Xiong Fu

List of Publications by Year in descending order

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125 papers	6,174 citations	53794 45 h-index	85541 71 g-index
125 all docs	125 docs citations	125 times ranked	5055 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.	15.1	285
2	Physicochemical, functional, and biological properties of water-soluble polysaccharides from Rosa roxburghii Tratt fruit. Food Chemistry, 2018, 249, 127-135.	8.2	261
3	Comparison of phytochemical profiles, antioxidant and cellular antioxidant activities of different varieties of blueberry (Vaccinium spp.). Food Chemistry, 2017, 217, 773-781.	8.2	184
4	Optimization of microwave-assisted extraction of Sargassum thunbergii polysaccharides and its antioxidant and hypoglycemic activities. Carbohydrate Polymers, 2017, 173, 192-201.	10.2	155
5	Microwave-assisted extraction of polysaccharides from Moringa oleifera Lam. leaves: Characterization and hypoglycemic activity. Industrial Crops and Products, 2017, 100, 1-11.	5.2	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.	10.2	145
7	Effects of octenylsuccinylation on the structure and properties of high-amylose maize starch. Carbohydrate Polymers, 2011, 84, 1276-1281.	10.2	142
8	Characterization, antioxidant and immunomodulatory activities of polysaccharides from Prunella vulgaris Linn. International Journal of Biological Macromolecules, 2015, 75, 298-305.	7.5	142
9	Pickering emulsion gel stabilized by octenylsuccinate quinoa starch granule as lutein carrier: Role of the gel network. Food Chemistry, 2020, 305, 125476.	8.2	131
10	Comparative assessment of phytochemical profiles, antioxidant and antiproliferative activities of Sea buckthorn (HippophaÃ« rhamnoides L.) berries. Food Chemistry, 2017, 221, 997-1003.	8.2	126
11	Comparison of aroma-active compounds in broiler broth and native chicken broth by aroma extract dilution analysis (AEDA), odor activity value (OAV) and omission experiment. Food Chemistry, 2018, 265, 274-280.	8.2	124
12	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.	5.2	120
13	Fractionation, preliminary structural characterization and bioactivities of polysaccharides from Sargassum pallidum. Carbohydrate Polymers, 2017, 155, 261-270.	10.2	106
14	Phenolic contents and cellular antioxidant activity of Chinese hawthorn â€œCrataegus pinnatifidaâ€• Food Chemistry, 2015, 186, 54-62.	8.2	104
15	Sulfated modification, characterization, antioxidant and hypoglycemic activities of polysaccharides from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 121, 407-414.	7.5	104
16	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.	4.6	94
17	Octenylsuccinate quinoa starch granule-stabilized Pickering emulsion gels: Preparation, microstructure and gelling mechanism. Food Hydrocolloids, 2019, 91, 40-47.	10.7	94
18	Physicochemical properties and bioactivity of whey protein isolate-inulin conjugates obtained by Maillard reaction. International Journal of Biological Macromolecules, 2020, 150, 326-335.	7.5	94

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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.	7.5	92
20	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.	4.6	87
21	Structural characterization and immune enhancement activity of a novel polysaccharide from Moringa oleifera leaves. Carbohydrate Polymers, 2020, 234, 115897.	10.2	87
22	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.	7.5	82
23	Immobilization of chitosan grafted carboxylic Zr-MOF to porous starch for sulfanilamide adsorption. Carbohydrate Polymers, 2021, 253, 117305.	10.2	80
24	In vitro fermentation of mulberry fruit polysaccharides by human fecal inocula and impact on microbiota. Food and Function, 2016, 7, 4637-4643.	4.6	78
25	Ultrasonic degradation effects on the physicochemical, rheological and antioxidant properties of polysaccharide from Sargassum pallidum. Carbohydrate Polymers, 2020, 239, 116230.	10.2	78
26	Encapsulation of Ethylene Gas into Granular Cold-Water-Soluble Starch: Structure and Release Kinetics. Journal of Agricultural and Food Chemistry, 2017, 65, 2189-2197.	5.2	77
27	Metalâ€“Organic Framework Based on Î±-Cyclodextrin Gives High Ethylene Gas Adsorption Capacity and Storage Stability. ACS Applied Materials & Interfaces, 2020, 12, 34095-34104.	8.0	75
28	Comparison of phytochemical profiles and health benefits in fiber and oil flaxseeds (Linum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Tc	8.2	72
29	In vitro fecal fermentation of propionylated high-amylose maize starch and its impact on gut microbiota. Carbohydrate Polymers, 2019, 223, 115069.	10.2	72
30	Effect of germination on lignan biosynthesis, and antioxidant and antiproliferative activities in flaxseed (Linum usitatissimum L.). Food Chemistry, 2016, 205, 170-177.	8.2	71
31	Starch granules as Pickering emulsifiers: Role of octenylsuccinylation and particle size. Food Chemistry, 2019, 283, 437-444.	8.2	67
32	Effects of limited moisture content and storing temperature on retrogradation of rice starch. International Journal of Biological Macromolecules, 2019, 137, 1068-1075.	7.5	66
33	Granular size of potato starch affects structural properties, octenylsuccinic anhydride modification and flowability. Food Chemistry, 2016, 212, 453-459.	8.2	64
34	Current applications and new opportunities for the thermal and non-thermal processing technologies to generate berry product or extracts with high nutraceutical contents. Food Research International, 2017, 100, 19-30.	6.2	64
35	Physicochemical characterization, antioxidant and hypoglycemic activities of selenized polysaccharides from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 132, 308-315.	7.5	61
36	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.	7.5	59

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37	Ethnomedicinal values, phenolic contents and antioxidant properties of wild culinary vegetables. Journal of Ethnopharmacology, 2015, 162, 333-345.	4.1	53
38	Particle size affects structural and in vitro digestion properties of cooked rice flours. International Journal of Biological Macromolecules, 2018, 118, 160-167.	7.5	53
39	Fabrication and characterization of starch/zein nanocomposites with pH-responsive emulsion behavior. Food Hydrocolloids, 2021, 112, 106341.	10.7	52
40	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.	5.2	51
41	Preparation of starch nanoparticles in water in oil microemulsion system and their drug delivery properties. Carbohydrate Polymers, 2016, 138, 192-200.	10.2	50
42	Octenylsuccinate starch spherulites as a stabilizer for Pickering emulsions. Food Chemistry, 2017, 227, 298-304.	8.2	49
43	Preparation and Characterization of Microemulsions of Myricetin for Improving Its Antiproliferative and Antioxidative Activities and Oral Bioavailability. Journal of Agricultural and Food Chemistry, 2016, 64, 6286-6294.	5.2	48
44	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.	10.7	47
45	Encapsulation of lutein into swelled cornstarch granules: Structure, stability and in vitro digestion. Food Chemistry, 2018, 268, 362-368.	8.2	47
46	Identification of polyphenols from Rosa roxburghii Tratt pomace and evaluation of in vitro and in vivo antioxidant activity. Food Chemistry, 2022, 377, 131922.	8.2	47
47	Digestive Property and Bioactivity of Blackberry Polysaccharides with Different Molecular Weights. Journal of Agricultural and Food Chemistry, 2019, 67, 12428-12440.	5.2	46
48	Structure, physicochemical and inÂvitro digestion properties of ternary blends containing swollen maize starch, maize oil and zein protein. Food Hydrocolloids, 2018, 76, 88-95.	10.7	45
49	Physicochemical characterization, potential antioxidant and hypoglycemic activity of polysaccharide from Sargassum pallidum. International Journal of Biological Macromolecules, 2019, 139, 1009-1017.	7.5	45
50	Changes of digestive and fermentation properties of Sargassum pallidum polysaccharide after ultrasonic degradation and its impacts on gut microbiota. International Journal of Biological Macromolecules, 2020, 164, 1443-1450.	7.5	44
51	Distribution of Octenylsuccinic Substituents in Modified A and B Polymorph Starch Granules. Journal of Agricultural and Food Chemistry, 2013, 61, 12492-12498.	5.2	42
52	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.	5.2	42
53	Phytochemical composition, cellular antioxidant capacity and antiproliferative activity in mango (Mangifera indica L.) pulp and peel. International Journal of Food Science and Technology, 2017, 52, 817-826.	2.7	41
54	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.	7.5	41

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55	Advantages of the polysaccharides from Gracilaria lemaneiformis over metformin in antidiabetic effects on streptozotocin-induced diabetic mice. RSC Advances, 2017, 7, 9141-9151.	3.6	40
56	The novel contributors of anti-diabetic potential in mulberry polyphenols revealed by UHPLC-HR-ESI-TOF-MS/MS. Food Research International, 2017, 100, 873-884.	6.2	39
57	Preparation of Prunella vulgaris polysaccharide-zinc complex and its antiproliferative activity in HepG2 cells. International Journal of Biological Macromolecules, 2016, 91, 671-679.	7.5	38
58	Starch digestion in intact pulse cotyledon cells depends on the extent of thermal treatment. Food Chemistry, 2020, 315, 126268.	8.2	38
59	Major triterpenoids in Chinese hawthorn â€œCrataegus pinnatifidaâ€•and their effects on cell proliferation and apoptosis induction in MDA-MB-231 cancer cells. Food and Chemical Toxicology, 2017, 100, 149-160.	3.6	37
60	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.	4.6	37
61	Single helix in V-type starch carrier determines the encapsulation capacity of ethylene. Carbohydrate Polymers, 2017, 174, 798-803.	10.2	36
62	Screening Î±-glucosidase inhibitors from four edible brown seaweed extracts by ultra-filtration and molecular docking. LWT - Food Science and Technology, 2021, 138, 110654.	5.2	36
63	Phenolic content, antioxidant and antiproliferative activities of six varieties of white sesame seeds (Sesamum indicumÂL.). RSC Advances, 2017, 7, 5751-5758.	3.6	35
64	Chemical property and impacts of different polysaccharide fractions from Fructus Mori. on lipolysis with digestion model in vitro. Carbohydrate Polymers, 2017, 178, 360-367.	10.2	34
65	Surface structural features control in vitro digestion kinetics of bean starches. Food Hydrocolloids, 2018, 85, 343-351.	10.7	34
66	Physicochemical properties and in vitro bioaccessibility of lutein loaded emulsions stabilized by corn fiber gums. RSC Advances, 2017, 7, 38243-38250.	3.6	32
67	Current advances in the anti-inflammatory effects and mechanisms of natural polysaccharides. Critical Reviews in Food Science and Nutrition, 2023, 63, 5890-5910.	10.3	32
68	Side-by-side and exo-pitting degradation mechanism revealed from in vitro human fecal fermentation of granular starches. Carbohydrate Polymers, 2021, 263, 118003.	10.2	30
69	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.	5.2	29
70	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.	8.2	29
71	Spheroidization on Fructus Mori polysaccharides to enhance bioavailability and bioactivity by anti-solvent precipitation method. Food Chemistry, 2019, 300, 125245.	8.2	28
72	Annealing improves the concentration and controlled release of encapsulated ethylene in V-type starch. International Journal of Biological Macromolecules, 2019, 141, 947-954.	7.5	28

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73	In vitro fecal fermentation outcomes of starch-lipid complexes depend on starch assembles more than lipid type. Food Hydrocolloids, 2021, 120, 106941.	10.7	28
74	Solid encapsulation of lauric acid into â€œemptyâ€•V-type starch: Structural characteristics and emulsifying properties. Carbohydrate Polymers, 2021, 267, 118181.	10.2	27
75	Antioxidant, antitumor and immunomodulatory activities of water-soluble polysaccharides in Abrus cantoniensis. International Journal of Biological Macromolecules, 2016, 89, 707-716.	7.5	26
76	The use of an enzymatic extraction procedure for the enhancement of highland barley (Hordeum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Technology, 2016, 51, 1916-1924.	2.7	25
77	Type 1 resistant starch: Nutritional properties and industry applications. Food Hydrocolloids, 2022, 125, 107369.	10.7	25
78	Enhanced stability and controlled release of menthol using a Î²-cyclodextrin metal-organic framework. Food Chemistry, 2022, 374, 131760.	8.2	25
79	Phytochemical content, cellular antioxidant activity and antiproliferative activity of Adinandra nitida tea (Shiyacha) infusion subjected to in vitro gastrointestinal digestion. RSC Advances, 2017, 7, 50430-50440.	3.6	24
80	Structural features and starch digestion properties of intact pulse cotyledon cells modified by heat-moisture treatment. Journal of Functional Foods, 2019, 61, 103500.	3.4	23
81	Immobilization of urease on dialdehyde porous starch. Starch/Staerke, 2010, 62, 652-657.	2.1	22
82	Reducing the Influence of the Thermally Induced Reactions on the Determination of Aroma-Active Compounds in Soy Sauce Using SDE and GC-MS/O. Food Analytical Methods, 2017, 10, 931-942.	2.6	22
83	Encapsulation and release characteristics of ethylene gas from V6- and V7-type crystalline starches. International Journal of Biological Macromolecules, 2020, 156, 10-17.	7.5	22
84	Polyethylene-octene elastomer/starch blends: miscibility, morphology and mechanical properties. Journal of Polymer Research, 2007, 14, 297-304.	2.4	21
85	Effects of aging on the phytochemical profile and antioxidative activity of Pericarpium Citri Reticulatae â€˜Chachiensisâ€™. RSC Advances, 2016, 6, 105272-105281.	3.6	21
86	Effects of tea polyphenols and gluten addition on in vitro wheat starch digestion properties. International Journal of Biological Macromolecules, 2019, 126, 525-530.	7.5	21
87	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.	7.5	21
88	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.	10.7	21
89	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.	5.2	21
90	Starch-lauric acid complex-stabilised Pickering emulsion gels enhance the thermo-oxidative resistance of flaxseed oil. Carbohydrate Polymers, 2022, 292, 119715.	10.2	21

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91	CO2 inclusion complexes of Granular V-type crystalline starch: Structure and release kinetics. Food Chemistry, 2019, 289, 145-151.	8.2	19
92	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.	6.2	19
93	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.	7.5	19
94	Effect of chitosan oligosaccharide glycosylation on the emulsifying property of lactoferrin. International Journal of Biological Macromolecules, 2022, 209, 93-106.	7.5	19
95	In vitro fermentation of human milk oligosaccharides by individual Bifidobacterium longum-dominant infant fecal inocula. Carbohydrate Polymers, 2022, 287, 119322.	10.2	18
96	Morphology and phase transition of waxy cornstarch in solvents of 1-allyl-3-methylimidazolium chloride/water. International Journal of Biological Macromolecules, 2015, 78, 304-312.	7.5	17
97	Comparative assessment of phytochemical profiles and antioxidant and antiproliferative activities of kiwifruit (Actinidia deliciosa) cultivars. Journal of Food Biochemistry, 2019, 43, e13025.	2.9	17
98	Structural and in vitro starch digestion properties of potato parenchyma cells: Effects of gelatinization degree. Food Hydrocolloids, 2021, 113, 106464.	10.7	17
99	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.	7.5	17
100	Physicochemical properties and bioactivity of polysaccharides from Sargassum pallidum by fractional ethanol precipitation. International Journal of Food Science and Technology, 2021, 56, 3536-3545.	2.7	16
101	Structure characterization of soybean peptides and their protective activity against intestinal inflammation. Food Chemistry, 2022, 387, 132868.	8.2	16
102	Comparative suppression of NLRP3 inflammasome activation with LPS-induced inflammation by blueberry extracts (Vaccinium spp.). RSC Advances, 2017, 7, 28931-28939.	3.6	15
103	Fabrication and Optimization of Selfâ€Microemulsions to Improve the Oral Bioavailability of Total Flavones of HippophaÃ« rhamnoides L. Journal of Food Science, 2017, 82, 2901-2909.	3.1	15
104	Characterization, functional and biological properties of degraded polysaccharides from Hylocereus undatu s flowers. Journal of Food Processing and Preservation, 2019, 43, e13973.	2.0	15
105	Characteristics and ethylene encapsulation properties of V-type linear dextrin with different degrees of polymerisation. Carbohydrate Polymers, 2022, 277, 118814.	10.2	14
106	Encapsulation of caffeine into starch matrices: Bitterness evaluation and suppression mechanism. International Journal of Biological Macromolecules, 2021, 173, 118-127.	7.5	13
107	Stirâ€frying treatments affect the phenolics profiles and cellular antioxidant activity of Adinandra nitida tea (Shiyacha) in daily tea model. International Journal of Food Science and Technology, 2017, 52, 1820-1827.	2.7	12
108	Cell wall permeability of pinto bean cotyledon cells regulate in vitro fecal fermentation and gut microbiota. Food and Function, 2021, 12, 6070-6082.	4.6	10

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109	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.	5.2	10
110	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.	4.6	10
111	The structure, conformation, and hypoglycemic activity of a novel heteropolysaccharide from the blackberry fruit. Food and Function, 2021, 12, 5451-5464.	4.6	9
112	Preparation and characterization of Sargassum pallidum polysaccharide nanoparticles with enhanced antioxidant activity and adsorption capacity. International Journal of Biological Macromolecules, 2022, 208, 196-207.	7.5	9
113	Starch retrogradation in potato cells: Structure and in vitro digestion paradigm. Carbohydrate Polymers, 2022, 286, 119261.	10.2	9
114	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.	3.5	9
115	The effect of geographic variation on chemical composition, antioxidant and hypoglycemic activities of Morus alba L. polysaccharides. Journal of Food Processing and Preservation, 2019, 43, e14206.	2.0	8
116	Effect of Octenylsuccinylation of Oxidized Cassava Starch on Grease Resistance and Waterproofing of Food Wrapping Paper. Starch/Staerke, 2019, 71, 1800284.	2.1	8
117	Analysis of solvent effects on polyphenols profile, antiproliferative and antioxidant activities of mulberry (Morus alba L.) extracts. International Journal of Food Science and Technology, 2017, 52, 1690-1698.	2.7	7
118	In vitro fecal fermentation profiles and microbiota responses of pulse cell wall polysaccharides: enterotype effect. Food and Function, 2021, 12, 8376-8385.	4.6	7
119	In vitro faecal fermentation outcomes and microbiota shifts of resistant starch spherulites. International Journal of Food Science and Technology, 2022, 57, 2782-2792.	2.7	7
120	Association behaviors between carboxymethyl cellulose and polylactic acid revealed by resonance light scattering spectra. Polymer Bulletin, 2009, 62, 549-559.	3.3	6
121	In vitro digestibility and prebiotic activities of a bioactive polysaccharide from Moringa oleifera leaves. Journal of Food Biochemistry, 2021, 45, e13944.	2.9	6
122	Encapsulation and controlled release characteristics of ethylene gas in cucurbit[n]urils. Polymer Chemistry, 2019, 10, 6021-6030.	3.9	4
123	A dynamic view on the chemical composition and bioactive properties of mulberry fruit using anin vitrodigestion and fermentation model. Food and Function, 2022, 13, 4142-4157.	4.6	4
124	A study on the Fe₃O₄@Fructus mori L. polysaccharide particles with enhanced antioxidant activity and bioavailability. Food and Function, 2020, 11, 2268-2278.	4.6	3
125	Characterization of a novel starch-based foam with a tunable release of oxygen. Food Chemistry, 2022, 389, 133062.	8.2	2