Yuxiang Bai

List of Publications by Year
in descending order

45 papers	894 citations	516561 16 h-index	501076 28 g-index
45 all docs	45 docs citations	45 times ranked	734 citing authors

#	Article	IF	Citations
1	Effect of frying on the pasting and rheological properties of normal maize starch. Food Hydrocolloids, 2018, 77, 85-95.	5.6	101
2	Structureâ€"function relationships of family GH70 glucansucrase and 4,6-Î±-glucanotransferase enzymes, and their evolutionary relationships with family GH13 enzymes. Cellular and Molecular Life Sciences, 2016, 73, 2681-2706.	2.4	64
3	Food-derived non-phenolic Î±-amylase and Î±-glucosidase inhibitors for controlling starch digestion rate and guiding diabetes-friendly recipes. LWT - Food Science and Technology, 2022, 153, 112455.	2.5	62
4	Biosynthesis of levan from sucrose using a thermostable levansucrase from Lactobacillus reuteri LTH5448. International Journal of Biological Macromolecules, 2018, 113, 29-37.	3.6	55
5	Biochemical Characterization of the Lactobacillus reuteri Glycoside Hydrolase Family 70 GTFB Type of 4,6-Î±-Glucanotransferase Enzymes That Synthesize Soluble Dietary Starch Fibers. Applied and Environmental Microbiology, 2015, 81, 7223-7232.	1.4	54
6	Physicochemical properties of a high molecular weight levan from Brenneria sp. EniD312. International Journal of Biological Macromolecules, 2018, 109, 810-818.	3.6	47
7	Crystal Structure of 4,6-Î±-Glucanotransferase Supports Diet-Driven Evolution of GH70 Enzymes from Î±-Amylases in Oral Bacteria. Structure, 2017, 25, 231-242.	1.6	45
8	The binding mechanism between cyclodextrins and pullulanase: A molecular docking, isothermal titration calorimetry, circular dichroism and fluorescence study. Food Chemistry, 2020, 321, 126750.	4.2	34
9	Maltogenic Î±-amylase hydrolysis of wheat starch granules: Mechanism and relation to starch retrogradation. Food Hydrocolloids, 2022, 124, 107256.	5.6	30
10	<i>Lactobacillus reuteri</i> Strains Convert Starch and Maltodextrins into Homoexopolysaccharides Using an Extracellular and Cell-Associated 4,6-Î±-Glucanotransferase. Journal of Agricultural and Food Chemistry, 2016, 64, 2941-2952.	2.4	27
11	Biosynthesis of inulin from sucrose using inulosucrase from Lactobacillus gasseri DSM 20604. International Journal of Biological Macromolecules, 2018, 109, 1209-1218.	3.6	27
12	Identification of an Î±-(1,4)-Glucan-Synthesizing Amylosucrase from <i>Cellulomonas carboniz</i> T26. Journal of Agricultural and Food Chemistry, 2017, 65, 2110-2119.	2.4	25
13	Preparation of malto-oligosaccharides with specific degree of polymerization by a novel cyclodextrinase from Palaeococcus pacificus. Carbohydrate Polymers, 2019, 210, 64-72.	5.1	24
14	Structural and property characterization of corn starch modified by cyclodextrin glycosyltransferase and specific cyclodextrinase. Carbohydrate Polymers, 2020, 237, 116137.	5.1	24
15	Cycloamylose production from amylomaize by isoamylase and Thermus aquaticus 4-Î±-glucanotransferase. Carbohydrate Polymers, 2014, 102, 66-73.	5.1	23
16	Biochemical characterization of a highly thermostable amylosucrase from Truepera radiovictrix DSM 17093. International Journal of Biological Macromolecules, 2018, 116, 744-752.	3.6	20
17	High-efficiency production of Î³-cyclodextrin using Î²-cyclodextrin as the donor raw material by cyclodextrin opening reactions using recombinant cyclodextrin glycosyltransferase. Carbohydrate Polymers, 2018, 182, 75-80.	5.1	19
18	Synergetic modification of waxy maize starch by dual-enzyme to lower the in vitro digestibility through modulating molecular structure and malto-oligosaccharide content. International Journal of Biological Macromolecules, 2021, 180, 187-193.	3.6	17

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19	Characterization of the 4,6-Î±-glucanotransferase GTFB enzyme of Lactobacillus reuteri 121 isolated from inclusion bodies. BMC Biotechnology, 2015, 15, 49.	1.7	15
20	Acrylated Composite Hydrogel Preparation and Adsorption Kinetics of Methylene Blue. Molecules, 2017, 22, 1824.	1.7	13
21	Thermophilic 4-Î±-Glucanotransferase from <i>Thermoproteus Uzoniensis</i> Retards the Long-Term Retrogradation but Maintains the Short-Term Gelation Strength of Tapioca Starch. Journal of Agricultural and Food Chemistry, 2020, 68, 5658-5667.	2.4	13
22	Comparison of encapsulation properties of major garlic oil components by hydroxypropyl Î²-cyclodextrin. European Food Research and Technology, 2010, 231, 519-524.	1.6	12
23	Deciphering external chain length and cyclodextrin production with starch catalyzed by cyclodextrin glycosyltransferase. Carbohydrate Polymers, 2022, 284, 119156.	5.1	11
24	Structural basis for the roles of starch and sucrose in homo-exopolysaccharide formation by Lactobacillus reuteri 35-5. Carbohydrate Polymers, 2016, 151, 29-39.	5.1	10
25	Distinct effects of different Î±-amylases on cross-linked tapioca starch and gel-improving mechanism. Food Hydrocolloids, 2022, 128, 107580.	5.6	10
26	Functional characterization of tryptophan437 at subsite +2 in pullulanase from Bacillus subtilis str. 168. International Journal of Biological Macromolecules, 2019, 133, 920-928.	3.6	9
27	HPTLC Screening of Folic Acid in Food: In Situ Derivatization with Ozone-Induced Fluorescence. Food Analytical Methods, 2019, 12, 431-439.	1.3	9
28	Phenylalanine476 mutation of pullulanase from Bacillus subtilis str. 168 improves the starch substrate utilization by weakening the product Î²-cyclodextrin inhibition. International Journal of Biological Macromolecules, 2020, 155, 490-497.	3.6	9
29	Structure, function and enzymatic synthesis of glucosaccharides assembled mainly by Î±1Ââ†'Â6 linkages â€" A review. Carbohydrate Polymers, 2022, 275, 118705.	5.1	9
30	Improved production of gamma-cyclodextrin from high-concentrated starch using enzyme pretreatment under swelling condition. Carbohydrate Polymers, 2022, 284, 119124.	5.1	9
31	Development of pullulanase mutants to enhance starch substrate utilization for efficient production of Î²-CD. International Journal of Biological Macromolecules, 2021, 168, 640-648.	3.6	8
32	A Cyclodextrin-Based Controlled Release System in the Simulation of In Vitro Small Intestine. Molecules, 2020, 25, 1212.	1.7	7
33	Enzymatic synthesis, structure of isomalto/malto-polysaccharides from linear dextrins prepared by retrogradation. Carbohydrate Polymers, 2022, 288, 119350.	5.1	7
34	A Novel Cyclodextrin-Functionalized Hybrid Silicon Wastewater Nano-Adsorbent Material and Its Adsorption Properties. Molecules, 2018, 23, 1485.	1.7	6
35	Thermal and rheological properties of the supersaturated sucrose solution in the presence of different molecular weight fractions and concentrations of dextran. European Food Research and Technology, 2012, 234, 639-648.	1.6	5
36	Efficient Synthesis of Glucosyl-Î²-Cyclodextrin from Maltodextrins by Combined Action of Cyclodextrin Glucosyltransferase and Amyloglucosidase. Journal of Agricultural and Food Chemistry, 2017, 65, 6023-6029.	2.4	5

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37	Application of cyclodextrinase in nonâ€complexant production of Î³â€cyclodextrin. Biotechnology Progress, 2020, 36, e2930.	1.3	4
38	Controlling the Fine Structure of Glycogen-like Glucan by Rational Enzymatic Synthesis. Journal of Agricultural and Food Chemistry, 2021, 69, 14951-14960.	2.4	4
39	Enhancing gel strength of Thermoproteus uzoniensis 4-Î±-glucanotransferase modified starch by amylosucrase treatment. International Journal of Biological Macromolecules, 2022, 209, 1-8.	3.6	4
40	Effect of Starch Primers on the Fine Structure of Enzymatically Synthesized Glycogen-like Glucan. Journal of Agricultural and Food Chemistry, 2022, 70, 6202-6212.	2.4	4
41	Preparation and Identification of 6²âˆ'Î±-Maltotriosyl-Maltotriose Using a Commercial Pullulanase. International Journal of Food Properties, 2015, 18, 186-193.	1.3	3
42	Synthesis, separation, and purification of glucosylâ€Î²â€cyclodextrin by oneâ€pot method. Journal of Food Biochemistry, 2019, 43, e12890.	1.2	3
43	Mutations in Amino Acid Residues of <i>Limosilactobacillus reuteri</i> 121 GtfB 4,6-Î±-Glucanotransferase that Affect Reaction and Product Specificity. Journal of Agricultural and Food Chemistry, 2022, 70, 1952-1961.	2.4	3
44	A novel amylolytic enzyme from Palaeococcus ferrophilus with malto-oligosaccharide forming ability belonging to subfamily GH13_20. Food Bioscience, 2022, 45, 101498.	2.0	2
45	Partial hydrolysis of waxy rice starch by maltogenic Î±â€amylase to regulate its structures, rheological properties and digestibility. International Journal of Food Science and Technology, 2023, 58, 4881-4890.	1.3	2