Qing-Yao Shu

List of Publications by Citations

124 papers	3,435 citations	32 h-index	54 g-index
132 ext. papers	4,178 ext. citations	4.5 avg, IF	5.08 L-index

#	Paper	IF	Citations
124	Gene actions of QTLs affecting several agronomic traits resolved in a recombinant inbred rice population and two backcross populations. *Theoretical and Applied Genetics*, **2005**, 110, 649-59	6	151
123	A rice cis-natural antisense RNA acts as a translational enhancer for its cognate mRNA and contributes to phosphate homeostasis and plant fitness. *Plant Cell*, **2013**, 25, 4166-82	11.6	148
122	Transgenic rice plants with a synthetic cry1Ab gene from Bacillus thuringiensis were highly resistant to eight lepidopteran rice pest species. *Molecular Breeding*, **2000**, 6, 433-439	3.4	141
121	Field evaluation of resistance of transgenic rice containing a synthetic cry1Ab gene from Bacillus thuringiensis Berliner to two stem borers. *Journal of Economic Entomology*, **2001**, 94, 271-6	2.2	128
120	Effect of gamma irradiation on starch viscosity and physicochemical properties of different rice. *Radiation Physics and Chemistry*, **2002**, 65, 79-86	2.5	118
119	A 90-day safety study of genetically modified rice expressing Cry1Ab protein (Bacillus thuringiensis toxin) in Wistar rats. *Food and Chemical Toxicology*, **2007**, 45, 339-49	4.7	115
118	Generation and characterization of low phytic acid germplasm in rice (Oryza sativa L.). *Theoretical and Applied Genetics*, **2007**, 114, 803-14	6	111
117	Larvicidal Cry proteins from Bacillus thuringiensis are released in root exudates of transgenic B. thuringiensis corn, potato, and rice but not of B. thuringiensis canola, cotton, and tobacco. *Plant Physiology and Biochemistry*, **2004**, 42, 383-7	5.4	95
116	High levels of stable resistance in transgenic rice with a cry1Ab gene from Bacillus thuringiensis Berliner to rice leaffolder, Cnaphalocrocis medinalis (Guenée) under field conditions. *Crop Protection*, **2003**, 22, 171-178	2.7	92
115	Generation and characterization of two novel low phytate mutations in soybean (Glycine max L. Merr.). *Theoretical and Applied Genetics*, **2007**, 115, 945-57	6	88
114	Metabolite profiling of germinating rice seeds. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 11612-20	5.7	83
113	Echinochloa crus-galli genome analysis provides insight into its adaptation and invasiveness as a weed. *Nature Communications*, **2017**, 8, 1031	17.4	80
112	Cyclic nucleotide-gated ion channel gene family in rice, identification, characterization and experimental analysis of expression response to plant hormones, biotic and abiotic stresses. *BMC Genomics*, **2014**, 15, 853	4.5	79
111	Mutations of the multi-drug resistance-associated protein ABC transporter gene 5 result in reduction of phytic acid in rice seeds. *Theoretical and Applied Genetics*, **2009**, 119, 75-83	6	74
110	Resistance of rice to insect pests mediated by suppression of serotonin biosynthesis. *Nature Plants*, **2018**, 4, 338-344	11.5	71
109	Inheritance and expression of the cry1Ab gene in Bt (Bacillus thuringiensis) transgenic rice. *Theoretical and Applied Genetics*, **2002**, 104, 727-734	6	69
108	A 90-day safety study in Wistar rats fed genetically modified rice expressing snowdrop lectin Galanthus nivalis (GNA). *Food and Chemical Toxicology*, **2007**, 45, 350-63	4.7	67

107	Workable male sterility systems for hybrid rice: Genetics, biochemistry, molecular biology, and utilization. *Rice*, **2014**, 7, 13	5.8	64
106	Metabolite profiling of two low phytic acid (lpa) rice mutants. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 11011-9	5.7	58
105	Disruption of OsSULTR3;3 reduces phytate and phosphorus concentrations and alters the metabolite profile in rice grains. *New Phytologist*, **2016**, 211, 926-39	9.8	56
104	CRISPR-S: an active interference element for a rapid and inexpensive selection of genome-edited, transgene-free rice plants. *Plant Biotechnology Journal*, **2017**, 15, 1371-1373	11.6	52
103	Immunotoxicological studies of genetically modified rice expressing PHA-E lectin or Bt toxin in Wistar rats. *Toxicology*, **2008**, 245, 24-34	4.4	52
102	Toxicological evaluation of transgenic rice flour with a synthetic cry1Ab gene from Bacillus thuringiensis. *Journal of the Science of Food and Agriculture*, **2002**, 82, 738-744	4.3	48
101	Metabolite profiling of colored rice (Oryza sativa L.) grains. *Journal of Cereal Science*, **2012**, 55, 112-119	3.8	47
100	Identification of proteins associated with ion homeostasis and salt tolerance in barley. *Proteomics*, **2014**, 14, 1381-92	4.8	45
99	Safety testing of GM-rice expressing PHA-E lectin using a new animal test design. *Food and Chemical Toxicology*, **2007**, 45, 364-77	4.7	45
98	Fine mapping and candidate gene analysis of purple pericarp gene Pb in rice (Oryza sativa L.). *Science Bulletin*, **2007**, 52, 3097-3104		42
97	Glutamate alleviates cadmium toxicity in rice via suppressing cadmium uptake and translocation. *Journal of Hazardous Materials*, **2020**, 384, 121319	12.8	41
96	Genome-wide Association Mapping of Quantitative Trait Loci (QTLs) for Contents of Eight Elements in Brown Rice (Oryza sativa L.). *Journal of Agricultural and Food Chemistry*, **2015**, 63, 8008-16	5.7	39
95	Haplotype diversity at the Pi-ta locus in cultivated rice and its wild relatives. *Phytopathology*, **2008**, 98, 1305-11	3.8	38
94	Effect of non-lethal low phytic acid mutations on grain yield and seed viability in rice. *Field Crops Research*, **2008**, 108, 206-211	5.5	37
93	Agronomic and morphological characterization of Agrobacterium-transformed Bt rice plants. *Euphytica*, **2002**, 127, 345-352	2.1	37
92	Mutation of Impairs Plant Growth and Phytic Acid Synthesis in Rice. *Plants*, **2019**, 8,	4.5	31
91	Identification and characterization of the soybean IPK1 ortholog of a low phytic acid mutant reveals an exon-excluding splice-site mutation. *Theoretical and Applied Genetics*, **2012**, 125, 1413-23	6	31
90	Using hyperspectral analysis as a potential high throughput phenotyping tool in GWAS for protein content of rice quality. *Plant Methods*, **2019**, 15, 54	5.8	30

89	Gene identification and allele-specific marker development for two allelic low phytic acid mutations in rice (Oryza sativa L.). *Molecular Breeding*, **2008**, 22, 603-612	3.4	30
88	Density alteration of nutrient elements in rice grains of a low phytate mutant. *Food Chemistry*, **2007**, 102, 1400-1406	8.5	29
87	EFFECTS OF GAMMA IRRADIATION ON ASPECTS OF MILLED RICE (ORYZA SATIVA) END-USE QUALITY1. *Journal of Food Quality*, **2001**, 24, 327-336	2.7	29
86	Identification of Substitutions and Small Insertion-Deletions Induced by Carbon-Ion Beam Irradiation in. *Frontiers in Plant Science*, **2017**, 8, 1851	6.2	28
85	Assessment of the contents of phytic acid and divalent cations in low phytic acid (lpa) mutants of rice and soybean. *Journal of Food Composition and Analysis*, **2009**, 22, 278-284	4.1	27
84	A revisit of mutation induction by gamma rays in rice (Oryza sativa L.): implications of microsatellite markers for quality control. *Molecular Breeding*, **2008**, 22, 281-288	3.4	27
83	Genome-wide identification, evolution and expression analysis of cyclic nucleotide-gated channels in tobacco (Nicotiana tabacum L.). *Genomics*, **2019**, 111, 142-158	4.3	27
82	Functional molecular markers and high-resolution melting curve analysis of low phytic acid mutations for marker-assisted selection in rice. *Molecular Breeding*, **2013**, 31, 517-528	3.4	26
81	Starch Structure and Digestibility of Rice High in Resistant Starch. *Starch/Staerke*, **2006**, 58, 411-417	2.3	24
80	Comprehensive genomic analysis of the CNGC gene family in Brassica oleracea: novel insights into synteny, structures, and transcript profiles. *BMC Genomics*, **2017**, 18, 869	4.5	23
79	Genome re-sequencing of semi-wild soybean reveals a complex Soja population structure and deep introgression. *PLoS ONE*, **2014**, 9, e108479	3.7	23
78	Frequency and type of inheritable mutations induced by □rays in rice as revealed by whole genome sequencing. *Journal of Zhejiang University: Science B*, **2016**, 17, 905-915	4.5	23
77	Seed-specific silencing of OsMRP5 reduces seed phytic acid and weight in rice. *Transgenic Research*, **2014**, 23, 585-99	3.3	22
76	Mutational Analysis of Reveals Its Involvement in Phytic Acid Biosynthesis in Rice Grains. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 11436-11443	5.7	21
75	Molecular and biochemical analysis of the gelatinization temperature characteristics of rice (Oryza sativa L.) Starch granules. *Journal of Cereal Science*, **2006**, 44, 40-48	3.8	21
74	Introduction of a xantha mutation for testing and increasing varietal purity in hybrid rice. *Field Crops Research*, **2006**, 96, 71-79	5.5	21
73	Rhizosphere-associated Alcaligenes and Bacillus strains that induce resistance against blast and sheath blight diseases, enhance plant growth and improve mineral content in rice. *Journal of Applied Microbiology*, **2018**, 124, 779-796	4.7	20
72	Genetic analysis of resistance of Bt rice to stripe stem borer (Chilo suppressalis). *Euphytica*, **2002**, 123, 379-386	2.1	19

71	Mutagenic effects of carbon-ion irradiation on dry Arabidopsis thaliana seeds. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2014**, 759, 28-36	3	18
70	Effects of two low phytic acid mutations on seed quality and nutritional traits in soybean (Glycine max L. Merr). *Journal of Agricultural and Food Chemistry*, **2009**, 57, 3632-8	5.7	18
69	Identification of glutinous maize landraces and inbred lines with altered transcription of waxy gene. *Molecular Breeding*, **2012**, 30, 1707-1714	3.4	17
68	A novel thermo/photoperiod-sensitive genic male-sterile (T/PGMS) rice mutant with green-revertible albino leaf color marker induced by gamma irradiation. *Field Crops Research*, **2003**, 81, 141-147	5.5	17
67	Changes in protein expression profiles between a low phytic acid rice (Oryza sativa L. Ssp. japonica) line and its parental line: a proteomic and bioinformatic approach. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 6912-22	5.7	15
66	Evaluation and Application of Two High-Iron Transgenic Rice Lines Expressing a Pea Ferritin Gene. *Rice Science*, **2008**, 15, 51-56	3.8	15
65	Biogas slurry as draw solution of forward osmosis process to extract clean water from micro-polluted water for hydroponic cultivation. *Journal of Membrane Science*, **2019**, 576, 88-95	9.6	14
64	Characterization of OsMIK in a rice mutant with reduced phytate content reveals an insertion of a rearranged retrotransposon. *Theoretical and Applied Genetics*, **2013**, 126, 3009-20	6	14
63	A down-regulated epi-allele of the genomes uncoupled 4 gene generates a xantha marker trait in rice. *Theoretical and Applied Genetics*, **2014**, 127, 2491-501	6	14
62	DNA extraction and fingerprinting of commercial rice cereal products. *Food Research International*, **2006**, 39, 433-439	7	14
61	Evolutionary and expression analysis of CAMTA gene family in Nicotiana tabacum yielded insights into their origin, expansion and stress responses. *Scientific Reports*, **2018**, 8, 10322	4.9	13
60	Characterization and Mutational Analysis of a Monogalactosyldiacylglycerol Synthase Gene in Rice. *Frontiers in Plant Science*, **2019**, 10, 992	6.2	13
59	Gold nanoparticles synthesized using melatonin suppress cadmium uptake and alleviate its toxicity in rice. *Environmental Science: Nano*, **2021**, 8, 1042-1056	7.1	13
58	Molecular nature of chemically and physically induced mutants in plants: a review. *Plant Genetic Resources: Characterisation and Utilisation*, **2014**, 12, S74-S78	1	12
57	High photosynthetic efficiency of a rice (Oryza sativa L.) xantha mutant. *Photosynthetica*, **2006**, 44, 316-319	2.2	12
56	Expression of cytochrome P450 CYP81A6 in rice: tissue specificity, protein subcellular localization, and response to herbicide application. *Journal of Zhejiang University: Science B*, **2015**, 16, 113-22	4.5	11
55	In vitro mutagenesis induced novel thermo/photoperiod-sensitive genic male sterile indica rice with green-revertible xanthan leaf color marker. *Euphytica*, **2002**, 123, 195-202	2.1	11
54	Analysis of Lysophospholipid Content in Low Phytate Rice Mutants. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 5435-5441	5.7	10

53	OsDGD2 is the Sole Digalactosyldiacylglycerol Synthase Gene Highly Expressed in Anther, and its Mutation Confers Male Sterility in Rice. *Rice*, **2019**, 12, 66	5.8	10
52	Genome-wide profiling of genetic variation in Agrobacterium-transformed rice plants. *Journal of Zhejiang University: Science B*, **2016**, 17, 992-996	4.5	10
51	A Suppressor Mutation Partially Reverts the Trait Lowered Methylation in the Promoter of in Rice. *Frontiers in Plant Science*, **2019**, 10, 1003	6.2	9
50	Gene editing: an instrument for practical application of gene biology to plant breeding. *Journal of Zhejiang University: Science B*, **2020**, 21, 460-473	4.5	9
49	Development of an HRM-based, safe and high-throughput genotyping system for two low phytic acid mutations in soybean. *Molecular Breeding*, **2016**, 36, 1	3.4	9
48	Stability of the Metabolite Signature Resulting from the OsSULTR3;3 Mutation in Low Phytic Acid Rice (Oryza sativa L.) Seeds upon Cross-breeding. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 9366-9376	5.7	9
47	Characterization of an RNase Z nonsense mutation identified exclusively in environment-conditioned genic male sterile rice. *Molecular Breeding*, **2014**, 34, 481-489	3.4	9
46	The Marker Trait Is Associated with Altered Tetrapyrrole Biosynthesis and Deregulated Transcription of PhANGs in Rice. *Frontiers in Plant Science*, **2017**, 8, 901	6.2	9
45	Competitive amplification of differentially melting amplicons facilitates efficient genotyping of photoperiod- and temperature-sensitive genic male sterility in rice. *Molecular Breeding*, **2014**, 34, 1765-1776	3.4	9
44	Advances in optical phenotyping of cereal crops. *Trends in Plant Science*, **2021**,	13.1	9
43	High-resolution melting-based TILLING of ray-induced mutations in rice. *Journal of Zhejiang University: Science B*, **2018**, 19, 620-629	4.5	8
42	An optimal DNA pooling strategy for progressive fine mapping. *Genetica*, **2009**, 135, 267-81	1.5	8
41	Characterization of indica-type giant embryo mutant rice enriched with nutritional components. *Cereal Research Communications*, **2007**, 35, 1459-1468	1.1	8
40	Evaluation of Simple and Inexpensive High-Throughput Methods for Phytic Acid Determination. *JAOCS, Journal of the American Oil Chemistsl Society*, **2017**, 94, 353-362	1.8	7
39	Impact of Crossing Parent and Environment on the Metabolite Profiles of Progenies Generated from a Low Phytic Acid Rice (Oryza sativa L.) Mutant. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 2396-2407	5.7	7
38	Production of low phytic acid rice by hairpin RNA- and artificial microRNA-mediated silencing of OsMIK in seeds. *Plant Cell, Tissue and Organ Culture*, **2014**, 119, 15-25	2.7	7
37	Generation and characterization of bentazon susceptible mutants of commercial male sterile lines and evaluation of their utility in hybrid rice production. *Field Crops Research*, **2012**, 137, 12-18	5.5	7
36	HRM-facilitated rapid identification and genotyping of mutations induced by CRISPR/Cas9 mutagenesis in rice. *Crop Breeding and Applied Biotechnology*, **2018**, 18, 184-191	1.1	7

35	Microsatellite analysis for revealing parentage of gamma ray-induced mutants in rice (Oryza sativa L.). *Israel Journal of Plant Sciences*, **2007**, 55, 201-206	0.6	6
34	Impact of Cross-Breeding of Low Phytic Acid MIPS1 and IPK1 Soybean (Glycine max L. Merr.) Mutants on Their Contents of Inositol Phosphate Isomers. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 247-257	5.7	6
33	Phytic Acid Contents and Metabolite Profiles of Progenies from Crossing and Rice (L.) Mutants. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 11805-11814	5.7	5
32	Characterization of a New Green-Revertible Albino Mutant in Rice. *Crop Science*, **2011**, 51, 2706-2715	2.4	5
31	Fine mapping of a Xantha mutation in rice (Oryza sativa L.). *Euphytica*, **2010**, 172, 215-220	2.1	5
30	Identification of a major quantitative trait locus and its candidate underlying genetic variation for rice stigma exsertion rate. *Crop Journal*, **2019**, 7, 350-359	4.6	4
29	Mutations of Increase Lysophospholipid Content and Enhance Cooking and Eating Quality in Rice. *Plants*, **2020**, 9,	4.5	4
28	An Efficient Procedure for Protoplast Isolation from Mesophyll Cells and Nuclear Fractionation in Rice. *Bio-protocol*, **2015**, 5,	0.9	4
27	An ,,,, Mutant with a 33-nt Deletion Showed Enhanced Tolerance to Salt and Drought Stress in Rice. *Plants*, **2020**, 10,	4.5	4
26	Development and molecular characterization of a doubled haploid population derived from a hybrid between rice and wide compatible rice. *Breeding Science*, **2016**, 66, 552-559	2	4
25	Impact of cross-breeding of low phytic acid rice (Oryza sativa L.) mutants with commercial cultivars on the phytic acid contents. *European Food Research and Technology*, **2019**, 245, 707-716	3.4	4
24	A novel nitrous oxide mitigation strategy: expressing nitrous oxide reductase fromPseudomonas stutzeriin transgenic plants. *Canadian Journal of Plant Science*, **2014**, 94, 1013-1023	1	3
23	Characterization of Pi-ta blast resistance gene in an international rice core collection. *Plant Breeding*, **2009**, 129, 491	2.4	3
22	Progressive fine mapping in experimental populations: an improved strategy toward positional cloning. *Journal of Theoretical Biology*, **2008**, 253, 817-23	2.3	3
21	Generation, characterization, and application of mutant genetic resources in soybean. *Israel Journal of Plant Sciences*, **2007**, 55, 147-157	0.6	3
20	COMPARATIVE STUDIES ON MAJOR NUTRITIONAL COMPONENTS AND PHYSICOCHEMICAL PROPERTIES OF THE TRANSGENIC RICE WITH A SYNTHETIC Cry1Ab GENE FROM BACILLUS THURINGIENSIS. *Journal of Food Biochemistry*, **2003**, 27, 295-308	3.3	3
19	Induction and Identification of Temperature-Sensitive Albino Genes in Indica Rice (Oryza sativa L). *Cereal Research Communications*, **1997**, 25, 905-910	1.1	3
18	OsKEAP1 Interacts with OsABI5 and Its Downregulation Increases the Transcription of and the ABA Response Genes in Germinating Rice Seeds. *Plants*, **2021**, 10,	4.5	3

17	Nuclear translocation of OsMFT1 that is impeded by OsFTIP1 promotes drought tolerance in rice. *Molecular Plant*, **2021**, 14, 1297-1311	14.4	3
16	Mutagenic Effect of Three Ion Beams on Rice and Identification of Heritable Mutations by Whole Genome Sequencing. *Plants*, **2020**, 9,	4.5	2
15	Identification and Characterization of -Ray-Induced Mutations in Rice Cytoplasmic Genomes by Whole-Genome Sequencing. *Cytogenetic and Genome Research*, **2020**, 160, 100-109	1.9	2
14	Mutations of the Gene Cause ROS Accumulation and Repress Expression of Peroxidase Genes in Rice. *Frontiers in Plant Science*, **2021**, 12, 682453	6.2	2
13	Tissue-specific expression, developmentally and spatially regulated alternative splicing, and protein subcellular localization of OsLpa rice. *Journal of Zhejiang University: Science B*, **2016**, 17, 100-9	4.5	2
12	Identification, Characterization, and Mutational Analysis of a Probable KEAP1 Ortholog in Rice (L.). *Plants*, **2020**, 9,	4.5	1
11	Generation and Characterization of a Soybean Line with a Vernonia galamensis Diacylglycerol Acyltransferase-1 Gene and a myo-Inositol 1-Phosphate Synthase Knockout Mutation. *Lipids*, **2020**, 55, 469-477	1.6	1
10	Transcriptional silencing and developmental reactivation of cry1Ab gene in transgenic rice. *Science in China Series C: Life Sciences*, **2002**, 45, 68-78		1
9	Quantification of Serotonin in Rice and Insect Pest and its Functional Analysis in Insects Using Artificial Diet Feeding. *Bio-protocol*, **2019**, 9, e3173	0.9	1
8	Analysis of proline accumulation, antioxidant capacity and HSP expression in mutant rice lines with different heat tolerance. *Australian Journal of Crop Science*, **2021**, 22-27	0.5	1
7	New Breeding Techniques for Greenhouse Gas (GHG) Mitigation: Plants May Express Nitrous Oxide Reductase. *Climate*, **2018**, 6, 80	3.1	1
6	Identification and characterization of inheritable structural variations induced by ion beam radiations in rice. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*, **2021**, 823, 111757	3.3	0
5	Metabolite profiling reveals the metabolic features of the progenies resulting from the low phytic acid rice (Oryza sativa L.) mutant. *Journal of Cereal Science*, **2021**, 100, 103251	3.8	0
4	Stability of the Metabolite Signature Resulting from the MIPS1 Mutation in Low Phytic Acid Soybean (Glycine max L. Merr.) Mutants upon Cross-Breeding. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 5043-5052	5.7	
3	Combining DNA pooling with selective recombinant genotyping for increased efficiency in fine mapping. *Theoretical and Applied Genetics*, **2010**, 120, 775-83	6	
2	Rice: Breeding **2016**, 304-310		
1	Rice Breeding **2016**,		