of organics and nitrogen in moving bed biofilm reactors. *Bioresource Technology*, **2012**, 117, 201-7	11	79
149	Rapid mutation of Spirulina platensis by a new mutagenesis system of atmospheric and room temperature plasmas (ARTP) and generation of a mutant library with diverse phenotypes. *PLoS ONE*, **2013**, 8, e77046	3.7	74
148	Analysis of the mechanism of sludge ozonation by a combination of biological and chemical approaches. *Water Research*, **2009**, 43, 195-203	12.5	74
147	Effects of furan derivatives on biohydrogen fermentation from wet steam-exploded cornstalk and its microbial community. *Bioresource Technology*, **2015**, 175, 152-9	11	73

146	Characteristics of hydrogen production of an Enterobacter aerogenes mutant generated by a new atmospheric and room temperature plasma (ARTP). *Biochemical Engineering Journal*, **2011**, 55, 17-22	4.2	71
145	Towards biohythane production from biomass: Influence of operational stage on anaerobic fermentation and microbial community. *International Journal of Hydrogen Energy*, **2016**, 41, 4429-4438	6.7	69
144	Enhanced hydrogen production in a UASB reactor by retaining microbial consortium onto carbon nanotubes (CNTs). *International Journal of Hydrogen Energy*, **2012**, 37, 10619-10626	6.7	69
143	Bioengineering of the Enterobacter aerogenes strain for biohydrogen production. *Bioresource Technology*, **2011**, 102, 8344-9	11	65
142	Quantitative evaluation of DNA damage and mutation rate by atmospheric and room-temperature plasma (ARTP) and conventional mutagenesis. *Applied Microbiology and Biotechnology*, **2015**, 99, 5639-46	5.7	63
141	Cloning and knockout of formate hydrogen lyase and H2-uptake hydrogenase genes in Enterobacter aerogenes for enhanced hydrogen production. *International Journal of Hydrogen Energy*, **2009**, 34, 186-194	6.7	62
140	Microbial electrolysis cell to treat hydrothermal liquefied wastewater from cornstalk and recover hydrogen: Degradation of organic compounds and characterization of microbial community. *International Journal of Hydrogen Energy*, **2016**, 41, 4132-4142	6.7	61
139	Regulation of hydrogen production by Enterobacter aerogenes by external NADH and NAD+. *International Journal of Hydrogen Energy*, **2009**, 34, 1226-1232	6.7	60
138	Production of violet pigment by a newly isolated psychrotrophic bacterium from a glacier in Xinjiang, China. *Biochemical Engineering Journal*, **2009**, 43, 135-141	4.2	60
137	Continuous production of biohythane from hydrothermal liquefied cornstalk biomass via two-stage high-rate anaerobic reactors. *Biotechnology for Biofuels*, **2016**, 9, 254	7.8	59
136	Manipulation of Lipase Activity by the Helium Radio-Frequency, Atmospheric-Pressure Glow Discharge Plasma Jet. *Plasma Processes and Polymers*, **2011**, 8, 224-229	3.4	58
135	Construction of a linker library with widely controllable flexibility for fusion protein design. *Applied Microbiology and Biotechnology*, **2016**, 100, 215-25	5.7	57
134	Paraffin oil as a "methane vector" for rapid and high cell density cultivation of Methylosinus trichosporium OB3b. *Applied Microbiology and Biotechnology*, **2009**, 83, 669-77	5.7	56
133	Systematic analysis of biochemical performance and the microbial community of an activated sludge process using ozone-treated sludge for sludge reduction. *Bioresource Technology*, **2009**, 100, 5002-9	11	52
132	Diversity and activity of methanotrophs in alkaline soil from a Chinese coal mine. *FEMS Microbiology Ecology*, **2009**, 70, 40-51	4.3	51
131	Rapid detection of a gfp-marked Enterobacter aerogenes under anaerobic conditions by aerobic fluorescence recovery. *FEMS Microbiology Letters*, **2005**, 249, 211-8	2.9	51
130	High crude violacein production from glucose by Escherichia coli engineered with interactive control of tryptophan pathway and violacein biosynthetic pathway. *Microbial Cell Factories*, **2015**, 14, 8	6.4	49
129	Intermediate-sensor assisted push-pull strategy and its application in heterologous deoxyviolacein production in Escherichia coli. *Metabolic Engineering*, **2016**, 33, 41-51	9.7	49

128	Optimization of culture conditions for violacein production by a new strain of Duganella sp. B2. *Biochemical Engineering Journal*, **2009**, 44, 119-124	4.2	48
127	Reconstruction of the violacein biosynthetic pathway from Duganella sp. B2 in different heterologous hosts. *Applied Microbiology and Biotechnology*, **2010**, 86, 1077-88	5.7	46
126	Improved sgRNA design in bacteria via genome-wide activity profiling. *Nucleic Acids Research*, **2018**, 46, 7052-7069	20.1	43
125	MiYA, an efficient machine-learning workflow in conjunction with the YeastFab assembly strategy for combinatorial optimization of heterologous metabolic pathways in Saccharomyces cerevisiae. *Metabolic Engineering*, **2018**, 47, 294-302	9.7	42
124	Changes in biomass activity and characteristics of activated sludge exposed to low ozone dose. *Chemosphere*, **2009**, 77, 269-72	8.4	42
123	Production of MBP-HepA fusion protein in recombinant Escherichia coli by optimization of culture medium. *Biochemical Engineering Journal*, **2007**, 34, 114-121	4.2	42
122	Bioprocess engineering for biohythane production from low-grade waste biomass: technical challenges towards scale up. *Current Opinion in Biotechnology*, **2018**, 50, 25-31	11.4	41
121	Kinetic analysis of disruption of excess activated sludge by Dyno Mill and characteristics of protein release for recovery of useful materials. *Biochemical Engineering Journal*, **2001**, 8, 1-7	4.2	37
120	Effect of reaction mode on biohydrogen production and its microbial diversity. *International Journal of Hydrogen Energy*, **2015**, 40, 3191-3200	6.7	36
119	Biosynthesis and characterization of violacein, deoxyviolacein and oxyviolacein in heterologous host, and their antimicrobial activities. *Biochemical Engineering Journal*, **2012**, 67, 148-155	4.2	34
118	Characteristics of low molecular weight heparin production by an ultrafiltration membrane bioreactor using maltose binding protein fused heparinase I. *Biochemical Engineering Journal*, **2009**, 46, 193-198	4.2	34
117	Effect of C/N values on microbial simultaneous removal of carbonaceous and nitrogenous substances in wastewater by single continuous-flow fluidized-bed bioreactor containing porous carrier particles. *Biochemical Engineering Journal*, **2000**, 5, 29-37	4.2	34
116	Active inclusion bodies of acid phosphatase PhoC: aggregation induced by GFP fusion and activities modulated by linker flexibility. *Microbial Cell Factories*, **2013**, 12, 25	6.4	33
115	Modification of polyurethane foam carriers and application in a moving bed biofilm reactor. *Process Biochemistry*, **2014**, 49, 1979-1982	4.8	33
114	Non-anticoagulant effects of low molecular weight heparins in inflammatory disorders: A review. *Carbohydrate Polymers*, **2017**, 160, 71-81	10.3	32
113	Perturbation of formate pathway for hydrogen production by expressions of formate hydrogen lyase and its transcriptional activator in wild Enterobacter aerogenes and its mutants. *International Journal of Hydrogen Energy*, **2009**, 34, 5072-5079	6.7	32
112	Biosensor-assisted transcriptional regulator engineering for Methylobacterium extorquens AM1 to improve mevalonate synthesis by increasing the acetyl-CoA supply. *Metabolic Engineering*, **2017**, 39, 159-168	9.7	31
111	Effects of organic chemicals on growth of Methylosinus trichosporium OB3b. *Biochemical Engineering Journal*, **2006**, 31, 113-117	4.2	31

110	Controllable production of low molecular weight heparins by combinations of heparinase I/II/III. *Carbohydrate Polymers*, **2014**, 101, 484-92	10.3	30
109	Fed-batch fermentation of recombinant Citrobacter freundii with expression of a violacein-synthesizing gene cluster for efficient violacein production from glycerol. *Biochemical Engineering Journal*, **2011**, 57, 55-62	4.2	29
108	Prokaryotic communities in multidimensional bottom-pit-mud from old and young pits used for the production of Chinese Strong-Flavor Baijiu. *Food Chemistry*, **2020**, 312, 126084	8.5	29
107	Enhanced biohydrogen production from corn stover by the combination of Clostridium cellulolyticum and hydrogen fermentation bacteria. *Journal of Bioscience and Bioengineering*, **2016**, 122, 482-7	3.3	29
106	Alteration of hydrogen metabolism of ldh-deleted Enterobacter aerogenes by overexpression of NAD+-dependent formate dehydrogenase. *Applied Microbiology and Biotechnology*, **2010**, 86, 255-62	5.7	28
105	Performance study of the reduction of excess sludge and simultaneous removal of organic carbon and nitrogen by a combination of fluidized- and fixed-bed bioreactors with different structured macroporous carriers. *Biochemical Engineering Journal*, **2008**, 39, 344-352	4.2	28
104	Xanthine dehydrogenase: An old enzyme with new knowledge and prospects. *Bioengineered*, **2016**, 7, 395-405	5.7	26
103	Functional expression of the particulate methane mono-oxygenase gene in recombinant Rhodococcus erythropolis. *FEMS Microbiology Letters*, **2006**, 263, 136-41	2.9	26
102	Maltose Utilization as a Novel Selection Strategy for Continuous Evolution of Microbes with Enhanced Metabolite Production. *ACS Synthetic Biology*, **2017**, 6, 2326-2338	5.7	25
101	Magnetic nanoparticles for the affinity adsorption of maltose binding protein (MBP) fusion enzymes. *Journal of Materials Chemistry*, **2012**, 22, 6813		25
100	Pathway redesign for deoxyviolacein biosynthesis in Citrobacter freundii and characterization of this pigment. *Applied Microbiology and Biotechnology*, **2012**, 94, 1521-32	5.7	25
99	Temperature influence on fluorescence intensity and enzyme activity of the fusion protein of GFP and hyperthermophilic xylanase. *Applied Microbiology and Biotechnology*, **2009**, 84, 511-7	5.7	25
98	Structural characterization and in vitro antioxidant activities of chondroitin sulfate purified from Andrias davidianus cartilage. *Carbohydrate Polymers*, **2018**, 196, 398-404	10.3	25
97	Performance and microbial community of carbon nanotube fixed-bed microbial fuel cell continuously fed with hydrothermal liquefied cornstalk biomass. *Bioresource Technology*, **2015**, 185, 294-301	11	24
96	Effects of operating parameters on hydrogen production from raw wet steam-exploded cornstalk and two-stage fermentation potential for biohythane production. *Biochemical Engineering Journal*, **2014**, 90, 234-238	4.2	24
95	Construction of recombinant Escherichia coli for over-production of soluble heparinase I by fusion to maltose-binding protein. *Biochemical Engineering Journal*, **2005**, 23, 155-159	4.2	24
94	Bioconversion of methanol to value-added mevalonate by engineered Methylobacterium extorquens AM1 containing an optimized mevalonate pathway. *Applied Microbiology and Biotechnology*, **2016**, 100, 2171-82	5.7	23
93	Studies on the Physical Characteristics of the Radio-Frequency Atmospheric-Pressure Glow Discharge Plasmas for the Genome Mutation of Methylosinus trichosporium. *IEEE Transactions on Plasma Science*, **2012**, 40, 2853-2860	1.3	22

92	A study on the effects of linker flexibility on acid phosphatase PhoC-GFP fusion protein using a novel linker library. *Enzyme and Microbial Technology*, **2016**, 83, 1-6	3.8	21
91	Simple and sensitive bacterial quantification by a flow-based kinetic exclusion fluorescence immunoassay. *Biosensors and Bioelectronics*, **2007**, 22, 2500-7	11.8	21
90	Mechanistic study of on-site sludge reduction in a baffled bioreactor consisting of three series of alternating aerobic and anaerobic compartments. *Biochemical Engineering Journal*, **2012**, 67, 45-51	4.2	20
89	Simultaneous Removal of Carbonaceous and Nitrogenous Substances in Wastewater by a Continuous-Flow Fluidized-Bed Bioreactor.. *Journal of Chemical Engineering of Japan*, **1995**, 28, 525-530	0.8	20
88	Gel microdroplet-based high-throughput screening for directed evolution of xylanase-producing Pichia pastoris. *Journal of Bioscience and Bioengineering*, **2019**, 128, 662-668	3.3	19
87	Combination of site-directed mutagenesis and calcium ion addition for enhanced production of thermostable MBP-fused heparinase I in recombinant Escherichia coli. *Applied Microbiology and Biotechnology*, **2013**, 97, 2907-16	5.7	19
86	Quantification of a specific bacterial strain in an anaerobic mixed culture for biohydrogen production by the aerobic fluorescence recovery (AFR) technique. *Biochemical Engineering Journal*, **2008**, 39, 581-585	4.2	19
85	Microbial microdroplet culture system (MMC): An integrated platform for automated, high-throughput microbial cultivation and adaptive evolution. *Biotechnology and Bioengineering*, **2020**, 117, 1724-1737	4.9	18
84	Improved production of trans-4-hydroxy-l-proline by chromosomal integration of the Vitreoscilla hemoglobin gene into recombinant Escherichia coli with expression of proline-4-hydroxylase. *Journal of Bioscience and Bioengineering*, **2017**, 123, 109-115	3.3	18
83	Correcting for the inner filter effect in measurements of fluorescent proteins in high-cell-density cultures. *Analytical Biochemistry*, **2009**, 390, 197-202	3.1	18
82	Direct affinity immobilization of recombinant heparinase I fused to maltose binding protein on maltose-coated magnetic nanoparticles. *Biochemical Engineering Journal*, **2014**, 90, 170-177	4.2	17
81	Biochemical analysis and kinetic modeling of the thermal inactivation of MBP-fused heparinase I: implications for a comprehensive thermostabilization strategy. *Biotechnology and Bioengineering*, **2011**, 108, 1841-51	4.9	17
80	Expression of NAD+-dependent formate dehydrogenase in Enterobacter aerogenes and its involvement in anaerobic metabolism and H2 production. *Biotechnology Letters*, **2009**, 31, 1525-30	3	17
79	A model analysis of microbial retainment process in porous support particles in a fluidized-bed wastewater treatment reactor.. *Journal of Chemical Engineering of Japan*, **1992**, 25, 89-95	0.8	17
78	Aptamer assisted CRISPR-Cas12a strategy for small molecule diagnostics. *Biosensors and Bioelectronics*, **2021**, 183, 113196	11.8	17
77	In vivo continuous evolution of metabolic pathways for chemical production. *Microbial Cell Factories*, **2019**, 18, 82	6.4	16
76	Disruption of lactate dehydrogenase and alcohol dehydrogenase for increased hydrogen production and its effect on metabolic flux in Enterobacter aerogenes. *Bioresource Technology*, **2015**, 194, 99-107	11	16
75	Purification of total DNA extracted from activated sludge. *Journal of Environmental Sciences*, **2008**, 20, 80-7	6.4	16

74	Enhanced Production of Crude Violacein from Glucose in Escherichia coli by Overexpression of Rate-Limiting Key Enzyme(S) Involved in Violacein Biosynthesis. *Applied Biochemistry and Biotechnology*, **2018**, 186, 909-916	3.2	15
73	Insights into the global regulation of anaerobic metabolism for improved biohydrogen production. *Bioresource Technology*, **2016**, 200, 35-41	11	14
72	Improved hydrogen production under microaerophilic conditions by overexpression of polyphosphate kinase in Enterobacter aerogenes. *Enzyme and Microbial Technology*, **2011**, 48, 187-92	3.8	14
71	Massilia violaceinigra sp. nov., a novel purple-pigmented bacterium isolated from glacier permafrost. *International Journal of Systematic and Evolutionary Microbiology*, **2018**, 68, 2271-2278	2.2	14
70	Establishment of CRISPR interference in Methylorubrum extorquens and application of rapidly mining a new phytoene desaturase involved in carotenoid biosynthesis. *Applied Microbiology and Biotechnology*, **2020**, 104, 4515-4532	5.7	12
69	Breeding of Methanol-Tolerant Methylobacterium extorquens AM1 by Atmospheric and Room Temperature Plasma Mutagenesis Combined With Adaptive Laboratory Evolution. *Biotechnology Journal*, **2018**, 13, e1700679	5.6	12
68	Culture characteristics of the atmospheric and room temperature plasma-mutated Spirulina platensis mutants in CO2 aeration culture system for biomass production. *Journal of Bioscience and Bioengineering*, **2015**, 120, 438-43	3.3	11
67	Characteristics of scale-up fermentation of mixed methane-oxidizing bacteria. *Biochemical Engineering Journal*, **2016**, 109, 112-117	4.2	11
66	Targeted mutagenesis: A sniper-like diversity generator in microbial engineering. *Synthetic and Systems Biotechnology*, **2017**, 2, 75-86	4.2	11
65	Impairment of NADH dehydrogenase for increased hydrogen production and its effect on metabolic flux redistribution in wild strain and mutants of Enterobacter aerogenes. *International Journal of Hydrogen Energy*, **2012**, 37, 15875-15885	6.7	11
64	Production of heparin oligosaccharides by fusion protein of MBP–heparinase I and the enzyme thermostability. *Journal of Molecular Catalysis B: Enzymatic*, **2006**, 43, 90-95		11
63	Dynamics of transcription-translation coordination tune bacterial indole signaling. *Nature Chemical Biology*, **2020**, 16, 440-449	11.7	11
62	Characterization of a novel Acinetobacter baumannii xanthine dehydrogenase expressed in Escherichia coli. *Biotechnology Letters*, **2016**, 38, 337-44	3	10
61	Biological wastewater treatment by a bioreactor with repeated coupling of aerobes and anaerobes aiming at on-site reduction of excess sludge. *Water Science and Technology*, **2006**, 53, 71-7	2.2	10
60	Nutritional and medicinal characteristics of Chinese giant salamander (Andrias davidianus) for applications in healthcare industry by artificial cultivation: A review. *Food Science and Human Wellness*, **2018**, 7, 1-10	8.3	9
59	A rapid and specific colorimetric method for free tryptophan quantification. *Talanta*, **2018**, 176, 604-609	6.2	9
58	Medium redesign for stable cultivation and high production of mevalonate by recombinant Methtylobacterium extorquens AM1 with mevalonate synthetic pathway. *Biochemical Engineering Journal*, **2017**, 119, 67-73	4.2	8
57	Alteration of anaerobic metabolism in Escherichia coli for enhanced hydrogen production by heterologous expression of hydrogenase genes originating from Synechocystis sp. *Biochemical Engineering Journal*, **2012**, 60, 81-86	4.2	8

56	Effects of Enzymatically Depolymerized Low Molecular Weight Heparins on CCl-Induced Liver Fibrosis. *Frontiers in Pharmacology*, **2017**, 8, 514	5.6	8
55	Improvement of hydrogen productivity by introduction of NADH regeneration pathway in Clostridium paraputrificum. *Applied Biochemistry and Biotechnology*, **2012**, 167, 732-42	3.2	8
54	Principle and practice of a novel biological wastewater treatment technology capable of on-site reduction of excess sludge. *Journal of Biotechnology*, **2008**, 136, S647	3.7	8
53	Production of multienzymes consisting of alkaline amylase and cellulase by mixed alkalophilic culture and their potential use in the saccharification of sweet potato. *Biochemical Engineering Journal*, **2004**, 19, 181-187	4.2	8
52	Increased stability and intracellular antioxidant activity of chlorogenic acid depend on its molecular interaction with wheat gluten hydrolysate. *Food Chemistry*, **2020**, 325, 126873	8.5	8
51	Rational design of a tripartite fusion protein of heparinase I enables one-step affinity purification and real-time activity detection. *Journal of Biotechnology*, **2013**, 163, 30-7	3.7	7
50	Comprehensive phylogenetic diversity of [FeFe]-hydrogenase genes in termite gut microbiota. *Microbes and Environments*, **2013**, 28, 491-4	2.6	7
49	Effects of Ionic Surfactants on Bacterial Luciferase and □Amylase. *Chinese Journal of Chemical Engineering*, **2009**, 17, 829-834	3.2	7
48	Discovery of enzymatically depolymerized heparins capable of treating Bleomycin-induced pulmonary injury and fibrosis in mice. *Carbohydrate Polymers*, **2017**, 174, 82-88	10.3	6
47	DomSign: a top-down annotation pipeline to enlarge enzyme space in the protein universe. *BMC Bioinformatics*, **2015**, 16, 96	3.6	6
46	Empowering a Methanol-Dependent via Adaptive Evolution Using a High-Throughput Microbial Microdroplet Culture System. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 570	5.8	6
45	Radio-Frequency, Atmospheric-Pressure Glow Discharges: Producing Methods, Characteristics and Applications in Bio-Medical Fields. *AIP Conference Proceedings*, **2008**,	0	6
44	Identification and characterization of alcohol-soluble components from wheat germ-apple fermented by Lactobacillus sp. capable of preventing ulcerative colitis of dextran sodium sulfate-induced mice. *Journal of Functional Foods*, **2020**, 64, 103642	5.1	6
43	Enrichment and characteristics of mixed methane-oxidizing bacteria from a Chinese coal mine. *Applied Microbiology and Biotechnology*, **2016**, 100, 10331-10341	5.7	6
42	Genome-wide screening identifies promiscuous phosphatases impairing terpenoid biosynthesis in Escherichia coli. *Applied Microbiology and Biotechnology*, **2018**, 102, 9771-9780	5.7	6
41	Effects of bioactive components of Pu-erh tea on gut microbiomes and health: A review. *Food Chemistry*, **2021**, 353, 129439	8.5	6
40	Design of Fusion Proteins for Efficient and Soluble Production of Immunogenic Ebola Virus Glycoprotein in Escherichia coli. *Biotechnology Journal*, **2018**, 13, e1700627	5.6	5
39	Alteration of energy metabolism in Enterobacter aerogenes by external addition of pyrophosphates and overexpression of polyphosphate kinase for enhanced hydrogen production. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 996-1003	3.5	5

38	Preparation and characteristics of resting cells of bioluminescent Pseudomonas putida BLU. *Biochemical Engineering Journal*, **2002**, 12, 29-36	4.2	5
37	A pilot study of biohythane production from cornstalk via two-stage anaerobic fermentation. *International Journal of Hydrogen Energy*, **2020**, 45, 31719-31731	6.7	5
36	Metabolic engineering of Escherichia coli cell factory for highly active xanthine dehydrogenase production. *Bioresource Technology*, **2017**, 245, 1782-1789	11	4
35	Characteristics of a newly created bioluminescent Pseudomonas putida harboring TOL plasmid for use in analysis of a bioaugmentation system. *Biotechnology Letters*, **2000**, 22, 671-676	3	4
34	Characteristics of separation of carnitine and metal ions in cheese whey model solution by loose reverse osmosis membrane.. *Journal of Chemical Engineering of Japan*, **1996**, 29, 289-293	0.8	4
33	A heparin derivatives library constructed by chemical modification and enzymatic depolymerization for exploitation of non-anticoagulant functions. *Carbohydrate Polymers*, **2020**, 249, 116824	10.3	4
32	Insights into the molecular-level effects of atmospheric and room-temperature plasma on mononucleotides and single-stranded homo- and hetero-oligonucleotides. *Scientific Reports*, **2020**, 10, 14298	4.9	4
31	Cre/loxP-Mediated Multicopy Integration of the Mevalonate Operon into the Genome of Methylobacterium extorquens AM1. *Applied Biochemistry and Biotechnology*, **2018**, 185, 565-577	3.2	4
30	Application of combined physicochemical and biological processes for enhanced treatment of avermectin fermentation wastewater. *Water Science and Technology*, **2009**, 59, 771-7	2.2	3
29	Fluorescent Proteins as a Visible Molecular Signal for Rapid Quantification of Bioprocesses: Potential and Challenges. *Chinese Journal of Chemical Engineering*, **2010**, 18, 863-869	3.2	3
28	Selection criteria of oxygen carriers utilizable for autotrophic growth improvement of Alcaligenes eutrophus under lowered oxygen partial pressure.. *Journal of Chemical Engineering of Japan*, **1995**, 28, 218-220	0.8	3
27	Metabolomic analysis improves bioconversion of methanol to isobutanol in Methylorubrum extorquens AM1. *Biotechnology Journal*, **2021**, 16, e2000413	5.6	3
26	Advanced strategies and tools to facilitate and streamline microbial adaptive laboratory evolution. *Trends in Biotechnology*, **2021**,	15.1	3
25	Construction and characterization of novel bifunctional fusion proteins composed of alcohol dehydrogenase and NADH oxidase with efficient oxidized cofactor regeneration. *Biotechnology and Applied Biochemistry*, **2021**,	2.8	3
24	Effect of Ion Adsorption of Its Permeation through a Nanofiltration Membrane.. *Journal of Chemical Engineering of Japan*, **1997**, 30, 806-812	0.8	2
23	Enhanced degradation of 2,4-dichlorophenoxyacetic acid by activated sludge in a sequentially arrayed bioreactor.. *Journal of Chemical Engineering of Japan*, **1997**, 30, 346-349	0.8	2
22	Rewiring the native methanol assimilation metabolism by incorporating the heterologous ribulose monophosphate cycle into Methylorubrum extorquens. *Metabolic Engineering*, **2021**, 64, 95-110	9.7	2
21	Guide-target mismatch effects on dCas9-sgRNA binding activity in living bacterial cells. *Nucleic Acids Research*, **2021**, 49, 1263-1277	20.1	2

20	Product Inhibition of Desulfurization From Pyrite by Thiobacillus ferrooxidans in Packed-Bed Medium-Recirculating Bioreactor.. *Kagaku Kogaku Ronbunshu*, **1997**, 23, 597-600	0.4	1
19	Kinetic Analysis of Desulfurization from Pyrite by Thiobacillus ferrooxidans in Packed-Bed Medium-Recirculating Bioreactor.. *Kagaku Kogaku Ronbunshu*, **1998**, 24, 75-80	0.4	1
18	Separation of nonprotein nitrogens and metal ions in cheese whey by loose reverse osmosis membrane.. *Journal of Chemical Engineering of Japan*, **1996**, 29, 722-724	0.8	1
17	A versatile toolbox for CRISPR-based genome engineering in Pichia pastoris. *Applied Microbiology and Biotechnology*, **2021**, 105, 9211-9218	5.7	1
16	Recent advances of integrated microfluidic suspension cell culture system. *Engineering Biology*,	1.1	1
15	High-Throughput Chiral Molecule Determination Based on Multi-Channel Weak Measurement. *IEEE Photonics Journal*, **2021**, 13, 1-12	1.8	1
14	Establishment of chondroitin B lyase-based analytical methods for sensitive and quantitative detection of dermatan sulfate in heparin. *Carbohydrate Polymers*, **2016**, 144, 338-45	10.3	1
13	Quantitative evaluation of DNA damage caused by atmospheric and room-temperature plasma (ARTP) and other mutagenesis methods using a rapid umu-microplate test protocol for microbial mutation breeding. *Chinese Journal of Chemical Engineering*, **2021**, 39, 205-205	3.2	1
12	Genome-wide genotype-phenotype associations in microbes. *Journal of Bioscience and Bioengineering*, **2021**, 132, 1-8	3.3	1
11	Highly Efficient Capture of Marine Microbial Strains in Seawater Using Bare FeO Magnetic Beads. *Current Microbiology*, **2020**, 77, 1210-1216	2.4	0
10	Specific detection of glucose by an optical weak measurement sensor. *Biomedical Optics Express*, **2021**, 12, 5128-5138	3.5	0
9	Strategic Preparations of DPP-IV Inhibitory Peptides from Val-Pro-Xaa and Ile-Pro-Xaa Peptide Mixtures. *International Journal of Peptide Research and Therapeutics*, **2021**, 27, 735-743	2.1	0
8	Production of high value-added chemicals by engineering methylotrophic cell factories **2021**, 265-276		0
7	Design and construction of chimeric linker library with controllable flexibilities for precision protein engineering. *Methods in Enzymology*, **2021**, 647, 23-49	1.7	0
6	Mixed Methanotrophic Consortium for Applications in Environmental Bioengineering and Biocatalysis **2018**, 237-251		0
5	Binding ability of methylene blue with heparin dependent on its sulfate level rather than its sulfation location or basic saccharide structure. *Glycoconjugate Journal*, **2021**, 38, 551-560	3	0
4	Imaging Sensor for the Detection of the Flow Battery Via Weak Value Amplification. *Analytical Chemistry*, **2021**, 93, 12914-12920	7.8	0
3	Heterologus expression of particulate methane mooxygenase gene in different host bacterial cells for biocatalysis. *Journal of Biotechnology*, **2008**, 136, S303	3.7	

2	New Method for Genome-Scale Functional Genomic Study in Bacteria with Superior Performance: CRISPR Interference Screen. *Methods in Molecular Biology*, **2022**, 2377, 123-141	1.4
1	Optimization of the Weak Measurement System by Determining the Optimal Total Phase Difference. *IEEE Photonics Journal*, **2021**, 13, 1-8	1.8