

2020 年发表的重要研究论文 (注: 上标 1 为共同通讯作者)

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
1	秦 峰 ¹	Mapping regulatory variants controlling gene expression in drought response and tolerance in maize	Genome Biol (2020) 21:163	19.041
2	陈其军 ¹	Prime editing efficiently generates W542L and S621I double mutations in two ALS genes in maize	Genome Biol (2020) 21:257	19.041
3	陈艳梅 ¹	Mass spectrometry untangles plant membrane protein signaling networks	Trends Plant Sci (2020) 25:930-944	15.727
4	陈艳梅	Organellar proteomic profiling to analyze membrane afficking pathways	Trends Plant Sci DOI: 10.1016/j.tplants.2020.11.008	15.727
5	寿惠霞 ¹	Simultaneous changes in seed size, oil content, and protein content driven by selection of <i>SWEET</i> homologues during soybean domestication	Natl Sci Rev (2020) 7:1776–1786	15.209
6	李召虎 ¹	Introducing selective agrochemical manipulation of gibberellin metabolism into a cereal crop	Nat Plants (2020) 6:67–72	14.576
7	蒋才富	Natural variation of an EF-hand Ca ²⁺ -binding-protein coding gene confers saline-alkaline tolerance in maize	Nat Commun (2020) 11:186	13.611
8	徐明良	A helitron-induced RabGDI α variant causes quantitative recessive resistance to maize rough dwarf disease	Nat Commun (2020) 11:495	13.611
9	张 静 ¹	Strigolactones inhibit auxin feedback on PIN-dependent auxin transport canalization	Nat Commun (2020) 11:3508	13.611
10	傅 纓	<i>Arabidopsis</i> ECAP is a new adaptor protein that connects JAZ repressors with TPR2 co-repressor to suppress Jasmonate-responsive anthocyanin accumulation	Mol Plant (2020) 13:246–265	12.744

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
11	李继刚	PHYTOCHROME-INTERACTING FACTORS interact with the ABA receptors PYL8 and PYL9 to orchestrate ABA signaling in darkness	Mol Plant (2020) 13:414–430	12.744
12	杨淑华	Molecular regulation of plant responses to environmental temperatures	Mol Plant (2020) 13:544–564	12.744
13	杨淑华	Cold-induced CBF-PIF3 interaction enhances freezing tolerance by stabilizing the phyB thermosensor in <i>Arabidopsis</i>	Mol Plant (2020) 13:894–906	12.744
14	徐娟 ¹	The YDA-MKK4/MKK5-MPK3/MPK6 cascade functions downstream of the RGF1-RGI ligand-receptor pair in regulating mitotic activity in the root apical meristem	Mol Plant (2020) 13:1608–1623	12.744
15	刘建祥	Protein quality control in plant organelles: current progress and future perspectives	Mol Plant (2020) 14:1–20	12.744
16	李继刚 杨淑华	The cold response regulator CBF1 promotes <i>Arabidopsis</i> hypocotyl growth at ambient temperatures	EMBO J (2020) 39:e103630	10.373
17	杨淑华	The calcium transporter ANNEXIN1 mediates cold-induced calcium signaling and freezing tolerance in plants	EMBO J (2020) e104559	10.373
18	巩志忠	The <i>Arabidopsis</i> nodulin homeobox factor AtNDX interacts with AtRING1A/B and negatively regulates abscisic acid signaling	Plant Cell (2020) 32:703–721	10.144
19	毛传澡	PROTEIN PHOSPHATASE95 regulates phosphate homeostasis by affecting phosphate transporter trafficking in rice	Plant Cell (2020) 32:740–757	10.144
20	李继刚	MYB30 is a key negative regulator of <i>Arabidopsis</i> photomorphogenic development that promotes PIF4 and PIF5 protein accumulation in the light	Plant Cell (2020) 32:2196–2215	10.144

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
21	徐娟 ¹	WRKY15 suppresses tracheary element differentiation upstream of VND7 during xylem formation	Plant Cell (2020) 32:2307–2324	10.144
22	宋任涛	A SnRK1-ZmRFWD3-Opaque2 signaling axis regulates diurnal nitrogen accumulation in maize seeds	Plant Cell (2020) 32:2823–2841	10.144
23	陈益芳	The transcription factor NIGT1.2 modulates both phosphate uptake and nitrate influx during phosphate starvation in <i>Arabidopsis</i> and maize	Plant Cell (2020) 32:3519–3534	10.144
24	金危危	Ectopic expression of the transcriptional regulator <i>silky3</i> causes pleiotropic meristem and sex determination defects in maize inflorescences	Plant Cell (2020) 32:3750–3773	10.144
25	郭岩	The GSK3-like Kinase BIN2 Is a molecular switch between the salt stress response and growth recovery in <i>Arabidopsis thaliana</i>	Dev Cell (2020) 55:367–380	10.129
26	王毅	KUP9 maintains root meristem activity by regulating K ⁺ and auxin homeostasis in response to low K	EMBO Rep (2020) 21:e50164	9.214
27	杨建立	Low phosphate represses histone deacetylase complex1 to regulate root system architecture remodeling in <i>Arabidopsis</i>	New Phytol (2020) 225:1732–1745	8.795
28	李颖章	E2 conjugases UBC1 and UBC2 regulate MYB42-mediated SOS pathway in response to salt stress in <i>Arabidopsis</i>	New Phytol (2020) 27:455–472	8.795
29	金危危 田丰	<i>d1f1</i> promotes floral transition by directly activating <i>ZmMADS4</i> and <i>ZmMADS67</i> in the maize shoot apex	New Phytol (2020) 228:1386–1400	8.795
30	李召虎 ¹	Emerging investigator series: molecular mechanisms of plant salinity stress tolerance improvement by seed priming with cerium oxide nanoparticles	Environ Sci-Nano (2020) 7:2214–2228	7.913

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
31	刘建祥 ¹	A membrane-associated NAC transcription factor OsNTL3 is involved in thermotolerance in rice	Plant Biotechnol J (2020) 18:1317–1329	7.658
32	傅 纓 王喜庆	Maize <i>ZmRPH1</i> encodes a microtubule-associated protein that controls plant and ear height	Plant Biotechnol J (2020) 18:1345–1347	7.658
33	陈益芳	Maize <i>ZmPT7</i> regulates Pi uptake and redistribution which is modulated by phosphorylation	Plant Biotechnol J (2020) 18:2406–2419	7.658
34	孙传清 ¹	<i>TAC4</i> controls tiller angle by regulating the endogenous auxin content and distribution in rice	Plant Biotechnol J DOI: 10.1111/pbi.13440	7.658
35	李颖章	H2Bub1 regulates <i>RbohD</i> -dependent H ₂ O ₂ signal pathway in the defense responses to Vd-toxins	Plant Physiol (2020) 182:640–657	7.52
36	毛传澡	CASEIN KINASE2-dependent phosphorylation of PHOSPHATE2 fine-tunes phosphate homeostasis in rice	Plant Physiol (2020) 183:250–262	7.52
37	金危危	Maize plant architecture is regulated by the ethylene biosynthetic gene <i>ZmACS7</i>	Plant Physiol (2020) 183:1184–1199	7.52
38	金危危	A missense mutation in a large subunit of ribonucleotide reductase confers temperature-gated tassel formation	Plant Physiol (2020) 184:1979–1997	7.52
39	金崇伟	The K ⁺ and NO ₃ ⁻ interaction mediated by NITRATE TRANSPORTER 1.1 ensures better plant growth under K ⁺ -limiting conditions	Plant Physiol (2020) 184:1990–1916	7.52
40	金崇伟	Inhibition of DNA demethylation enhances plant tolerance to cadmium toxicity by improving iron nutrition	Plant Cell Environ (2020) 43:275–291	7.044
41	杨建立	A NAC-type transcription factor confers aluminium resistance by regulating cell wall-associated receptor kinase 1 and cell wall pectin	Plant Cell Environ (2020) 43:463–478	7.044

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
42	毛同林	Submergence stress-induced hypocotyl elongation through ethylene signaling-mediated regulation of cortical microtubules in <i>Arabidopsis</i>	J Exp Bot (2020) 71:1067–1077	7.011
43	韩玉珍	KHZ1 and KHZ2, novel members of the autonomous pathway, repress the splicing efficiency of <i>FLC</i> pre-mRNA in <i>Arabidopsis</i>	J Exp Bot (2020) 71:1375–1386	7.011
44	汪 洋	CALCIUM-DEPENDENT PROTEIN KINASE 32-mediated phosphorylation is essential for the ammonium transport activity of AMT1;1 in <i>Arabidopsis</i> roots	J Exp Bot (2020) 71:5087–5097	7.011
45	宋任涛	Maize pentatricopeptide repeat protein DEK53 is required for mitochondrial RNA editing at multiple sites and seed development	J Exp Bot (2020) 71:6246–6261	7.011
46	孙传清 ¹	<i>HIGH-TILLERING AND DWARF 12</i> regulates photosynthesis and plant architecture by affecting carotenoid biosynthesis in rice	J Exp Bot DOI:10.1093/jxb/er-aa497	7.011
47	杨小红	Genetic basis of kernel nutritional traits during maize domestication and improvement	Plant J (2020) 101:278–292	6.629
48	任东涛	MAPK-like protein 1 positively regulates maize seedling drought sensitivity by suppressing ABA biosynthesis	Plant J (2020) 102:747–760	6.629
49	李 岩	Organelle movement and apical accumulation of secretory vesicles in pollen tubes of <i>Arabidopsis thaliana</i> depend on class XI myosins	Plant J (2020) 104:1685–1697	6.629
50	毛传澡	OsHHLH6 interacts with OsSPX4 and regulates the phosphate-starvation response in rice	Plant J DOI: 10.1111/TPJ.15061	6.629
51	金崇伟	Ammonium aggravates salt stress in plants by entrapping them in a chloride over-accumulation state in an NRT1. 1-dependent manner	Sci Total Environ (2020) 746:141244	6.419

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
52	段留生 ¹	A novel plant growth regulator improves the grain yield of high-density maize crops by reducing stalk lodging and promoting a compact plant type	Field Crop Res (2021) 260:107982	4.816
53	李颖章	<i>Arabidopsis thaliana</i> CRK41 negatively regulates salt tolerance via H ₂ O ₂ and ABA cross-linked networks	Environ Exp Bot (2020) 179:104210	4.744
54	刘建祥	Mutation of <i>DELAYED GREENING1</i> impairs chloroplast RNA editing at elevated ambient temperature in <i>Arabidopsis</i>	J Genet Genomics (2020) 47:201–212	4.732
55	李 溱	iTRAQ-Based quantitative proteomic analysis of the <i>Arabidopsis</i> mutant opr3-1 in response to exogenous MeJA	Int J Mol Sci (2020) 21:571	4.653
56	张明才	The role of gibberellins in regulation of nitrogen uptake and physiological traits in maize responding to nitrogen availability	Int J Mol Sci (2020) 21:1824	4.653
57	寿惠霞 ¹	Analysis of spatio-temporal transcriptome profiles of soybean (<i>Glycine max</i>) tissues during early seed development	Int J Mol Sci (2020) 21:7603	4.653
58	宋任涛	The regulation of zein biosynthesis in maize endosperm	Theor Appl Genet (2020) 133:1443–1453	4.603
59	王向锋 ¹	The roles of endomembrane trafficking in plant abiotic stress responses	J Integr Plant Biol (2020) 1:55–69	4.586
60	汪 洋	Phosphorylation at Ser28 stabilizes the <i>Arabidopsis</i> nitrate transporter NRT2.1 in response to nitrate limitation	J Integr Plant Biol (2020) 62:865–876	4.586
61	丁忠杰	A WRKY transcription factor confers aluminum tolerance via regulation of cell wall modifying genes	J Integr Plant Biol (2020) 62:1176–1192	4.586
62	丁忠杰	Ethylene promotes seed iron storage during <i>Arabidopsis</i> seed maturation via ERF95 transcription factor	J Integr Plant Biol (2020) 62:1193–1212	4.586

序号	通讯作者	论文题目	刊物名称/ 卷期页	影响因子
63	徐明良	Combined genome-wide association study and transcriptome analysis reveal candidate genes for resistance to Fusarium ear rot in maize	J Integr Plant Biol (2020) 62:1535–1551	4.586
64	徐娟 ¹	Co-regulation of indole glucosinolates and camalexin biosynthesis by CPK5/CPK6 and MPK3/MPK6 signaling pathways	J Integr Plant Biol (2020) 62:1780–1796	4.586
65	徐娟	Induction of γ - aminobutyric acid plays a positive role to <i>Arabidopsis</i> resistance against <i>Pseudomonas syringae</i>	J Integr Plant Biol (2020) 62:1797–1812	4.586
66	徐明良 ¹	Genetic dissection of grain water content and dehydration rate related to mechanical harvest in maize	BMC Plant Biol (2020) 20:118	4.494
67	杨建立	Genome-wide identification and expression analysis of the NAC transcription factor family in tomato (<i>Solanum lycopersicum</i>) during aluminum stress	BMC Genomics (2020) 21:288	4.093
68	苏震 ¹	Co-expression network analysis reveals the dynamic modules regulating the growth and development of cirrus in the rattans (<i>Calamus simplicifolius</i> and <i>Daemonorops jenkinsiana</i>)	Front Genet (2020) 11:378	4.007
69	苏震 ¹	Systematic analysis of differential H3K27me3 and H3K4me3 deposition in callus and seedling reveals the epigenetic regulatory mechanisms involved in callus formation in rice	Front Genet (2020) 11:766	4.007
70	苏震 ¹	HpeNet: co-expression network database for de novo transcriptome assembly of <i>Paeonia lactiflora</i> Pall	Front Genet (2020) 11:570138	4.007
71	陈其军	<i>Agrobacterium</i> -mediated delivery of CRISPR/Cas reagents for genome editing in plants enters an era of ternary vector systems	Sci China Life Sci (2020) 63:1491–1498	3.549

累计 SCI 影响因子 601，平均影响因子 8.5/篇。