Zhongyi Li

List of Publications by Year
in descending order

83 papers	4,065 citations	101543 36 h-index	118850 62 g-index
85 all docs	85 docs citations	85 times ranked	3249 citing authors

#	Article	IF	Citations
1	High-amylose wheat generated by RNA interference improves indices of large-bowel health in rats. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3546-3551.	7.1	465
2	Barley sex6 mutants lack starch synthase IIa activity and contain a starch with novel properties. Plant Journal, 2003, 34, 173-185.	5.7	297
3	Control of starch branching in barley defined through differential RNAi suppression of starch branching enzyme IIa and IIb. Journal of Experimental Botany, 2010, 61, 1469-1482.	4.8	174
4	Quality of winter wheat in relation to heat and drought shock after anthesis. Czech Journal of Food Sciences, 2011, 29, 117-128.	1.2	147
5	Circadian Clock Regulation of Starch Metabolism Establishes GBSSI as a Major Contributor to Amylopectin Synthesis in Chlamydomonas reinhardtii Â. Plant Physiology, 2006, 142, 305-317.	4.8	133
6	Over-expression of microRNA171 affects phase transitions and floral meristem determinancy in barley. BMC Plant Biology, 2013, 13, 6.	3.6	125
7	Role of the Escherichia coli glgX Gene in Glycogen Metabolism. Journal of Bacteriology, 2005, 187, 1465-1473.	2.2	120
8	Comparison of Starch-Branching Enzyme Genes Reveals Evolutionary Relationships Among Isoforms. Characterization of a Gene for Starch-Branching Enzyme IIa from the Wheat D Genome DonorAegilops tauschii. Plant Physiology, 2001, 125, 1314-1324.	4.8	107
9	Effects of starch synthase IIa gene dosage on grain, protein and starch in endosperm of wheat. Theoretical and Applied Genetics, 2007, 115, 1053-1065.	3.6	100
10	Starch branching enzyme IIb in wheat is expressed at low levels in the endosperm compared to other cereals and encoded at a non-syntenic locus. Planta, 2005, 222, 899-909.	3.2	98
11	The Localization and Expression of the Class II Starch Synthases of Wheat1. Plant Physiology, 1999, 120, 1147-1156.	4.8	96
12	The Structure and Expression of the Wheat Starch Synthase III Gene. Motifs in the Expressed Gene Define the Lineage of the Starch Synthase III Gene Family. Plant Physiology, 2000, 123, 613-624.	4.8	93
13	Genetic Alteration of Starch Functionality in Wheat. Journal of Cereal Science, 2000, 31, 91-110.	3.7	91
14	Complementation of sugary-1 Phenotype in Rice Endosperm with the Wheat Isoamylase1 Gene Supports a Direct Role for Isoamylase1 in Amylopectin Biosynthesis. Plant Physiology, 2005, 137, 43-56.	4.8	91
15	A genetic strategy generating wheat with very high amylose content. Plant Biotechnology Journal, 2015, 13, 1276-1286.	8.3	88
16	IMPROVED VECTORS FOR AGROBACTERIUM TUMEFACIENS-MEDIATED TRANSFORMATION OF MONOCOT PLANTS. Acta Horticulturae, 1998, , 401-408.	0.2	86
17	Resistant starch in cereals: Exploiting genetic engineering and genetic variation. Journal of Cereal Science, 2007, 46, 251-260.	3.7	82
18	miRNA regulation in the early development of barley seed. BMC Plant Biology, 2012, 12, 120.	3.6	68

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19	Genetic enhancement of oil content in potato tuber (<i>Solanum tuberosum</i> L.) through an integrated metabolic engineering strategy. Plant Biotechnology Journal, 2017, 15, 56-67.	8.3	68
20	Cloning and characterization of a gene encoding wheat starch synthase I. Theoretical and Applied Genetics, 1999, 98, 1208-1216.	3.6	67
21	The structural organisation of the gene encoding class II starch synthase of wheat and barley and the evolution of the genes encoding starch synthases in plants. Functional and Integrative Genomics, 2003, 3, 76-85.	3.5	64
22	Resistant Starch and Healthâ€"Himalaya 292, a Novel Barley Cultivar to Deliver Benefits to Consumers. Starch/Staerke, 2003, 55, 539-545.	2.1	62
23	Suppression of starch synthase I expression affects the granule morphology and granule size and fine structure of starch in wheat endosperm. Journal of Experimental Botany, 2014, 65, 2189-2201.	4.8	61
24	Differential effects of genetically distinct mechanisms of elevating amylose on barley starch characteristics. Carbohydrate Polymers, 2012, 89, 979-991.	10.2	59
25	Comparison of promoters and selectable marker genes for use in Indica rice transformation. Molecular Breeding, 1997, 3, 1-14.	2.1	58
26	The barley amo1 locus is tightly linked to the starch synthase IIIa gene and negatively regulates expression of granule-bound starch synthetic genes. Journal of Experimental Botany, 2011, 62, 5217-5231.	4.8	55
27	Multiple isoforms of starch branching enzyme-I in wheat: lack of the major SBE-I isoform does not alter starch phenotype. Functional Plant Biology, 2004, 31, 591.	2.1	54
28	Downâ€regulation of Glucan, Waterâ€Dikinase activity in wheat endosperm increases vegetative biomass and yield. Plant Biotechnology Journal, 2012, 10, 871-882.	8.3	52
29	Gene expression in a starch synthase IIa mutant of barley: changes in the level of gene transcription and grain composition. Functional and Integrative Genomics, 2008, 8, 211-221.	3.5	50
30	A high-throughput method for the detection of homoeologous gene deletions in hexaploid wheat. BMC Plant Biology, 2010, 10, 264.	3.6	49
31	Production of high oleic rice grains by suppressing the expression of the OsFAD2-1 gene. Functional Plant Biology, 2013, 40, 996.	2.1	48
32	Comparison of three selectable marker genes for transformation of wheat by microprojectile bombardment. Functional Plant Biology, 1998, 25, 39.	2.1	41
33	Characterisation of disproportionating enzyme from wheat endosperm. Planta, 2006, 224, 20-31.	3.2	41
34	The different effects of starch synthase IIa mutations or variation on endosperm amylose content of barley, wheat and rice are determined by the distribution of starch synthase I and starch branching enzyme IIb between the starch granule and amyloplast stroma. Theoretical and Applied Genetics, 2015, 128, 1407-1419.	3.6	39
35	Allelic effects on starch structure and properties of six starch biosynthetic genes in a rice recombinant inbred line population. Rice, 2015, 8, 15.	4.0	39
36	Processing of Novel Elevated Amylose Wheats: Functional Properties and Starch Digestibility of Extruded Products. Journal of Agricultural and Food Chemistry, 2007, 55, 10248-10257.	5.2	38

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37	Characterisation of a gene encoding wheat endosperm starch branching enzyme-I. Theoretical and Applied Genetics, 1999, 98, 156-163.	3.6	36
38	Transcriptome profiling reveals the genetic basis of alkalinity tolerance in wheat. BMC Genomics, 2017, 18, 24.	2.8	35
39	A survey of Î²â€glucan and arabinoxylan content in wheat. Journal of the Science of Food and Agriculture, 2011, 91, 1298-1303.	3.5	34
40	Mutation of the d-hordein gene by RNA-guided Cas9 targeted editing reducing the grain size and changing grain compositions in barley. Food Chemistry, 2020, 311, 125892.	8.2	32
41	Multiple effects of the starch synthase II mutation in developing wheat endosperm. Functional Plant Biology, 2007, 34, 431.	2.1	31
42	Wheat starch biosynthesis. Euphytica, 2001, 119, 55-58.	1.2	28
43	The sugary-type isoamylase gene from rice and Aegilops tauschii: characterization and comparison with maize and Arabidopsis. Genome, 2003, 46, 496-506.	2.0	26
44	RNAi-mediated down-regulation of the expression of OsFAD2-1: effect on lipid accumulation and expression of lipid biosynthetic genes in the rice grain. BMC Plant Biology, 2016, 16, 189.	3.6	26
45	Rice ragged stunt oryzavirus genome segment S4 could encode an RNA dependent RNA polymerase and a second protein of unknown function. Archives of Virology, 1998, 143, 1815-1822.	2.1	23
46	An Assessment of Heavy Ion Irradiation Mutagenesis for Reverse Genetics in Wheat (Triticum aestivum) Tj ETQq0 0 0 rgBT /Overlock 10	2.5	23
47	Somatic embryogenesis and plant regeneration from protoplasts isolated from embryogenic cell suspensions of wheat (Triticum aestivum L.). Plant Cell, Tissue and Organ Culture, 1992, 28, 79-85.	2.3	22
48	TheM r 43K major capsid protein of rice ragged stunt oryzavirus is a post-translationally processed product of aM r 67 348 polypeptide encoded by genome segment 8. Archives of Virology, 1996, 141, 1689-1701.	2.1	22
49	Rice ragged stunt oryzavirus genome segments S7 and S10 encode non-structural proteins of Mr 68â€‰025 (Pns7) and Mr 32â€‰364 (Pns10). Archives of Virology, 1997, 142, 1719-1726.	2.1	22
50	Characterization of starch phosphorylases inÂbarley grains. Journal of the Science of Food and Agriculture, 2013, 93, 2137-2145.	3.5	19
51	Upregulated Lipid Biosynthesis at the Expense of Starch Production in Potato (Solanum tuberosum) Vegetative Tissues via Simultaneous Downregulation of ADP-Glucose Pyrophosphorylase and Sugar Dependent1 Expressions. Frontiers in Plant Science, 2019, 10, 1444.	3.6	19
52	A Synergistic Genetic Engineering Strategy Induced Triacylglycerol Accumulation in Potato (Solanum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.6	19
53	Effect of Wide Variation of the <i>Waxy</i> Gene on Starch Properties in Hull-less Barley from Qinghai-Tibet Plateau in China. Journal of Agricultural and Food Chemistry, 2014, 62, 11369-11385.	5.2	18
54	Genome segment 5 of rice ragged stunt virus encodes avirion protein. Journal of General Virology, 1996, 77, 3155-3160.	2.9	17

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55	A single-base change at a splice site in Wx-A1 caused incorrect RNA splicing and gene inactivation in a wheat EMS mutant line. Theoretical and Applied Genetics, 2019, 132, 2097-2109.	3.6	17
56	Editing of the starch synthase IIa gene led to transcriptomic and metabolomic changes and high amylose starch in barley. Carbohydrate Polymers, 2022, 285, 119238.	10.2	17
57	Plant Regeneration from Protoplasts Derived from Embryogenesis Suspension Cultures of Wheat (Triticum aestivum L.). Journal of Plant Physiology, 1992, 139, 714-718.	3.5	16
58	Asymmetric somatic hybridization between haploid common wheat and UV-irradiated Haynaldia villosa. Plant Science, 1998, 137, 217-223.	3.6	16
59	Direct somatic embryogenesis and plant regeneration from protoplasts of Bupleurum scorzonerifolium Willd. Plant Cell Reports, 1992, 11, 155-8.	5.6	15
60	Effects of a Novel Barley, Himalaya 292, on Rheological and Breadmaking Properties of Wheat and Barley Doughs. Cereal Chemistry, 2005, 82, 626-632.	2.2	12
61	The starch branching enzyme I locus from Aegilops tauschii, the donor of the D genome to wheat. Functional and Integrative Genomics, 2003, 3, 69-75.	3.5	11
62	Callus regeneration from Trifolium subterraneum protoplasts and enhanced protoplast division by low-voltage treatment and nurse cells. Plant Cell, Tissue and Organ Culture, 1990, 21, 67-73.	2.3	9
63	Genetically Modified Starch. , 2014, , 13-29.		9
64	Production of waxy tetraploid wheat (Triticum turgidum durum L.) by EMS mutagenesis. Genetic Resources and Crop Evolution, 2020, 67, 433-443.	1.6	9
65	Detailed comparison between the wheat chromosome group 7 short arms and the rice chromosome arms 6S and 8L with special reference to genes involved in starch biosynthesis. Functional and Integrative Genomics, 2004, 4, 231-40.	3.5	8
66	Effect of Milling on the Starch Properties of Winter Wheat Genotypes. Starch/Staerke, 2010, 62, 115-122.	2.1	8
67	Functional Genomic Validation of the Roles of Soluble Starch Synthase IIa in Japonica Rice Endosperm. Frontiers in Genetics, 2020, 11, 289.	2.3	7
68	PRODUCTION OF TRANSGENIC RICE WITH RICE RAGGED STUNT VIRUS SYNTHETIC RESISTANCE GENES. Acta Horticulturae, 1998, , 393-400.	0.2	7
69	Expression of the high molecular weight glutenin 1Ay gene from Triticum urartu in barley. Transgenic Research, 2019, 28, 225-235.	2.4	6
70	Down-Regulation of FAD2-1 Gene Expression Alters Lysophospholipid Composition in the Endosperm of Rice Grain and Influences Starch Properties. Foods, 2021, 10, 1169.	4.3	6
71	Replication of subterranean clover stunt virus in pea and subterranean clover protoplasts. Virus Research, 1993, 27, 173-183.	2.2	4
72	Advances in the Understanding of Starch Synthesis in Wheat and Barley. Journal of Applied Glycoscience (1999), 2003, 50, 217-224.	0.7	4

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73	Processing high amylose wheat varieties with a capillary rheometer: Structure and thermomechanical properties of products. Food Research International, 2013, 53, 73-80.	6.2	4
74	A modified Megazyme fructan assay for rapidly screening wheat starch synthase IIa mutation populations reveals high fructan accumulation in mature grains of triple null lines. Journal of Cereal Science, 2017, 73, 143-150.	3.7	4
75	The production of wheat â€" <i>Aegilops sharonensis</i> 1S^{sh} chromosome substitution lines harboring alien novel high-molecular-weight glutenin subunits. Genome, 2020, 63, 155-167.	2.0	3
76	Starch biosynthesis in the small grained cereals: Wheat and barley. Special Publication - Royal Society of Chemistry, 0, , 129-137.	0.0	3
77	Control of Starch Biosynthesis in Vascular Plants and Algae. , 0, , 258-289.		2
78	Effects of Two Starch Synthase IIa Isoforms on Grain Components and Other Grain Traits in Barley. Journal of Agricultural and Food Chemistry, 2021, 69, 1206-1213.	5.2	2
79	Down-regulation of glucan, water-dikinase activity in wheat endosperm increases vegetative biomass and yield. Plant Biotechnology Journal, 2013, 11, 390-391.	8.3	1
80	The impact of the indica rice SSIIa allele on the apparent high amylose starch from rice grain with downregulated japonica SBEIIb. Theoretical and Applied Genetics, 2020, 133, 2961-2974.	3.6	1
81	Differential expression of three key starch biosynthetic genes in developing grains of rice differing in glycemic index. Journal of Cereal Science, 2021, 99, 103187.	3.7	1
82	Bioengineering Cereal Carbohydrates to Improve Human Health. Cereal Foods World, 2007, , .	0.2	1
83	Analysis of Starch Synthase Activities in Wheat Grains using Native-PAGE. Bio-protocol, 2016, 6, .	0.4	0