

2023年发表的重要研究论文

序号	通讯作者	论文名称	期刊名称	影响因子
1	秦 峰	Genome assembly and genetic dissection of a prominent drought-resistant maize germplasm	<i>Nat Genet</i>	37.4
2	徐明良	The ZmWAKL–ZmWIK–ZmBLK1–ZmRBOH4 module provides quantitative resistance to gray leaf spot in maize	<i>Nat Genet</i>	37.4
3	蒋才富 张敬波	Cytokinin signaling promotes salt tolerance by modulating shoot chloride exclusion in maize	<i>Mol Plant</i>	22.6
4	杨淑华 蒋才富 秦 峰	Genetic and molecular exploration of maize environmental stress resilience: Towards sustainable agriculture	<i>Mol Plant</i>	22.6
5	陈艳梅	Mass spectrometric exploration of phytohormone profiles and signaling networks	<i>Trends Plant Sci</i>	22.5
6	王喜庆	Identifying yield-related genes in maize based on ear trait plasticity	<i>Genome Biol</i>	17.4
7	王献兵	A selective autophagy receptor VISP1 induces symptom recovery by targeting viral silencing suppressors	<i>Nat Commun</i>	17
8	王献兵	A plant cytorhabdovirus modulates locomotor activity of insect vectors to enhance virus transmission	<i>Nat Commun</i>	17
9	陈艳梅	Spatial proteomics of vesicular trafficking: coupling mass spectrometry and imaging approaches in membrane biology	<i>Plant Biotechnol J</i>	13.2
10	杨小红	Divergent selection of <i>KNR6</i> maximizes grain production by balancing the flowering-time adaptation and ear size in maize	<i>Plant Biotechnol J</i>	13.2
11	田 丰	A single nucleotide polymorphism in <i>conz1</i> enhances maize adaptation to higher latitudes	<i>Plant Biotechnol J</i>	13.2
12	周于毅 贺 岩	Natural polymorphisms in <i>ZmIRX15A</i> affect water-use efficiency by modulating stomatal density in maize	<i>Plant Biotechnol J</i>	13.2

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13	王向锋 郭玉双	The OPEN STOMATA1–SPIRAL1 module regulates microtubule stability during abscisic acid-induced stomatal closure in <i>Arabidopsis</i>	<i>Plant Cell</i>	13.1
14	郭 岩	SALT OVERLY SENSITIVE 1 is inhibited by clade D Protein phosphatase 2C D6 and D7 in <i>Arabidopsis thaliana</i>	<i>Plant Cell</i>	13.1
15	张永亮	RETICULON-LIKE PROTEIN B2 is a pro-viral factor co-opted for the biogenesis of viral replication organelles in plants	<i>Plant Cell</i>	13.1
16	毛同林 王向锋	HY5 inhibits lateral root initiation in <i>Arabidopsis</i> through negative regulation of the microtubule-stabilizing protein TPXL5	<i>Plant Cell</i>	13.1
17	毛同林	PHYTOCHROME INTERACTING FACTOR 4 regulates microtubule organization to mediate high temperature–induced hypocotyl elongation in <i>Arabidopsis</i>	<i>Plant Cell</i>	13.1
18	李继刚	SALT OVERLY SENSITIVE 2 stabilizes phytochrome-interacting factors PIF4 and PIF5 to promote <i>Arabidopsis</i> shade avoidance	<i>Plant Cell</i>	13.1
19	郭 岩 李继刚	Phytochromes enhance SOS2-mediated PIF1 and PIF3 phosphorylation and degradation to promote <i>Arabidopsis</i> salt tolerance	<i>Plant Cell</i>	13.1
20	丁杨林	PUB25 and PUB26 dynamically modulate ICE1 stability via differential ubiquitination during cold stress in <i>Arabidopsis</i>	<i>Plant Cell</i>	13.1
21	郭 岩 周文焜	On salt stress, PLETHORA signaling maintains root meristems	<i>Dev Cell</i>	12.4
22	田长富	Intracellular common gardens reveal niche differentiation in transposable element community during bacterial adaptive evolution	<i>ISME J</i>	12.3
23	田长富	Rhizobial migration toward roots mediated by FadL-ExoFQP modulation of extracellular long-chain AHLs	<i>ISME J</i>	12.3
24	张永亮 Savithramma P. Dinesh- Kumar	The MAPK-Alfin-like 7 module negatively regulates ROS scavenging genes to promote NLR-mediated immunity	<i>Proc Natl Acad Sci USA</i>	12

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25	张 静	The nitrate transporter NRT2.1 directly antagonizes PIN7-mediated auxin transport for root growth adaptation	<i>Proc Natl Acad Sci USA</i>	12
26	郭 岩	Phosphorylation of RhoGDI1, a Rho GDP dissociation inhibitor, regulates root hair development in <i>Arabidopsis</i> under salt stress	<i>Proc Natl Acad Sci USA</i>	12
27	李继刚 邓兴旺	Reconstitution of phytochrome A-mediated light modulation of the ABA signaling pathways in yeast	<i>Proc Natl Acad Sci USA</i>	12
28	郭 岩 章文华	Phosphatidic acid-regulated SOS2 controls Na ⁺ /K ⁺ homeostasis in <i>Arabidopsis</i> under salt stress	<i>EMBO J</i>	12
29	郭 岩 Jörg Kudla	A salt stress-activated GSO1-SOS2-SOS1 module protects the <i>Arabidopsis</i> root stem cell niche by enhancing sodium ion extrusion	<i>EMBO J</i>	12
30	杨淑华	Strigolactones promote plant freezing tolerance by releasing the WRKY41-mediated inhibition of <i>CBF/DREB1</i> expression	<i>EMBO J</i>	12
31	李继刚	14-3-3 proteins regulate photomorphogenesis by facilitating light-induced degradation of PIF3	<i>New Phytol</i>	10.5
32	朱 蕾	PUB30-mediated downregulation of the HB24-SWEET11 module is involved in root growth inhibition under salt stress by attenuating sucrose supply in <i>Arabidopsis</i>	<i>New Phytol</i>	10.5
33	王 瑜	The clade F PP2C phosphatase ZmPP84 negatively regulates drought tolerance by repressing stomatal closure in maize	<i>New phytol</i>	10.5
34	张明才 陈 刚	Straw return drives soil microbial community assemblage to change metabolic processes for soil quality amendment in a rice-wheat rotation system	<i>Soil Biol Biochem</i>	10.2
35	朱 蕾	ARK2 stabilizes the plus-end of microtubules and promotes microtubule bundling in <i>Arabidopsis</i>	<i>J Integr Plant Biol</i>	10.1
36	巩志忠	AtMCM10 promotes DNA replication-coupled nucleosome assembly in <i>Arabidopsis</i>	<i>J Integr Plant Biol</i>	10.1

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37	秦 峰	The battle of crops against drought: Genetic dissection and improvement	<i>J Integr Plant Biol</i>	10.1
38	段留生 周于毅	Coronatine promotes maize water uptake by directly binding to the aquaporin ZmPIP2;5 and enhancing its activity	<i>J Integr Plant Biol</i>	10.1
39	任东涛	Phosphorylation of the LCB1 subunit of <i>Arabidopsis</i> serine palmitoyltransferase stimulates its activity and modulates sphingolipid biosynthesis	<i>J Integr Plant Biol</i>	10.1
40	于静娟	The m ⁶ A reader <i>SiYTH1</i> enhances drought tolerance by affecting the mRNA stability of genes related to stomatal closure and ROS scavenging in <i>Setaria italica</i>	<i>J Integr Plant Biol</i>	10.1
41	杨小红	Using systems metabolic engineering strategies for high-oil maize breeding	<i>Curr Opin in Biotechnol</i>	8.9
42	赵 倩 宋伟彬	HEAT SHOCK PROTEIN 90.6 interacts with carbon and nitrogen metabolism components during seed development	<i>Plant Physiol</i>	8.8
43	张明才 张钰石	Organic amendments alter microbiota assembly to stimulate soil metabolism for improving soil quality in wheat-maize rotation system	<i>J Environ Manage</i>	8.4
44	张明才 张钰石	Metagenomic analysis insights into the influence of 3,4-dimethylpyrazole phosphate application on nitrous oxide mitigation efficiency across different climate zones in Eastern China	<i>Environ Res</i>	8.2
45	朱 蕾	Stable ARMADILLO REPEAT KINESIN 2 in light inhibits hypocotyl elongation and facilitates light-induced cortical microtubule reorientation in <i>Arabidopsis</i>	<i>J Exp Bot</i>	8
46	于静娟 刁现民	Maize WRKY28 interacts with the DELLA protein D8 to affect skotomorphogenesis and participates in the regulation of shade avoidance and plant architecture	<i>J Exp Bot</i>	8
47	杨永青	Ubiquitin negatively regulates ABA responses by inhibiting SnRK2.2 and SnRK2.3 kinase activity in <i>Arabidopsis</i>	<i>J Exp Bot</i>	8

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48	李景睿	The SALT OVERLY SENSITIVE 2– CONSTITUTIVE TRIPLE RESPONSE1 module coordinates plant growth and salt tolerance in <i>Arabidopsis</i>	<i>J Exp Bot</i>	8
49	段留生 易 飞	Deciphering transcriptional mechanisms of maize internodal elongation by regulatory network analysis	<i>J Exp Bot</i>	8
50	杨小红	Genetic basis of maize stalk strength decoded via linkage and association mapping	<i>Plant J</i>	7.9
51	段留生 周于毅	Exogenous application of coronatine and alginate oligosaccharide to maize seedlings enhanced drought tolerance at seedling and reproductive stages	<i>Agric Water Manag</i>	6.6
52	段留生 周于毅	A novel plant growth regulator brazide improved maize water productivity in the arid region of Northwest China	<i>Agric Water Manag</i>	6.6
53	段留生 周于毅	Increase in root density induced by coronatine improves maize drought resistance in North China	<i>Crop J</i>	6.5
54	王 毅	Potassium nutrition of maize: Uptake, transport, utilization, and role in stress tolerance	<i>Crop J</i>	6.5
55	杨小红	Identifying QTL and candidate genes for prolificacy in maize	<i>Crop J</i>	6.5
56	陈艳梅	Reversible protein phosphorylation, a central signaling hub to regulate carbohydrate metabolic networks	<i>Crop J</i>	6.5
57	段留生	Transcriptomic analysis of resistant and wild-type <i>Botrytis cinerea</i> isolates revealed fludioxonil-resistance mechanisms	<i>Int J Mol Sci</i>	6.2
58	苏 震	Genome-wide investigation and co- expression network analysis of SBT family gene in <i>Gossypium</i>	<i>Int J Mol Sci</i>	6.2
59	田晓莉	Comparative physiological and transcriptomic mechanisms of defoliation in cotton in response to thidiazuron versus ethephon	<i>Int J Mol Sci</i>	6.2
60	段留生	Discovery of novel hybrid-type strigolactone mimics derived from cinnamic amide	<i>In J Mol Sci</i>	6.2

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61	汪 洋	Finding balance in adversity: nitrate signaling as the key to plant growth, resilience, and stress response	<i>Int J Mol Sci</i>	6.2
62	段留生 周于毅	Sensitivity of maize genotypes to ethephon across different climatic zones	<i>Environ Exp Bot</i>	6
63	施怡婷	Genetic and lipidomic analyses reveal the key role of lipid metabolism for cold tolerance in maize	<i>J.G.G</i>	5.9
64	于静娟	SimiR396d targets SiGRF1 to regulate drought tolerance and root growth in foxtail millet	<i>Plant Sci</i>	5.7
65	于静娟	<i>ZmAdSS1</i> encodes adenylosuccinate synthetase and plays a critical role in maize seed development and the accumulation of nutrients	<i>Plant Sci</i>	5.7
66	赵 倩	The NAC transcription factor ZmNAC132 regulates leaf senescence and male fertility in maize	<i>Plant Sci</i>	5.7
67	王喜庆	Quantitative evaluation of maize emergence using UAV imagery and deep learning	<i>Remote Sens</i>	5.6
68	徐明良	Effects of the quantitative trait locus <i>qPss3</i> on inhibition of photoperiod sensitivity and resistance to stalk rot disease in maize	<i>Theor Appl Genet</i>	5.4
69	段留生 周于毅	Effects of a novel plant growth regulator B2 on stalk quality and grain yield of winter wheat in North China	<i>Plant Soil</i>	5.2
70	段留生 周于毅	Ethylene enhanced waterlogging tolerance by changing root architecture and inducing aerenchyma formation in maize seedlings	<i>J Plant Physiol</i>	4.5
71	王喜庆	Analyzing architectural diversity in maize plants using the skeletonimage-based method	<i>J Integ Agr</i>	4.8
72	田晓莉 李召虎	Chemical topping with mepiquat chloride at flowering does not compromise the maturity or yield of cotton	<i>Agronomy</i>	4
73	段留生	The effect of new nano-released 1,1-dimethyl-piperidinium chloride (DPC) drip application on cotton agronomic traits	<i>Agronomy</i>	4

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74	田长富	Adaptive evolution of rhizobial symbiosis beyond horizontal gene transfer: from genome innovation to regulation reconstruction	<i>Genes</i>	3.9
75	梁鹏博	Staying hungry: a roadmap to harnessing central regulators of symbiotic nitrogen fixation under fluctuating nitrogen availability	<i>aBIOTECH</i>	3.7
76	田晓莉	Identification of shaker potassium channel family members in <i>Gossypium hirsutum</i> L. and characterization of GhKAT1aD	<i>Life</i>	3.253
77	杨小红	QTL mapping for flowering time in a maize-teosinte population under well-watered and water-stressed conditions	<i>Mol Breeding</i>	3.1

累计 SCI 影响因子 803.7，平均影响因子每篇 10.4。