Fan Zhu

List of Publications by Citations

142 papers	5,075 citations	43 h-index	64 g-index
144 ext. papers	6,551 ext. citations	8.5 avg, IF	7.59 L-index

#	Paper	IF	Citations
142	Interactions between starch and phenolic compound. *Trends in Food Science and Technology*, **2015**, 43, 129-143	15.3	248
141	Composition, structure, physicochemical properties, and modifications of cassava starch. *Carbohydrate Polymers*, **2015**, 122, 456-80	10.3	190
140	Impact of ultrasound on structure, physicochemical properties, modifications, and applications of starch. *Trends in Food Science and Technology*, **2015**, 43, 1-17	15.3	142
139	Chemical composition and health effects of Tartary buckwheat. *Food Chemistry*, **2016**, 203, 231-245	8.5	139
138	Encapsulation and delivery of food ingredients using starch based systems. *Food Chemistry*, **2017**, 229, 542-552	8.5	136
137	Influence of ingredients and chemical components on the quality of Chinese steamed bread. *Food Chemistry*, **2014**, 163, 154-62	8.5	124
136	Chemical constituents and health effects of sweet potato. *Food Research International*, **2016**, 89, 90-1167		116
135	Starch based Pickering emulsions: Fabrication, properties, and applications. *Trends in Food Science and Technology*, **2019**, 85, 129-137	15.3	110
134	Effect of phytochemical extracts on the pasting, thermal, and gelling properties of wheat starch. *Food Chemistry*, **2009**, 112, 919-923	8.5	101
133	Physicochemical properties of quinoa starch. *Carbohydrate Polymers*, **2016**, 137, 328-338	10.3	96
132	Effect of black tea on antioxidant, textural, and sensory properties of Chinese steamed bread. *Food Chemistry*, **2016**, 194, 1217-23	8.5	94
131	Anthocyanins in cereals: Composition and health effects. *Food Research International*, **2018**, 109, 232-249	7	83
130	Relationships between amylopectin internal molecular structure and physicochemical properties of starch. *Trends in Food Science and Technology*, **2018**, 78, 234-242	15.3	82
129	Anthocyanins, hydroxycinnamic acid derivatives, and antioxidant activity in roots of different chinese purple-fleshed sweetpotato genotypes. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 7588-96	5.7	79
128	Chemical composition and food uses of teff (Eragrostis tef). *Food Chemistry*, **2018**, 239, 402-415	8.5	77
127	Buckwheat starch: Structures, properties, and applications. *Trends in Food Science and Technology*, **2016**, 49, 121-135	15.3	77
126	Amylopectin internal molecular structure in relation to physical properties of sweetpotato starch. *Carbohydrate Polymers*, **2011**, 84, 907-918	10.3	73

125	Quinoa starch: Structure, properties, and applications. *Carbohydrate Polymers*, **2018**, 181, 851-861	10.3	73
124	Physicochemical properties, molecular structure, and uses of sweetpotato starch. *Trends in Food Science and Technology*, **2014**, 36, 68-78	15.3	72
123	Effect of γ-irradiation on phenolic compounds in rice grain. *Food Chemistry*, **2010**, 120, 74-77	8.5	70
122	Interactions between cell wall polysaccharides and polyphenols. *Critical Reviews in Food Science and Nutrition*, **2018**, 58, 1808-1831	11.5	69
121	Physicochemical properties of sweetpotato starch. *Starch/Staerke*, **2011**, 63, 249-259	2.3	67
120	Plasma modification of starch. *Food Chemistry*, **2017**, 232, 476-486	8.5	66
119	Physicochemical properties of quinoa flour as affected by starch interactions. *Food Chemistry*, **2017**, 221, 1560-1568	8.5	64
118	Structure, Physicochemical Properties, Modifications, and Uses of Sorghum Starch. *Comprehensive Reviews in Food Science and Food Safety*, **2014**, 13, 597-610	16.4	64
117	Physicochemical interactions of maize starch with ferulic acid. *Food Chemistry*, **2016**, 199, 372-9	8.5	63
116	Formulation and Quality Attributes of Quinoa Food Products. *Food and Bioprocess Technology*, **2016**, 9, 49-68	5.1	62
115	Modifications of konjac glucomannan for diverse applications. *Food Chemistry*, **2018**, 256, 419-426	8.5	59
114	Sacha inchi (Plukenetia volubilis L.): Nutritional composition, biological activity, and uses. *Food Chemistry*, **2018**, 265, 316-328	8.5	57
113	Effect of ozone treatment on the quality of grain products. *Food Chemistry*, **2018**, 264, 358-366	8.5	55
112	Influence of Quinoa Flour on Quality Characteristics of Cookie, Bread and Chinese Steamed Bread. *Journal of Texture Studies*, **2015**, 46, 281-292	3.6	55
111	Rheological and thermal properties of rice starch and rutin mixtures. *Food Research International*, **2012**, 49, 757-762	7	54
110	Amylopectin molecular structure in relation to physicochemical properties of quinoa starch. *Carbohydrate Polymers*, **2017**, 164, 396-402	10.3	53
109	Effect of high pressure on rheological and thermal properties of quinoa and maize starches. *Food Chemistry*, **2018**, 241, 380-386	8.5	53
108	Ultrasound modified polysaccharides: A review of structure, physicochemical properties, biological activities and food applications. *Trends in Food Science and Technology*, **2021**, 107, 491-508	15.3	52

107	Coix: Chemical composition and health effects. *Trends in Food Science and Technology*, **2017**, 61, 160-175	15.3	50
106	Isolation, Composition, Structure, Properties, Modifications, and Uses of Yam Starch. *Comprehensive Reviews in Food Science and Food Safety*, **2015**, 14, 357-386	16.4	49
105	Structure, physicochemical properties, and uses of millet starch. *Food Research International*, **2014**, 64, 200-211	7	48
104	Structures, properties, and applications of lotus starches. *Food Hydrocolloids*, **2017**, 63, 332-348	10.6	47
103	NMR spectroscopy of starch systems. *Food Hydrocolloids*, **2017**, 63, 611-624	10.6	47
102	Triticale: Nutritional composition and food uses. *Food Chemistry*, **2018**, 241, 468-479	8.5	46
101	Starch based aerogels: Production, properties and applications. *Trends in Food Science and Technology*, **2019**, 89, 1-10	15.3	44
100	Staling of Chinese steamed bread: Quantification and control. *Trends in Food Science and Technology*, **2016**, 55, 118-127	15.3	43
99	Impact of γ-irradiation on structure, physicochemical properties, and applications of starch. *Food Hydrocolloids*, **2016**, 52, 201-212	10.6	42
98	Barley Starch: Composition, Structure, Properties, and Modifications. *Comprehensive Reviews in Food Science and Food Safety*, **2017**, 16, 558-579	16.4	40
97	Molecular structure of quinoa starch. *Carbohydrate Polymers*, **2017**, 158, 124-132	10.3	40
96	Structures, properties, modifications, and uses of oat starch. *Food Chemistry*, **2017**, 229, 329-340	8.5	39
95	Effect of Phenolic Compounds on the Pasting and Textural Properties of Wheat Starch. *Starch/Staerke*, **2008**, 60, 609-616	2.3	39
94	Chemical composition and health effects of maca (Lepidium meyenii). *Food Chemistry*, **2019**, 288, 422-448	8.5	36
93	Tannins as an alternative to antibiotics. *Food Bioscience*, **2020**, 38, 100751	4.9	35
92	Dietary fiber polysaccharides of amaranth, buckwheat and quinoa grains: A review of chemical structure, biological functions and food uses. *Carbohydrate Polymers*, **2020**, 248, 116819	10.3	35
91	Dietary antioxidant synergy in chemical and biological systems. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 2343-2357	11.5	34
90	Physicochemical properties of kiwifruit starch. *Food Chemistry*, **2017**, 220, 129-136	8.5	34

89	Evaluation of Asian salted noodles in the presence of Amaranthus betacyanin pigments. *Food Chemistry*, **2010**, 118, 663-669	8.5	34
88	Structure, properties, and applications of aroid starch. *Food Hydrocolloids*, **2016**, 52, 378-392	10.6	32
87	Rheological and thermal properties in relation to molecular structure of New Zealand sweetpotato starch. *Food Hydrocolloids*, **2018**, 83, 165-172	10.6	32
86	Molecular structure of starches from maize mutants deficient in starch synthase III. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 9899-907	5.7	31
85	Modification of quinoa flour functionality using ultrasound. *Ultrasonics Sonochemistry*, **2019**, 52, 305-310	8.9	31
84	Gelatinization, Pasting, and Gelling Properties of Sweetpotato and Wheat Starch Blends. *Cereal Chemistry*, **2011**, 88, 302-309	2.4	30
83	Structures of clusters in sweetpotato amylopectin. *Carbohydrate Research*, **2011**, 346, 1112-21	2.9	29
82	Modifications of starch by electric field based techniques. *Trends in Food Science and Technology*, **2018**, 75, 158-169	15.3	28
81	Physicochemical properties of maca starch. *Food Chemistry*, **2017**, 218, 56-63	8.5	28
80	Recent advances in modifications and applications of sago starch. *Food Hydrocolloids*, **2019**, 96, 412-423	10.6	27
79	Physicochemical properties of black pepper (Piper nigrum) starch. *Carbohydrate Polymers*, **2018**, 181, 986-993	10.3	27
78	Structures, physicochemical properties, and applications of amaranth starch. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 313-325	11.5	26
77	Chemical and biological properties of feijoa (Acca sellowiana). *Trends in Food Science and Technology*, **2018**, 81, 121-131	15.3	26
76	Antivirulence properties and related mechanisms of spice essential oils: A comprehensive review. *Comprehensive Reviews in Food Science and Food Safety*, **2020**, 19, 1018-1055	16.4	25
75	Thermal and Rheological Properties of Mung Bean Starch Blends with Potato, Sweet Potato, Rice, and Sorghum Starches. *Food and Bioprocess Technology*, **2016**, 9, 1408-1421	5.1	22
74	Physicochemical and sensory properties of steamed bread fortified with purple sweet potato flour. *Food Bioscience*, **2019**, 30, 100411	4.9	21
73	Starch gelatinization, retrogradation, and enzyme susceptibility of retrograded starch: Effect of amylopectin internal molecular structure. *Food Chemistry*, **2020**, 316, 126036	8.5	21
72	Buckwheat and Millet Affect Thermal, Rheological, and Gelling Properties of Wheat Flour. *Journal of Food Science*, **2016**, 81, E627-36	3.4	21

71	Antidiabetic dietary materials and animal models. *Food Research International*, **2016**, 85, 315-331	7	21
70	Supramolecular structure of high hydrostatic pressure treated quinoa and maize starches. *Food Hydrocolloids*, **2019**, 92, 276-284	10.6	20
69	Morphological, Thermal, and Rheological Properties of Starches from Maize Mutants Deficient in Starch Synthase III. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 6539-45	5.7	20
68	Effect of Processing on Quality Attributes of Chestnut. *Food and Bioprocess Technology*, **2016**, 9, 1429-1443	5.1	20
67	Polysaccharide based films and coatings for food packaging: Effect of added polyphenols. *Food Chemistry*, **2021**, 359, 129871	8.5	20
66	Structures of building blocks in clusters of sweetpotato amylopectin. *Carbohydrate Research*, **2011**, 346, 2913-25	2.9	19
65	Physicochemical and sensory properties of fresh noodles fortified with ground linseed (Linum usitatissimum). *LWT - Food Science and Technology*, **2019**, 101, 847-853	5.4	19
64	Encapsulation of rutin using quinoa and maize starch nanoparticles. *Food Chemistry*, **2021**, 353, 128534	8.5	19
63	Characterization of internal structure of maize starch without amylose and amylopectin separation. *Carbohydrate Polymers*, **2013**, 97, 475-81	10.3	18
62	Influence of Amaranthus betacyanin pigments on the physical properties and color of wheat flours. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 8212-7	5.7	18
61	Effect of ultrasound on structural and physicochemical properties of sweetpotato and wheat flours. *Ultrasonics Sonochemistry*, **2020**, 66, 105118	8.9	17
60	Atomic force microscopy of starch systems. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 3127-3144	11.5	16
59	Chemical composition and biological activity of staghorn sumac (Rhus typhina). *Food Chemistry*, **2017**, 237, 431-443	8.5	16
58	Comparison of molecular structure of oca (Oxalis tuberosa), potato, and maize starches. *Food Chemistry*, **2019**, 296, 116-122	8.5	16
57	Physicochemical, functional and nutritional properties of kiwifruit flour. *Food Hydrocolloids*, **2019**, 92, 250-258	10.6	16
56	Underutilized and unconventional starches: Why should we care?. *Trends in Food Science and Technology*, **2020**, 100, 363-373	15.3	16
55	Proanthocyanidins in cereals and pseudocereals. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 1521-1533	11.5	16
54	Properties and Food Uses of Chestnut Flour and Starch. *Food and Bioprocess Technology*, **2017**, 10, 1173-1191	5.1	15

53	Physicochemical properties and bioactive compounds of different varieties of sweetpotato flour treated with high hydrostatic pressure. *Food Chemistry*, **2019**, 299, 125129	8.5	15
52	Characterization of modified high-amylose maize starch-naphthol complexes and their influence on rheological properties of wheat starch. *Food Chemistry*, **2013**, 138, 256-62	8.5	15
51	Gluten Enhances Cooking, Textural, and Sensory Properties of Oat Noodles. *Cereal Chemistry*, **2011**, 88, 228-233	2.4	15
50	Comparison of physicochemical properties of oca (Oxalis tuberosa), potato, and maize starches. *International Journal of Biological Macromolecules*, **2020**, 148, 601-607	7.9	15
49	Structure of black pepper (Piper nigrum) starch. *Food Hydrocolloids*, **2017**, 71, 102-107	10.6	14
48	Rheological properties in relation to molecular structure of quinoa starch. *International Journal of Biological Macromolecules*, **2018**, 114, 767-775	7.9	14
47	Effect of chia seed on glycemic response, texture, and sensory properties of Chinese steamed bread. *LWT - Food Science and Technology*, **2018**, 98, 77-84	5.4	14
46	Antioxidant capacity of food mixtures is not correlated with their antiproliferative activity against MCF-7 breast cancer cells. *Journal of Medicinal Food*, **2013**, 16, 1138-45	2.8	14
45	Buckwheat proteins and peptides: Biological functions and food applications. *Trends in Food Science and Technology*, **2021**, 110, 155-167	15.3	14
44	Glycemic control in Chinese steamed bread: Strategies and opportunities. *Trends in Food Science and Technology*, **2019**, 86, 252-259	15.3	14
43	Starch structure in developing kiwifruit. *International Journal of Biological Macromolecules*, **2018**, 120, 1306-1314	7.9	14
42	Physicochemical properties of potato, sweet potato and quinoa starch blends. *Food Hydrocolloids*, **2020**, 100, 105278	10.6	13
41	Physicochemical properties of dodecenyl succinic anhydride (DDSA) modified quinoa starch. *Food Chemistry*, **2019**, 300, 125201	8.5	12
40	Composition of clusters and building blocks in amylopectins from maize mutants deficient in starch synthase III. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 12345-55	5.7	12
39	Synergistic interaction of sumac and raspberry mixtures in their antioxidant capacities and selective cytotoxicity against cancerous cells. *Journal of Medicinal Food*, **2015**, 18, 345-53	2.8	11
38	Chemical composition, health effects, and uses of water caltrop. *Trends in Food Science and Technology*, **2016**, 49, 136-145	15.3	11
37	Physicochemical properties of Maori potato starch affected by molecular structure. *Food Hydrocolloids*, **2019**, 90, 248-253	10.6	11
36	Physicochemical properties of steamed bread fortified with ground linseed (Linum usitatissimum). *International Journal of Food Science and Technology*, **2019**, 54, 1670-1676	3.8	11

35	Branching patterns in leaf starches from Arabidopsis mutants deficient in diverse starch synthases. *Carbohydrate Research*, **2015**, 401, 96-108	2.9	10
34	Distribution of branches in whole starches from maize mutants deficient in starch synthase III. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 4577-83	5.7	10
33	Structure of Arabidopsis leaf starch is markedly altered following nocturnal degradation. *Carbohydrate Polymers*, **2015**, 117, 1002-1013	10.3	10
32	Frozen steamed breads and boiled noodles: Quality affected by ingredients and processing. *Food Chemistry*, **2021**, 349, 129178	8.5	10
31	Effect of high hydrostatic pressure on physicochemical properties of quinoa flour. *LWT - Food Science and Technology*, **2019**, 114, 108367	5.4	9
30	Changes in the Composition of Methylxanthines, Polyphenols, and Volatiles and Sensory Profiles of Cocoa Beans from the Sul 1 Genotype Affected by Fermentation. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 8658-8675	5.7	9
29	Kiwifruit (Actinidia spp.): A review of chemical diversity and biological activities. *Food Chemistry*, **2021**, 350, 128469	8.5	9
28	Textural and Sensory Attributes of Steamed Bread Fortified with High-Amylose Maize Starch. *Journal of Texture Studies*, **2017**, 48, 3-8	3.6	8
27	Physicochemical and functional properties of sweetpotato flour. *Journal of the Science of Food and Agriculture*, **2019**, 99, 4624-4634	4.3	8
26	Structure of New Zealand sweetpotato starch. *Carbohydrate Polymers*, **2018**, 188, 181-187	10.3	8
25	Diversity in Composition of Bioactive Compounds Among 26 Cocoa Genotypes. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 9501-9509	5.7	8
24	Physical properties and enzyme susceptibility of rice and high-amylose maize starch mixtures. *Journal of the Science of Food and Agriculture*, **2013**, 93, 3100-6	4.3	8
23	Enzymatic formation of galactooligosaccharides in goat milk. *Food Bioscience*, **2018**, 26, 38-41	4.9	8
22	Rheological & 3D printing properties of potato starch composite gels. *Journal of Food Engineering*, **2022**, 313, 110756	6	8
21	Fonio grains: Physicochemical properties, nutritional potential, and food applications. *Comprehensive Reviews in Food Science and Food Safety*, **2020**, 19, 3365-3389	16.4	7
20	Quality attributes of bread fortified with staghorn sumac extract. *Journal of Texture Studies*, **2018**, 49, 129-134	3.6	6
19	Characterization of polymer chain fractions of kiwifruit starch. *Food Chemistry*, **2018**, 240, 579-587	8.5	6
18	Molecular structure of Maori potato starch. *Food Hydrocolloids*, **2018**, 80, 206-211	10.6	5

17	Physicochemical and functional properties of Maori potato flour. *Food Bioscience*, **2020**, 33, 100488	4.9	5
16	Structure and Physicochemical Properties of Starch **2018**, 1-14		5
15	Structure and physicochemical properties of starch affected by dynamic pressure treatments: A review. *Trends in Food Science and Technology*, **2021**, 116, 639-654	15.3	5
14	Staghorn Sumac Reduces 5-Fluorouracil-Induced Toxicity in Normal Cells. *Journal of Medicinal Food*, **2015**, 18, 938-40	2.8	4
13	Bidirectional Estrogen-Like Effects of Genistein on Murine Experimental Autoimmune Ovarian Disease. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	4
12	Relationships between supramolecular organization and amylopectin fine structure of quinoa starch. *Food Hydrocolloids*, **2021**, 117, 106685	10.6	4
11	Chemical constituents and biological properties of Pu-erh tea.. *Food Research International*, **2022**, 154, 110899	7	4
10	Effect of konjac glucomannan on physicochemical properties of quinoa and maize starches. *Cereal Chemistry*, **2019**, 96, 878-884	2.4	3
9	Intravariety Diversity of Bioactive Compounds in Trinitario Cocoa Beans with Different Degrees of Fermentation. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 3150-3158	5.7	3
8	Unit and internal chain profiles of maca amylopectin. *Food Chemistry*, **2018**, 242, 106-112	8.5	3
7	Changes in structure and phenolic profiles during processing of steamed bread enriched with purple sweetpotato flour. *Food Chemistry*, **2022**, 369, 130578	8.5	3
6	Physicochemical, rheological, and emulsification properties of nonenyl succinic anhydride (NSA) modified quinoa starch. *International Journal of Biological Macromolecules*, **2021**, 193, 1371-1371	7.9	2
5	Chemical and biological properties of cocoa beans affected by processing: a review. *Critical Reviews in Food Science and Nutrition*, **2021**, 1-32	11.5	2
4	A novel starch from lotus (Nelumbo nucifera) seeds: Composition, structure, properties and modifications. *Food Hydrocolloids*, **2021**, 120, 106899	10.6	2
3	Composition of methylxanthines, polyphenols, key odorant volatiles and minerals in 22 cocoa beans obtained from different geographic origins. *LWT - Food Science and Technology*, **2022**, 153, 112395	5.4	2
2	Comparison of microwave and conventional heating on physicochemical properties and phenolic profiles of purple sweetpotato and wheat flours. *Food Bioscience*, **2022**, 46, 101602	4.9	0
1	Physicochemical, structural and nutritional properties of steamed bread fortified with red beetroot powder and their changes during breadmaking process.. *Food Chemistry*, **2022**, 383, 132547	8.5	0