Zhina Qiao

List of Publications by Year in Descending Order

78 papers	1,001 citations	18 h-index	26 g-index
92 ext. papers	1,304 ext. citations	5.2 avg, IF	4.33 L-index

#	Paper	IF	Citations
78	High-level production of the agmatine in engineered Corynebacterium crenatum with the inhibition-releasing arginine decarboxylase.. *Microbial Cell Factories*, **2022**, 21, 16	6.4	1
77	Efficient D-allulose synthesis under acidic conditions by auto-inducing expression of the tandem D-allulose 3-epimerase genes in Bacillus subtilis.. *Microbial Cell Factories*, **2022**, 21, 63	6.4	1
76	Citrulline deiminase pathway provides ATP and boosts growth of Clostridium carboxidivorans P7. *Biotechnology for Biofuels*, **2021**, 14, 204	7.8	1
75	Semi-quantitative activity assays for high-throughput screening of higher activity gamma glutamyl transferase and enzyme immobilization to efficiently synthesize L-theanine. *Journal of Biotechnology*, **2021**, 330, 9-16	3.7	3
74	Efficient single whole-cell biotransformation for L-2-aminobutyric acid production through engineering of leucine dehydrogenase combined with expression regulation. *Bioresource Technology*, **2021**, 326, 124665	11	3
73	Enhanced production of L-arginine by improving carbamoyl phosphate supply in metabolically engineered Corynebacterium crenatum. *Applied Microbiology and Biotechnology*, **2021**, 105, 3265-3276	5.7	1
72	Rational engineering of the Plasmodium falciparuml-lactate dehydrogenase loop involved in catalytic proton transfer to improve chiral 2-hydroxybutyric acid production. *International Journal of Biological Macromolecules*, **2021**, 179, 71-79	7.9	1
71	Integrated gene engineering synergistically improved substrate-product transport, cofactor generation and gene translation for cadaverine biosynthesis in E. coli. *International Journal of Biological Macromolecules*, **2021**, 169, 8-17	7.9	3
70	Cascade biocatalysis for production of enantiopure (S)-2-hydroxybutyric acid using recombinant Escherichia coli with a tunable multi-enzyme-coordinate expression system. *Systems Microbiology and Biomanufacturing*, **2021**, 1, 234-244		3
69	Redistribution of Intracellular Metabolic Flow in Improves Carbon Atom Economy for High-Yield 2,5-Dimethylpyrazine Production. *Journal of Agricultural and Food Chemistry*, **2021**, 69, 2512-2521	5.7	1
68	Engineering of microbial cells for L-valine production: challenges and opportunities. *Microbial Cell Factories*, **2021**, 20, 172	6.4	2
67	Microbial production of riboflavin: Biotechnological advances and perspectives. *Metabolic Engineering*, **2021**, 68, 46-58	9.7	1
66	Enhancing l-glutamine production in Corynebacterium glutamicum by rational metabolic engineering combined with a two-stage pH control strategy. *Bioresource Technology*, **2021**, 341, 125799	11	4
65	MarR-type transcription factor RosR regulates glutamate metabolism network and promotes accumulation of L-glutamate in Corynebacterium glutamicum G01. *Bioresource Technology*, **2021**, 342, 125945	11	0
64	One-dimensional consolidation of layered soils under ramp load based on continuous drainage boundary. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2021**, 45, 738-752	4	4
63	Biotechnological Innovations and Therapeutic Application of Pediococcus and Lactic Acid Bacteria: The Next-Generation Microorganism.. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 802031	5.8	1
62	Production of d-Tagatose by Whole-Cell Conversion of Recombinant in the Absence of Antibiotics.. *Biology*, **2021**, 10,	4.9	2

61	One-Pot Biocatalytic Preparation of Enantiopure Unusual Amino Acids from Hydroxy Acids via a Hydrogen-Borrowing Dual-Enzyme Cascade. *Catalysts*, **2020**, 10, 1470	4	1
60	Optimization of l-arginine purification from Corynebacterium crenatum fermentation broth. *Journal of Separation Science*, **2020**, 43, 2936-2948	3.4	2
59	Directed Evolution of Ornithine Cyclodeaminase Using an EvolvR-Based Growth-Coupling Strategy for Efficient Biosynthesis of l-Proline. *ACS Synthetic Biology*, **2020**, 9, 1855-1863	5.7	9
58	Development of a Novel Biosensor-Driven Mutation and Selection System via Growth of for the Production of L-Arginine. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 175	5.8	6
57	LysR-Type Transcriptional Regulator MetR Controls Prodigiosin Production, Methionine Biosynthesis, Cell Motility, HO Tolerance, Heat Tolerance, and Exopolysaccharide Synthesis in Serratia marcescens. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	18
56	One-dimensional consolidation of soil under multistage load based on continuous drainage boundary. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2020**, 44, 1170-1183	4	12
55	PII Signal Transduction Protein GlnK Alleviates Feedback Inhibition of -Acetyl-l-Glutamate Kinase by l-Arginine in Corynebacterium glutamicum. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	6
54	Significantly enhancing production of -4-hydroxy-l-proline by integrated system engineering in. *Science Advances*, **2020**, 6, eaba2383	14.3	15
53	Surface charge-based rational design of aspartase modifies the optimal pH for efficient aminobutyric acid production. *International Journal of Biological Macromolecules*, **2020**, 164, 4165-4172	7.9	5
52	Engineered disulfide bonds improve thermostability and activity of L-isoleucine hydroxylase for efficient 4-HIL production in 168. *Engineering in Life Sciences*, **2020**, 20, 7-16	3.4	6
51	Asp305Gly mutation improved the activity and stability of the styrene monooxygenase for efficient epoxide production in Pseudomonas putida KT2440. *Microbial Cell Factories*, **2019**, 18, 12	6.4	10
50	Enhancement of L-arginine production by increasing ammonium uptake in an AmtR-deficient Corynebacterium crenatum mutant. *Journal of Industrial Microbiology and Biotechnology*, **2019**, 46, 1155-1166	4.2	5
49	Designing of a Cofactor Self-Sufficient Whole-Cell Biocatalyst System for Production of 1,2-Amino Alcohols from Epoxides. *ACS Synthetic Biology*, **2019**, 8, 734-743	5.7	21
48	Improving the Production of Salt-Tolerant Glutaminase by Integrating Multiple Copies of into the Protease and Genes of 168. *Molecules*, **2019**, 24,	4.8	5
47	Rational Engineering of Bacillus cereus Leucine Dehydrogenase Towards keto Acid Reduction for Improving Unnatural Amino Acid Production. *Biotechnology Journal*, **2019**, 14, e1800253	5.6	14
46	Synthetic engineering of Corynebacterium crenatum to selectively produce acetoin or 2,3-butanediol by one step bioconversion method. *Microbial Cell Factories*, **2019**, 18, 128	6.4	3
45	A Novel 3-Phytosterone-9Hydroxylase Oxygenation Component and Its Application in Bioconversion of 4-Androstene-3,17-Dione to 9Hydroxy-4-Androstene-3,17-Dione Coupling with A NADH Regeneration Formate Dehydrogenase. *Molecules*, **2019**, 24,	4.8	3
44	Enhanced extracellular gamma glutamyl transpeptidase production by overexpressing of PrsA lipoproteins and improving its mRNA stability in Bacillus subtilis and application in biosynthesis of L-theanine. *Journal of Biotechnology*, **2019**, 302, 85-91	3.7	12

43	Insight into the thermostability of thermophilic L-asparaginase and non-thermophilic L-asparaginase II through bioinformatics and structural analysis. *Applied Microbiology and Biotechnology*, **2019**, 103, 7055-7070	5.7	9
42	Lys-Arg mutation improved the thermostability of Bacillus cereus neutral protease through increased residue interactions. *World Journal of Microbiology and Biotechnology*, **2019**, 35, 173	4.4	5
41	Identification of steroid C27 monooxygenase isoenzymes involved in sterol catabolism and stepwise pathway engineering of Mycobacterium neoaurum for improved androst-1,4-diene-3,17-dione production. *Journal of Industrial Microbiology and Biotechnology*, **2019**, 46, 635-647	4.2	8
40	Intracellular Environment Improvement of for Enhancing Androst-1,4-Diene-3,17-Dione Production by Manipulating NADH and Reactive Oxygen Species Levels. *Molecules*, **2019**, 24,	4.8	6
39	Loss of Serine-Type D-Ala-D-Ala Carboxypeptidase DacA Enhances Prodigiosin Production in. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 367	5.8	9
38	Effect of selected strains on physical and organoleptic properties of breads. *Food Chemistry*, **2019**, 276, 547-553	8.5	6
37	Efficient biosynthesis of L-phenylglycine by an engineered Escherichia coli with a tunable multi-enzyme-coordinate expression system. *Applied Microbiology and Biotechnology*, **2018**, 102, 2129-2141	5.7	17
36	Improved L-ornithine production in Corynebacterium crenatum by introducing an artificial linear transacetylation pathway. *Journal of Industrial Microbiology and Biotechnology*, **2018**, 45, 393-404	4.2	11
35	Improved thermostability and catalytic efficiency of overexpressed catalase from B. pumilus ML 413 (KatX2) by introducing disulfide bond C286-C289. *Enzyme and Microbial Technology*, **2018**, 119, 10-16	3.8	5
34	Relieving Allosteric Inhibition by Designing Active Inclusion Bodies and Coating of the Inclusion Bodies with Fe3O4 Nanomaterials for Sustainable 2-Oxobutyric Acid Production. *ACS Catalysis*, **2018**, 8, 8889-8901	13.1	7
33	Simultaneous cell disruption and semi-quantitative activity assays for high-throughput screening of thermostable L-asparaginases. *Scientific Reports*, **2018**, 8, 7915	4.9	20
32	Effects of Geniposide from Gardenia Fruit Pomace on Skeletal-Muscle Fibrosis. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 5802-5811	5.7	9
31	Effects of functional β-glucan on proliferation, differentiation, metabolism and its anti-fibrosis properties in muscle cells. *International Journal of Biological Macromolecules*, **2018**, 117, 287-293	7.9	8
30	Enhanced intracellular soluble production of 3-ketosteroid-Δ1-dehydrogenase from Mycobacterium neoaurum in Escherichia coli and its application in the androst-1,4-diene-3,17-dione production. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 350-357	3.5	8
29	Improvement of the ammonia assimilation for enhancing L-arginine production of Corynebacterium crenatum. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 443-451	4.2	14
28	Optimized whole cell biocatalyst from acetoin to 2,3-butanediol through coexpression of acetoin reductase with NADH regeneration systems in engineered Bacillus subtilis. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 2477-2487	3.5	11
27	Metabolic engineering strategies for acetoin and 2,3-butanediol production: advances and prospects. *Critical Reviews in Biotechnology*, **2017**, 37, 990-1005	9.4	51
26	Reengineering of the feedback-inhibition enzyme N-acetyl-L-glutamate kinase to enhance L-arginine production in Corynebacterium crenatum. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 271-283	4.2	11

25	Efficient production of d-amino acid oxidase in Escherichia coli by a trade-off between its expression and biomass using N-terminal modification. *Bioresource Technology*, **2017**, 243, 716-723	11	3
24	Elimination of a Free Cysteine by Creation of a Disulfide Bond Increases the Activity and Stability of Candida boidinii Formate Dehydrogenase. *Applied and Environmental Microbiology*, **2017**, 83,	4.8	27
23	Amino acid residues adjacent to the catalytic cavity of tetramer L-asparaginase II contribute significantly to its catalytic efficiency and thermostability. *Enzyme and Microbial Technology*, **2016**, 82, 15-22	3.8	22
22	Efficient 9α-hydroxy-4-androstene-3,17-dione production by engineered Bacillus subtilis co-expressing Mycobacterium neoaurum 3-ketosteroid 9α-hydroxylase and B. subtilis glucose 1-dehydrogenase with NADH regeneration. *SpringerPlus*, **2016**, 5, 1207		5
21	Systems pathway engineering of Corynebacterium crenatum for improved L-arginine production. *Scientific Reports*, **2016**, 6, 28629	4.9	40
20	Controlling the transcription levels of argGH redistributed L-arginine metabolic flux in N-acetylglutamate kinase and ArgR-deregulated Corynebacterium crenatum. *Journal of Industrial Microbiology and Biotechnology*, **2016**, 43, 55-66	4.2	9
19	A mutant form of 3-ketosteroid-Δ(1)-dehydrogenase gives altered androst-1,4-diene-3, 17-dione/androst-4-ene-3,17-dione molar ratios in steroid biotransformations by Mycobacterium neoaurum ST-095. *Journal of Industrial Microbiology and Biotechnology*, **2016**, 43, 691-701	4.2	20
18	Effect of Polyhydroxybutyrate (PHB) storage on L-arginine production in recombinant Corynebacterium crenatum using coenzyme regulation. *Microbial Cell Factories*, **2016**, 15, 15	6.4	23
17	Efficient testosterone production by engineered Pichia pastoris co-expressing human 17β-hydroxysteroid dehydrogenase type 3 and Saccharomyces cerevisiae glucose 6-phosphate dehydrogenase with NADPH regeneration. *Green Chemistry*, **2016**, 18, 1774-1784	10	40
16	Improvement of the intracellular environment for enhancing l-arginine production of Corynebacterium glutamicum by inactivation of HO-forming flavin reductases and optimization of ATP supply. *Metabolic Engineering*, **2016**, 38, 310-321	9.7	35
15	Cloning and identification of a novel tyrosinase and its overexpression in Streptomyces kathirae SC-1 for enhancing melanin production. *FEMS Microbiology Letters*, **2015**, 362, fnv041	2.9	14
14	Metabolic engineering of Bacillus subtilis for redistributing the carbon flux to 2,3-butanediol by manipulating NADH levels. *Biotechnology for Biofuels*, **2015**, 8, 129	7.8	24
13	Construction of a highly efficient Bacillus subtilis 168 whole-cell biocatalyst and its application in the production of L-ornithine. *Journal of Industrial Microbiology and Biotechnology*, **2015**, 42, 1427-37	4.2	14
12	Enhanced 2,3-butanediol production from biodiesel-derived glycerol by engineering of cofactor regeneration and manipulating carbon flux in Bacillus amyloliquefaciens. *Microbial Cell Factories*, **2015**, 14, 122	6.4	39
11	Enhancement of the thermostability of Streptomyces kathirae SC-1 tyrosinase by rational design and empirical mutation. *Enzyme and Microbial Technology*, **2015**, 77, 54-60	3.8	16
10	Bioconversion of cholesterol to 4-cholesten-3-one by recombinant Bacillus subtilis expressing choM gene encoding cholesterol oxidase from Mycobacterium neoaurum JC-12. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 1811-1820	3.5	13
9	Enhanced Production of Androst-1,4-Diene-3,17-Dione by Mycobacterium neoaurum JC-12 Using Three-Stage Fermentation Strategy. *PLoS ONE*, **2015**, 10, e0137658	3.7	26
8	Efficient one-step preparation of γ-aminobutyric acid from glucose without an exogenous cofactor by the designed Corynebacterium glutamicum. *Green Chemistry*, **2014**, 16, 4190-4197	10	22

7	The rebalanced pathway significantly enhances acetoin production by disruption of acetoin reductase gene and moderate-expression of a new water-forming NADH oxidase in Bacillus subtilis. *Metabolic Engineering*, **2014**, 23, 34-41	9.7	81
6	The role of ARGR repressor regulation on L-arginine production in Corynebacterium crenatum. *Applied Biochemistry and Biotechnology*, **2013**, 170, 587-97	3.2	14
5	The effect of a LYSE exporter overexpression on L-arginine production in Corynebacterium crenatum. *Current Microbiology*, **2013**, 67, 271-8	2.4	12
4	Site-directed mutagenesis studies on the L-arginine-binding sites of feedback inhibition in N-acetyl-L-glutamate kinase (NAGK) from Corynebacterium glutamicum. *Current Microbiology*, **2012** , 64, 164-72	2.4	15
3	Heterologous and homologous expression of the arginine biosynthetic argC~H cluster from Corynebacterium crenatum for improvement of (L) -arginine production. *Journal of Industrial Microbiology and Biotechnology*, **2012**, 39, 495-502	4.2	27
2	Site-directed mutagenesis and feedback-resistant N-acetyl-L-glutamate kinase (NAGK) increase Corynebacterium crenatum L-arginine production. *Amino Acids*, **2012**, 43, 255-66	3.5	26
1	Enhanced production of L-arginine by expression of Vitreoscilla hemoglobin using a novel expression system in Corynebacterium crenatum. *Applied Biochemistry and Biotechnology*, **2011**, 163, 707-19	3.2	30