Jian-Rong Wu

List of Publications by Year
in descending order

42 papers	791 citations	516710 16 h-index	526287 27 g-index
44 all docs	44 docs citations	44 times ranked	996 citing authors

#	Article	IF	Citations
1	Influence of sodium chloride on thermal denaturation of a high-salt-tolerant neutral protease from Aspergillus oryzae. Food Science and Biotechnology, 2013, 22, 1-7.	2.6	149
2	Characterization of xanthan gum produced from glycerol by a mutant strain Xanthomonas campestris CCTCC M2015714. Carbohydrate Polymers, 2017, 157, 521-526.	10.2	67
3	Activation of glycerol metabolism in Xanthomonas campestris by adaptive evolution to produce a high-transparency and low-viscosity xanthan gum from glycerol. Bioresource Technology, 2016, 211, 390-397.	9.6	45
4	Improved curdlan fermentation process based on optimization of dissolved oxygen combined with pH control and metabolic characterization of Agrobacterium sp. ATCC 31749. Applied Microbiology and Biotechnology, 2012, 93, 367-379.	3.6	39
5	Influence of Tween-80 on the production and structure of water-insoluble curdlan from Agrobacterium sp.. International Journal of Biological Macromolecules, 2018, 106, 611-619.	7.5	37
6	Enhanced curdlan production in Agrobacterium sp. ATCC 31749 by addition of low-polyphosphates. Biotechnology and Bioprocess Engineering, 2011, 16, 34-41.	2.6	35
7	ARTP mutation and genome shuffling of ABE fermentation symbiotic system for improvement of butanol production. Applied Microbiology and Biotechnology, 2017, 101, 2189-2199.	3.6	28
8	Enhanced Production of Curdlan by Alcaligenes faecalis by Selective Feeding with Ammonia Water during the Cell Growth Phase of Fermentation. Shengwu Gongcheng Xuebao/Chinese Journal of Biotechnology, 2008, 24, 1035-1039.	0.2	27
9	Reconstruction and analysis of a genome-scale metabolic network of Corynebacterium glutamicum S9114. Gene, 2016, 575, 615-622.	2.2	27
10	Production of rhamnolipids by semi-solid-state fermentation with Pseudomonas aeruginosa RG18 for heavy metal desorption. Bioprocess and Biosystems Engineering, 2017, 40, 1611-1619.	3.4	25
11	Enhancement of Sphingolipid Synthesis Improves Osmotic Tolerance of Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2020, 86, .	3.1	25
12	Effect of metabolic structures and energy requirements on curdlan production byAlcaligenes faecalis. Biotechnology and Bioprocess Engineering, 2007, 12, 359-365.	2.6	23
13	Production of polysialic acid from fed-batch fermentation with pH control. Biochemical Engineering Journal, 2002, 11, 201-204.	3.6	21
14	Sequence and transcriptional analysis of the genes responsible for curdlan biosynthesis in Agrobacterium sp. ATCC 31749 under simulated dissolved oxygen gradients conditions. Applied Microbiology and Biotechnology, 2011, 91, 163-175.	3.6	21
15	A new polysialic acid production process based on dual-stage pH control and fed-batch fermentation for higher yield and resulting high molecular weight product. Applied Microbiology and Biotechnology, 2013, 97, 2405-2412.	3.6	21
16	Enhanced production of curdlan by coupled fermentation system of Agrobacterium sp. ATCC 31749 and Trichoderma harzianum GIM 3.442. Carbohydrate Polymers, 2017, 157, 1687-1694.	10.2	20
17	An efficient and large-scale preparation process for polysialic acid by Escherichia coli CCTCC M208088. Biochemical Engineering Journal, 2010, 53, 97-103.	3.6	15
18	Improvement of ATP regeneration efficiency and operation stability in porcine interferon-Î± production by Pichia pastoris under lower induction temperature. Korean Journal of Chemical Engineering, 2011, 28, 1412-1419.	2.7	15

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19	Improvement of the CuZn-superoxide dismutase enzyme activity and stability as a therapeutic agent by modification with polysialic acids. Biotechnology Letters, 2010, 32, 1939-1945.	2.2	14
20	High production of xanthan gum by a glycerol-tolerant strain Xanthomonas campestris WXLB-006. Preparative Biochemistry and Biotechnology, 2017, 47, 468-472.	1.9	13
21	Potential application of a low-viscosity and high-transparency xanthan gum produced from <i>Xanthomonas campestris</i> CCTCC M2015714 in foods. Preparative Biochemistry and Biotechnology, 2018, 48, 402-407.	1.9	13
22	Efficient whole-cell biocatalyst for Neu5Ac production by manipulating synthetic, degradation and transmembrane pathways. Biotechnology Letters, 2017, 39, 55-63.	2.2	11
23	Recycling of cooking oil fume condensate for the production of rhamnolipids by Pseudomonas aeruginosa WB505. Bioprocess and Biosystems Engineering, 2019, 42, 777-784.	3.4	10
24	Enhancement of polysialic acid yield by reducing initial phosphate and feeding ammonia water to Escherichia coli CCTCC M208088. Biotechnology and Bioprocess Engineering, 2010, 15, 657-663.	2.6	8
25	Effective production of biologically active water-soluble Î²-1,3-glucan by a coupled system of Agrobacterium sp. and Trichoderma harzianum. Preparative Biochemistry and Biotechnology, 2018, 48, 446-456.	1.9	8
26	Phosphoenolpyruvate-supply module in Escherichia coli improves N-acetyl-d-neuraminic acid biocatalysis. Biotechnology Letters, 2017, 39, 227-234.	2.2	7
27	Bioproduction, purification, and application of polysialic acid. Applied Microbiology and Biotechnology, 2018, 102, 9403-9409.	3.6	7
28	Synthesis of functional oligosaccharides and their derivatives through cocultivation and cellular NTP regeneration. Advances in Applied Microbiology, 2021, 115, 35-63.	2.4	7
29	Metabolic profiles of oligosaccharides derived from four microbial polysaccharides by faecal inocula from type 2 diabetes patients. International Journal of Food Sciences and Nutrition, 2021, 72, 1-12.	2.8	7
30	Synthesis and characterization of polysialic acid/carboxymethyl chitosan hydrogel with potential for drug delivery. Russian Journal of Bioorganic Chemistry, 2015, 41, 562-567.	1.0	5
31	Modification with polysialic acidâ€"PEG copolymer as a new method for improving the therapeutic efficacy of proteins. Preparative Biochemistry and Biotechnology, 2016, 46, 788-797.	1.9	5
32	Enhanced <i>N</i>-acetyl-<scp>d</scp>-neuraminic production from glycerol and <i>N</i>-acetyl-<scp>d</scp>-glucosamine by metabolically engineered <i>Escherichia coli</i> with a two-stage pH-shift control strategy. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 125-132.	3.0	5
33	Synthesis of branched Î²-1,3-glucan oligosaccharide with narrow degree of polymerization by fungi co-cultivation. Carbohydrate Polymers, 2021, 273, 118582.	10.2	5
34	Structural characterization and in vitro evaluation of the prebiotic potential of an exopolysaccharide produced by Bacillus thuringiensis during fermentation. LWT - Food Science and Technology, 2022, 163, 113532.	5.2	5
35	Preparation and characterization of a novel polysialic acidâ€"hyaluronan graft copolymer potential as dermal filler. International Journal of Biological Macromolecules, 2017, 99, 692-698.	7.5	4
36	An Oligomannuronic Acid-Sialic Acid Conjugate Capable of Inhibiting AÎ²42 Aggregation and Alleviating the Inflammatory Response of BV-2 Microglia. International Journal of Molecular Sciences, 2021, 22, 12338.	4.1	4

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37	Dipotassium phosphate improves the molecular weight stability of polysialic acid in Escherichia coli K235 culture broth. Bioresource Technology, 2018, 247, 30-35.	9.6	3
38	Preparation of sulfonated silk fibroin for anti-coagulation material. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 1701-1715.	3.5	2
39	Preparation and property of a biantenna macromolecule based on polysialic acid. International Journal of Biological Macromolecules, 2020, 155, 1342-1349.	7.5	1
40	Metabolic fate of dietary sialic acid and its influence on gut and oral bacteria. Systems Microbiology and Biomanufacturing, 0, , 1.	2.9	1
41	Preparation and characterization of bifunctional edible gellan-polylysine fiber. International Journal of Biological Macromolecules, 2022, 204, 293-299.	7.5	1
42	New Strategy for Enhancement Curdlan Biosynthesis in Alcaligenes faecalis by Activating Gene Expression. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	0