Yanfeng Liu

List of Publications by Year
in descending order

107 papers	3,330 citations	159358 30 h-index	174990 52 g-index
110 all docs	110 docs citations	110 times ranked	2544 citing authors

#	Article	IF	Citations
1	Microbial production of hyaluronic acid: current state, challenges, and perspectives. Microbial Cell Factories, 2011, 10, 99.	1.9	288
2	Advances and prospects of Bacillus subtilis cellular factories: From rational design to industrial applications. Metabolic Engineering, 2018, 50, 109-121.	3.6	163
3	Combinatorial pathway enzyme engineering and host engineering overcomes pyruvate overflow and enhances overproduction of N-acetylglucosamine in Bacillus subtilis. Microbial Cell Factories, 2019, 18, 1.	1.9	163
4	Modular pathway engineering of Bacillus subtilis for improved N-acetylglucosamine production. Metabolic Engineering, 2014, 23, 42-52.	3.6	130
5	Developing Bacillus spp. as a cell factory for production of microbial enzymes and industrially important biochemicals in the context of systems and synthetic biology. Applied Microbiology and Biotechnology, 2013, 97, 6113-6127.	1.7	121
6	Design of a programmable biosensor-CRISPRi genetic circuits for dynamic and autonomous dual-control of metabolic flux in Bacillus subtilis. Nucleic Acids Research, 2020, 48, 996-1009.	6.5	111
7	Microbial production of glucosamine and N-acetylglucosamine: advances and perspectives. Applied Microbiology and Biotechnology, 2013, 97, 6149-6158.	1.7	105
8	Pyruvate-responsive genetic circuits for dynamic control of central metabolism. Nature Chemical Biology, 2020, 16, 1261-1268.	3.9	94
9	Microbial Chassis Development for Natural Product Biosynthesis. Trends in Biotechnology, 2020, 38, 779-796.	4.9	84
10	CRISPRi allows optimal temporal control of N-acetylglucosamine bioproduction by a dynamic coordination of glucose and xylose metabolism in Bacillus subtilis. Metabolic Engineering, 2018, 49, 232-241.	3.6	83
11	Synthetic Biology Toolbox and Chassis Development in Bacillus subtilis. Trends in Biotechnology, 2019, 37, 548-562.	4.9	81
12	Spatial modulation of key pathway enzymes by DNA-guided scaffold system and respiration chain engineering for improved N-acetylglucosamine production by Bacillus subtilis. Metabolic Engineering, 2014, 24, 61-69.	3.6	77
13	Pathway engineering of Bacillus subtilis for microbial production of N-acetylglucosamine. Metabolic Engineering, 2013, 19, 107-115.	3.6	76
14	Metabolic engineering of Bacillus subtilis fueled by systems biology: Recent advances and future directions. Biotechnology Advances, 2017, 35, 20-30.	6.0	74
15	Synthetic redesign of central carbon and redox metabolism for high yield production of N-acetylglucosamine in Bacillus subtilis. Metabolic Engineering, 2019, 51, 59-69.	3.6	66
16	CAMERSâ€B: CRISPR/Cpf1 assisted multipleâ€genes editing and regulation system for Bacillus subtilis. Biotechnology and Bioengineering, 2020, 117, 1817-1825.	1.7	58
17	Engineering the Substrate Transport and Cofactor Regeneration Systems for Enhancing 2â€²-Fucosyllactose Synthesis in Bacillus subtilis. ACS Synthetic Biology, 2019, 8, 2418-2427.	1.9	54
18	Engineering a Glucosamine-6-phosphate Responsive glmS Ribozyme Switch Enables Dynamic Control of Metabolic Flux in Bacillus subtilis for Overproduction of N-Acetylglucosamine. ACS Synthetic Biology, 2018, 7, 2423-2435.	1.9	49

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19	Synthetic N-terminal coding sequences for fine-tuning gene expression and metabolic engineering in Bacillus subtilis. Metabolic Engineering, 2019, 55, 131-141.	3.6	48
20	Microbial production of sialic acid and sialylated human milk oligosaccharides: Advances and perspectives. Biotechnology Advances, 2019, 37, 787-800.	6.0	48
21	A dynamic pathway analysis approach reveals a limiting futile cycle in N-acetylglucosamine overproducing Bacillus subtilis. Nature Communications, 2016, 7, 11933.	5.8	45
22	Metabolic engineering of carbon overflow metabolism of Bacillus subtilis for improved N-acetyl-glucosamine production. Bioresource Technology, 2018, 250, 642-649.	4.8	44
23	Synergistic improvement of N-acetylglucosamine production by engineering transcription factors and balancing redox cofactors. Metabolic Engineering, 2021, 67, 330-346.	3.6	43
24	Rewiring the Glucose Transportation and Central Metabolic Pathways for Overproduction of Nâ€Acetylglucosamine in Bacillus subtilis. Biotechnology Journal, 2017, 12, 1700020.	1.8	37
25	Combinatorial synthetic pathway fineâ€tuning and comparative transcriptomics for metabolic engineering of Raoultella ornithinolytica BF60 to efficiently synthesize 2,5â€furandicarboxylic acid. Biotechnology and Bioengineering, 2018, 115, 2148-2155.	1.7	36
26	De novo biosynthesis of rubusoside and rebaudiosides in engineered yeasts. Nature Communications, 2022, 13, .	5.8	36
27	Modular pathway engineering of key carbonâ€precursor supplyâ€pathways for improved Nâ€acetylneuraminic acid production in Bacillus subtilis. Biotechnology and Bioengineering, 2018, 115, 2217-2231.	1.7	35
28	Refactoring transcription factors for metabolic engineering. Biotechnology Advances, 2022, 57, 107935.	6.0	35
29	Facile controlled synthesis of coreâ€“shell/yolkâ€“shell/hollow ZIF-67@Co-LDH/SiO₂via a self-template method. Inorganic Chemistry Frontiers, 2020, 7, 1643-1650.	3.0	34
30	Titrating bacterial growth and chemical biosynthesis for efficient N-acetylglucosamine and N-acetylneuraminic acid bioproduction. Nature Communications, 2020, 11, 5078.	5.8	33
31	A Zinc Coordination Polymer Sensor for Selective and Sensitive Detection of Doxycycline Based on Fluorescence Enhancement. Crystal Growth and Design, 2021, 21, 4971-4978.	1.4	33
32	Combinatorial promoter engineering of glucokinase and phosphoglucoisomerase for improved N-acetylglucosamine production in Bacillus subtilis. Bioresource Technology, 2017, 245, 1093-1102.	4.8	32
33	Synergistic Rewiring of Carbon Metabolism and Redox Metabolism in Cytoplasm and Mitochondria of Aspergillus oryzae for Increased <scp>l</scp>-Malate Production. ACS Synthetic Biology, 2018, 7, 2139-2147.	1.9	32
34	Identification of microorganisms producing lactic acid during solid-state fermentation ofMaotaiflavour liquor. Journal of the Institute of Brewing, 2019, 125, 171-177.	0.8	32
35	Current advances in design and engineering strategies of industrial enzymes. Systems Microbiology and Biomanufacturing, 2021, 1, 15-23.	1.5	32
36	Toward metabolic engineering in the context of system biology and synthetic biology: advances and prospects. Applied Microbiology and Biotechnology, 2015, 99, 1109-1118.	1.7	31

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37	Synthetic biology for future food: Research progress and future directions. Future Foods, 2021, 3, 100025.	2.4	31
38	An optimal glucose feeding strategy integrated with step-wise regulation of the dissolved oxygen level improves N-acetylglucosamine production in recombinant Bacillus subtilis. Bioresource Technology, 2015, 177, 387-392.	4.8	30
39	Creating an in vivo bifunctional gene expression circuit through an aptamer-based regulatory mechanism for dynamic metabolic engineering in Bacillus subtilis. Metabolic Engineering, 2019, 55, 179-190.	3.6	29
40	Cell Membrane and Electron Transfer Engineering for Improved Synthesis of Menaquinone-7 in Bacillus subtilis. IScience, 2020, 23, 100918.	1.9	29
41	Combinatorial metabolic engineering of Escherichia coli for de novo production of 2â€²-fucosyllactose. Bioresource Technology, 2022, 351, 126949.	4.8	27
42	Metabolic engineering of Corynebacterium glutamicum S9114 based on whole-genome sequencing for efficient N-acetylglucosamine synthesis. Synthetic and Systems Biotechnology, 2019, 4, 120-129.	1.8	26
43	Metabolic engineering for the production of fat-soluble vitamins: advances and perspectives. Applied Microbiology and Biotechnology, 2020, 104, 935-951.	1.7	25
44	Metabolic engineering of Escherichia coli for the production of Lacto-N-neotetraose (LNnT). Systems Microbiology and Biomanufacturing, 2021, 1, 291-301.	1.5	24
45	Secretory Expression Fine-Tuning and Directed Evolution of Diacetylchitobiose Deacetylase by Bacillus subtilis. Applied and Environmental Microbiology, 2019, 85, .	1.4	21
46	Synthetic metabolic channel by functional membrane microdomains for compartmentalized flux control. Metabolic Engineering, 2020, 59, 106-118.	3.6	21
47	New synthetic biology tools for metabolic control. Current Opinion in Biotechnology, 2022, 76, 102724.	3.3	21
48	Engineered Bacillus subtilis for the de novo production of 2â€²-fucosyllactose. Microbial Cell Factories, 2022, 21, .	1.9	21
49	Engineering diacetylchitobiose deacetylase from Pyrococcus horikoshii towards an efficient glucosamine production. Bioresource Technology, 2021, 334, 125241.	4.8	20
50	A pathway independent multi-modular ordered control system based on thermosensors and CRISPRi improves bioproduction in Bacillus subtilis. Nucleic Acids Research, 2022, 50, 6587-6600.	6.5	20
51	Lactic acid biosynthesis pathways and important genes of Lactobacillus panis L7 isolated from the Chinese liquor brewing microbiome. Food Bioscience, 2020, 36, 100627.	2.0	18
52	Combining CRISPRâ€“Cpf1 and Recombineering Facilitates Fast and Efficient Genome Editing in Escherichia coli. ACS Synthetic Biology, 2022, 11, 1897-1907.	1.9	17
53	Systems metabolic engineering of Bacillus subtilis for efficient biosynthesis of 5â€²methyltetrahydrofolate. Biotechnology and Bioengineering, 2020, 117, 2116-2130.	1.7	16
54	Production of proteins and commodity chemicals using engineered Bacillus subtilis platform strain. Essays in Biochemistry, 2021, 65, 173-185.	2.1	16

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55	Synthetic repetitive extragenic palindromic (REP) sequence as an efficient mRNA stabilizer for protein production and metabolic engineering in prokaryotic cells. Biotechnology and Bioengineering, 2019, 116, 5-18.	1.7	15
56	Genome sequencing and flavor compound biosynthesis pathway analyses of Bacillus licheniformis isolated from Chinese Maotai-flavor liquor-brewing microbiome. Food Biotechnology, 2020, 34, 193-211.	0.6	14
57	Applications of CRISPR in a Microbial Cell Factory: From Genome Reconstruction to Metabolic Network Reprogramming. ACS Synthetic Biology, 2020, 9, 2228-2238.	1.9	14
58	Multilayer Genetic Circuits for Dynamic Regulation of Metabolic Pathways. ACS Synthetic Biology, 2021, 10, 1587-1597.	1.9	14
59	Synthetic Biology Toolkits and Metabolic Engineering Applied in Corynebacterium glutamicum for Biomanufacturing. ACS Synthetic Biology, 2021, 10, 3237-3250.	1.9	14
60	Engineered yeast for efficient de novo synthesis of 7â€dehydrocholesterol. Biotechnology and Bioengineering, 2022, 119, 1278-1289.	1.7	14
61	Combinatorial engineering for improved menaquinone-4 biosynthesis in Bacillus subtilis. Enzyme and Microbial Technology, 2020, 141, 109652.	1.6	13
62	Developing rapid growing Bacillus subtilis for improved biochemical and recombinant protein production. Metabolic Engineering Communications, 2020, 11, e00141.	1.9	12
63	Biocatalytic Production of Glucosamine from N-Acetylglucosamine by Diacetylchitobiose Deacetylase. Journal of Microbiology and Biotechnology, 2018, 28, 1850-1858.	0.9	12
64	Modular remodeling of sterol metabolism for overproduction of 7-dehydrocholesterol in engineered yeast. Bioresource Technology, 2022, 360, 127572.	4.8	12
65	Engineering of Synthetic Multiplexed Pathways for High-Level N-Acetylneuraminic Acid Bioproduction. Journal of Agricultural and Food Chemistry, 2021, 69, 14868-14877.	2.4	11
66	Combinatorial Fine-Tuning of GNA1 and GlmS Expression by 5â€™-Terminus Fusion Engineering Leads to Overproduction of N-Acetylglucosamine inBacillus subtilis. Biotechnology Journal, 2019, 14, 1800264.	1.8	10
67	Combinatorial Methylerythritol Phosphate Pathway Engineering and Process Optimization for Increased Menaquinone-7 Synthesis in Bacillus subtilis. Journal of Microbiology and Biotechnology, 2020, 30, 762-769.	0.9	10
68	Pathway Engineering of Bacillus subtilis for Enhanced Nâ€Acetylneuraminic Acid Production via Wholeâ€Cell Biocatalysis. Biotechnology Journal, 2019, 14, e1800682.	1.8	9
69	Towards next-generation model microorganism chassis for biomanufacturing. Applied Microbiology and Biotechnology, 2020, 104, 9095-9108.	1.7	9
70	Development of a DNA double-strand break-free base editing tool in Corynebacterium glutamicum for genome editing and metabolic engineering. Metabolic Engineering Communications, 2020, 11, e00135.	1.9	9
71	High level production of diacetylchitobiose deacetylase by refactoring genetic elements and cellular metabolism. Bioresource Technology, 2021, 341, 125836.	4.8	9
72	Overexpression of HMGA1 confers radioresistance by transactivating RAD51 in cholangiocarcinoma. Cell Death Discovery, 2021, 7, 322.	2.0	9

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73	Engineered Microbial Cell Factories for Sustainable Production of L-Lactic Acid: A Critical Review. Fermentation, 2022, 8, 279.	1.4	9
74	Effects of carbon sources and feeding strategies on heparosan production by Escherichia coli K5. Bioprocess and Biosystems Engineering, 2012, 35, 1209-1218.	1.7	8
75	Development and optimization of Nâ€acetylneuraminic acid biosensors in Bacillus subtilis. Biotechnology and Applied Biochemistry, 2020, 67, 693-705.	1.4	8
76	The elucidation of phosphosugar stress response in Bacillus subtilis guides strain engineering for high Nâ€acetylglucosamine production. Biotechnology and Bioengineering, 2021, 118, 383-396.	1.7	8
77	Recent advances and prospects in purification and heterologous expression of lactoferrin. , 2022, 1, 58-67.		8
78	Efficient Removal of U(VI) Using Functionalized Hollow Mesoporous Silica Nanospheres. ChemistrySelect, 2019, 4, 7396-7402.	0.7	7
79	Cell-free synthesis system-assisted pathway bottleneck diagnosis and engineering in Bacillus subtilis. Synthetic and Systems Biotechnology, 2020, 5, 131-136.	1.8	7
80	Food synthetic biology-driven protein supply transition: From animal-derived production to microbial fermentation. Chinese Journal of Chemical Engineering, 2021, 30, 29-36.	1.7	7
81	Engineering a ComA Quorum-Sensing circuit to dynamically control the production of Menaquinone-4 in Bacillus subtilis. Enzyme and Microbial Technology, 2021, 147, 109782.	1.6	7
82	Inducible Population Quality Control of Engineered Bacillus subtilis for Improved N-Acetylneuraminic Acid Biosynthesis. ACS Synthetic Biology, 2021, 10, 2197-2209.	1.9	7
83	Modelâ€driven design of synthetic Nâ€terminal coding sequences for regulating gene expression in yeast and bacteria. Biotechnology Journal, 2022, 17, e2100655.	1.8	7
84	Combinatorial pathway engineering of Bacillus subtilis for production of structurally defined and homogeneous chitooligosaccharides. Metabolic Engineering, 2022, 70, 55-66.	3.6	7
85	Construction of Multiscale Genome-Scale Metabolic Models: Frameworks and Challenges. Biomolecules, 2022, 12, 721.	1.8	7
86	Quantitation of RNA by a fluorometric method using the SYTO RNASelect stain. Analytical Biochemistry, 2020, 606, 113857.	1.1	6
87	Engineering of Biosynthesis Pathway and NADPH Supply for Improved L-5-Methyltetrahydrofolate Production by Lactococcus lactis. Journal of Microbiology and Biotechnology, 2021, 31, 154-162.	0.9	6
88	Chitin deacetylase: from molecular structure to practical applications. Systems Microbiology and Biomanufacturing, 2022, 2, 271-284.	1.5	6
89	Metabolomics-Driven Elucidation of Interactions between Saccharomyces cerevisiae and Lactobacillus panis from Chinese Baijiu Fermentation Microbiome. Fermentation, 2022, 8, 33.	1.4	6
90	Combinatorial Metabolic Engineering and Enzymatic Catalysis Enable Efficient Production of Colanic Acid. Microorganisms, 2022, 10, 877.	1.6	5

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91	Synthetic biology-driven microbial production of folates: Advances and perspectives. Bioresource Technology, 2021, 324, 124624.	4.8	4
92	Enzymatic production of N-acetylneuraminic acid: advances and perspectives. Systems Microbiology and Biomanufacturing, 2022, 2, 130-146.	1.5	4
93	Semi-rational design of L-amino acid deaminase for production of pyruvate and d-alanine by Escherichia coli whole-cell biocatalyst. Amino Acids, 2021, 53, 1361-1371.	1.2	4
94	Enhanced 2,5-Furandicarboxylic Acid (FDCA) Production in BF60 by Manipulation of the Key Genes in FDCA Biosynthesis Pathway. Journal of Microbiology and Biotechnology, 2018, 28, 1999-2008.	0.9	4
95	High-Level 5-Methyltetrahydrofolate Bioproduction in Bacillus subtilis by Combining Modular Engineering and Transcriptomics-Guided Global Metabolic Regulation. Journal of Agricultural and Food Chemistry, 2022, 70, 5849-5859.	2.4	4
96	Microbiome analysis and random forest algorithm-aided identification of the diacetyl-producing microorganisms in the stacking fermentation stage of Maotai-flavor liquor production. Food Biotechnology, 2019, 33, 338-352.	0.6	3
97	Efficient Bioproduction of Human Milk Alpha-Lactalbumin in Komagataella phaffii. Journal of Agricultural and Food Chemistry, 2022, 70, 2664-2672.	2.4	3
98	Systems biology, synthetic biology, and metabolic engineering. , 2020, , 1-31.		2
99	Systems and synthetic metabolic engineering for production of biochemicals. , 2020, , 207-235.		2
100	Refactoring and optimization of metabolic network. , 2020, , 77-105.		2
101	Biosynthesis of Guanidinoacetate by Bacillus subtilis Whole-Cell Catalysis. Fermentation, 2022, 8, 116.	1.4	2
102	Biochemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 929-993.	2.3	1
103	Screening, Optimization and Assembly of Key Pathway Enzymes in Metabolic Engineering. , 2019, , 167-176.		1
104	A CRISPR-Cas12a-Based Assay for Efficient Quantification of Lactobacillus panis in Chinese Baijiu Brewing Microbiome. Fermentation, 2022, 8, 88.	1.4	1
105	Cover Image, Volume 116, Number 1, January 2019. Biotechnology and Bioengineering, 2019, 116, ii.	1.7	0
106	Nutraceuticals Definition, Kinds and Applications. , 2019, , 1-7.		0
107	Microbial Production of Oligosaccharides and Polysaccharides. , 2019, , 75-91.		0