Ming Miao

List of Publications by Year
in descending order

118 papers	4,671 citations	81839 39 h-index	110317 64 g-index
119 all docs	119 docs citations	119 times ranked	4343 citing authors

#	Article	IF	Citations
1	Dietary polyphenols modulate starch digestion and glycaemic level: a review. Critical Reviews in Food Science and Nutrition, 2020, 60, 541-555.	5.4	227
2	Effect of pullulanase debranching and recrystallization on structure and digestibility of waxy maize starch. Carbohydrate Polymers, 2009, 76, 214-221.	5.1	206
3	Slowly Digestible Starchâ€"A Review. Critical Reviews in Food Science and Nutrition, 2015, 55, 1642-1657.	5.4	205
4	Structure and physicochemical properties of octenyl succinic esters of sugary maize soluble starch and waxy maize starch. Food Chemistry, 2014, 151, 154-160.	4.2	165
5	Purification and characterisation of a new antioxidant peptide from chickpea (Cicer arietium L.) protein hydrolysates. Food Chemistry, 2011, 128, 28-33.	4.2	145
6	<scp>d</scp>â€Mannose: Properties, Production, and Applications: An Overview. Comprehensive Reviews in Food Science and Food Safety, 2016, 15, 773-785.	5.9	129
7	Characterization and antioxidant activity of Ginkgo biloba exocarp polysaccharides. Carbohydrate Polymers, 2012, 87, 40-45.	5.1	119
8	Interaction between soybean protein and tea polyphenols under high pressure. Food Chemistry, 2019, 277, 632-638.	4.2	118
9	Interaction mechanism between green tea extract and human Î±-amylase for reducing starch digestion. Food Chemistry, 2015, 186, 20-25.	4.2	116
10	Recent advances in intelligent food packaging materials: Principles, preparation and applications. Food Chemistry, 2022, 375, 131738.	4.2	115
11	Characterisations of kabuli and desi chickpea starches cultivated in China. Food Chemistry, 2009, 113, 1025-1032.	4.2	112
12	Improving the properties of starch-based antimicrobial composite films using ZnO-chitosan nanoparticles. Carbohydrate Polymers, 2019, 210, 204-209.	5.1	103
13	Impact of mild acid hydrolysis on structure and digestion properties of waxy maize starch. Food Chemistry, 2011, 126, 506-513.	4.2	100
14	Inhibition of Î±-amylase by polyphenolic compounds: Substrate digestion, binding interactions and nutritional intervention. Trends in Food Science and Technology, 2020, 104, 190-207.	7.8	99
15	Elucidation of stabilizing oil-in-water Pickering emulsion with different modified maize starch-based nanoparticles. Food Chemistry, 2017, 229, 152-158.	4.2	87
16	Characterisation of a novel water-soluble polysaccharide from Leuconostoc citreum SK24.002. Food Hydrocolloids, 2014, 36, 265-272.	5.6	81
17	Biosynthesis of levan by levansucrase from Bacillus methylotrophicus SK 21.002. Carbohydrate Polymers, 2014, 101, 975-981.	5.1	75
18	Combined effects of high-pressure and enzymatic treatments on the hydrolysis of chickpea protein isolates and antioxidant activity of the hydrolysates. Food Chemistry, 2012, 135, 904-912.	4.2	74

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19	Enzymatic modification of corn starch with 4-Î±-glucanotransferase results in increasing slow digestible and resistant starch. International Journal of Biological Macromolecules, 2014, 65, 208-214.	3.6	74
20	Microbial Starchâ€Converting Enzymes: Recent Insights and Perspectives. Comprehensive Reviews in Food Science and Food Safety, 2018, 17, 1238-1260.	5.9	74
21	Characterisations of oil-in-water Pickering emulsion stabilized hydrophobic phytoglycogen nanoparticles. Food Hydrocolloids, 2018, 76, 78-87.	5.6	72
22	Effect of controlled gelatinization in excess water on digestibility of waxy maize starch. Food Chemistry, 2010, 119, 41-48.	4.2	64
23	Dual-enzymatic modification of maize starch for increasing slow digestion property. Food Hydrocolloids, 2014, 38, 180-185.	5.6	64
24	Partial branching enzyme treatment increases the low glycaemic property and Î±-1,6 branching ratio of maize starch. Food Chemistry, 2014, 164, 502-509.	4.2	60
25	Physicochemical characteristics of a high molecular weight bioengineered Î±-D-glucan from Leuconostoc citreum SK24.002. Food Hydrocolloids, 2015, 50, 37-43.	5.6	59
26	Structural investigation of a neutral extracellular glucan from Lactobacillus reuteri SK24.003. Carbohydrate Polymers, 2014, 106, 384-392.	5.1	58
27	Impact of Î²-amylase degradation on properties of sugary maize soluble starch particles. Food Chemistry, 2015, 177, 1-7.	4.2	58
28	Molecular Dynamics Simulation for Mechanism Elucidation of Food Processing and Safety: State of the Art. Comprehensive Reviews in Food Science and Food Safety, 2019, 18, 243-263.	5.9	58
29	Structural characterizations of waxy maize starch residue following in vitro pancreatin and amyloglucosidase synergistic hydrolysis. Food Hydrocolloids, 2011, 25, 214-220.	5.6	50
30	Structure and physicochemical properties for modified starch-based nanoparticle from different maize varieties. Food Hydrocolloids, 2017, 67, 37-44.	5.6	50
31	Food Matrix Effects for Modulating Starch Bioavailability. Annual Review of Food Science and Technology, 2021, 12, 169-191.	5.1	50
32	Physicochemical properties of a water soluble extracellular homopolysaccharide from Lactobacillus reuteri SK24.003. Carbohydrate Polymers, 2015, 131, 377-383.	5.1	49
33	Resveratrol and inflammatory bowel disease. Annals of the New York Academy of Sciences, 2017, 1403, 38-47.	1.8	49
34	Structure and digestibility of endosperm water-soluble Î±-glucans from different sugary maize mutants. Food Chemistry, 2014, 143, 156-162.	4.2	48
35	Elucidation of structural difference in theaflavins for modulation of starch digestion. Journal of Functional Foods, 2013, 5, 2024-2029.	1.6	45
36	Phytonutrients for controlling starch digestion: Evaluation of grape skin extract. Food Chemistry, 2014, 145, 205-211.	4.2	45

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37	Development of maize starch with a slow digestion property using maltogenic Î±-amylase. Carbohydrate Polymers, 2014, 103, 164-169.	5.1	45
38	Metabolic mechanism of phenyllactic acid naturally occurring in Chinese pickles. Food Chemistry, 2015, 186, 265-270.	4.2	45
39	Structure elucidation of catechins for modulation of starch digestion. LWT - Food Science and Technology, 2014, 57, 188-193.	2.5	44
40	Impact of dual-enzyme treatment on the octenylsuccinic anhydride esterification of soluble starch nanoparticle. Carbohydrate Polymers, 2016, 147, 392-400.	5.1	43
41	Mechanism of binding interactions between young apple polyphenols and porcine pancreatic Î±-amylase. Food Chemistry, 2019, 283, 468-474.	4.2	43
42	The effects of an antioxidative pentapeptide derived from chickpea protein hydrolysates on oxidative stress in Caco-2 and HT-29 cell lines. Journal of Functional Foods, 2014, 7, 719-726.	1.6	42
43	Biotransformation of stevioside by Leuconostoc citreum SK24.002 alternansucrase acceptor reaction. Food Chemistry, 2014, 146, 23-29.	4.2	41
44	High-level production of poly(Î³-glutamic acid) by a newly isolated glutamate-independent strain, Bacillus methylotrophicus. Process Biochemistry, 2015, 50, 329-335.	1.8	39
45	Structure and functional properties of starches from Chinese ginkgo (Ginkgo biloba L.) nuts. Food Research International, 2012, 49, 303-310.	2.9	38
46	Elucidation of Substituted Ester Group Position in Octenylsuccinic Anhydride Modified Sugary Maize Soluble Starch. Journal of Agricultural and Food Chemistry, 2014, 62, 11696-11705.	2.4	36
47	Characterizations of oil-in-water emulsion stabilized by different hydrophobic maize starches. Carbohydrate Polymers, 2017, 166, 195-201.	5.1	36
48	Purification, preliminary structural characterization and inÂvitro antioxidant activity of polysaccharides from Acanthus ilicifolius. LWT - Food Science and Technology, 2014, 56, 9-14.	2.5	35
49	Characterizations and Bioavailability of Dendrimer-like Glucan Nanoparticulate System Containing Resveratrol. Journal of Agricultural and Food Chemistry, 2020, 68, 6420-6429.	2.4	35
50	Improving properties of normal maize starch films using dual-modification: Combination treatment of debranching and hydroxypropylation. International Journal of Biological Macromolecules, 2019, 130, 197-202.	3.6	32
51	Polysaccharides modification through green technology: Role of ultrasonication towards improving physicochemical properties of (1-3)(1-6)-Î±-d-glucans. Food Hydrocolloids, 2015, 50, 166-173.	5.6	28
52	Characterization of a thermostable glucose isomerase with an acidic pH optimum from Acidothermus cellulolyticus. Food Research International, 2012, 47, 364-367.	2.9	26
53	Effect of high hydrostatic pressure (HHP) treatment on texture changes of water bamboo shoots cultivated in China. Postharvest Biology and Technology, 2011, 59, 327-329.	2.9	25
54	Improved the slow digestion property of maize starch using partially Î²-amylolysis. Food Chemistry, 2014, 152, 128-132.	4.2	24

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55	Biological macromolecule delivery system for improving functional performance of hydrophobic nutraceuticals. Current Opinion in Food Science, 2016, 9, 56-61.	4.1	23
56	Engineering <i>Escherichia coli</i> for the High-Titer Biosynthesis of Lacto-<i>N</i>-tetraose. Journal of Agricultural and Food Chemistry, 2022, 70, 8704-8712.	2.4	23
57	Arginase from Bacillus thuringiensis SK 20.001: Purification, characteristics, and implications for l-ornithine biosynthesis. Process Biochemistry, 2013, 48, 663-668.	1.8	22
58	Enzyme-catalysed synthesis of plant steryl laurate in non-aqueous media using salt hydrate pairs and its characterisation. Journal of Functional Foods, 2014, 7, 452-461.	1.6	22
59	Leuconostoc citreum SK24.002 glucansucrase: Biochemical characterisation and de novo synthesis of Î±-glucan. International Journal of Biological Macromolecules, 2016, 91, 123-131.	3.6	22
60	Characterisations of Lactobacillus reuteri SK24.003 glucansucrase: Implications for Î±-gluco-poly- and oligosaccharides biosynthesis. Food Chemistry, 2017, 222, 105-112.	4.2	21
61	Production of Mannitol from a High Concentration of Glucose by Candida parapsilosis SK26.001. Applied Biochemistry and Biotechnology, 2017, 181, 391-406.	1.4	21
62	Structure, properties and potential applications of phytoglycogen and waxy starch subjected to carboxymethylation. Carbohydrate Polymers, 2020, 234, 115908.	5.1	21
63	Structural elucidation and in vitro fermentation of extracellular Î±-d-glucan from Lactobacillus reuteri SK24.003. Bioactive Carbohydrates and Dietary Fibre, 2015, 6, 109-116.	1.5	20
64	Effect of New Frying Technology on Starchy Food Quality. Foods, 2021, 10, 1852.	1.9	20
65	Development of dendrimer-like glucan-stabilized Pickering emulsions incorporated with Î²-carotene. Food Chemistry, 2022, 385, 132626.	4.2	20
66	Biosynthesis of lactosylfructoside by an intracellular levansucrase from Bacillus methylotrophicus SK 21.002. Carbohydrate Research, 2015, 401, 122-126.	1.1	19
67	Elucidating molecular structure and prebiotics properties of bioengineered Î±-D-glucan from Leuconostoc citreum SK24.002. Food Hydrocolloids, 2016, 54, 227-233.	5.6	19
68	Rebuilding the lid region from conformational and dynamic features to engineering applications of lipase in foods: Current status and future prospects. Comprehensive Reviews in Food Science and Food Safety, 2022, 21, 2688-2714.	5.9	19
69	Dendrimer-like glucan nanoparticulate system improves the solubility and cellular antioxidant activity of coenzyme Q10. Food Chemistry, 2020, 333, 127510.	4.2	18
70	Enzymatic hydrolysis of inulin in a bioreactor coupled with an ultrafiltration membrane. Desalination, 2012, 284, 309-315.	4.0	17
71	Effects of high hydrostatic pressure on lipase from Rhizopus chinensis: I. Conformational changes. Innovative Food Science and Emerging Technologies, 2017, 41, 267-276.	2.7	17
72	Purification and characterization of an intracellular Î±-l-rhamnosidase from a newly isolated strain, Alternaria alternata SK37.001. Food Chemistry, 2018, 269, 63-69.	4.2	17

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73	Recent advances on biological difructose anhydride III production using inulase II from inulin. Applied Microbiology and Biotechnology, 2011, 92, 457-465.	1.7	15
74	DFA III production from inulin with inulin fructotransferase in ultrafiltration membrane bioreactor. Journal of Bioscience and Bioengineering, 2012, 113, 55-57.	1.1	15
75	Structural modification and characterisation of a sugary maize soluble starch particle after double enzyme treatment. Carbohydrate Polymers, 2015, 122, 101-107.	5.1	15
76	Characterization of a thermostable arginase from Rummeliibacillus pycnus SK31.001. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S68-S75.	1.8	15
77	The contribution of intact structure and food processing to functionality of plant cell wall-derived dietary fiber. Food Hydrocolloids, 2022, 127, 107511.	5.6	15
78	Purification and characterization of an intracellular levansucrase derived from <i>Bacillus methylotrophicus</i> SK 21.002. Biotechnology and Applied Biochemistry, 2015, 62, 815-822.	1.4	14
79	Development of a recombinant d-mannose isomerase and its characterizations for d-mannose synthesis. International Journal of Biological Macromolecules, 2016, 89, 328-335.	3.6	14
80	Advances in applications, metabolism, and biotechnological production of L-xylulose. Applied Microbiology and Biotechnology, 2016, 100, 535-540.	1.7	14
81	Plant-sourced intrinsic dietary fiber: Physical structure and health function. Trends in Food Science and Technology, 2021, 118, 341-355.	7.8	13
82	Difructosan anhydrides III preparation from sucrose by coupled enzyme reaction. Carbohydrate Polymers, 2013, 92, 1608-1611.	5.1	12
83	Structureâ€“prebiotic properties relationship for Î±-D-glucan from Leuconostoc citreum SK24.002. Food Hydrocolloids, 2016, 57, 246-252.	5.6	12
84	Behavior of Yarrowia lipolytica Lipase Lip2 under high hydrostatic pressure: Conformational changes and isokineticity diagram. Journal of Molecular Catalysis B: Enzymatic, 2016, 127, 34-39.	1.8	11
85	Overproduction of Rummeliibacillus pycnus arginase with multi-copy insertion of the arg R.pyc cassette into the Bacillus subtilis chromosome. Applied Microbiology and Biotechnology, 2017, 101, 6039-6048.	1.7	11
86	Enhancing the thermal stability of inulin fructotransferase with high hydrostatic pressure. International Journal of Biological Macromolecules, 2015, 74, 171-178.	3.6	10
87	Cloning, expression, and characterization of a thermostable <scp>l</scp>â€arginase from <i>Geobacillus thermodenitrificans</i> NG80â€2 for <scp>l</scp>â€ornithine production. Biotechnology and Applied Biochemistry, 2016, 63, 391-397.	1.4	10
88	Biofabrication, structure and characterization of an amylopectin-based cyclic glucan. Food and Function, 2020, 11, 2543-2554.	2.1	10
89	Deciphering molecular interaction and digestibility in retrogradation of amylopectin gel networks. Food and Function, 2021, 12, 11460-11468.	2.1	10
90	Functional characteristics of starches from the root of Cynanchum auriculatum Royle ex Wight grown in China. Carbohydrate Polymers, 2012, 88, 568-575.	5.1	9

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91	Dry powder preparation of inulin fructotransferase from Arthrobacter aurescens SK 8.001 fermented liquor. Carbohydrate Polymers, 2013, 95, 654-656.	5.1	9
92	Intracellular synthesis of glutamic acid in <i>Bacillus methylotrophicus</i><scp>SK19</scp>.001, a glutamateâ€independent poly(<i>Î³</i>â€glutamic acid)â€producing strain. Journal of the Science of Food and Agriculture, 2016, 96, 66-72.	1.7	9
93	Synthesis of potential prebiotic Î±-glucooligosaccharides using microbial glucansucrase and their <i>in vitro</i> fecal fermentation. Food and Function, 2020, 11, 1672-1683.	2.1	9
94	Activity of Candida rugosa lipase for synthesis of hexyl octoate under high hydrostatic pressure and the mechanism of this reaction. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S439-S444.	1.8	8
95	Thermostability and Specific-Activity Enhancement of an Arginine Deiminase from <i>Enterococcus faecalis</i> SK23.001 via Semirational Design for <scp>l</scp>-Citrulline Production. Journal of Agricultural and Food Chemistry, 2018, 66, 8841-8850.	2.4	8
96	Effects of pH and dissolved oxygen on the synthesis of Î³â€glutamyltranspeptidase from <i>Bacillus subtilis</i> SK 11.004. Journal of the Science of Food and Agriculture, 2012, 92, 475-480.	1.7	7
97	Effects of high hydrostatic pressure on Rhizopus chinensis lipase: II. Intermediate states during unfolding. Innovative Food Science and Emerging Technologies, 2018, 45, 152-160.	2.7	7
98	Fabrication and characterizations of cyclic amylopectin-based delivery system incorporated with Î²-carotene. Food Hydrocolloids, 2022, 130, 107680.	5.6	7
99	Sorbitol counteracts high hydrostatic pressure-induced denaturation of inulin fructotransferase. International Journal of Biological Macromolecules, 2014, 70, 251-256.	3.6	6
100	Polysaccharide Modification through Green Technology: Role of Endodextranase in Improving the Physicochemical Properties of (1â†’3)(1â†’6)-Î±-<scp>d</scp>-Glucan. Journal of Agricultural and Food Chemistry, 2015, 63, 6450-6456.	2.4	6
101	Elucidation of pressure-induced lid movement and catalysis behavior of Rhizopus chinensis lipase. International Journal of Biological Macromolecules, 2017, 103, 360-365.	3.6	6
102	Impact of glucansucrase treatment on structure and properties of maize starch. Starch/Staerke, 2017, 69, 1600222.	1.1	6
103	Improving the catalytic behavior of inulin fructotransferase under high hydrostatic pressure. Journal of the Science of Food and Agriculture, 2015, 95, 2588-2594.	1.7	5
104	Development of a novel starch-based dietary fiber using glucanotransferase. Food and Function, 2021, 12, 5745-5754.	2.1	5
105	Effect of shaking velocity on mono-glycosyl-stevioside productivity via alternansucrase acceptor reaction. Journal of Molecular Catalysis B: Enzymatic, 2015, 116, 106-112.	1.8	4
106	A coupled system involving arginase and urease for l-ornithine production. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S303-S310.	1.8	3
107	Immobilization of Y. lipolytica lipase and the continuous synthesis of geranyl propionate. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S311-S316.	1.8	3
108	Coupled effects of salt and pressure on catalytic ability of <i>Rhizopus chinensis</i> lipase. Journal of the Science of Food and Agriculture, 2017, 97, 5381-5387.	1.7	3

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109	Fabrication, Structure and Functional Characterizations of pH-Responsive Hydrogels Derived from Phytoglycogen. Foods, 2021, 10, 2653.	1.9	3
110	2nd international symposium on phytochemicals in medicine and food (2-ISPMF). Phytochemistry Reviews, 2017, 16, 375-377.	3.1	2
111	In situ and real-time insight into Rhizopus chinensis lipase under high pressure and temperature: Conformational traits and biobehavioural analysis. International Journal of Biological Macromolecules, 2020, 154, 1314-1323.	3.6	2
112	Biosynthesis, structural characteristics and prebiotic properties of maltitol-based acceptor products. Journal of Functional Foods, 2021, 78, 104374.	1.6	2
113	Starch. , 2020, , 1-45.		1
114	Reuteransucrase-catalytic kinetic modeling and functional characteristics for novel prebiotic gluco-oligomers. Food and Function, 2020, 11, 7037-7047.	2.1	1
115	Characterization of xylitol 4-dehydrogenase from Erwinia aphidicola and its co-expression with NADH oxidase in Bacillus subtilis. Process Biochemistry, 2021, 104, 92-100.	1.8	1
116	Editorial: Advances and Challenges of Carrier Architectures for Bioactive Delivery Systems. Frontiers in Chemistry, 2021, 9, 739946.	1.8	1
117	Starch. , 2021, , 1909-1953.		0
118	Characterization of a recombinant arginine deiminase from <i>Halothermothrix orenii</i> and its application in citrulline production. Biotechnology and Applied Biochemistry, 0, , .	1.4	0