Wanqi Liang

List of Publications by Year in Descending Order

91 papers	4,890 citations	38 h-index	69 g-index
97 ext. papers	6,391 ext. citations	8.3 avg, IF	5.33 L-index

#	Paper	IF	Citations
91	Rice SIAH E3 Ligases Interact with RMD Formin and Affect Plant Morphology.. *Rice*, **2022**, 15, 6	5.8	0
90	Encodes a Type II Formin Required for Rice Morphogenesis.. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
89	SMALL REPRODUCTIVE ORGANS, a SUPERMAN-like transcription factor, regulates stamen and pistil growth in rice. *New Phytologist*, **2021**, 233, 1701	9.8	1
88	Rice SEPALLATA genes OsMADS5 and OsMADS34 cooperate to limit inflorescence branching by repressing the TERMINAL FLOWER1-like gene RCN4. *New Phytologist*, **2021**,	9.8	2
87	Rice Glucose 6-Phosphate/Phosphate Translocator 1 is required for tapetum function and pollen development. *Crop Journal*, **2021**, 9, 1278-1278	4.6	1
86	Two rice MYB transcription factors maintain male fertility in response to photoperiod by modulating sugar partitioning. *New Phytologist*, **2021**, 231, 1612-1629	9.8	3
85	MADS1 maintains barley spike morphology at high ambient temperatures. *Nature Plants*, **2021**, 7, 1093-1107	11.5	7
84	Integrating GWAS and transcriptomics to identify genes involved in seed dormancy in rice. *Theoretical and Applied Genetics*, **2021**, 134, 3553-3562	6	2
83	HSP70-16 and VDAC3 jointly inhibit seed germination under cold stress in Arabidopsis. *Plant, Cell and Environment*, **2021**, 44, 3616-3627	8.4	3
82	Rice transcription factor MADS32 regulates floral patterning through interactions with multiple floral homeotic genes. *Journal of Experimental Botany*, **2021**, 72, 2434-2449	7	1
81	Transcriptome Analysis Reveals Photoperiod-Associated Genes Expressed in Rice Anthers. *Frontiers in Plant Science*, **2021**, 12, 621561	6.2	5
80	Function of the pseudo phosphotransfer proteins has diverged between rice and Arabidopsis. *Plant Journal*, **2021**, 106, 159-173	6.9	2
79	Automated High-Resolution Structure Analysis of Plant Root with a Morphological Image Filtering Algorithm. *Mathematical Problems in Engineering*, **2021**, 2021, 1-14	1.1	
78	AUXIN RESPONSE FACTORS 6 and 17 control the flag leaf angle in rice by regulating secondary cell wall biosynthesis of lamina joints. *Plant Cell*, **2021**, 33, 3120-3133	11.6	5
77	Carbon Starved Anther modulates sugar and ABA metabolism to protect rice seed germination and seedling fitness. *Plant Physiology*, **2021**, 187, 2405-2418	6.6	1
76	Gibberellins orchestrate panicle architecture mediated by DELLA-KNOX signalling in rice. *Plant Biotechnology Journal*, **2021**, 19, 2304-2318	11.6	6
75	Dissection of the Genetic Basis of Rice Panicle Architecture Using a Genome-wide Association Study. *Rice*, **2021**, 14, 77	5.8	0

74	PERSISTENT TAPETAL CELL2 Is Required for Normal Tapetal Programmed Cell Death and Pollen Wall Patterning. *Plant Physiology*, **2020**, 182, 962-976	6.6	24
73	Bright Fluorescent Vacuolar Marker Lines Allow Vacuolar Tracing Across Multiple Tissues and Stress Conditions in Rice. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
72	NERD1 is required for primexine formation and plasma membrane undulation during microsporogenesis in Arabidopsis thaliana. *ABIOTECH*, **2020**, 1, 205-218	3.9	3
71	Genome-wide analysis of RopGEF gene family to identify genes contributing to pollen tube growth in rice (Oryza sativa). *BMC Plant Biology*, **2020**, 20, 95	5.3	11
70	Rice pollen aperture formation is regulated by the interplay between OsINP1 and OsDAF1. *Nature Plants*, **2020**, 6, 394-403	11.5	16
69	Defective Pollen Wall 3 (DPW3), a novel alpha integrin-like protein, is required for pollen wall formation in rice. *New Phytologist*, **2020**, 225, 807-822	9.8	21
68	DWT1/DWL2 act together with OsPIP5K1 to regulate plant uniform growth in rice. *New Phytologist*, **2020**, 225, 1234-1246	9.8	10
67	Grass-Specific Is Essential for Pollen Exine Patterning in Rice. *Plant Cell*, **2020**, 32, 3961-3977	11.6	7
66	Rice OsBRCA2 Is Required for DNA Double-Strand Break Repair in Meiotic Cells. *Frontiers in Plant Science*, **2020**, 11, 600820	6.2	4
65	Transcriptome profiling reveals phase-specific gene expression in the developing barley inflorescence. *Crop Journal*, **2020**, 8, 71-86	4.6	10
64	Wheat AGAMOUS LIKE 6 transcription factors function in stamen development by regulating the expression of. *Development (Cambridge)*, **2019**, 146,	6.6	7
63	Ostkpr1 functions in anther cuticle development and pollen wall formation in rice. *BMC Plant Biology*, **2019**, 19, 104	5.3	23
62	Chromatin interacting factor OsVIL2 increases biomass and rice grain yield. *Plant Biotechnology Journal*, **2019**, 17, 178-187	11.6	15
61	A Multiprotein Complex Regulates Interference-Sensitive Crossover Formation in Rice. *Plant Physiology*, **2019**, 181, 221-235	6.6	9
60	The Rice Actin-Binding Protein RMD Regulates Light-Dependent Shoot Gravitropism. *Plant Physiology*, **2019**, 181, 630-644	6.6	9
59	Genome-wide analysis of the barley non-specific lipid transfer protein gene family. *Crop Journal*, **2019**, 7, 65-76	4.6	11
58	Rice auxin influx carrier OsAUX1 facilitates root hair elongation in response to low external phosphate. *Nature Communications*, **2018**, 9, 1408	17.4	61
57	Controls Flower Development by Activating Rice. *Plant Physiology*, **2018**, 177, 713-727	6.6	15

56	A Rice Glutamyl-tRNA Synthetase Modulates Early Anther Cell Division and Patterning. *Plant Physiology*, **2018**, 177, 728-744	6.6	16
55	Rice Morphology Determinant-Mediated Actin Filament Organization Contributes to Pollen Tube Growth. *Plant Physiology*, **2018**, 177, 255-270	6.6	11
54	Regulates Spikelet Development by Controlling Regulatory Genes in. *Frontiers in Plant Science*, **2018**, 9, 102	6.2	8
53	Rice actin binding protein RMD controls crown root angle in response to external phosphate. *Nature Communications*, **2018**, 9, 2346	17.4	40
52	Loss of LOFSEP Transcription Factor Function Converts Spikelet to Leaf-Like Structures in Rice. *Plant Physiology*, **2018**, 176, 1646-1664	6.6	33
51	Defective Pollen Wall 2 (DPW2) Encodes an Acyl Transferase Required for Rice Pollen Development. *Plant Physiology*, **2017**, 173, 240-255	6.6	61
50	Resolvase OsGEN1 Mediates DNA Repair by Homologous Recombination. *Plant Physiology*, **2017**, 173, 1316-1329	6.6	13
49	Glycerol-3-Phosphate Acyltransferase 3 (OsGPAT3) is required for anther development and male fertility in rice. *Journal of Experimental Botany*, **2017**, 68, 513-526	7	38
48	Interactions between FLORAL ORGAN NUMBER4 and floral homeotic genes in regulating rice flower development. *Journal of Experimental Botany*, **2017**, 68, 483-498	7	12
47	Rice fatty acyl-CoA synthetase OsACOS12 is required for tapetum programmed cell death and male fertility. *Planta*, **2017**, 246, 105-122	4.7	42
46	Rice No Pollen 1 (NP1) is required for anther cuticle formation and pollen exine patterning. *Plant Journal*, **2017**, 91, 263-277	6.9	37
45	Two rice receptor-like kinases maintain male fertility under changing temperatures. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12327-12332	11.5	56
44	Regulatory network and genetic interactions established by OsMADS34 in rice inflorescence and spikelet morphogenesis. *Journal of Integrative Plant Biology*, **2017**, 59, 693-707	8.3	15
43	The polyketide synthase OsPKS2 is essential for pollen exine and Ubisch body patterning in rice. *Journal of Integrative Plant Biology*, **2017**, 59, 612-628	8.3	30
42	Dynamic Regulation of Auxin Response during Rice Development Revealed by Newly Established Hormone Biosensor Markers. *Frontiers in Plant Science*, **2017**, 8, 256	6.2	30
41	MEIOTIC F-BOX Is Essential for Male Meiotic DNA Double-Strand Break Repair in Rice. *Plant Cell*, **2016**, 28, 1879-93	11.6	34
40	Postmeiotic development of pollen surface layers requires two Arabidopsis ABCG-type transporters. *Plant Cell Reports*, **2016**, 35, 1863-73	5.1	22
39	Development of japonica Photo-Sensitive Genic Male Sterile Rice Lines by Editing Carbon Starved Anther Using CRISPR/Cas9. *Journal of Genetics and Genomics*, **2016**, 43, 415-9	4	69

38	ATP binding cassette G transporters and plant male reproduction. *Plant Signaling and Behavior*, **2016**, 11, e1136764	2.5	16
37	Defective Tapetum Cell Death 1 (DTC1) Regulates ROS Levels by Binding to Metallothionein during Tapetum Degeneration. *Plant Physiology*, **2016**, 170, 1611-23	6.6	76
36	Regulatory Role of a Receptor-Like Kinase in Specifying Anther Cell Identity. *Plant Physiology*, **2016**, 171, 2085-100	6.6	30
35	Dynamic changes of small RNAs in rice spikelet development reveal specialized reproductive phasiRNA pathways. *Journal of Experimental Botany*, **2016**, 67, 6037-6049	7	69
34	A Rice Ca2+ Binding Protein Is Required for Tapetum Function and Pollen Formation. *Plant Physiology*, **2016**, 172, 1772-1786	6.6	40
33	The DNA Topoisomerase VI-B Subunit OsMTOPVIB Is Essential for Meiotic Recombination Initiation in Rice. *Molecular Plant*, **2016**, 9, 1539-1541	14.4	19
32	Interactions of OsMADS1 with Floral Homeotic Genes in Rice Flower Development. *Molecular Plant*, **2015**, 8, 1366-84	14.4	54
31	Proteomic and phosphoproteomic analyses reveal extensive phosphorylation of regulatory proteins in developing rice anthers. *Plant Journal*, **2015**, 84, 527-44	6.9	41
30	Brassinosteroids promote development of rice pollen grains and seeds by triggering expression of Carbon Starved Anther, a MYB domain protein. *Plant Journal*, **2015**, 82, 570-81	6.9	78
29	Two ATP Binding Cassette G Transporters, Rice ATP Binding Cassette G26 and ATP Binding Cassette G15, Collaboratively Regulate Rice Male Reproduction. *Plant Physiology*, **2015**, 169, 2064-79	6.6	66
28	Jasmonic acid regulates spikelet development in rice. *Nature Communications*, **2014**, 5, 3476	17.4	150
27	Rice actin-binding protein RMD is a key link in the auxin-actin regulatory loop that controls cell growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 10377-82	11.5	58
26	The Rice Basic Helix-Loop-Helix Transcription Factor TDR INTERACTING PROTEIN2 Is a Central Switch in Early Anther Development. *Plant Cell*, **2014**, 26, 1512-1524	11.6	120
25	ABORTED MICROSPORES Acts as a Master Regulator of Pollen Wall Formation in Arabidopsis. *Plant Cell*, **2014**, 26, 1544-1556	11.6	136
24	Dwarf Tiller1, a Wuschel-related homeobox transcription factor, is required for tiller growth in rice. *PLoS Genetics*, **2014**, 10, e1004154	6	40
23	Rice CYP703A3, a cytochrome P450 hydroxylase, is essential for development of anther cuticle and pollen exine. *Journal of Integrative Plant Biology*, **2014**, 56, 979-94	8.3	107
22	Post-meiotic deficient anther1 (PDA1) encodes an ABC transporter required for the development of anther cuticle and pollen exine in rice **2013**, 56, 59-68		50
21	OsMADS16 genetically interacts with OsMADS3 and OsMADS58 in specifying floral patterning in rice. *Molecular Plant*, **2013**, 6, 743-56	14.4	36

20	EAT1 promotes tapetal cell death by regulating aspartic proteases during male reproductive development in rice. *Nature Communications*, **2013**, 4, 1445	17.4	201
19	MYB56 encoding a R2R3 MYB transcription factor regulates seed size in Arabidopsis thaliana. *Journal of Integrative Plant Biology*, **2013**, 55, 1166-78	8.3	41
18	Mutation in CSA creates a new photoperiod-sensitive genic male sterile line applicable for hybrid rice seed production. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 76-81	11.5	87
17	MTR1 encodes a secretory fasciclin glycoprotein required for male reproductive development in rice. *Developmental Cell*, **2012**, 22, 1127-37	10.2	67
16	RICE MORPHOLOGY DETERMINANT encodes the type II formin FH5 and regulates rice morphogenesis. *Plant Cell*, **2011**, 23, 681-700	11.6	75
15	Rice MADS3 regulates ROS homeostasis during late anther development. *Plant Cell*, **2011**, 23, 515-33	11.6	191
14	PERSISTENT TAPETAL CELL1 encodes a PHD-finger protein that is required for tapetal cell death and pollen development in rice. *Plant Physiology*, **2011**, 156, 615-30	6.6	186
13	Defective pollen wall is required for anther and microspore development in rice and encodes a fatty acyl carrier protein reductase. *Plant Cell*, **2011**, 23, 2225-46	11.6	180
12	Genetic interaction of OsMADS3, DROOPING LEAF, and OsMADS13 in specifying rice floral organ identities and meristem determinacy. *Plant Physiology*, **2011**, 156, 263-74	6.6	69
11	Rice MADS6 interacts with the floral homeotic genes SUPERWOMAN1, MADS3, MADS58, MADS13, and DROOPING LEAF in specifying floral organ identities and meristem fate. *Plant Cell*, **2011**, 23, 2536-52	11.6	108
10	Identification of gamyb-4 and analysis of the regulatory role of GAMYB in rice anther development. *Journal of Integrative Plant Biology*, **2010**, 52, 670-8	8.3	72
9	The AGL6-like gene OsMADS6 regulates floral organ and meristem identities in rice. *Cell Research*, **2010**, 20, 299-313	24.7	108
8	Carbon starved anther encodes a MYB domain protein that regulates sugar partitioning required for rice pollen development. *Plant Cell*, **2010**, 22, 672-89	11.6	174
7	The ABORTED MICROSPORES regulatory network is required for postmeiotic male reproductive development in Arabidopsis thaliana. *Plant Cell*, **2010**, 22, 91-107	11.6	235
6	The SEPALLATA-like gene OsMADS34 is required for rice inflorescence and spikelet development. *Plant Physiology*, **2010**, 153, 728-40	6.6	148
5	Cytochrome P450 family member CYP704B2 catalyzes the {omega}-hydroxylation of fatty acids and is required for anther cutin biosynthesis and pollen exine formation in rice. *Plant Cell*, **2010**, 22, 173-90	11.6	265
4	OsC6, encoding a lipid transfer protein, is required for postmeiotic anther development in rice. *Plant Physiology*, **2010**, 154, 149-62	6.6	200
3	The Post-meiotic Deficicent Anther1 (PDA1) gene is required for post-meiotic anther development in rice. *Journal of Genetics and Genomics*, **2010**, 37, 37-46	4	20

2	Genome-wide analysis of basic/helix-loop-helix transcription factor family in rice and Arabidopsis. *Plant Physiology*, **2006**, 141, 1167-84	6.6	396
1	Oral immunization of mice with plant-derived fimbrial adhesin FaeG induces systemic and mucosal K88ad enterotoxigenic Escherichia coli-specific immune responses. *FEMS Immunology and Medical Microbiology*, **2006**, 46, 393-9		9