

# Caiming Li

## List of Publications by Year in descending order

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81  
papers

1,851  
citations

304743

22  
h-index

315739

38  
g-index

81  
all docs

81  
docs citations

81  
times ranked

1609  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrospun starch nanofibers: Recent advances, challenges, and strategies for potential pharmaceutical applications. <i>Journal of Controlled Release</i> , 2017, 252, 95-107.	9.9	168
2	Retrogradation behavior of corn starch treated with 1,4- $\alpha$ -glucan branching enzyme. <i>Food Chemistry</i> , 2016, 203, 308-313.	8.2	108
3	Characterisation of physicochemical and functional properties of soluble dietary fibre from potato pulp obtained by enzyme-assisted extraction. <i>International Journal of Biological Macromolecules</i> , 2017, 101, 1004-1011.	7.5	90
4	Maltooligosaccharide-forming amylase: Characteristics, preparation, and application. <i>Biotechnology Advances</i> , 2017, 35, 619-632.	11.7	66
5	Preparation, characterization and properties of starch-based adhesive for wood-based panels. <i>International Journal of Biological Macromolecules</i> , 2019, 134, 247-254.	7.5	66
6	Chitosan coating of zein-carboxymethylated short-chain amylose nanocomposites improves oral bioavailability of insulin in vitro and in vivo. <i>Journal of Controlled Release</i> , 2019, 313, 1-13.	9.9	63
7	Effects of montmorillonite addition on the performance of starch-based wood adhesive. <i>Carbohydrate Polymers</i> , 2015, 115, 394-400.	10.2	51
8	Effect of modification with 1,4- $\alpha$ -glucan branching enzyme on the rheological properties of cassava starch. <i>International Journal of Biological Macromolecules</i> , 2017, 103, 630-639.	7.5	48
9	Effects of heat pretreatment of starch on graft copolymerization reaction and performance of resulting starch-based wood adhesive. <i>International Journal of Biological Macromolecules</i> , 2017, 96, 11-18.	7.5	47
10	Modification by $\alpha$ -D-glucan branching enzyme lowers the in vitro digestibility of starch from different sources. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 1758-1764.	7.5	44
11	Binary and Tertiary Complex Based on Short-Chain Glucan and Proanthocyanidins for Oral Insulin Delivery. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 8866-8874.	5.2	43
12	Digestion properties of corn starch modified by $\alpha$ -D-glucan branching enzyme and cyclodextrin glycosyltransferase. <i>Food Hydrocolloids</i> , 2019, 89, 534-541.	10.7	42
13	Preparation and characterization of pullulanase debranched starches and their properties for drug controlled-release. <i>RSC Advances</i> , 2015, 5, 97066-97075.	3.6	39
14	Pasting and thermal properties of waxy corn starch modified by 1,4- $\alpha$ -glucan branching enzyme. <i>International Journal of Biological Macromolecules</i> , 2017, 97, 679-687.	7.5	38
15	An investigation into the structure and digestibility of starch-oleic acid complexes prepared under various complexing temperatures. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 966-974.	7.5	33
16	A two-stage modification method using 1,4- $\alpha$ -glucan branching enzyme lowers the in vitro digestibility of corn starch. <i>Food Chemistry</i> , 2020, 305, 125441.	8.2	33
17	Stabilization of Pickering emulsions using starch nanocrystals treated with alkaline solution. <i>International Journal of Biological Macromolecules</i> , 2020, 155, 273-285.	7.5	33
18	Calcium Ion Contribution to Thermostability of Cyclodextrin Glycosyltransferase Is Closely Related to Calcium-Binding Site CallI. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 8836-8841.	5.2	32

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19	Preparation and stability mechanisms of double emulsions stabilized by gelatinized native starch. <i>Carbohydrate Polymers</i> , 2021, 262, 117926.	10.2	30
20	Effects of acid hydrolysis intensity on the properties of starch/xanthan mixtures. <i>International Journal of Biological Macromolecules</i> , 2018, 106, 320-329.	7.5	27
21	Calcium and sodium ions synergistically enhance the thermostability of a maltooligosaccharide-forming amylase from <i>Bacillus stearothermophilus</i> STB04. <i>Food Chemistry</i> , 2019, 283, 170-176.	8.2	27
22	Polyethylene glycols enhance the thermostability of $\beta$ -cyclodextrin glycosyltransferase from <i>Bacillus circulans</i> . <i>Food Chemistry</i> , 2014, 164, 17-22.	8.2	26
23	An extensive review: How starch and gluten impact dough machinability and resultant bread qualities. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 1930-1941.	10.3	25
24	Preparation of acetylated nanofibrillated cellulose from corn stalk microcrystalline cellulose and its reinforcing effect on starch films. <i>International Journal of Biological Macromolecules</i> , 2018, 111, 959-966.	7.5	23
25	Evolutionary Stability of Salt Bridges Hints Its Contribution to Stability of Proteins. <i>Computational and Structural Biotechnology Journal</i> , 2019, 17, 895-903.	4.1	23
26	An Innovative Short-Clustered Maltodextrin as Starch Substitute for Ameliorating Postprandial Glucose Homeostasis. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 354-367.	5.2	23
27	Met349 Mutations Enhance the Activity of 1,4- $\alpha$ -Glucan Branching Enzyme from <i>Geobacillus thermoglucosidans</i> STB02. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 5674-5680.	5.2	22
28	Additional salt bridges improve the thermostability of 1,4- $\alpha$ -glucan branching enzyme. <i>Food Chemistry</i> , 2020, 316, 126348.	8.2	22
29	Leu600 mutations decrease product inhibition of the $\beta$ -cyclodextrin glycosyltransferase from <i>Bacillus circulans</i> STB01. <i>International Journal of Biological Macromolecules</i> , 2018, 115, 1194-1201.	7.5	21
30	Combinatorial effect of fermentation and drying on the relationship between the structure and expansion properties of tapioca starch and potato starch. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 965-973.	7.5	21
31	Two 1,4- $\alpha$ -glucan branching enzymes successively rearrange glycosidic bonds: A novel synergistic approach for reducing starch digestibility. <i>Carbohydrate Polymers</i> , 2021, 262, 117968.	10.2	21
32	Thermostabilization of a thermophilic 1,4- $\alpha$ -glucan branching enzyme through C-terminal truncation. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 1510-1518.	7.5	20
33	Impact of celluloses and pectins restrictions on gluten development and water distribution in potato-wheat flour dough. <i>International Journal of Biological Macromolecules</i> , 2022, 206, 534-542.	7.5	20
34	Bacterial 1,4- $\alpha$ -glucan branching enzymes: characteristics, preparation and commercial applications. <i>Critical Reviews in Biotechnology</i> , 2020, 40, 380-396.	9.0	19
35	Expression and characterization of an extremely thermophilic 1,4- $\alpha$ -glucan branching enzyme from <i>Rhodothermus obamensis</i> STB05. <i>Protein Expression and Purification</i> , 2019, 164, 105478.	1.3	18
36	Characterization of physicochemical properties of cellulose from potato pulp and their effects on enzymatic hydrolysis by cellulase. <i>International Journal of Biological Macromolecules</i> , 2019, 131, 564-571.	7.5	18

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37	Structure-Based Engineering of a Maltooligosaccharide-Forming Amylase To Enhance Product Specificity. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 838-844.	5.2	18
38	Alanine 310 is important for the activity of 1,4- $\alpha$ -glucan branching enzyme from <i>Geobacillus thermoglucosidans</i> STB02. <i>International Journal of Biological Macromolecules</i> , 2017, 97, 156-163.	7.5	17
39	Potassium and sodium ions enhance the activity and thermostability of 1,4- $\alpha$ -glucan branching enzyme from <i>Geobacillus thermoglucosidans</i> in the presence of glycerol. <i>International Journal of Biological Macromolecules</i> , 2017, 102, 712-717.	7.5	16
40	Crystal structure of a maltooligosaccharide-forming amylase from <i>Bacillus stearothermophilus</i> STB04. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 394-402.	7.5	16
41	Flexible Loop in Carbohydrate-Binding Module 48 Allosterically Modulates Substrate Binding of the 1,4- $\alpha$ -Glucan Branching Enzyme. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 5755-5763.	5.2	16
42	Butyrylated starch protects mice from DSS-induced colitis: combined effects of butyrate release and prebiotic supply. <i>Food and Function</i> , 2021, 12, 11290-11302.	4.6	15
43	Effect of cassava starch structure on scalding of dough and baking expansion ability. <i>Food Chemistry</i> , 2021, 352, 129350.	8.2	15
44	Effects of different gelatinization degrees of starch in potato flour on the quality of steamed bread. <i>International Journal of Biological Macromolecules</i> , 2022, 209, 144-152.	7.5	15
45	Nanosilica Sol Leads to Further Increase in Polyethylene Glycol (PEG) 1000-Enhanced Thermostability of $\beta$ -Cyclodextrin Glycosyltransferase from <i>Bacillus circulans</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 2919-2924.	5.2	14
46	Asp577 mutations enhance the catalytic efficiency of cyclodextrin glycosyltransferase from <i>Bacillus circulans</i> . <i>International Journal of Biological Macromolecules</i> , 2016, 83, 111-116.	7.5	14
47	Mutations enhance $\beta$ -cyclodextrin specificity of cyclodextrin glycosyltransferase from <i>Bacillus circulans</i> . <i>Carbohydrate Polymers</i> , 2014, 108, 112-117.	10.2	13
48	Non-classical secretion of 1,4- $\alpha$ -glucan branching enzymes without signal peptides in <i>Escherichia coli</i> . <i>International Journal of Biological Macromolecules</i> , 2019, 132, 759-765.	7.5	13
49	Novel Short-Clustered Maltodextrin as a Dietary Starch Substitute Attenuates Metabolic Dysregulation and Restructures Gut Microbiota in <i>db/db</i> Mice. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 12400-12412.	5.2	13
50	Structure of maltotetraose-forming amylase from <i>Pseudomonas saccharophila</i> STB07 provides insights into its product specificity. <i>International Journal of Biological Macromolecules</i> , 2020, 154, 1303-1313.	7.5	12
51	Carbohydrate-Binding Module and Linker Allow Cold Adaptation and Salt Tolerance of Maltopentaose-Forming Amylase From Marine Bacterium <i>Saccharophagus degradans</i> 2-40T. <i>Frontiers in Microbiology</i> , 2021, 12, 708480.	3.5	12
52	Starch phosphorylation and the in vivo regulation of starch metabolism and characteristics. <i>International Journal of Biological Macromolecules</i> , 2020, 159, 823-831.	7.5	12
53	Mutations at calcium binding site III in cyclodextrin glycosyltransferase improve $\beta$ -cyclodextrin specificity. <i>International Journal of Biological Macromolecules</i> , 2015, 76, 224-229.	7.5	11
54	Rational Design of Disulfide Bonds for Enhancing the Thermostability of the 1,4- $\alpha$ -Glucan Branching Enzyme from <i>Geobacillus thermoglucosidans</i> STB02. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 13791-13797.	5.2	11

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55	Influence of guar gum on the in vitro digestibility of tapioca starch. <i>Starch/Staerke</i> , 2016, 68, 339-347.	2.1	10
56	Enzyme assisted fermentation of potato pulp: An effective way to reduce water holding capacity and improve drying efficiency. <i>Food Chemistry</i> , 2018, 258, 118-123.	8.2	10
57	Importance of Trp139 in the product specificity of a maltooligosaccharide-forming amylase from <i>Bacillus stearothermophilus</i> STB04. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 9433-9442.	3.6	10
58	The desirable salt bridges in amylases: Distribution, configuration and location. <i>Food Chemistry</i> , 2021, 354, 129475.	8.2	10
59	Ultrasonic pretreatment improves the high-temperature liquefaction of corn starch at high concentrations. <i>Starch/Staerke</i> , 2017, 69, 160002.	2.1	9
60	Variants at position 603 of the CGTase from <i>Bacillus circulans</i> STB01 for reducing product inhibition. <i>International Journal of Biological Macromolecules</i> , 2019, 136, 460-468.	7.5	9
61	Starch-Binding Domain Modulates the Specificity of Maltopentaose Production at Moderate Temperatures. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 9057-9065.	5.2	9
62	Effect of increased pressure on the coated layer profile of steamed rice. <i>Food Chemistry</i> , 2020, 310, 125971.	8.2	7
63	Combined effects of wheat gluten and carboxymethylcellulose on dough rheological behaviours and gluten network of potato-wheat flour-based bread. <i>International Journal of Food Science and Technology</i> , 2021, 56, 4149-4158.	2.7	7
64	Structure and Menthone Encapsulation of Corn Starch Modified by Octenyl Succinic Anhydride and Enzymatic Treatment. <i>Journal of Food Quality</i> , 2022, 2022, 1-10.	2.6	7
65	Insights into the thermostability and product specificity of a maltooligosaccharide-forming amylase from <i>Bacillus stearothermophilus</i> STB04. <i>Biotechnology Letters</i> , 2020, 42, 295-303.	2.2	6
66	New insights into the alleviating role of starch derivatives on dough quality deterioration caused by freeze. <i>Food Chemistry</i> , 2021, 362, 130240.	8.2	6
67	The amino acid on the top of the active groove allosterically modulates product specificity of the 1,4- $\alpha$ -glucan branching enzyme. <i>Food Chemistry</i> , 2022, 384, 132458.	8.2	6
68	A two-stage temperature control strategy enhances extracellular secretion of recombinant $\beta$ -cyclodextrin glucosyltransferase in <i>Escherichia coli</i> . <i>AMB Express</i> , 2017, 7, 165.	3.0	5
69	Moderate Vinyl Acetate Acetylation Improves the Pasting Properties of Oxidized Corn Starch. <i>Starch/Staerke</i> , 2021, 73, .	2.1	5
70	A review of controlled release from cyclodextrins: release methods, release systems and application. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 4744-4756.	10.3	5
71	Maltose binding site 2 mutations affect product inhibition of <i>Bacillus circulans</i> STB01 cyclodextrin glucosyltransferase. <i>International Journal of Biological Macromolecules</i> , 2021, 175, 254-261.	7.5	4
72	Effects of acid-ethanol hydrolysis and debranch on acetylated starch and its potential used for curcumin carrier. <i>Carbohydrate Polymers</i> , 2022, 279, 119019.	10.2	4

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73	Importance of C-Terminal Extension in Thermophilic 1,4- $\alpha$ -Glucan Branching Enzyme from <i>Geobacillus thermoglucosidans</i> STB02. <i>Applied Biochemistry and Biotechnology</i> , 2020, 190, 1010-1022.	2.9	3
74	Study on rapid drying and spoilage prevention of potato pulp using solid-state fermentation with <i>Aspergillus aculeatus</i> . <i>Bioresource Technology</i> , 2020, 296, 122323.	9.6	3
75	KOH/thiourea aqueous solution: A potential solvent for studying the dissolution mechanism and chain conformation of corn starch. <i>International Journal of Biological Macromolecules</i> , 2022, 195, 86-92.	7.5	3
76	Beneficial Effects of Three Dietary Cyclodextrins on Preventing Fat Accumulation and Remodeling Gut Microbiota in Mice Fed a High-Fat Diet. <i>Foods</i> , 2022, 11, 1118.	4.3	3
77	Fusion of maltooligosaccharide-forming amylases from two origins for the improvement of maltopentaose synthesis. <i>Food Research International</i> , 2021, 150, 110735.	6.2	2
78	Themes, Trends, and Knowledge Structure in 30 Years of Starch Research in Food Science and Technology: a Visualization Review. <i>Starch/Staerke</i> , 0, , 2100274.	2.1	2
79	The Global Amylase Research Trend in Food Science Technology: A Data-Driven Analysis. <i>Food Reviews International</i> , 2023, 39, 2492-2506.	8.4	1
80	Substrate Selectivity of a Novel Amylo- $\alpha$ -1,6-glucosidase from <i>Thermococcus gammatolerans</i> STB12. <i>Foods</i> , 2022, 11, 1442.	4.3	1
81	Enzymatic cyclodextrin synthesis-tributyrin inclusion complex: Properties, structural characterization and release behaviors in vitro. <i>LWT - Food Science and Technology</i> , 2022, 165, 113726.	5.2	1