2022 年发表的重要研究论文

序号	姓名	论文名称	期刊名称	影响因子
1	杨小红	Convergent selection of a WD40 protein that enhances grain yield in maize and rice	*Science*	59.937
2	陈艳梅	Dissecting the plant chromatin interactome using mass spectrometry	*Trends Biotechnol*	20.864
3	陈艳梅	Mapping histone modification-dependent protein interactions with chemical proteomics	*Trends Biochem Sci*	20.792
4	巩志忠	RAF22, ABI1 and OST1 form a dynamic interactive network that optimizes plant growth and responses to drought stress in *Arabidopsis*	*Mol Plant*	19.617
5	傅　缨	*Arabidopsis* SYP121 acts as an ROP2 effector in the regulation of root hair tip growth	*Mol Plant*	19.617
6	秦　峰	Natural variations of ZmSRO1d modulate the trade-off between drought resistance and yield by affecting ZmRBOHC-mediated stomatal ROS production in maize	*Mol Plant*	19.617
7	陈其军	Optimized prime editing efficiently generates glyphosate-resistant rice plants carrying homozygous TAP-IVS mutation in EPSPS	*Mol Plant*	19.617
8	杨淑华	Natural polymorphism of ZmICE1 contributes to amino acid metabolism that impacts cold tolerance in maize	*Nat Plants*	19.328
9	周　明	The CLASSY family controls tissue-specific DNA methylation patterns in *Arabidopsis*	*Nat Commun*	17.764
10	蒋才富	A dirigent family protein confers variation of Casparian strip thickness and salt tolerance in maize	*Nat Commun*	17.764
11	金崇伟	Phloem iron remodels root development in response to ammonium as the major nitrogen source	*Nat Commun*	17.764
12	杨淑华 丁杨林	CPK28-NLP7 module integrates cold-induced Ca^{2+} signal and transcriptional reprogramming in *Arabidopsis*	*Sci Adv*	16.9
13	杨淑华 丁杨林	Surviving and thriving: How plants perceive and respond to temperature stress	*Dev Cell*	13.294

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14	张　静	Nitrate availability controls translocation of the transcription factor NAC075 for cell type-specific reprogramming of root growth	*Dev Cell*	13.294
15	李继刚	Mutual upregulation of HY5 and TZP in mediating phytochrome A signaling	*Plant Cell*	12.796
16	宋任涛	ENB1 encodes a cellulose synthase 5 that directs synthesis of cell wall ingrowths in maize basal endosperm transfer cells	*Plant Cell*	12.796
17	巩志忠	Phosphorylation of the plasma membrane H^+-ATPase AHA2 by BAK1 is required for ABA-induced stomatal closure in *Arabidopsis*	*Plant Cell*	12.796
18	李继刚	COP1 positively regulates ABA signaling during *Arabidopsis* seedling growth in darkness by mediating ABA-induced ABI5 accumulation	*Plant Cell*	12.796
19	杨淑华 施怡婷	The transcription factor bZIP68 negatively regulates cold tolerance in maize	*Plant Cell*	12.796
20	陈立群	*Arabidopsis* ERdj3B coordinates with ERECTA-family receptor kinases to regulate ovule development and the heat stress response	*Plant Cell*	12.796
21	金危危	Heat shock protein 101 contributes to the thermotolerance of male meiosis in maize	*Plant Cell*	12.796
22	赖锦盛 王　毅	The sugar transporter ZmSUGCAR1 of the nitrate transporter 1/peptide transporter family is critical for maize grain filling	*Plant Cell*	12.796
23	郭　岩	SALT OVERLY SENSITIVE 1 is inhibited by clade D protein phosphatase 2C D6 and D7 in *Arabidopsis thaliana*	*Plant Cell*	12.796
24	王向锋	The OPEN STOMATA1–SPIRAL1 module regulates microtubule stability during abscisic acid-induced stomatal closure in *Arabidopsis*	*Plant Cell*	12.796
25	毛同林 王向锋	HY5 inhibits lateral root initiation in *Arabidopsis* through negative regulation of the microtubule-stabilizing protein TPXL5	*Plant Cell*	12.796
26	田　丰	Plant genetics: Mechanisms of wild soybean adaptation	*Curr Biol*	12.621
27	蒋才富	A teosinte-derived allele of an HKT1 family sodium transporter improves salt tolerance in maize	*Plant Biotechnol J*	11.619

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28	段留生	Construction and application of star polycation nanocarrier-based microRNA delivery system in *Arabidopsis* and maize	*J Nanobiotechnol*	11.509
29	张明才	Optimizing nitrogen management diminished reactive nitrogen loss and acquired optimal net ecosystem economic benefit in a wheat-maize rotation system	*J Clean Prod*	11.016
30	傅　缨	ECAP is a key negative regulator mediating different pathways to modulate salt stress-induced anthocyanin biosynthesis in *Arabidopsis*	*New Phytol*	10.768
31	蒋才富	The classical SOS pathway confers natural variation of salt tolerance in maize	*New Phytol*	10.768
32	刘建祥	A competition-attenuation mechanism modulates thermoresponsive growth at warm temperatures in plants	*New Phytol*	10.768
33	李继刚	14-3-3 proteins regulate photomorphogenesis by facilitating light-induced degradation of PIF3	*New Phytol*	10.768
34	金危危	Maize cytosolic invertase INVAN6 ensures faithful meiotic progression under heat stress	*New Phytol*	10.768
35	张明才	Fertilizer stabilizers reduce nitrous oxide emissions from agricultural soil by targeting microbial nitrogen transformations	*Sci Total Environ*	10.237
36	苏　震	WheatCENet: a database for comparative co-expression networks analysis of allohexaploid wheat and its progenitors	*Genom Proteom Bioinf*	10.196
37	傅　缨	The transcription factor ZmMYB69 represses lignin biosynthesis by regulating ZmMYB31 and ZmMYB42 in maize	*Plant Physiol*	9.115
38	王　毅	Receptor-like protein kinase BAK1 promotes K^+ uptake by regulating H^+-ATPase AHA2 under low potassium stress	*Plant Physiol*	9.115
39	朱　蕾	Stable ARMADILLO REPEAT KINESIN 2 in light inhibits hypocotyl elongation and facilitates light-induced cortical microtubule reorientation in *Arabidopsis*	*J Exp Bot*	8.331
40	周文焜	Small bending, big curvature	*J Integr Plant Biol*	8.241
41	李继刚 杨淑华	Integration of light and temperature signaling pathways in plants	*J Integr Plant Biol*	8.241

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42	杨永青	Testing the polar auxin transport model with a selective plasma membrane H^+-ATPase inhibitor	*J Integr Plant Biol*	8.241
43	丁忠杰	RING-box proteins regulate leaf senescence and stomatal closure via repression of ABA transporter gene ABCG40	*J Integr Plant Biol*	8.241
44	杨建立	The miR157-SPL-CNR module acts upstream of bHLH101 to negatively regulate iron deficiency responses in tomato	*J Integr Plant Biol*	8.241
45	巩志忠	BAK1 plays contrasting roles in regulating abscisic acid‐induced stomatal closure and abscisic acid inhibited primary root growth in *Arabidopsis*	*J Integ Plant Biol*	8.241
46	刘建祥	UBA domain protein SUF1 interacts with NatA-complex subunit NAA15 to regulate thermotolerance in *Arabidopsis*	*J Integr Plant Biol*	8.241
47	刘建祥	REVEILLE 7 inhibits the expression of the circadian clock gene EARLY FLOWERING 4 to fine-tune hypocotyl growth in response to warm temperatures	*J Integr Plant Biol*	8.241
48	杨建立	Abscisic acid-dependent PMT1 expression regulates salt tolerance by alleviating abscisic acid-mediated reactive oxygen species production in *Arabidopsis*	*J Integr Plant Biol*	8.241
49	朱　蕾	ARK2 stabilizes the plus-end of microtubules and promotes microtubule bundling in *Arabidopsis*	*J Integr Plant Biol*	8.241
50	陈其军	Optimized prime editing efficiently generates heritable mutations in maize	*J Integr Plant Biol*	8.241
51	苏　震	KNOX II transcription factor HOS59 functions in regulating rice grain size	*Plant J*	8.028
52	郑绍建	A novel kinase subverts aluminum resistance by boosting Ornithine decarboxylase-dependent putrescine biosynthesis	*Plant Cell Envrion*	7.947
53	寿惠霞	Functional characterization of the three Oryza sativa SPX-MFS proteins in maintaining phosphate homeostasis	*Plant Cell Envrion*	7.947
54	莫肖蓉	Characterizing membrane anchoring of leaf-form ferredoxin-$NADP^+$ oxidoreductase in rice	*Plant Cell Envrion*	7.947

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55	刘建祥	The FtsH-inactive protein FtsHi5 is required for chloroplast development and protein accumulation in chloroplasts at low ambient temperature in *Arabidopsis*	*Front Plant Sci*	7.255
56	杨建立	Potential role of domains rearranged methyltransferase7 in starch and chlorophyll metabolism to regulate leaf senescence in tomato	*Front Plant Sci*	7.255
57	杨建立	The tomato transcription factor slnac063 is required for aluminum tolerance by regulating slaae3-1 expression	*Front Plant Sci*	7.255
58	王智烨	Probing in vivo RNA structure with optimized DMS-MaPseq in rice	*Front Plant Sci*	7.255
59	徐　娟	Regulation of *Arabidopsis* matrix metalloproteinases by mitogen-activated protein kinases and their function in leaf senescence	*Front Plant Sci*	7.255
60	陈益芳	The ubiquitin E3 ligase PRU2 modulates phosphate uptake in *Arabidopsis*	*Int J Mol Sci*	6.628
61	张学琴	MAP3Kε1/2 interact with MOB1A/1B and play important roles in control of pollen germination through crosstalk with JA signaling in *Arabidopsis*	*Int J Mol Sci*	6.628
62	王　毅	STOP1 regulates LKS1 transcription and coordinates K^+/$NH4^+$ balance in *Arabidopsis* response to low-K^+ stress	*Int J Mol Sci*	6.628
63	刘建祥	Regulation of chloroplast development and function at adverse temperatures in plants	*Plant Cell Physiol*	5.783
64	杨小红	Identifying QTL and candidate genes for prolificacy in maize	*Crop J*	5.781
65	金危危	Amino acid permease 6 regulates grain protein content in maize	*Crop J*	5.781
66	杨小红	Population genomics of *Zea* species identifies selection signatures during maize domestication and adaptation	*BMC Plant Biology*	5.761
67	刘凤霞	Polyamine oxidase 3 is involved in salt tolerance at the germination stage in rice	*JGG*	5.224
68	李　岩	AtFTCD-L, a trans-Golgi network localized protein, modulates root growth of *Arabidopsis* in high-concentration agar culture medium	*Planta*	4.689

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69	段留生	Design, synthesis and herbicidal evaluation of novel urea derivatives with inhibition activity to root growth	*J Plant Growth Regul*	4.469
70	苏　震	Systems biology-based analysis indicates that PHO1;H10 positively modulates high light-induced anthocyanin biosynthesis in *Arabidopsis* leaves	*Genomics*	4.38

累计 SCI 影响因子 805，平均影响因子 11.5/篇。