Cunxu Wei

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Relationship between structure and functional properties of normal rice starches with different amylose contents. Carbohydrate Polymers, 2015, 125, 35-44.	5.1	185
2	The Central Element Protein ZEP1 of the Synaptonemal Complex Regulates the Number of Crossovers during Meiosis in Rice Â Â. Plant Cell, 2010, 22, 417-430.	3.1	173
3	Microstructure and Ultrastructure of High-Amylose Rice Resistant Starch Granules Modified by Antisense RNA Inhibition of Starch Branching Enzyme. Journal of Agricultural and Food Chemistry, 2010, 58, 1224-1232.	2.4	123
4	Comparative structure of starches from high-amylose maize inbred lines and their hybrids. Food Hydrocolloids, 2016, 52, 19-28.	5.6	123
5	Structural and functional properties of C-type starches. Carbohydrate Polymers, 2014, 101, 289-300.	5.1	119
6	Progress in C-type starches from different plant sources. Food Hydrocolloids, 2017, 73, 162-175.	5.6	111
7	Relationships between amylopectin molecular structures andÂfunctional properties of different-sized fractions of normal andÂhigh-amylose maize starches. Food Hydrocolloids, 2016, 52, 359-368.	5.6	105
8	Comparison of the crystalline properties and structural changes of starches from high-amylose transgenic rice and its wild type during heating. Food Chemistry, 2011, 128, 645-652.	4.2	104
9	Characterization and comparative study of starches from seven purple sweet potatoes. Food Hydrocolloids, 2018, 80, 168-176.	5.6	104
10	C-Type Starch from High-Amylose Rice Resistant Starch Granules Modified by Antisense RNA Inhibition of Starch Branching Enzyme. Journal of Agricultural and Food Chemistry, 2010, 58, 7383-7388.	2.4	96
11	Structural Changes of High-Amylose Rice Starch Residues following in Vitro and in Vivo Digestion. Journal of Agricultural and Food Chemistry, 2012, 60, 9332-9341.	2.4	94
12	Granule Structure and Distribution of Allomorphs in C-Type High-Amylose Rice Starch Granule Modified by Antisense RNA Inhibition of Starch Branching Enzyme. Journal of Agricultural and Food Chemistry, 2010, 58, 11946-11954.	2.4	93
13	Comparison of physicochemical properties of starches from seed and rhizome of lotus. Carbohydrate Polymers, 2012, 88, 676-683.	5.1	90
14	Comparison of structural and functional properties of starches from five fruit kernels. Food Chemistry, 2018, 257, 75-82.	4.2	85
15	Effects of nitrogen level on structure and physicochemical properties of rice starch. Food Hydrocolloids, 2017, 63, 525-532.	5.6	81
16	In situ observation of crystallinity disruption patterns during starch gelatinization. Carbohydrate Polymers, 2013, 92, 469-478.	5.1	80
17	Comparison of starches isolated from three different Trapa species. Food Hydrocolloids, 2014, 37, 174-181.	5.6	80
18	Different Structural Properties of High-Amylose Maize Starch Fractions Varying in Granule Size. Journal of Agricultural and Food Chemistry, 2014, 62, 11711-11721.	2.4	75

#	Article	IF	Citations
19	Morphology, structure and gelatinization properties of heterogeneous starch granules from high-amylose maize. Carbohydrate Polymers, 2014, 102, 606-614.	5.1	74
20	Comparison of molecular structures and functional properties of high-amylose starches from rice transgenic line and commercial maize. Food Hydrocolloids, 2015, 46, 172-179.	5.6	74
21	Physicochemical properties of indica-japonica hybrid rice starch from Chinese varieties. Food Hydrocolloids, 2017, 63, 356-363.	5.6	74
22	Molecular structure and enzymatic hydrolysis properties of starches from high-amylose maize inbred lines and their hybrids. Food Hydrocolloids, 2016, 58, 246-254.	5.6	71
23	Structural and functional properties of starches from root tubers of white, yellow, and purple sweet potatoes. Food Hydrocolloids, 2019, 89, 829-836.	5.6	71
24	The NAC Transcription Factors OsNAC20 and OsNAC26 Regulate Starch and Storage Protein Synthesis. Plant Physiology, 2020, 184, 1775-1791.	2.3	70
25	Effect of granule size on the properties of lotus rhizome C-type starch. Carbohydrate Polymers, 2015, 134, 448-457.	5.1	68
26	Different Structures of Heterogeneous Starch Granules from High-Amylose Rice. Journal of Agricultural and Food Chemistry, 2014, 62, 11254-11263.	2.4	66
27	Effect of Nitrogen Management on the Structure and Physicochemical Properties of Rice Starch. Journal of Agricultural and Food Chemistry, 2016, 64, 8019-8025.	2.4	61
28	Structural and functional properties of alkali-treated high-amylose rice starch. Food Chemistry, 2014, 145, 245-253.	4.2	58
29	Gradually Decreasing Starch Branching Enzyme Expression Is Responsible for the Formation of Heterogeneous Starch Granules. Plant Physiology, 2018, 176, 582-595.	2.3	57
30	Allomorph distribution and granule structure of lotus rhizome C-type starch during gelatinization. Food Chemistry, 2014, 142, 408-415.	4.2	55
31	Comparison of physicochemical properties of B-type nontraditional starches from different sources. International Journal of Biological Macromolecules, 2015, 78, 165-172.	3.6	53
32	Physicochemical properties and development of wheat large and small starch granules during endosperm development. Acta Physiologiae Plantarum, 2010, 32, 905-916.	1.0	51
33	Morphology and structural characterization of high-amylose rice starch residues hydrolyzed by porcine pancreatic Î±-amylase. Food Hydrocolloids, 2013, 31, 195-203.	5.6	50
34	Progress in High-Amylose Cereal Crops through Inactivation of Starch Branching Enzymes. Frontiers in Plant Science, 2017, 8, 469.	1.7	48
35	Effect of Simultaneous Inhibition of Starch Branching Enzymes I and IIb on the Crystalline Structure of Rice Starches with Different Amylose Contents. Journal of Agricultural and Food Chemistry, 2013, 61, 9930-9937.	2.4	46
36	The relationship between enzyme hydrolysis and the components of rice starches with the same genetic background and amylopectin structure but different amylose contents. Food Hydrocolloids, 2018, 84, 406-413.	5.6	46

#	Article	IF	Citations
37	Effects of surface proteins and lipids on molecular structure, thermal properties, and enzymatic hydrolysis of rice starch. Food Science and Technology, 2018, 38, 84-90.	0.8	43
38	Analysis of Flavonoids and Hydroxycinnamic Acid Derivatives in Rapeseeds (<i>Brassica napus</i> L.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Chemistry, 2014, 62, 2935-2945.	2.4	40
39	Properties of new starches from tubers of Arisaema elephas , yunnanense and erubescens. Food Hydrocolloids, 2016, 61, 183-190.	5.6	40
40	Phenotypic variation in progenies from somatic hybrids between Brassica napus and Sinapis alba. Euphytica, 2009, 170, 289-296.	0.6	39
41	Crystalline and structural properties of acid-modified lotus rhizome C-type starch. Carbohydrate Polymers, 2014, 102, 799-807.	5.1	39
42	Formation of Semi-compound C-Type Starch Granule in High-Amylose Rice Developed by Antisense RNA Inhibition of Starch-Branching Enzyme. Journal of Agricultural and Food Chemistry, 2010, 58, 11097-11104.	2.4	38
43	Application of whole sections of mature cereal seeds to visualize the morphology of endosperm cell and starch and the distribution of storage protein. Journal of Cereal Science, 2016, 71, 19-27.	1.8	37
44	Changes in kernel morphology and starch properties of high-amylose brown rice during the cooking process. Food Hydrocolloids, 2017, 66, 227-236.	5.6	36
45	Evaluation of the Molecular Structural Parameters of Normal Rice Starch and Their Relationships with Its Thermal and Digestion Properties. Molecules, 2017, 22, 1526.	1.7	36
46	Heterogeneous Structure and Spatial Distribution in Endosperm of High-Amylose Rice Starch Granules with Different Morphologies. Journal of Agricultural and Food Chemistry, 2014, 62, 10143-10152.	2.4	35
47	Comparison of Structural and Functional Properties of Wheat Starch Under Different Soil Drought Conditions. Scientific Reports, 2017, 7, 12312.	1.6	34
48	InÂvitro digestion properties of heterogeneous starch granules fromÂhigh-amylose rice. Food Hydrocolloids, 2016, 54, 10-22.	5.6	32
49	Comparison of Physicochemical Properties of Starches from Flesh and Peel of Green Banana Fruit. Molecules, 2018, 23, 2312.	1.7	32
50	A-, B- and C-type starch granules coexist in root tuber of sweet potato. Food Hydrocolloids, 2020, 98, 105279.	5.6	32
51	Effects of molecular compositions on crystalline structure and functional properties of rice starches with different amylopectin extra-long chains. Food Hydrocolloids, 2019, 88, 137-145.	5.6	31
52	Effects of Different Isolation Media on Structural and Functional Properties of Starches from Root Tubers of Purple, Yellow and White Sweet Potatoes. Molecules, 2018, 23, 2135.	1.7	30
53	The Kernel Size-Related Quantitative Trait Locus <i>qKW9</i> Encodes a Pentatricopeptide Repeat Protein That Aaffects Photosynthesis and Grain Filling. Plant Physiology, 2020, 183, 1696-1709.	2.3	29
54	Physicochemical properties of high-amylose rice starches during kernel development. Carbohydrate Polymers, 2012, 88, 690-698.	5.1	28

#	Article	IF	Citations
55	In situ gelatinization of starch using hot stage microscopy. Food Science and Biotechnology, 2014, 23, 15-22.	1.2	25
56	Physicochemical Properties of C-Type Starch from Root Tuber of Apios fortunei in Comparison with Maize, Potato, and Pea Starches. Molecules, 2018, 23, 2132.	1.7	25
57	Relationships between transparency, amylose content, starch cavity, and moisture of brown rice kernels. Journal of Cereal Science, 2019, 90, 102854.	1.8	25
58	Physicochemical properties of rhizome starch from a traditional Chinese medicinal plant of Anemone altaica. Carbohydrate Polymers, 2012, 89, 571-577.	5.1	24
59	Morphology and structural properties of high-amylose rice starch residues hydrolysed by amyloglucosidase. Food Chemistry, 2013, 138, 2089-2098.	4.2	24
60	The effects of chilling stress after anthesis on the physicochemical properties of rice (Oryza sativa L) starch. Food Chemistry, 2017, 237, 936-941.	4.2	24
61	Physicochemical properties of starches from vitreous and floury endosperms from the same maize kernels. Food Chemistry, 2019, 291, 149-156.	4.2	24
62	Morphology, structure, properties and applications of starch ghost: A review. International Journal of Biological Macromolecules, 2020, 163, 2084-2096.	3.6	24
63	Comparison of physicochemical properties of very small granule starches from endosperms of dicotyledon plants. International Journal of Biological Macromolecules, 2020, 154, 818-825.	3.6	24
64	Comparison of Physicochemical Properties of Starches from Nine Chinese Chestnut Varieties. Molecules, 2018, 23, 3248.	1.7	22
65	A Novel Mutation of OsPPDKB, Encoding Pyruvate Orthophosphate Dikinase, Affects Metabolism and Structure of Starch in the Rice Endosperm. International Journal of Molecular Sciences, 2018, 19, 2268.	1.8	22
66	Comparison of Structural and Functional Properties of Starches from the Rhizome and Bulbil of Chinese Yam (Dioscorea opposita Thunb.). Molecules, 2018, 23, 427.	1.7	21
67	Cooking, morphological, mechanical and digestion properties of cooked rice with suppression of starch branching enzymes. International Journal of Biological Macromolecules, 2019, 137, 187-196.	3.6	21
68	Ordered structure and thermal property of acid-modified high-amylose rice starch. Food Chemistry, 2012, 134, 2242-2248.	4.2	20
69	The CBM48 domain-containing protein FLO6 regulates starch synthesis by interacting with SSIVb and GBSS in rice. Plant Molecular Biology, 2022, 108, 343-361.	2.0	20
70	Structural Properties of Hydrolyzed High-Amylose Rice Starch by Î±-Amylase from <i>Bacillus licheniformis</i>. Journal of Agricultural and Food Chemistry, 2011, 59, 12667-12673.	2.4	19
71	Long branch-chains of amylopectin with B-type crystallinity in rice seed with inhibition of starch branching enzyme I and IIb resist in situ degradation and inhibit plant growth during seedling development. BMC Plant Biology, 2018, 18, 9.	1.6	19
72	A critical review on structural properties and formation mechanism of heterogeneous starch granules in cereal endosperm lacking starch branching enzyme. Food Hydrocolloids, 2020, 100, 105434.	5.6	19

#	Article	IF	Citations
73	Physicochemical Properties of Ginkgo Kernal Starch. International Journal of Food Properties, 2015, 18, 380-391.	1.3	16
74	A simple and rapid method for preparing the whole section of starchy seed to investigate the morphology and distribution of starch in different regions of seed. Plant Methods, 2018, 14, 16.	1.9	15
75	Spatiotemporal accumulation and characteristics of starch in developing maize caryopses. Plant Physiology and Biochemistry, 2018, 130, 493-500.	2.8	15
76	Physicochemical Properties ofEuryale feroxKernel Starches from Two Different Regions. International Journal of Food Properties, 2016, 19, 289-299.	1.3	14
77	Morphological characteristics of endosperm in different regions of maize kernels with different vitreousness. Journal of Cereal Science, 2019, 87, 273-279.	1.8	14
78	Effects of nitrogen level on structural and functional properties of starches from different colored-fleshed root tubers of sweet potato. International Journal of Biological Macromolecules, 2020, 164, 3235-3242.	3.6	14
79	Structural and functional properties of starches from wild Trapa quadrispinosa, japonica, mammillifera and incisa. Food Hydrocolloids, 2015, 48, 117-126.	5.6	13
80	Inhibition of starch branching enzymes in waxy rice increases the proportion of long branch-chains of amylopectin resulting in the comb-like profiles of starch granules. Plant Science, 2018, 277, 177-187.	1.7	13
81	Structural, thermal, and hydrolysis properties of large and small granules from C-type starches of four Chinese chestnut varieties. International Journal of Biological Macromolecules, 2019, 137, 712-720.	3.6	13
82	The defective effect of starch branching enzyme IIb from weak to strong induces the formation of biphasic starch granules in amylose-extender maize endosperm. Plant Molecular Biology, 2020, 103, 355-371.	2.0	12
83	<scp>FTâ€IR</scp> and <scp>NMR</scp> study of seed coat dissected from different colored progenies of <i>Brassica napusâ€"Sinapis alba</i> hybrids. Journal of the Science of Food and Agriculture, 2013, 93, 1898-1902.	1.7	11
84	Starch Components, Starch Properties and Appearance Quality of Opaque Kernels from Rice Mutants. Molecules, 2019, 24, 4580.	1.7	11
85	A new allomorph distribution of C-type starch from root tuber of Apios fortunei. Food Hydrocolloids, 2017, 66, 334-342.	5.6	10
86	Properties of starch from root tuber of <i>Stephania epigaea</i> in comparison with potato and maize starches. International Journal of Food Properties, 2017, 20, 1740-1750.	1.3	10
87	Physicochemical properties of a new starch from ramie (Boehmeria nivea) root. International Journal of Biological Macromolecules, 2021, 174, 392-401.	3.6	10
88	Structural properties of starch from single kernel of high-amylose maize. Food Hydrocolloids, 2022, 124, 107349.	5.6	10
89	Changes in kernel properties, inÂsitu gelatinization, and physicochemical properties of waxy rice with inhibition of starch branching enzyme during cooking. International Journal of Food Science and Technology, 2019, 54, 2780-2791.	1.3	9
90	Comprehensive comparison and applications of different sections in investigating the microstructure and histochemistry of cereal kernels. Plant Methods, 2020, 16, 8.	1.9	9

#	Article	IF	Citations
91	Structural and functional properties of endosperm starch and flour from dicotyledon <i>Mirabilis jalapa</i>. Starch/Staerke, 2015, 67, 328-337.	1.1	8
92	Effects of inhibiting starch branching enzymes on molecular and crystalline structures of starches from endosperm different regions in rice. Food Chemistry, 2019, 301, 125271.	4.2	8
93	Effects of inhibition of starch branching enzymes on starch ordered structure and component accumulation in developing kernels of rice. Journal of Cereal Science, 2020, 91, 102884.	1.8	8
94	Sizes, Components, Crystalline Structure, and Thermal Properties of Starches from Sweet Potato Varieties Originating from Different Countries. Molecules, 2022, 27, 1905.	1.7	8
95	Effects of Variety and Growing Location on Physicochemical Properties of Starch from Sweet Potato Root Tuber. Molecules, 2021, 26, 7137.	1.7	7
96	Characterization of underutilized root starches from eight varieties of ramie (Boehmeria nivea) grown in China. International Journal of Biological Macromolecules, 2021, 183, 1475-1485.	3.6	5
97	Application of Allele Specific PCR in Identifying Offspring Genotypes of Bi-Allelic SbeIIb Mutant Lines in Rice. Plants, 2022, 11, 524.	1.6	4
98	Genetic dissection of hybrid breakdown in an indica/japonica cross and fine mapping of a quantitative trait locus qSF-12 in rice (Oryza sativa L.). Molecular Breeding, 2015, 35, 1.	1.0	3
99	Relationships between X-ray Diffraction Peaks, Molecular Components, and Heat Properties of C-Type Starches from Different Sweet Potato Varieties. Molecules, 2022, 27, 3385.	1.7	3
100	Anatomical and chemical characteristics of culm of rice brittle mutant bc7(t). Functional Plant Biology, 2011, 38, 227.	1.1	2
101	Seed Plumpness of Rice with Inhibition Expression of Starch Branching Enzymes and Starch Properties, Grain Position on Panicle. Agronomy, 2018, 8, 252.	1.3	2
102	In situ Degradation and Characterization of Endosperm Starch in Waxy Rice with the Inhibition of Starch Branching Enzymes during Seedling Growth. International Journal of Molecular Sciences, 2018, 19, 3397.	1.8	2
103	An image processing method for investigating the morphology of cereal endosperm cells. Biotechnic and Histochemistry, 2020, 95, 249-261.	0.7	2
104	Characterization and Starch Properties of a Waxy Mutant in Japonica Rice Kitaake. Journal of Agriculture and Crops, 2018, , 117-124.	0.0	1
105	Screening and identification of rice non-floury endosperm mutants with different starch components. Journal of Cereal Science, 2022, 103, 103397.	1.8	1
106	A Simple Dry Sectioning Method for Obtaining Whole-Seed-Sized Resin Section and Its Applications. Journal of Visualized Experiments, 2021, , .	0.2	0