Jiazhang Lian

List of Publications by Year
in descending order

66 papers	2,630 citations	218592 26 h-index	197736 49 g-index
69 all docs	69 docs citations	69 times ranked	2469 citing authors

#	Article	IF	Citations
1	Combinatorial metabolic engineering using an orthogonal tri-functional CRISPR system. Nature Communications, 2017, 8, 1688.	5.8	244
2	Recent advances in metabolic engineering of Saccharomyces cerevisiae: New tools and their applications. Metabolic Engineering, 2018, 50, 85-108.	3.6	228
3	Customized optimization of metabolic pathways by combinatorial transcriptional engineering. Nucleic Acids Research, 2012, 40, e142-e142.	6.5	207
4	Design and construction of acetyl-CoA overproducing Saccharomyces cerevisiae strains. Metabolic Engineering, 2014, 24, 139-149.	3.6	199
5	Metabolic engineering of Saccharomyces cerevisiae to improve 1-hexadecanol production. Metabolic Engineering, 2015, 27, 10-19.	3.6	104
6	Multi-functional genome-wide CRISPR system for high throughput genotypeâ€“phenotype mapping. Nature Communications, 2019, 10, 5794.	5.8	104
7	Towards a fully automated algorithm driven platform for biosystems design. Nature Communications, 2019, 10, 5150.	5.8	95
8	Metabolic engineering of a Saccharomyces cerevisiae strain capable of simultaneously utilizing glucose and galactose to produce enantiopure (2R,3R)-butanediol. Metabolic Engineering, 2014, 23, 92-99.	3.6	91
9	Reversal of the Î²-Oxidation Cycle in Saccharomyces cerevisiae for Production of Fuels and Chemicals. ACS Synthetic Biology, 2015, 4, 332-341.	1.9	82
10	Construction of plasmids with tunable copy numbers in Saccharomyces cerevisiae and their applications in pathway optimization and multiplex genome integration. Biotechnology and Bioengineering, 2016, 113, 2462-2473.	1.7	61
11	Protein design for pathway engineering. Journal of Structural Biology, 2014, 185, 234-242.	1.3	60
12	Engineered CRISPR/Cas9 system for multiplex genome engineering of polyploid industrial yeast strains. Biotechnology and Bioengineering, 2018, 115, 1630-1635.	1.7	52
13	Cell-free protein synthesis enabled rapid prototyping for metabolic engineering and synthetic biology. Synthetic and Systems Biotechnology, 2018, 3, 90-96.	1.8	46
14	Development of synthetic biology tools to engineer Pichia pastoris as a chassis for the production of natural products. Synthetic and Systems Biotechnology, 2021, 6, 110-119.	1.8	46
15	Preparative Scale Production of Functional Mouse Aquaporin 4 Using Different Cell-Free Expression Modes. PLoS ONE, 2010, 5, e12972.	1.1	41
16	Advancing Metabolic Engineering of Saccharomyces cerevisiae Using the CRISPR/Cas System. Biotechnology Journal, 2018, 13, e1700601.	1.8	41
17	Improving aquaporin Z expression in Escherichia coli by fusion partners and subsequent condition optimization. Applied Microbiology and Biotechnology, 2009, 82, 463-470.	1.7	40
18	Directed evolution of a cellodextrin transporter for improved biofuel production under anaerobic conditions in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2014, 111, 1521-1531.	1.7	40

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19	Recent advances in biosynthesis of fatty acids derived products in Saccharomyces cerevisiae via enhanced supply of precursor metabolites. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 437-451.	1.4	39
20	Recent advances in the discovery, characterization, and engineering of poly(ethylene terephthalate) (PET) hydrolases. Enzyme and Microbial Technology, 2021, 150, 109868.	1.6	39
21	The Biosynthetic Gene Cluster of Pyrazomycinâ€"A Câ€Nucleoside Antibiotic with a Rare Pyrazole Moiety. ChemBioChem, 2020, 21, 644-649.	1.3	38
22	Metabolic pathway engineering for high-level production of 5-hydroxytryptophan in Escherichia coli. Metabolic Engineering, 2018, 48, 279-287.	3.6	36
23	Construction of a series of episomal plasmids and their application in the development of an efficient CRISPR/Cas9 system in Pichia pastoris. World Journal of Microbiology and Biotechnology, 2019, 35, 79.	1.7	33
24	Boron nitride nanosheet embedded bio-inspired wet adhesives with switchable adhesion and oxidation resistance. Journal of Materials Chemistry A, 2019, 7, 12266-12275.	5.2	32
25	Efficient production of lycopene from CO2 via microbial electrosynthesis. Chemical Engineering Journal, 2022, 430, 132943.	6.6	31
26	Synthetic Biology Toolkit for Marker-Less Integration of Multigene Pathways into Pichia pastoris via CRISPR/Cas9. ACS Synthetic Biology, 2022, 11, 623-633.	1.9	30
27	Production of long chain alcohols and alkanes upon coexpression of an acyl-ACP reductase and aldehyde-deformylating oxygenase with a bacterial type-I fatty acid synthase in E. coli. Molecular BioSystems, 2015, 11, 2464-2472.	2.9	29
28	Highly Efficient Single-Pot Scarless Golden Gate Assembly. ACS Synthetic Biology, 2019, 8, 1047-1054.	1.9	29
29	Functional expression of eukaryotic cytochrome P450s in yeast. Biotechnology and Bioengineering, 2021, 118, 1050-1065.	1.7	27
30	Combined genome editing and transcriptional repression for metabolic pathway engineering in Corynebacterium glutamicum using a catalytically active Cas12a. Applied Microbiology and Biotechnology, 2019, 103, 8911-8922.	1.7	24
31	A Single Cas9-VPR Nuclease for Simultaneous Gene Activation, Repression, and Editing in Saccharomyces cerevisiae. ACS Synthetic Biology, 2020, 9, 2252-2257.	1.9	24
32	Efficient production of vindoline from tabersonine by metabolically engineered Saccharomyces cerevisiae. Communications Biology, 2021, 4, 1089.	2.0	24
33	Construction of ajmalicine and sanguinarine de novo biosynthetic pathways using stable integration sites in yeast. Biotechnology and Bioengineering, 2022, 119, 1314-1326.	1.7	24
34	Efficient Expression of Aquaporin Z in Escherichia coli Cell-Free System Using Different Fusion Vectors. Protein and Peptide Letters, 2010, 17, 181-185.	0.4	21
35	Functional Reconstitution of a Pyruvate Dehydrogenase in the Cytosol of Saccharomyces cerevisiae through Lipoylation Machinery Engineering. ACS Synthetic Biology, 2016, 5, 689-697.	1.9	19
36	Metabolic engineering of Parageobacillus thermoglucosidasius for the efficient production of (2R,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.7	18

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37	RNAi assisted genome evolution unveils yeast mutants with improved xylose utilization. Biotechnology and Bioengineering, 2018, 115, 1552-1560.	1.7	17
38	Construction of a Stable and Temperature-Responsive Yeast Cell Factory for Crocetin Biosynthesis Using CRISPR-Cas9. Frontiers in Bioengineering and Biotechnology, 2020, 8, 653.	2.0	17
39	Identification of novel metabolic engineering targets for S-adenosyl-L-methionine production in Saccharomyces cerevisiae via genome-scale engineering. Metabolic Engineering, 2021, 66, 319-327.	3.6	17
40	Efficient Expression of Membrane-Bound Water Channel Protein (Aquaporin Z) in Escherichia coli. Protein and Peptide Letters, 2008, 15, 687-691.	0.4	16
41	Enhanced functional expression of aquaporin Z via fusion of in situ cleavable leader peptides in Escherichia coli cell-free system. Enzyme and Microbial Technology, 2014, 55, 26-30.	1.6	16
42	Establishing Komagataella phaffii as a Cell Factory for Efficient Production of Sesquiterpenoid Î±-Santalene. Journal of Agricultural and Food Chemistry, 2022, 70, 8024-8031.	2.4	16
43	Microbial degradation and valorization of poly(ethylene terephthalate) (PET) monomers. World Journal of Microbiology and Biotechnology, 2022, 38, 89.	1.7	15
44	High-level expression of soluble subunit b of F1F0 ATP synthase in Escherichia coli cell-free system. Applied Microbiology and Biotechnology, 2009, 85, 303-311.	1.7	14
45	Multi-level metabolic engineering of Pseudomonas mutabilis ATCC31014 for efficient production of biotin. Metabolic Engineering, 2020, 61, 406-415.	3.6	14
46	PCR & Go: A Pre-installed Expression Chassis for Facile Integration of Multi-Gene Biosynthetic Pathways. Frontiers in Bioengineering and Biotechnology, 2020, 8, 613771.	2.0	14
47	Synthetic biology toolkit for engineering Cupriviadus necator H16 as a platform for CO2 valorization. Biotechnology for Biofuels, 2021, 14, 212.	6.2	14
48	Enhancing Homologous Recombination Efficiency in Pichia pastoris for Multiplex Genome Integration Using Short Homology Arms. ACS Synthetic Biology, 2022, 11, 547-553.	1.9	13
49	Real-time monitoring of Ralstonia solanacearum infection progress in tomato and Arabidopsis using bioluminescence imaging technology. Plant Methods, 2022, 18, 7.	1.9	13
50	High-level soluble expression of hIGF-1 fusion protein in recombinant Escherichia coli. Process Biochemistry, 2010, 45, 1401-1405.	1.8	12
51	Efficient production of Sâ€adenosylâ€<scp>l</scp>â€methionine from <scp>dl</scp>â€methionine in metabolic engineered Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2019, 116, 3312-3323.	1.7	12
52	Enzymatic preparation of pyruvate by a whole-cell biocatalyst coexpressing l-lactate oxidase and catalase. Process Biochemistry, 2020, 96, 113-121.	1.8	12
53	Random Base Editing for Genome Evolution in Saccharomyces cerevisiae. ACS Synthetic Biology, 2021, 10, 2440-2446.	1.9	12
54	Metabolic Engineering of Saccharomyces cerevisiae for High-Level Production of Chlorogenic Acid from Glucose. ACS Synthetic Biology, 2022, 11, 800-811.	1.9	12

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55	SgRNA engineering for improved genome editing and expanded functional assays. Current Opinion in Biotechnology, 2022, 75, 102697.	3.3	12
56	Reconstruction of the UDP-N-acetylglucosamine biosynthetic pathway in cell-free system. Biotechnology Letters, 2010, 32, 1481-1486.	1.1	10
57	Biocascade Synthesis of Lâ€Tyrosine Derivatives by Coupling a Thermophilic Tyrosine Phenolâ€Lyase and Lâ€Lactate Oxidase. European Journal of Organic Chemistry, 2020, 2020, 1050-1054.	1.2	10
58	Cloning and characterization of a panel of mitochondrial targeting sequences for compartmentalization engineering in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2021, 118, 4269-4277.	1.7	10
59	Efficient production of Pseudoionone with multipathway engineering in Escherichia coli. Journal of Applied Microbiology, 2019, 126, 1751-1760.	1.4	9
60	Efficient production of glutathione with multi-pathway engineering in Corynebacterium glutamicum. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 1685-1695.	1.4	7
61	Metabolic Engineering of Saccharomyces cerevisiae Using a Trifunctional CRISPR/Cas System for Simultaneous Gene Activation, Interference, and Deletion. Methods in Enzymology, 2018, 608, 265-276.	0.4	6
62	Highly efficient soluble expression and purification of recombinant human basic fibroblast growth factor (hbFGF) by fusion with a new collagen-like protein (Scl2) inEscherichia coli. Preparative Biochemistry and Biotechnology, 2020, 50, 598-606.	1.0	4
63	Improved Functional Expression of Cytochrome P450s in Saccharomyces cerevisiae Through Screening a cDNA Library From Arabidopsis thaliana. Frontiers in Bioengineering and Biotechnology, 2021, 9, 764851.	2.0	4
64	Strain Development by Whole-Cell Directed Evolution. , 2017, , 173-200.		2
65	Cell-Free Expression of Unnatural Amino Acid Incorporated Aquaporin SS9 with Improved Separation Performance in Biomimetic Membranes. BioMed Research International, 2018, 2018, 1-7.	0.9	1
66	Editorial: Development and Application of Novel Genome Engineering Tools in Microbial Biotechnology. Frontiers in Bioengineering and Biotechnology, 2020, 8, 621851.	2.0	0