

# Dawei Zhang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/265695/publications.pdf>

Version: 2024-02-01

77  
papers

2,347  
citations

218677

26  
h-index

243625

44  
g-index

84  
all docs

84  
docs citations

84  
times ranked

2315  
citing authors

#	ARTICLE	IF	CITATIONS
1	Melatonin biosynthesis pathways in nature and its production in engineered microorganisms. <i>Synthetic and Systems Biotechnology</i> , 2022, 7, 544-553.	3.7	21
2	An operator-based expression toolkit for <i>Bacillus subtilis</i> enables fine-tuning of gene expression and biosynthetic pathway regulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2119980119.	7.1	29
3	Assessment of Spoilage Microbiota of Rainbow Trout ( <i>Oncorhynchus mykiss</i> ) during Storage by 16S rDNA Sequencing. <i>Journal of Food Quality</i> , 2022, 2022, 1-10.	2.6	6
4	Application of Biotechnology in Specific Spoilage Organisms of Aquatic Products. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 895283.	4.1	9
5	Identification of a xylose-inducible promoter and its application for improving vitamin B <sub>12</sub> production in <i>Sinorhizobium meliloti</i> . <i>Biotechnology and Applied Biochemistry</i> , 2021, 68, 856-864.	3.1	1
6	Genetic Incorporation of Selenotyrosine Significantly Improves Enzymatic Activity of <i>Agrobacterium radiobacter</i> Phosphotriesterase. <i>ChemBioChem</i> , 2021, 22, 2535-2539.	2.6	5
7	Signal Recognition Particle Suppressor Screening Reveals the Regulation of Membrane Protein Targeting by the Translation Rate. <i>MBio</i> , 2021, 12, .	4.1	5
8	Analyzing the genetic characteristics of a tryptophan-overproducing <i>Escherichia coli</i> . <i>Bioprocess and Biosystems Engineering</i> , 2021, 44, 1685-1697.	3.4	6
9	New aspects of microbial vitamin K <sub>2</sub> production by expanding the product spectrum. <i>Microbial Cell Factories</i> , 2021, 20, 84.	4.0	21
10	Metabolic profiling analysis of the vitamin B <sub>12</sub> producer <i>Propionibacterium freudenreichii</i> . <i>MicrobiologyOpen</i> , 2021, 10, e1199.	3.0	6
11	Microbial Cell Factories for Green Production of Vitamins. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 661562.	4.1	24
12	Establishment of a Biosensor-based High-Throughput Screening Platform for Tryptophan Overproduction. <i>ACS Synthetic Biology</i> , 2021, 10, 1373-1383.	3.8	23
13	Compensating Complete Loss of Signal Recognition Particle During Co-translational Protein Targeting by the Translation Speed and Accuracy. <i>Frontiers in Microbiology</i> , 2021, 12, 690286.	3.5	3
14	Improving the Production of Riboflavin by Introducing a Mutant Ribulose 5-Phosphate 3-Epimerase Gene in <i>Bacillus subtilis</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 704650.	4.1	7
15	Biosynthesis and applications of curdlan. <i>Carbohydrate Polymers</i> , 2021, 273, 118597.	10.2	22
16	Somatic Embryogenesis and Indirect In Vitro Plant Regeneration in <i>Amorphophallus konjac</i> K. Koch by One-Step Seedling Formation. <i>Horticulturae</i> , 2021, 7, 497.	2.8	1
17	CRISPR/Cas Technologies and Their Applications in <i>Escherichia coli</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 762676.	4.1	9
18	Enhanced production of D-psicose 3-epimerase in <i>Bacillus subtilis</i> by regulation of segmented fermentation. <i>Biotechnology and Applied Biochemistry</i> , 2020, 67, 812-818.	3.1	7

#	ARTICLE	IF	CITATIONS
19	Hyper-secretion mechanism exploration of a heterologous creatinase in <i>Bacillus subtilis</i> . <i>Biochemical Engineering Journal</i> , 2020, 153, 107419.	3.6	4
20	Principle and potential applications of the non-classical protein secretory pathway in bacteria. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 953-965.	3.6	29
21	Zebrafish <i>hif-3</i> modulates erythropoiesis via regulation of <i>gata-1</i> to facilitate hypoxia tolerance. <i>Development (Cambridge)</i> , 2020, 147, .	2.5	11
22	Zebrafish <i>Nedd8</i> facilitates ovarian development and the maintenance of female secondary sexual characteristics via suppression of androgen receptor activity. <i>Development (Cambridge)</i> , 2020, 147, .	2.5	5
23	Expanding application of CRISPR-Cas9 system in microorganisms. <i>Synthetic and Systems Biotechnology</i> , 2020, 5, 269-276.	3.7	21
24	TET is targeted for proteasomal degradation by the PHD-pVHL pathway to reduce DNA hydroxymethylation. <i>Journal of Biological Chemistry</i> , 2020, 295, 16299-16313.	3.4	11
25	Manipulation of Purine Metabolic Networks for Riboflavin Production in <i>Bacillus subtilis</i> . <i>ACS Omega</i> , 2020, 5, 29140-29146.	3.5	9
26	Advances on systems metabolic engineering of <i>Bacillus subtilis</i> as a chassis cell. <i>Synthetic and Systems Biotechnology</i> , 2020, 5, 245-251.	3.7	29
27	Biosensor-based monitoring of the central metabolic pathway metabolites. <i>Biosensors and Bioelectronics</i> , 2020, 167, 112456.	10.1	9
28	Application of different types of CRISPR/Cas-based systems in bacteria. <i>Microbial Cell Factories</i> , 2020, 19, 172.	4.0	87
29	<i>Bacillus subtilis</i> : a universal cell factory for industry, agriculture, biomaterials and medicine. <i>Microbial Cell Factories</i> , 2020, 19, 173.	4.0	194
30	A multistrategy approach for improving the expression of <i>E. coli</i> phytase in <i>Pichia pastoris</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 1161-1172.	3.0	10
31	Metabolic engineering and optimization of the fermentation medium for vitamin B12 production in <i>Escherichia coli</i> . <i>Bioprocess and Biosystems Engineering</i> , 2020, 43, 1735-1745.	3.4	10
32	Optimization of hydrogenobyrinic acid biosynthesis in <i>Escherichia coli</i> using multi-level metabolic engineering strategies. <i>Microbial Cell Factories</i> , 2020, 19, 118.	4.0	7
33	High-Efficiency Secretion and Directed Evolution of Chitinase <i>BcChiA1</i> in <i>Bacillus subtilis</i> for the Conversion of Chitinous Wastes Into Chitooligosaccharides. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 432.	4.1	10
34	Engineering <i>Escherichia coli</i> to improve tryptophan production via genetic manipulation of precursor and cofactor pathways. <i>Synthetic and Systems Biotechnology</i> , 2020, 5, 200-205.	3.7	17
35	Metabolic engineering of <i>Escherichia coli</i> for production of chemicals derived from the shikimate pathway. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 525-535.	3.0	19
36	Zebrafish <i>NF-<math>\kappa</math>B/p65</i> Is Required for Antiviral Responses. <i>Journal of Immunology</i> , 2020, 204, 3019-3029.	0.8	17

#	ARTICLE	IF	CITATIONS
37	The Versatile Type V CRISPR Effectors and Their Application Prospects. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 622103.	3.7	16
38	Two classes of cytochrome P450 reductase genes and their divergent functions in <i>Camptotheca acuminata</i> Decne. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 1098-1108.	7.5	16
39	Zebrafish prmt5 arginine methyltransferase is essential for germ cell development. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	24
40	Strategies for Applying Nonhomologous End Joining-Mediated Genome Editing in Prokaryotes. <i>ACS Synthetic Biology</i> , 2019, 8, 2194-2202.	3.8	8
41	High-efficiency expression and secretion of human FGF21 in <i>Bacillus subtilis</i> by intercalation of a mini-cistron cassette and combinatorial optimization of cell regulatory components. <i>Microbial Cell Factories</i> , 2019, 18, 17.	4.0	17
42	Pinpointing the l-phenylalanine binding sites of TyrR using biosensors and computer-aided simulation. <i>Biotechnology Letters</i> , 2019, 41, 401-408.	2.2	0
43	Evolution of <i>E. coli</i> Phytase for Increased Thermostability Guided by Rational Parameters. <i>Journal of Microbiology and Biotechnology</i> , 2019, 29, 419-428.	2.1	7
44	Application of Dynamic Regulation to Increase L-Phenylalanine Production in <i>Escherichia coli</i> . <i>Journal of Microbiology and Biotechnology</i> , 2019, 29, 923-932.	2.1	14
45	Rational design and analysis of an <i>Escherichia coli</i> strain for high-efficiency tryptophan production. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018, 45, 357-367.	3.0	30
46	Property Improvement of $\alpha$ -Amylase from <i>Bacillus stearothermophilus</i> by Deletion of Amino Acid Residues Arginine 179-Glycine 180. <i>Food Technology and Biotechnology</i> , 2018, 56, 58-64.	2.1	16
47	Zebrafish androgen receptor is required for spermatogenesis and maintenance of ovarian function. <i>Oncotarget</i> , 2018, 9, 24320-24334.	1.8	41
48	Systematic Screening of Optimal Signal Peptides for Secretory Production of Heterologous Proteins in <i>Bacillus subtilis</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 13141-13151.	5.2	54
49	Metabolic engineering of <i>Escherichia coli</i> for de novo biosynthesis of vitamin B12. <i>Nature Communications</i> , 2018, 9, 4917.	12.8	99
50	Engineering a vitamin B12 high-throughput screening system by riboswitch sensor in <i>Sinorhizobium meliloti</i> . <i>BMC Biotechnology</i> , 2018, 18, 27.	3.3	31
51	Genetic engineering of <i>Escherichia coli</i> to improve L-phenylalanine production. <i>BMC Biotechnology</i> , 2018, 18, 5.	3.3	49
52	A pathogen-derived effector modulates host glucose metabolism by arginine GlcNAcylation of HIF-1 $\alpha$ protein. <i>PLoS Pathogens</i> , 2018, 14, e1007259.	4.7	29
53	Biosensor-Based Evolution and Elucidation of a Biosynthetic Pathway in <i>Escherichia coli</i> . <i>ACS Synthetic Biology</i> , 2017, 6, 837-848.	3.8	64
54	A food-grade expression system for d-psicose 3-epimerase production in <i>Bacillus subtilis</i> using an alanine racemase-encoding selection marker. <i>Bioresources and Bioprocessing</i> , 2017, 4, 9.	4.2	15

#	ARTICLE	IF	CITATIONS
55	High-Efficiency Secretion of Î²-Mannanase in <i>Bacillus subtilis</i> through Protein Synthesis and Secretion Optimization. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 2540-2548.	5.2	53
56	Microbial production of vitamin B12: a review and future perspectives. <i>Microbial Cell Factories</i> , 2017, 16, 15.	4.0	260
57	A new maltose-inducible high-performance heterologous expression system in <i>Bacillus subtilis</i> . <i>Biotechnology Letters</i> , 2017, 39, 1237-1244.	2.2	16
58	Multimer recognition and secretion by the non-classical secretion pathway in <i>Bacillus subtilis</i> . <i>Scientific Reports</i> , 2017, 7, 44023.	3.3	26
59	Tet1 facilitates hypoxia tolerance by stabilizing the HIF-1 $\alpha$ proteins independent of its methylcytosine dioxygenase activity. <i>Nucleic Acids Research</i> , 2017, 45, 12700-12714.	14.5	32
60	Identification of a new gene <i>yecC</i> involved in threonine export in <i>Escherichia coli</i> . <i>FEMS Microbiology Letters</i> , 2017, 364, .	1.8	5
61	In Vitro Optimization of Enzymes Involved in Precorrin-2 Synthesis Using Response Surface Methodology. <i>PLoS ONE</i> , 2016, 11, e0151149.	2.5	12
62	Promoter Screening from <i>Bacillus subtilis</i> in Various Conditions Hunting for Synthetic Biology and Industrial Applications. <i>PLoS ONE</i> , 2016, 11, e0158447.	2.5	62
63	High-level intra- and extra-cellular production of <i>scpd</i> -psicose 3-epimerase via a modified xylose-inducible expression system in <i>Bacillus subtilis</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2016, 43, 1577-1591.	3.0	33
64	Improving the Production of L-Phenylalanine by Identifying Key Enzymes Through Multi-Enzyme Reaction System in Vitro. <i>Scientific Reports</i> , 2016, 6, 32208.	3.3	41
65	A novel strategy for protein production using non-classical secretion pathway in <i>Bacillus subtilis</i> . <i>Microbial Cell Factories</i> , 2016, 15, 69.	4.0	57
66	A newly isolated and identified vitamin B12 producing strain: <i>Sinorhizobium meliloti</i> 320. <i>Bioprocess and Biosystems Engineering</i> , 2016, 39, 1527-1537.	3.4	17
67	Determination of key enzymes for threonine synthesis through in vitro metabolic pathway analysis. <i>Microbial Cell Factories</i> , 2015, 14, 86.	4.0	30
68	Combinatorial Sec pathway analysis for improved heterologous protein secretion in <i>Bacillus subtilis</i> : identification of bottlenecks by systematic gene overexpression. <i>Microbial Cell Factories</i> , 2015, 14, 92.	4.0	72
69	Developing a high-throughput screening method for threonine overproduction based on an artificial promoter. <i>Microbial Cell Factories</i> , 2015, 14, 121.	4.0	55
70	An Enzymatic Assay for High-Throughput Screening of Cytidine-Producing Microbial Strains. <i>PLoS ONE</i> , 2015, 10, e0121612.	2.5	9
71	Enhanced extracellular production of Î±-amylase in <i>Bacillus subtilis</i> by optimization of regulatory elements and over-expression of PrsA lipoprotein. <i>Biotechnology Letters</i> , 2015, 37, 899-906.	2.2	68
72	Improving Protein Production on the Level of Regulation of both Expression and Secretion Pathways in <i>Bacillus subtilis</i> . <i>Journal of Microbiology and Biotechnology</i> , 2015, 25, 963-977.	2.1	79

#	ARTICLE	IF	CITATIONS
73	A fast and sensitive coupled enzyme assay for the measurement of l-threonine and application to high-throughput screening of threonine-overproducing strains. <i>Enzyme and Microbial Technology</i> , 2014, 67, 1-7.	3.2	11
74	Current development in genetic engineering strategies of <i>Bacillus</i> species. <i>Microbial Cell Factories</i> , 2014, 13, 63.	4.0	103
75	Cloning, Characterization, and Production of a Novel Lysozyme by Different Expression Hosts. <i>Journal of Microbiology and Biotechnology</i> , 2014, 24, 1405-1412.	2.1	18
76	Translation Elongation Regulates Substrate Selection by the Signal Recognition Particle. <i>Journal of Biological Chemistry</i> , 2012, 287, 7652-7660.	3.4	32
77	Novel Proteomic Tools Reveal Essential Roles of SRP and Importance of Proper Membrane Protein Biogenesis. <i>Molecular and Cellular Proteomics</i> , 2012, 11, M111.011585.	3.8	18