Qiang Huang

List of Publications by Year
in descending order

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133	7,030	34016	74018
papers	citations	52 h-index	75 g-index

133	133	133	4826
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In vitro colonic fermentation of dietary fibers: Fermentation rate, short-chain fatty acid production and changes in microbiota. Trends in Food Science and Technology, 2019, 88, 1-9.	7.8	285
2	Physicochemical, functional, and biological properties of water-soluble polysaccharides from Rosa roxburghii Tratt fruit. Food Chemistry, 2018, 249, 127-135.	4.2	261
3	Structural characterizations and digestibility of debranched high-amylose maize starch complexed with lauric acid. Food Hydrocolloids, 2012, 28, 174-181.	5.6	180
4	InÂvitro digestion and physicochemical properties of wheat starch/flour modified by heat-moisture treatment. Journal of Cereal Science, 2015, 63, 109-115.	1.8	161
5	Microwave-assisted extraction of polysaccharides from Moringa oleifera Lam. leaves: Characterization and hypoglycemic activity. Industrial Crops and Products, 2017, 100, 1-11.	2.5	154
6	Structural characterization and in vitro fermentation of a novel polysaccharide from Sargassum thunbergii and its impact on gut microbiota. Carbohydrate Polymers, 2018, 183, 230-239.	5.1	145
7	Effects of octenylsuccinylation on the structure and properties of high-amylose maize starch. Carbohydrate Polymers, 2011, 84, 1276-1281.	5.1	142
8	Characterization, antioxidant and immunomodulatory activities of polysaccharides from Prunella vulgaris Linn. International Journal of Biological Macromolecules, 2015, 75, 298-305.	3.6	142
9	Pickering emulsion gel stabilized by octenylsuccinate quinoa starch granule as lutein carrier: Role of the gel network. Food Chemistry, 2020, 305, 125476.	4.2	131
10	Ultrasound Effects on the Structure and Chemical Reactivity of Cornstarch Granules. Starch/Staerke, 2007, 59, 371-378.	1.1	129
11	Polysaccharide from Rosa roxburghii Tratt Fruit Attenuates Hyperglycemia and Hyperlipidemia and Regulates Colon Microbiota in Diabetic db/db Mice. Journal of Agricultural and Food Chemistry, 2020, 68, 147-159.	2.4	120
12	Modulation of gut microbiota by mulberry fruit polysaccharide treatment of obese diabetic db/db mice. Food and Function, 2018, 9, 3732-3742.	2.1	116
13	Preparation and characterisation of crosslinked waxy potato starch. Food Chemistry, 2009, 115, 563-568.	4.2	111
14	Sulfated modification, characterization, antioxidant and hypoglycemic activities of polysaccharides from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 121, 407-414.	3.6	104
15	Biofunctionalization of selenium nanoparticles with a polysaccharide from Rosa roxburghii fruit and their protective effect against H₂O₂-induced apoptosis in INS-1 cells. Food and Function, 2019, 10, 539-553.	2.1	94
16	Octenylsuccinate quinoa starch granule-stabilized Pickering emulsion gels: Preparation, microstructure and gelling mechanism. Food Hydrocolloids, 2019, 91, 40-47.	5.6	94
17	Physicochemical properties and bioactivity of whey protein isolate-inulin conjugates obtained by Maillard reaction. International Journal of Biological Macromolecules, 2020, 150, 326-335.	3.6	94
18	The inhibitory effects of flavonoids on Î±-amylase and Î±-glucosidase. Critical Reviews in Food Science and Nutrition, 2020, 60, 695-708.	5.4	93

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19	Physicochemical characterization and in vitro hypoglycemic activities of polysaccharides from Sargassum pallidum by microwave-assisted aqueous two-phase extraction. International Journal of Biological Macromolecules, 2018, 109, 357-368.	3.6	92
20	The physicochemical properties of swelled maize starch granules complexed with lauric acid. Food Hydrocolloids, 2013, 32, 365-372.	5.6	90
21	Structural characterization of a novel acidic polysaccharide from Rosa roxburghii Tratt fruit and its Î±-glucosidase inhibitory activity. Food and Function, 2018, 9, 3974-3985.	2.1	87
22	Structural characterization and immune enhancement activity of a novel polysaccharide from Moringa oleifera leaves. Carbohydrate Polymers, 2020, 234, 115897.	5.1	87
23	Effects of maltose on stability and rheological properties of orange oil-in-water emulsion formed by OSA modified starch. Food Hydrocolloids, 2013, 32, 79-86.	5.6	85
24	Effects of adding corn oil and soy protein to corn starch on the physicochemical and digestive properties of the starch. International Journal of Biological Macromolecules, 2017, 104, 481-486.	3.6	82
25	Immobilization of chitosan grafted carboxylic Zr-MOF to porous starch for sulfanilamide adsorption. Carbohydrate Polymers, 2021, 253, 117305.	5.1	80
26	Preparation and characterization of pectin/chitosan beads containing porous starch embedded with doxorubicin hydrochloride: A novel and simple colon targeted drug delivery system. Food Hydrocolloids, 2019, 95, 562-570.	5.6	79
27	In vitro fermentation of mulberry fruit polysaccharides by human fecal inocula and impact on microbiota. Food and Function, 2016, 7, 4637-4643.	2.1	78
28	Ultrasonic degradation effects on the physicochemical, rheological and antioxidant properties of polysaccharide from Sargassum pallidum. Carbohydrate Polymers, 2020, 239, 116230.	5.1	78
29	Ultrasonic effect on the octenyl succinate starch synthesis andÂsubstitution patterns in starch granules. Food Hydrocolloids, 2014, 35, 636-643.	5.6	77
30	Encapsulation of Ethylene Gas into Granular Cold-Water-Soluble Starch: Structure and Release Kinetics. Journal of Agricultural and Food Chemistry, 2017, 65, 2189-2197.	2.4	77
31	Effect of lauric acid on the V-amylose complex distribution and properties ofÂswelled normal cornstarch granules. Journal of Cereal Science, 2013, 58, 89-95.	1.8	76
32	Metalâ€“Organic Framework Based on Î±-Cyclodextrin Gives High Ethylene Gas Adsorption Capacity and Storage Stability. ACS Applied Materials & Interfaces, 2020, 12, 34095-34104.	4.0	75
33	In vitro fecal fermentation of propionylated high-amylose maize starch and its impact on gut microbiota. Carbohydrate Polymers, 2019, 223, 115069.	5.1	72
34	Encapsulation of menthol into cyclodextrin metal-organic frameworks: Preparation, structure characterization and evaluation of complexing capacity. Food Chemistry, 2021, 338, 127839.	4.2	70
35	The effect of enzymatic pretreatments on subsequent octenyl succinic anhydride modifications of cornstarch. Food Hydrocolloids, 2010, 24, 60-65.	5.6	67
36	Effects of palm oil on structural and in vitro digestion properties of cooked rice starches. International Journal of Biological Macromolecules, 2018, 107, 1080-1085.	3.6	67

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37	Comparative study on the physicochemical properties and bioactivities of polysaccharide fractions extracted from Fructus Mori at different temperatures. Food and Function, 2019, 10, 410-421.	2.1	67
38	Starch granules as Pickering emulsifiers: Role of octenylsuccinylation and particle size. Food Chemistry, 2019, 283, 437-444.	4.2	67
39	Effects of Heat Treatment and Moisture Contents on Interactions Between Lauric Acid and Starch Granules. Journal of Agricultural and Food Chemistry, 2014, 62, 7862-7868.	2.4	66
40	Effects of limited moisture content and storing temperature on retrogradation of rice starch. International Journal of Biological Macromolecules, 2019, 137, 1068-1075.	3.6	66
41	Granular size of potato starch affects structural properties, octenylsuccinic anhydride modification and flowability. Food Chemistry, 2016, 212, 453-459.	4.2	64
42	In vitro digestibility and prebiotic potential of a novel polysaccharide from Rosa roxburghii Tratt fruit. Journal of Functional Foods, 2019, 52, 408-417.	1.6	64
43	A comparison study on polysaccharides extracted from Fructus Mori using different methods: structural characterization and glucose entrapment. Food and Function, 2019, 10, 3684-3695.	2.1	61
44	Physicochemical characterization, antioxidant and hypoglycemic activities of selenized polysaccharides from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 132, 308-315.	3.6	61
45	Effects of hydrothermal pretreatment on subsequent octenylsuccinic anhydride (OSA) modification of cornstarch. Carbohydrate Polymers, 2014, 101, 493-498.	5.1	60
46	Anthocyanin-loaded double Pickering emulsion stabilized by octenylsuccinate quinoa starch: Preparation, stability and in vitro gastrointestinal digestion. International Journal of Biological Macromolecules, 2020, 152, 1233-1241.	3.6	60
47	Ordered structure of starch inclusion complex with C10 aroma molecules. Food Hydrocolloids, 2020, 108, 105969.	5.6	60
48	Ultrasonic extraction and structural identification of polysaccharides from Prunella vulgaris and its antioxidant and antiproliferative activities. European Food Research and Technology, 2015, 240, 49-60.	1.6	59
49	Complexation of rice starch/flour and maize oil through heat moisture treatment: Structural, in vitro digestion and physicochemical properties. International Journal of Biological Macromolecules, 2017, 98, 557-564.	3.6	59
50	Modification of starch octenylsuccinate by Î²-amylase hydrolysis in order to increase its emulsification properties. Food Hydrocolloids, 2015, 48, 55-61.	5.6	54
51	High-speed shear effect on properties and octenylsuccinic anhydride modification of corn starch. Food Hydrocolloids, 2015, 44, 32-39.	5.6	54
52	The chemical structure and biological activities of a novel polysaccharide obtained from Fructus Mori and its zinc derivative. Journal of Functional Foods, 2019, 54, 64-73.	1.6	54
53	Particle size affects structural and in vitro digestion properties of cooked rice flours. International Journal of Biological Macromolecules, 2018, 118, 160-167.	3.6	53
54	Fabrication and characterization of starch/zein nanocomposites with pH-responsive emulsion behavior. Food Hydrocolloids, 2021, 112, 106341.	5.6	52

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55	Cell Wall Integrity of Pulse Modulates the in Vitro Fecal Fermentation Rate and Microbiota Composition. Journal of Agricultural and Food Chemistry, 2020, 68, 1091-1100.	2.4	51
56	Octenylsuccinate starch spherulites as a stabilizer for Pickering emulsions. Food Chemistry, 2017, 227, 298-304.	4.2	49
57	AmyM, a Novel Maltohexaose-Forming Î±-Amylase from Corallococcus sp. Strain EGB. Applied and Environmental Microbiology, 2015, 81, 1977-1987.	1.4	48
58	Hypoglycemic effects of a Fructus Mori polysaccharide in vitro and in vivo. Food and Function, 2017, 8, 2523-2535.	2.1	47
59	Characterization of a novel polysaccharide from the leaves of Moringa oleifera and its immunostimulatory activity. Journal of Functional Foods, 2018, 49, 391-400.	1.6	47
60	Variation in the rate and extent of starch digestion is not determined by the starch structural features of cooked whole pulses. Food Hydrocolloids, 2018, 83, 340-347.	5.6	47
61	Encapsulation of lutein into swelled cornstarch granules: Structure, stability and in vitro digestion. Food Chemistry, 2018, 268, 362-368.	4.2	47
62	Identification of polyphenols from Rosa roxburghii Tratt pomace and evaluation of in vitro and in vivo antioxidant activity. Food Chemistry, 2022, 377, 131922.	4.2	47
63	Structure, physicochemical and inÂvitro digestion properties of ternary blends containing swollen maize starch, maize oil and zein protein. Food Hydrocolloids, 2018, 76, 88-95.	5.6	45
64	Physicochemical characterization, potential antioxidant and hypoglycemic activity of polysaccharide from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 139, 1009-1017.	3.6	45
65	Amyloid Fibril Templated MOF Aerogels for Water Purification. Small, 2022, 18, e2105502.	5.2	43
66	Distribution of Octenylsuccinic Substituents in Modified A and B Polymorph Starch Granules. Journal of Agricultural and Food Chemistry, 2013, 61, 12492-12498.	2.4	42
67	Chemical Cross-Linking Controls in Vitro Fecal Fermentation Rate of High-Amylose Maize Starches and Regulates Gut Microbiota Composition. Journal of Agricultural and Food Chemistry, 2019, 67, 13728-13736.	2.4	42
68	Comparative study on the effect of extraction solvent on the physicochemical properties and bioactivity of blackberry fruit polysaccharides. International Journal of Biological Macromolecules, 2021, 183, 1548-1559.	3.6	41
69	Structural characterization and immunomodulatory activity of a new heteropolysaccharide from Prunella vulgaris. Food and Function, 2015, 6, 1557-1567.	2.1	39
70	Preparation of Prunella vulgaris polysaccharide-zinc complex and its antiproliferative activity in HepG2 cells. International Journal of Biological Macromolecules, 2016, 91, 671-679.	3.6	38
71	Structure andin vitrohypoglycemic activity of a homogenous polysaccharide purified fromSargassum pallidum. Food and Function, 2019, 10, 2828-2838.	2.1	38
72	Starch digestion in intact pulse cotyledon cells depends on the extent of thermal treatment. Food Chemistry, 2020, 315, 126268.	4.2	38

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73	Controlled gelatinization of potato parenchyma cells under excess water condition: structural and in vitro digestion properties of starch. Food and Function, 2019, 10, 5312-5322.	2.1	37
74	Single helix in V-type starch carrier determines the encapsulation capacity of ethylene. Carbohydrate Polymers, 2017, 174, 798-803.	5.1	36
75	Chemical property and impacts of different polysaccharide fractions from Fructus Mori. on lipolysis with digestion model in vitro. Carbohydrate Polymers, 2017, 178, 360-367.	5.1	34
76	Surface structural features control in vitro digestion kinetics of bean starches. Food Hydrocolloids, 2018, 85, 343-351.	5.6	34
77	Sprayâ€drying microencapsulation of Î²â€carotene by soy protein isolate and/or OSAâ€modified starch. Journal of Applied Polymer Science, 2014, 131, .	1.3	33
78	Effect of pH and ionic strength on the emulsifying properties of two Octenylsuccinate starches in comparison with gum Arabic. Food Hydrocolloids, 2018, 76, 96-102.	5.6	33
79	Structural and physicochemical properties of granular starches after treatment with debranching enzyme. Carbohydrate Polymers, 2017, 169, 351-356.	5.1	32
80	Physicochemical properties and in vitro bioaccessibility of lutein loaded emulsions stabilized by corn fiber gums. RSC Advances, 2017, 7, 38243-38250.	1.7	32
81	Current advances in the anti-inflammatory effects and mechanisms of natural polysaccharides. Critical Reviews in Food Science and Nutrition, 2023, 63, 5890-5910.	5.4	32
82	Physicochemical properties and application of micronized cornstarch in low fat cream. Journal of Food Engineering, 2013, 116, 881-888.	2.7	31
83	Side-by-side and exo-pitting degradation mechanism revealed from in vitro human fecal fermentation of granular starches. Carbohydrate Polymers, 2021, 263, 118003.	5.1	30
84	Wheat gluten protein inhibits Î±-amylase activity more strongly than a soy protein isolate based on kinetic analysis. International Journal of Biological Macromolecules, 2019, 129, 433-441.	3.6	29
85	Complexation between High-Amylose Starch and Binary Aroma Compounds of Decanal and Thymol: Cooperativity or Competition?. Journal of Agricultural and Food Chemistry, 2021, 69, 11665-11675.	2.4	29
86	In vitro digestion of the whole blackberry fruit: bioaccessibility, bioactive variation of active ingredients and impacts on human gut microbiota. Food Chemistry, 2022, 370, 131001.	4.2	29
87	Annealing improves the concentration and controlled release of encapsulated ethylene in V-type starch. International Journal of Biological Macromolecules, 2019, 141, 947-954.	3.6	28
88	In-vitro inhibitory effects of flavonoids in Rosa roxburghii and R. sterilis fruits on Î±-glucosidase: Effect of stomach digestion on flavonoids alone and in combination with acarbose. Journal of Functional Foods, 2019, 54, 13-21.	1.6	28
89	In vitro fecal fermentation outcomes of starch-lipid complexes depend on starch assembles more than lipid type. Food Hydrocolloids, 2021, 120, 106941.	5.6	28
90	Substituent distribution changes the pasting and emulsion properties of octenylsuccinate starch. Carbohydrate Polymers, 2016, 135, 64-71.	5.1	27

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91	Solid encapsulation of lauric acid into â€œemptyâ€•V-type starch: Structural characteristics and emulsifying properties. Carbohydrate Polymers, 2021, 267, 118181.	5.1	27
92	Type 1 resistant starch: Nutritional properties and industry applications. Food Hydrocolloids, 2022, 125, 107369.	5.6	25
93	Enhanced stability and controlled release of menthol using a Î²-cyclodextrin metal-organic framework. Food Chemistry, 2022, 374, 131760.	4.2	25
94	Preparation and characterization of modified starch granules with high hydrophobicity and flowability. Food Chemistry, 2014, 152, 177-183.	4.2	23
95	Structural features and starch digestion properties of intact pulse cotyledon cells modified by heat-moisture treatment. Journal of Functional Foods, 2019, 61, 103500.	1.6	23
96	Encapsulation and release characteristics of ethylene gas from V6- and V7-type crystalline starches. International Journal of Biological Macromolecules, 2020, 156, 10-17.	3.6	22
97	The mechanism of starch granule reacted with OSA by phase transition catalyst in aqueous medium. Food Chemistry, 2013, 141, 3381-3385.	4.2	21
98	Effects of tea polyphenols and gluten addition on in vitro wheat starch digestion properties. International Journal of Biological Macromolecules, 2019, 126, 525-530.	3.6	21
99	Pea cell wall integrity controls the starch and protein digestion properties in the INFOGEST in vitro simulation. International Journal of Biological Macromolecules, 2021, 182, 1200-1207.	3.6	21
100	Effect of Rosa Roxburghii juice on starch digestibility: A focus on the binding of polyphenols to amylose and porcine pancreatic Î±-amylase by molecular modeling. Food Hydrocolloids, 2022, 123, 106966.	5.6	21
101	Starch Microspheres Entrapped with Chitosan Delay In Vitro Fecal Fermentation and Regulate Human Gut Microbiota Composition. Journal of Agricultural and Food Chemistry, 2021, 69, 12323-12332.	2.4	21
102	Starch-lauric acid complex-stabilised Pickering emulsion gels enhance the thermo-oxidative resistance of flaxseed oil. Carbohydrate Polymers, 2022, 292, 119715.	5.1	21
103	Î±-Glucosidase inhibitors: consistency of in silico docking data with in vitro inhibitory data and inhibitory effect prediction of quercetin derivatives. Food and Function, 2019, 10, 6312-6321.	2.1	20
104	Study on a novel spherical polysaccharide from Fructus Mori with good antioxidant activity. Carbohydrate Polymers, 2021, 256, 117516.	5.1	20
105	CO2 inclusion complexes of Granular V-type crystalline starch: Structure and release kinetics. Food Chemistry, 2019, 289, 145-151.	4.2	19
106	In vitro colonic fermentation profiles and microbial responses of propionylated high-amylose maize starch by individual Bacteroides-dominated enterotype inocula. Food Research International, 2021, 144, 110317.	2.9	19
107	Preparation and characterization of chitosan-based edible active films incorporated with Sargassum pallidum polysaccharides by ultrasound treatment. International Journal of Biological Macromolecules, 2021, 183, 473-480.	3.6	19
108	In vitro fermentation of human milk oligosaccharides by individual Bifidobacterium longum-dominant infant fecal inocula. Carbohydrate Polymers, 2022, 287, 119322.	5.1	18

#	Article	IF	Citations
109	Structural and in vitro starch digestion properties of potato parenchyma cells: Effects of gelatinization degree. Food Hydrocolloids, 2021, 113, 106464.	5.6	17
110	Fabrication and characterization of Pickering high internal phase emulsions stabilized by debranched starch-capric acid complex nanoparticles. International Journal of Biological Macromolecules, 2022, 207, 791-800.	3.6	17
111	Characterization, functional and biological properties of degraded polysaccharides from Hylocereus undatu s flowers. Journal of Food Processing and Preservation, 2019, 43, e13973.	0.9	15
112	Chemical cross-linking reduces in vitro starch digestibility of cooked potato parenchyma cells. Food Hydrocolloids, 2022, 124, 107297.	5.6	15
113	Characteristics and ethylene encapsulation properties of V-type linear dextrin with different degrees of polymerisation. Carbohydrate Polymers, 2022, 277, 118814.	5.1	14
114	Encapsulation of caffeine into starch matrices: Bitterness evaluation and suppression mechanism. International Journal of Biological Macromolecules, 2021, 173, 118-127.	3.6	13
115	Cell wall permeability of pinto bean cotyledon cells regulate in vitro fecal fermentation and gut microbiota. Food and Function, 2021, 12, 6070-6082.	2.1	10
116	Investigation into the mechanisms of quercetin-3-O-glucuronide inhibiting Î±-glucosidase activity and non-enzymatic glycation by spectroscopy and molecular docking. Food and Function, 2021, 12, 7825-7835.	2.1	10
117	Ultra-high Pressure Treatment Controls In Vitro Fecal Fermentation Rate of Insoluble Dietary Fiber from Rosa Roxburghii Tratt Pomace and Induces Butyrogenic Shifts in Microbiota Composition. Journal of Agricultural and Food Chemistry, 2021, 69, 10638-10647.	2.4	10
118	A polysaccharide from Sargassum pallidum reduces obesity in high-fat diet-induced obese mice by modulating glycolipid metabolism. Food and Function, 2022, 13, 7181-7191.	2.1	10
119	Digestibility, bioactivity and prebiotic potential of phenolics released from whole gold kiwifruit and pomace byin vitrogastrointestinal digestion and colonic fermentation. Food and Function, 2020, 11, 9613-9623.	2.1	9
120	The structure, conformation, and hypoglycemic activity of a novel heteropolysaccharide from the blackberry fruit. Food and Function, 2021, 12, 5451-5464.	2.1	9
121	Preparation and characterization of Sargassum pallidum polysaccharide nanoparticles with enhanced antioxidant activity and adsorption capacity. International Journal of Biological Macromolecules, 2022, 208, 196-207.	3.6	9
122	Starch retrogradation in potato cells: Structure and in vitro digestion paradigm. Carbohydrate Polymers, 2022, 286, 119261.	5.1	9
123	Effect of potassium salts on the structure of Î³â€cyclodextrin <scp>MOF</scp> and the encapsulation properties with thymol. Journal of the Science of Food and Agriculture, 2022, 102, 6387-6396.	1.7	9
124	Effect of Octenylsuccinylation of Oxidized Cassava Starch on Grease Resistance and Waterproofing of Food Wrapping Paper. Starch/Staerke, 2019, 71, 1800284.	1.1	8
125	In vitro fecal fermentation profiles and microbiota responses of pulse cell wall polysaccharides: enterotype effect. Food and Function, 2021, 12, 8376-8385.	2.1	7
126	In vitro faecal fermentation outcomes and microbiota shifts of resistant starch spherulites. International Journal of Food Science and Technology, 2022, 57, 2782-2792.	1.3	7

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127	Production of cocoa butter equivalent from blending of illipÃ© butter and palm mid-fraction. Food Chemistry, 2022, 384, 132535.	4.2	7
128	In vitro digestibility and prebiotic activities of a bioactive polysaccharide from Moringa oleifera leaves. Journal of Food Biochemistry, 2021, 45, e13944.	1.2	6
129	Amyloseâ€“Lipid Complex. , 2020, , 57-76.		5
130	In Vitro Starch Digestion: Mechanisms and Kinetic Models. , 2020, , 151-167.		5
131	Encapsulation and controlled release characteristics of ethylene gas in cucurbit[n]urils. Polymer Chemistry, 2019, 10, 6021-6030.	1.9	4
132	Effect of lipids complexes on controlling ethylene gas release from V-type starch. Carbohydrate Polymers, 2022, 291, 119556.	5.1	4
133	Effects of Dual Pullulanaseâ€Đebranching and Temperatureâ€Cycling Treatments on Physicochemical Properties and In Vitro Digestibility of Sago Starch and Its Application in Chinese Steamed Buns. Starch/Staerke, 2020, 72, 2000034.	1.1	3