Cunxu Wei

List of Publications by Year
in descending order

115 papers	4,708 citations	74677 40 h-index	115152 63 g-index
118 all docs	118 docs citations	118 times ranked	3900 citing authors

#	Article	IF	Citations
1	Relationship between structure and functional properties of normal rice starches with different amylose contents. Carbohydrate Polymers, 2015, 125, 35-44.	10.5	203
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.	6.7	176
3	Comparative structure of starches from high-amylose maize inbred lines and their hybrids. Food Hydrocolloids, 2016, 52, 19-28.	10.9	135
4	Progress in C-type starches from different plant sources. Food Hydrocolloids, 2017, 73, 162-175.	10.9	133
5	Structural and functional properties of C-type starches. Carbohydrate Polymers, 2014, 101, 289-300.	10.5	129
6	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.	5.3	124
7	Characterization and comparative study of starches from seven purple sweet potatoes. Food Hydrocolloids, 2018, 80, 168-176.	10.9	115
8	Relationships between amylopectin molecular structures andÂfunctional properties of different-sized fractions of normal andÂhigh-amylose maize starches. Food Hydrocolloids, 2016, 52, 359-368.	10.9	114
9	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.	8.4	107
10	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.	5.3	98
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.	5.3	97
12	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.	5.3	96
13	Comparison of physicochemical properties of starches from seed and rhizome of lotus. Carbohydrate Polymers, 2012, 88, 676-683.	10.5	95
14	Effects of nitrogen level on structure and physicochemical properties of rice starch. Food Hydrocolloids, 2017, 63, 525-532.	10.9	91
15	In situ observation of crystallinity disruption patterns during starch gelatinization. Carbohydrate Polymers, 2013, 92, 469-478.	10.5	89
16	Comparison of structural and functional properties of starches from five fruit kernels. Food Chemistry, 2018, 257, 75-82.	8.4	89
17	Structural and functional properties of starches from root tubers of white, yellow, and purple sweet potatoes. Food Hydrocolloids, 2019, 89, 829-836.	10.9	84
18	Comparison of starches isolated from three different Trapa species. Food Hydrocolloids, 2014, 37, 174-181.	10.9	83

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19	Different Structural Properties of High-Amylose Maize Starch Fractions Varying in Granule Size. Journal of Agricultural and Food Chemistry, 2014, 62, 11711-11721.	5.3	80
20	Morphology, structure and gelatinization properties of heterogeneous starch granules from high-amylose maize. Carbohydrate Polymers, 2014, 102, 606-614.	10.5	80
21	The NAC Transcription Factors OsNAC20 and OsNAC26 Regulate Starch and Storage Protein Synthesis. Plant Physiology, 2020, 184, 1775-1791.	5.1	80
22	Comparison of molecular structures and functional properties of high-amylose starches from rice transgenic line and commercial maize. Food Hydrocolloids, 2015, 46, 172-179.	10.9	78
23	Molecular structure and enzymatic hydrolysis properties of starches from high-amylose maize inbred lines and their hybrids. Food Hydrocolloids, 2016, 58, 246-254.	10.9	77
24	Physicochemical properties of indica-japonica hybrid rice starch from Chinese varieties. Food Hydrocolloids, 2017, 63, 356-363.	10.9	76
25	Effect of granule size on the properties of lotus rhizome C-type starch. Carbohydrate Polymers, 2015, 134, 448-457.	10.5	74
26	Different Structures of Heterogeneous Starch Granules from High-Amylose Rice. Journal of Agricultural and Food Chemistry, 2014, 62, 11254-11263.	5.3	69
27	Effect of Nitrogen Management on the Structure and Physicochemical Properties of Rice Starch. Journal of Agricultural and Food Chemistry, 2016, 64, 8019-8025.	5.3	67
28	Structural and functional properties of alkali-treated high-amylose rice starch. Food Chemistry, 2014, 145, 245-253.	8.4	62
29	Gradually Decreasing Starch Branching Enzyme Expression Is Responsible for the Formation of Heterogeneous Starch Granules. Plant Physiology, 2018, 176, 582-595.	5.1	62
30	Allomorph distribution and granule structure of lotus rhizome C-type starch during gelatinization. Food Chemistry, 2014, 142, 408-415.	8.4	60
31	Physicochemical properties and development of wheat large and small starch granules during endosperm development. Acta Physiologiae Plantarum, 2010, 32, 905-916.	2.2	55
32	Comparison of physicochemical properties of B-type nontraditional starches from different sources. International Journal of Biological Macromolecules, 2015, 78, 165-172.	7.7	54
33	Morphology and structural characterization of high-amylose rice starch residues hydrolyzed by porcine pancreatic Î±-amylase. Food Hydrocolloids, 2013, 31, 195-203.	10.9	52
34	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.	10.9	52
35	Progress in High-Amylose Cereal Crops through Inactivation of Starch Branching Enzymes. Frontiers in Plant Science, 2017, 8, 469.	3.8	48
36	Robotic surgery vs laparoscopic surgery in patients with diagnosis of endometriosis: a systematic review and meta-analysis. Journal of Robotic Surgery, 2020, 14, 687-694.	2.0	47

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37	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.	5.3	46
38	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.	1.7	45
39	Properties of new starches from tubers of Arisaema elephas , yunnanense and erubescens. Food Hydrocolloids, 2016, 61, 183-190.	10.9	44
40	Crystalline and structural properties of acid-modified lotus rhizome C-type starch. Carbohydrate Polymers, 2014, 102, 799-807.	10.5	42
41	Phenotypic variation in progenies from somatic hybrids between Brassica napus and Sinapis alba. Euphytica, 2009, 170, 289-296.	1.2	41
42	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.	5.3	41
43	Evaluation of the Molecular Structural Parameters of Normal Rice Starch and Their Relationships with Its Thermal and Digestion Properties. Molecules, 2017, 22, 1526.	3.9	40
44	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.	3.7	39
45	A-, B- and C-type starch granules coexist in root tuber of sweet potato. Food Hydrocolloids, 2020, 98, 105279.	10.9	39
46	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.	5.3	38
47	Comparison of Physicochemical Properties of Starches from Flesh and Peel of Green Banana Fruit. Molecules, 2018, 23, 2312.	3.9	38
48	Changes in kernel morphology and starch properties of high-amylose brown rice during the cooking process. Food Hydrocolloids, 2017, 66, 227-236.	10.9	37
49	Comparison of Structural and Functional Properties of Wheat Starch Under Different Soil Drought Conditions. Scientific Reports, 2017, 7, 12312.	3.4	37
50	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.	5.3	35
51	InÂvitro digestion properties of heterogeneous starch granules fromÂhigh-amylose rice. Food Hydrocolloids, 2016, 54, 10-22.	10.9	33
52	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.	5.1	32
53	Physicochemical properties of high-amylose rice starches during kernel development. Carbohydrate Polymers, 2012, 88, 690-698.	10.5	31
54	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.	3.9	31

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55	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.	10.9	31
56	Morphology, structure, properties and applications of starch ghost: A review. International Journal of Biological Macromolecules, 2020, 163, 2084-2096.	7.7	31
57	Physicochemical Properties of C-Type Starch from Root Tuber of Apios fortunei in Comparison with Maize, Potato, and Pea Starches. Molecules, 2018, 23, 2132.	3.9	28
58	Physicochemical properties of starches from vitreous and floury endosperms from the same maize kernels. Food Chemistry, 2019, 291, 149-156.	8.4	28
59	The effects of chilling stress after anthesis on the physicochemical properties of rice (Oryza sativa L) starch. Food Chemistry, 2017, 237, 936-941.	8.4	27
60	Physicochemical properties of rhizome starch from a traditional Chinese medicinal plant of Anemone altaica. Carbohydrate Polymers, 2012, 89, 571-577.	10.5	26
61	In situ gelatinization of starch using hot stage microscopy. Food Science and Biotechnology, 2014, 23, 15-22.	2.6	25
62	Comparison of physicochemical properties of very small granule starches from endosperms of dicotyledon plants. International Journal of Biological Macromolecules, 2020, 154, 818-825.	7.7	25
63	Morphology and structural properties of high-amylose rice starch residues hydrolysed by amyloglucosidase. Food Chemistry, 2013, 138, 2089-2098.	8.4	24
64	Comparison of Physicochemical Properties of Starches from Nine Chinese Chestnut Varieties. Molecules, 2018, 23, 3248.	3.9	24
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.	4.2	23
66	Comparison of Structural and Functional Properties of Starches from the Rhizome and Bulbil of Chinese Yam (Dioscorea opposita Thunb.). Molecules, 2018, 23, 427.	3.9	23
67	The CBM48 domain-containing protein FLO6 regulates starch synthesis by interacting with SSIVb and GBSS in rice. Plant Molecular Biology, 2022, 108, 343-361.	4.0	23
68	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.	3.7	21
69	Cooking, morphological, mechanical and digestion properties of cooked rice with suppression of starch branching enzymes. International Journal of Biological Macromolecules, 2019, 137, 187-196.	7.7	21
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.	5.3	20
71	Ordered structure and thermal property of acid-modified high-amylose rice starch. Food Chemistry, 2012, 134, 2242-2248.	8.4	20
72	Liquid state machine built of Hodgkinâ€“Huxley neurons and pattern recognition. Neurocomputing, 2004, 58-60, 245-251.	6.2	19

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73	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.	10.9	19
74	Physicochemical Properties of Ginkgo Kernal Starch. International Journal of Food Properties, 2015, 18, 380-391.	3.0	17
75	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.	4.5	15
76	Spatiotemporal accumulation and characteristics of starch in developing maize caryopses. Plant Physiology and Biochemistry, 2018, 130, 493-500.	5.9	15
77	Physicochemical properties of a new starch from ramie (Boehmeria nivea) root. International Journal of Biological Macromolecules, 2021, 174, 392-401.	7.7	15
78	Structural properties of starch from single kernel of high-amylose maize. Food Hydrocolloids, 2022, 124, 107349.	10.9	15
79	Physicochemical Properties ofEuryale feroxKernel Starches from Two Different Regions. International Journal of Food Properties, 2016, 19, 289-299.	3.0	14
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.	3.8	14
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.	7.7	14
82	Morphological characteristics of endosperm in different regions of maize kernels with different vitreousness. Journal of Cereal Science, 2019, 87, 273-279.	3.7	14
83	Starch Components, Starch Properties and Appearance Quality of Opaque Kernels from Rice Mutants. Molecules, 2019, 24, 4580.	3.9	14
84	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.	7.7	14
85	Structural and functional properties of starches from wild Trapa quadrispinosa, japonica, mammillifera and incisa. Food Hydrocolloids, 2015, 48, 117-126.	10.9	13
86	A new allomorph distribution of C-type starch from root tuber of Apios fortunei. Food Hydrocolloids, 2017, 66, 334-342.	10.9	13
87	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.	4.0	13
88	<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.	3.6	12
89	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.	3.0	11
90	Sizes, Components, Crystalline Structure, and Thermal Properties of Starches from Sweet Potato Varieties Originating from Different Countries. Molecules, 2022, 27, 1905.	3.9	11

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91	Comprehensive comparison and applications of different sections in investigating the microstructure and histochemistry of cereal kernels. Plant Methods, 2020, 16, 8.	4.5	10
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.	8.4	9
93	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.	2.7	9
94	Structural and functional properties of endosperm starch and flour from dicotyledon <i>Mirabilis jalapa</i>. Starch/Staerke, 2015, 67, 328-337.	2.2	8
95	Effects of growth temperature on multi-scale structure of root tuber starch in sweet potato. Carbohydrate Polymers, 2022, 298, 120136.	10.5	8
96	Effects of Variety and Growing Location on Physicochemical Properties of Starch from Sweet Potato Root Tuber. Molecules, 2021, 26, 7137.	3.9	7
97	Characterization of underutilized root starches from eight varieties of ramie (Boehmeria nivea) grown in China. International Journal of Biological Macromolecules, 2021, 183, 1475-1485.	7.7	6
98	Application of Allele Specific PCR in Identifying Offspring Genotypes of Bi-Allelic SbeIIb Mutant Lines in Rice. Plants, 2022, 11, 524.	3.6	6
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.	3.9	6
100	Relationships between starch molecular components and eating and cooking qualities of rice using single-segment substitution lines with different Wx loci. Journal of Cereal Science, 2023, 114, 103765.	3.7	4
101	Beobachtungen zum Auftreten von <i>Tetrastichus turionum</i> Htg. (Hym. Euloph.), einem Parasiten von <i>Rhyacionia buoliana</i> Schiff. (Lep. Tortric.)¹. Zeitschrift FÃ¼r Angewandte Entomologie, 1962, 50, 455-462.	0.0	3
102	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.	2.1	3
103	Seed Plumpness of Rice with Inhibition Expression of Starch Branching Enzymes and Starch Properties, Grain Position on Panicle. Agronomy, 2018, 8, 252.	3.1	2
104	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.	4.2	2
105	An image processing method for investigating the morphology of cereal endosperm cells. Biotechnic and Histochemistry, 2020, 95, 249-261.	1.4	2
106	Screening and identification of rice non-floury endosperm mutants with different starch components. Journal of Cereal Science, 2022, 103, 103397.	3.7	2
107	Structural, Thermal, Pasting and Digestion Properties of Starches from Developing Root Tubers of Sweet Potato. Foods, 2024, 13, 1103.	4.3	2
108	Characterization and Starch Properties of a Waxy Mutant in Japonica Rice Kitaake. Journal of Agriculture and Crops, 2018, , 117-124.	0.2	1

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109	Screening methods for cereal grains with different starch components: A mini review. Journal of Cereal Science, 2022, 108, 103557.	3.7	1
110	A New SNP in AGPL2, Associated with Floury Endosperm in Rice, Is Identified Using a Modified MutMap Method. Agronomy, 2023, 13, 1381.	3.1	1
111	Regulatory loops between rice transcription factors OsNAC25 and OsNAC20/26 balance starch synthesis. Plant Physiology, 2024, 195, 1365-1381.	5.1	1
112	A Simple Dry Sectioning Method for Obtaining Whole-Seed-Sized Resin Section and Its Applications. Journal of Visualized Experiments, 2021, , .	0.3	0
113	G1 Interacts with OsMADS1 to Regulate the Development of the Sterile Lemma in Rice. Plants, 2024, 13, 505.	3.6	0
114	Identification and analysis of nine new flo2 allelic mutants in rice. Journal of Plant Physiology, 2024, 301, 154300.	3.8	0
115	A mutant allele of the <i>Wx</i> gene encoding granule-bound starch synthase I results in extremely low amylose content in rice. Plant Physiology, 0, , .	5.1	0