

Jian-Kang Zhu

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528 papers	90,928 citations	156 h-index	293 g-index
554 ext. papers	107,800 ext. citations	11.1 avg, IF	8.68 L-index

#	Paper	IF	Citations
528	Salt and drought stress signal transduction in plants. <i>Annual Review of Plant Biology</i> , 2002 , 53, 247-73	30.7	4011
527	PLANT CELLULAR AND MOLECULAR RESPONSES TO HIGH SALINITY. <i>Annual Review of Plant Biology</i> , 2000 , 51, 463-499		3051
526	Plant salt tolerance. <i>Trends in Plant Science</i> , 2001 , 6, 66-71	13.1	2469
525	Abiotic Stress Signaling and Responses in Plants. <i>Cell</i> , 2016 , 167, 313-324	56.2	1915
524	Absciscic acid inhibits type 2C protein phosphatases via the PYR/PYL family of START proteins. <i>Science</i> , 2009 , 324, 1068-71	33.3	1782
523	Cell signaling during cold, drought, and salt stress. <i>Plant Cell</i> , 2002 , 14 Suppl, S165-83	11.6	1548
522	Novel and stress-regulated microRNAs and other small RNAs from Arabidopsis. <i>Plant Cell</i> , 2004 , 16, 2001-10	11.0	1475
521	Regulation of ion homeostasis under salt stress. <i>Current Opinion in Plant Biology</i> , 2003 , 6, 441-5	9.9	1389
520	Cold stress regulation of gene expression in plants. <i>Trends in Plant Science</i> , 2007 , 12, 444-51	13.1	1241
519	The Arabidopsis thaliana salt tolerance gene SOS1 encodes a putative Na ⁺ /H ⁺ antiporter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 6896-901	11.5	1177
518	ICE1: a regulator of cold-induced transcriptome and freezing tolerance in Arabidopsis. <i>Genes and Development</i> , 2003 , 17, 1043-54	12.6	1071
517	Methods and concepts in quantifying resistance to drought, salt and freezing, abiotic stresses that affect plant water status. <i>Plant Journal</i> , 2006 , 45, 523-39	6.9	1029
516	Criteria for annotation of plant MicroRNAs. <i>Plant Cell</i> , 2008 , 20, 3186-90	11.6	992
515	Posttranscriptional induction of two Cu/Zn superoxide dismutase genes in Arabidopsis is mediated by downregulation of miR398 and important for oxidative stress tolerance. <i>Plant Cell</i> , 2006 , 18, 2051-65	11.6	937
514	The putative plasma membrane Na ⁽⁺⁾ /H ⁽⁺⁾ antiporter SOS1 controls long-distance Na ⁽⁺⁾ transport in plants. <i>Plant Cell</i> , 2002 , 14, 465-77	11.6	913
513	Endogenous siRNAs derived from a pair of natural cis-antisense transcripts regulate salt tolerance in Arabidopsis. <i>Cell</i> , 2005 , 123, 1279-91	56.2	887
512	In vitro reconstitution of an abscisic acid signalling pathway. <i>Nature</i> , 2009 , 462, 660-4	50.4	833

511	Regulation of SOS1, a plasma membrane Na ⁺ /H ⁺ exchanger in <i>Arabidopsis thaliana</i> , by SOS2 and SOS3. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 8436-41	11.5	812
510	Epigenetic regulation of stress responses in plants. <i>Current Opinion in Plant Biology</i> , 2009 , 12, 133-9	9.9	811
509	Molecular genetic perspectives on cross-talk and specificity in abiotic stress signalling in plants. <i>Journal of Experimental Botany</i> , 2004 , 55, 225-36	7	790
508	Understanding and Improving Salt Tolerance in Plants. <i>Crop Science</i> , 2005 , 45, 437-448	2.4	780
507	The Arabidopsis CDPK-SnRK superfamily of protein kinases. <i>Plant Physiology</i> , 2003 , 132, 666-80	6.6	762
506	Overexpression of a plasma membrane Na ⁺ /H ⁺ antiporter gene improves salt tolerance in <i>Arabidopsis thaliana</i> . <i>Nature Biotechnology</i> , 2003 , 21, 81-5	44.5	728
505	Small RNAs as big players in plant abiotic stress responses and nutrient deprivation. <i>Trends in Plant Science</i> , 2007 , 12, 301-9	13.1	726
504	Role of miRNAs and siRNAs in biotic and abiotic stress responses of plants. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2012 , 1819, 137-48	6	711
503	A miRNA involved in phosphate-starvation response in Arabidopsis. <i>Current Biology</i> , 2005 , 15, 2038-43	6.3	691
502	A calcium sensor homolog required for plant salt tolerance. <i>Science</i> , 1998 , 280, 1943-5	33.3	686
501	Efficient genome editing in plants using a CRISPR/Cas system. <i>Cell Research</i> , 2013 , 23, 1229-32	24.7	677
500	The Arabidopsis NFYA5 transcription factor is regulated transcriptionally and posttranscriptionally to promote drought resistance. <i>Plant Cell</i> , 2008 , 20, 2238-51	11.6	660
499	Regulation of abscisic acid biosynthesis. <i>Plant Physiology</i> , 2003 , 133, 29-36	6.6	579
498	Arabidopsis mutant deficient in 3 abscisic acid-activated protein kinases reveals critical roles in growth, reproduction, and stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 8380-5	11.5	565
497	A R2R3 type MYB transcription factor is involved in the cold regulation of CBF genes and in acquired freezing tolerance. <i>Journal of Biological Chemistry</i> , 2006 , 281, 37636-45	5.4	555
496	The Arabidopsis cold-responsive transcriptome and its regulation by ICE1. <i>Plant Cell</i> , 2005 , 17, 3155-75	11.6	555
495	Molecular and genetic aspects of plant responses to osmotic stress. <i>Plant, Cell and Environment</i> , 2002 , 25, 131-139	8.4	553
494	Genetic analysis of plant salt tolerance using Arabidopsis. <i>Plant Physiology</i> , 2000 , 124, 941-8	6.6	548

493	The CRISPR/Cas9 system produces specific and homozygous targeted gene editing in rice in one generation. <i>Plant Biotechnology Journal</i> , 2014 , 12, 797-807	11.6	540
492	Rapid phosphatidic acid accumulation in response to low temperature stress in Arabidopsis is generated through diacylglycerol kinase. <i>Frontiers in Plant Science</i> , 2013 , 4, 1	6.2	537
491	Active DNA demethylation mediated by DNA glycosylases. <i>Annual Review of Genetics</i> , 2009 , 43, 143-66	14.5	535
490	Genetic analysis of salt tolerance in arabidopsis. Evidence for a critical role of potassium nutrition. <i>Plant Cell</i> , 1998 , 10, 1181-91	11.6	530
489	Dynamics and function of DNA methylation in plants. <i>Nature Reviews Molecular Cell Biology</i> , 2018 , 19, 489-506	48.7	526
488	ROS1, a repressor of transcriptional gene silencing in Arabidopsis, encodes a DNA glycosylase/lyase. <i>Cell</i> , 2002 , 111, 803-14	56.2	514
487	Multigeneration analysis reveals the inheritance, specificity, and patterns of CRISPR/Cas-induced gene modifications in Arabidopsis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 4632-7	11.5	511
486	A gate-latch-lock mechanism for hormone signalling by abscisic acid receptors. <i>Nature</i> , 2009 , 462, 602-8	50.4	498
485	Comparative genomics in salt tolerance between Arabidopsis and aRabidopsis-related halophyte salt cress using Arabidopsis microarray. <i>Plant Physiology</i> , 2004 , 135, 1697-709	6.6	497
484	Radically rethinking agriculture for the 21st century. <i>Science</i> , 2010 , 327, 833-4	33.3	491
483	Identification of two protein kinases required for abscisic acid regulation of seed germination, root growth, and gene expression in Arabidopsis. <i>Plant Cell</i> , 2007 , 19, 485-94	11.6	482
482	The negative regulator of plant cold responses, HOS1, is a RING E3 ligase that mediates the ubiquitination and degradation of ICE1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 8281-6	11.5	475
481	Cell signaling under salt, water and cold stresses. <i>Current Opinion in Plant Biology</i> , 2001 , 4, 401-6	9.9	443
480	The Arabidopsis LOS5/ABA3 locus encodes a molybdenum cofactor sulfurase and modulates cold stress- and osmotic stress-responsive gene expression. <i>Plant Cell</i> , 2001 , 13, 2063-83	11.6	442
479	Structural basis for sequence-specific recognition of DNA by TAL effectors. <i>Science</i> , 2012 , 335, 720-3	33.3	432
478	Cloning and characterization of microRNAs from rice. <i>Plant Cell</i> , 2005 , 17, 1397-411	11.6	429
477	Reconstitution in yeast of the Arabidopsis SOS signaling pathway for Na ⁺ homeostasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 9061-6	11.5	423
476	Conservation of the salt overly sensitive pathway in rice. <i>Plant Physiology</i> , 2007 , 143, 1001-12	6.6	400

475	A pathogen-inducible endogenous siRNA in plant immunity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 18002-7	11.5	400
474	The Arabidopsis LOS5/ABA3 Locus Encodes a Molybdenum Cofactor Sulfurase and Modulates Cold Stress- and Osmotic Stress-Responsive Gene Expression. <i>Plant Cell</i> , 2001 , 13, 2063-2083	11.6	396
473	Role of an Arabidopsis AP2/EREBP-type transcriptional repressor in abscisic acid and drought stress responses. <i>Plant Cell</i> , 2005 , 17, 2384-96	11.6	395
472	SOS3 function in plant salt tolerance requires N-myristoylation and calcium binding. <i>Plant Cell</i> , 2000 , 12, 1667-78	11.6	391
471	Identification of novel and candidate miRNAs in rice by high throughput sequencing. <i>BMC Plant Biology</i> , 2008 , 8, 25	5.3	388
470	Circulating tumour DNA methylation markers for diagnosis and prognosis of hepatocellular carcinoma. <i>Nature Materials</i> , 2017 , 16, 1155-1161	27	387
469	Application of the CRISPR-Cas system for efficient genome engineering in plants. <i>Molecular Plant</i> , 2013 , 6, 2008-11	14.4	382
468	AtHKT1 is a salt tolerance determinant that controls Na(+) entry into plant roots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001 , 98, 14150-5	11.5	380
467	Salt cress. A halophyte and cryophyte Arabidopsis relative model system and its applicability to molecular genetic analyses of growth and development of extremophiles. <i>Plant Physiology</i> , 2004 , 135, 1718-37	6.6	377
466	From laboratory to field. Using information from Arabidopsis to engineer salt, cold, and drought tolerance in crops. <i>Plant Physiology</i> , 2004 , 135, 615-21	6.6	377
465	Interplay between cold-responsive gene regulation, metabolism and RNA processing during plant cold acclimation. <i>Current Opinion in Plant Biology</i> , 2007 , 10, 290-5	9.9	342
464	De novo-engineered transcription activator-like effector (TALE) hybrid nuclease with novel DNA binding specificity creates double-strand breaks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 2623-8	11.5	339
463	SCREAM/ICE1 and SCREAM2 specify three cell-state transitional steps leading to arabidopsis stomatal differentiation. <i>Plant Cell</i> , 2008 , 20, 1775-85	11.6	338
462	Molecular Characterization of Functional Domains in the Protein Kinase SOS2 That Is Required for Plant Salt Tolerance. <i>Plant Cell</i> , 2001 , 13, 1383-1400	11.6	335
461	Molecular mimicry regulates ABA signaling by SnRK2 kinases and PP2C phosphatases. <i>Science</i> , 2012 , 335, 85-8	33.3	327
460	Regulation of osmotic stress-responsive gene expression by the LOS6/ABA1 locus in Arabidopsis. <i>Journal of Biological Chemistry</i> , 2002 , 277, 8588-96	5.4	321
459	The Arabidopsis HOS1 gene negatively regulates cold signal transduction and encodes a RING finger protein that displays cold-regulated nucleo-cytoplasmic partitioning. <i>Genes and Development</i> , 2001 , 15, 912-24	12.6	320
458	Regulation and function of DNA methylation in plants and animals. <i>Cell Research</i> , 2011 , 21, 442-65	24.7	319

457	ABO3, a WRKY transcription factor, mediates plant responses to abscisic acid and drought tolerance in Arabidopsis. <i>Plant Journal</i> , 2010 , 63, 417-29	6.9	319
456	Gain- and loss-of-function mutations in Zat10 enhance the tolerance of plants to abiotic stress. <i>FEBS Letters</i> , 2006 , 580, 6537-42	3.8	316
455	The Arabidopsis SOS5 locus encodes a putative cell surface adhesion protein and is required for normal cell expansion. <i>Plant Cell</i> , 2003 , 15, 19-32	11.6	309
454	The Arabidopsis thaliana SOS2 gene encodes a protein kinase that is required for salt tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 3730-4	11.5	306
453	ABA receptor PYL9 promotes drought resistance and leaf senescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1949-54	11.5	303
452	Arabidopsis protein kinase PKS5 inhibits the plasma membrane H ⁺ -ATPase by preventing interaction with 14-3-3 protein. <i>Plant Cell</i> , 2007 , 19, 1617-34	11.6	299
451	The Arabidopsis SOS2 protein kinase physically interacts with and is activated by the calcium-binding protein SOS3. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 3735-40	11.5	297
450	Cloning and characterization of microRNAs from wheat (<i>Triticum aestivum</i> L.). <i>Genome Biology</i> , 2007 , 8, R96	18.3	292
449	A novel domain in the protein kinase SOS2 mediates interaction with the protein phosphatase 2C ABI2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 11771-6	11.5	292
448	FIERY1 encoding an inositol polyphosphate 1-phosphatase is a negative regulator of abscisic acid and stress signaling in Arabidopsis. <i>Genes and Development</i> , 2001 , 15, 1971-84	12.6	292
447	Overexpression of SOS (Salt Overly Sensitive) genes increases salt tolerance in transgenic Arabidopsis. <i>Molecular Plant</i> , 2009 , 2, 22-31	14.4	290
446	Quantitative phosphoproteomics identifies SnRK2 protein kinase substrates and reveals the effectors of abscisic acid action. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 11205-10	11.5	288
445	Molecular Aspects of Osmotic Stress in Plants. <i>Critical Reviews in Plant Sciences</i> , 1997 , 16, 253-277	5.6	285
444	Proline accumulation and salt-stress-induced gene expression in a salt-hypersensitive mutant of Arabidopsis. <i>Plant Physiology</i> , 1997 , 114, 591-6	6.6	282
443	A DEAD box RNA helicase is essential for mRNA export and important for development and stress responses in Arabidopsis. <i>Plant Cell</i> , 2005 , 17, 256-67	11.6	281
442	Modulation of abscisic acid signal transduction and biosynthesis by an Sm-like protein in Arabidopsis. <i>Developmental Cell</i> , 2001 , 1, 771-81	10.2	277
441	Precise Editing of a Target Base in the Rice Genome Using a Modified CRISPR/Cas9 System. <i>Molecular Plant</i> , 2017 , 10, 523-525	14.4	271
440	Absciscic acid dynamics, signaling, and functions in plants. <i>Journal of Integrative Plant Biology</i> , 2020 , 62, 25-54	8.3	271

439	Involvement of miR169 in the nitrogen-starvation responses in Arabidopsis. <i>New Phytologist</i> , 2011 , 190, 906-915	9.8	268
438	Regulation of vacuolar Na ⁺ /H ⁺ exchange in Arabidopsis thaliana by the salt-overly-sensitive (SOS) pathway. <i>Journal of Biological Chemistry</i> , 2004 , 279, 207-15	5.4	264
437	Activated expression of an Arabidopsis HD-START protein confers drought tolerance with improved root system and reduced stomatal density. <i>Plant Cell</i> , 2008 , 20, 1134-51	11.6	263
436	The genome of the extremophile crucifer Thellungiella parvula. <i>Nature Genetics</i> , 2011 , 43, 913-8	36.3	261
435	LOS2, a genetic locus required for cold-responsive gene transcription encodes a bi-functional enolase. <i>EMBO Journal</i> , 2002 , 21, 2692-702	13	261
434	Mutational Evidence for the Critical Role of CBF Transcription Factors in Cold Acclimation in Arabidopsis. <i>Plant Physiology</i> , 2016 , 171, 2744-59	6.6	258
433	Gene regulation during cold stress acclimation in plants. <i>Methods in Molecular Biology</i> , 2010 , 639, 39-55	1.4	257
432	Nitric oxide negatively regulates abscisic acid signaling in guard cells by S-nitrosylation of OST1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 613-8	11.5	256
431	Nomenclature for HKT transporters, key determinants of plant salinity tolerance. <i>Trends in Plant Science</i> , 2006 , 11, 372-4	13.1	254
430	A calcium sensor and its interacting protein kinase are global regulators of abscisic acid signaling in Arabidopsis. <i>Developmental Cell</i> , 2002 , 3, 233-44	10.2	252
429	Novel and nodulation-regulated microRNAs in soybean roots. <i>BMC Genomics</i> , 2008 , 9, 160	4.5	248
428	AtHKT1 facilitates Na ⁺ homeostasis and K ⁺ nutrition in planta. <i>Plant Physiology</i> , 2004 , 136, 2500-11	6.6	248
427	HOS1, a genetic locus involved in cold-responsive gene expression in arabidopsis. <i>Plant Cell</i> , 1998 , 10, 1151-61	11.6	247
426	Plant abiotic stress response and nutrient use efficiency. <i>Science China Life Sciences</i> , 2020 , 63, 635-674	8.5	246
425	Arabidopsis decuple mutant reveals the importance of SnRK2 kinases in osmotic stress responses in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 1717-22	11.5	243
424	Activation of the plasma membrane Na/H antiporter Salt-Overly-Sensitive 1 (SOS1) by phosphorylation of an auto-inhibitory C-terminal domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 2611-6	11.5	241
423	Role of Arabidopsis AGO6 in siRNA accumulation, DNA methylation and transcriptional gene silencing. <i>EMBO Journal</i> , 2007 , 26, 1691-701	13	237
422	Gene regulation during cold acclimation in plants. <i>Physiologia Plantarum</i> , 2006 , 126, 52-61	4.6	237

4 ²¹	Identification of cold-inducible microRNAs in plants by transcriptome analysis. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2008 , 1779, 780-8	6	236
4 ²⁰	Role of the Arabidopsis DNA glycosylase/lyase ROS1 in active DNA demethylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 11796-801	11.5	235
4 ¹⁹	DNA methylation markers for diagnosis and prognosis of common cancers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 7414-7419	11.5	231
4 ¹⁸	An Arabidopsis mutant that requires increased calcium for potassium nutrition and salt tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997 , 94, 14960-4	11.5	231
4 ¹⁷	Absciscic acid-mediated epigenetic processes in plant development and stress responses. <i>Journal of Integrative Plant Biology</i> , 2008 , 50, 1187-95	8.3	231
4 ¹⁶	Involvement of Arabidopsis HOS15 in histone deacetylation and cold tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 4945-50	11.5	230
4 ¹⁵	Insights into salt tolerance from the genome of <i>Thellungiella salsuginea</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 12219-24	11.5	227
4 ¹⁴	RNA helicase-like protein as an early regulator of transcription factors for plant chilling and freezing tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 11507-12	11.5	225
4 ¹³	Reciprocal Regulation of the TOR Kinase and ABA Receptor Balances Plant Growth and Stress Response. <i>Molecular Cell</i> , 2018 , 69, 100-112.e6	17.6	224
4 ¹²	Structural basis for the modular recognition of single-stranded RNA by PPR proteins. <i>Nature</i> , 2013 , 504, 168-71	50.4	224
4 ¹¹	Antifungal activity of tobacco osmotin has specificity and involves plasma membrane permeabilization. <i>Plant Science</i> , 1996 , 118, 11-23	5.3	210
4 ¹⁰	A mitochondrial complex I defect impairs cold-regulated nuclear gene expression. <i>Plant Cell</i> , 2002 , 14, 1235-51	11.6	209
4 ⁰⁹	ABA receptors: the START of a new paradigm in phytohormone signalling. <i>Journal of Experimental Botany</i> , 2010 , 61, 3199-210	7	208
4 ⁰⁸	Multiplex Gene Editing in Rice Using the CRISPR-Cpf1 System. <i>Molecular Plant</i> , 2017 , 10, 1011-1013	14.4	202
4 ⁰⁷	Phosphoproteins in extracellular vesicles as candidate markers for breast cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 3175-3180	11.5	201
4 ⁰⁶	An Arabidopsis homeodomain transcription factor gene, HOS9, mediates cold tolerance through a CBF-independent pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 9873-8	11.5	200
4 ⁰⁵	An RNA polymerase II- and AGO4-associated protein acts in RNA-directed DNA methylation. <i>Nature</i> , 2010 , 465, 106-9	50.4	198
4 ⁰⁴	The protein kinase SOS2 activates the Arabidopsis H(+)/Ca(2+) antiporter CAX1 to integrate calcium transport and salt tolerance. <i>Journal of Biological Chemistry</i> , 2004 , 279, 2922-6	5.4	197

403	Control of DNA methylation and heterochromatic silencing by histone H2B deubiquitination. <i>Nature</i> , 2007 , 447, 735-8	50.4	196
402	MAP Kinase Cascades Regulate the Cold Response by Modulating ICE1 Protein Stability. <i>Developmental Cell</i> , 2017 , 43, 618-629.e5	10.2	195
401	SOS2 promotes salt tolerance in part by interacting with the vacuolar H ⁺ -ATPase and upregulating its transport activity. <i>Molecular and Cellular Biology</i> , 2007 , 27, 7781-90	4.8	194
400	The ABA receptor PYL8 promotes lateral root growth by enhancing MYB77-dependent transcription of auxin-responsive genes. <i>Science Signaling</i> , 2014 , 7, ra53	8.8	193
399	Reactive oxygen species signaling and stomatal movement in plant responses to drought stress and pathogen attack. <i>Journal of Integrative Plant Biology</i> , 2018 , 60, 805-826	8.3	190
398	An effector of RNA-directed DNA methylation in arabidopsis is an ARGONAUTE 4- and RNA-binding protein. <i>Cell</i> , 2009 , 137, 498-508	56.2	189
397	Critical roles of DNA demethylation in the activation of ripening-induced genes and inhibition of ripening-repressed genes in tomato fruit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E4511-E4519	11.5	188
396	The plasma membrane Na ⁺ /H ⁺ antiporter SOS1 interacts with RCD1 and functions in oxidative stress tolerance in Arabidopsis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 18816-21	11.5	188
395	RNA-directed DNA methylation. <i>Current Opinion in Plant Biology</i> , 2011 , 14, 142-7	9.9	187
394	The DNA glycosylase/lyase ROS1 functions in pruning DNA methylation patterns in Arabidopsis. <i>Current Biology</i> , 2007 , 17, 54-9	6.3	187
393	Subunit compositions of the RNA-silencing enzymes Pol IV and Pol V reveal their origins as specialized forms of RNA polymerase II. <i>Molecular Cell</i> , 2009 , 33, 192-203	17.6	185
392	Reactive oxygen species mediate Na ⁺ -induced SOS1 mRNA stability in Arabidopsis. <i>Plant Journal</i> , 2008 , 53, 554-65	6.9	184
391	Abiotic stress signal transduction in plants: Molecular and genetic perspectives. <i>Physiologia Plantarum</i> , 2001 , 112, 152-166	4.6	182
390	Distinctive core histone post-translational modification patterns in Arabidopsis thaliana. <i>PLoS ONE</i> , 2007 , 2, e1210	3.7	179
389	Regulation of expression of the vacuolar Na ⁺ /H ⁺ antiporter gene AtNHX1 by salt stress and abscisic acid. <i>Plant Molecular Biology</i> , 2002 , 50, 543-50	4.6	179
388	Disruption of the cellulose synthase gene, AtCesA8/IRX1, enhances drought and osmotic stress tolerance in Arabidopsis. <i>Plant Journal</i> , 2005 , 43, 273-83	6.9	174
387	Salt stress signaling and mechanisms of plant salt tolerance. <i>Genetic Engineering</i> , 2006 , 27, 141-77		173
386	Learning from the Arabidopsis Experience. The Next Gene Search Paradigm. <i>Plant Physiology</i> , 2001 , 127, 1354-1360	6.6	173

385	The Arabidopsis salt overly sensitive 4 mutants uncover a critical role for vitamin B6 in plant salt tolerance. <i>Plant Cell</i> , 2002 , 14, 575-88	11.6	172
384	OSM1/SYP61: a syntaxin protein in Arabidopsis controls abscisic acid-mediated and non-abscisic acid-mediated responses to abiotic stress. <i>Plant Cell</i> , 2002 , 14, 3009-28	11.6	171
383	The SOS3 family of calcium sensors and SOS2 family of protein kinases in Arabidopsis. <i>Plant Physiology</i> , 2004 , 134, 919-26	6.6	169
382	A protein complex required for polymerase V transcripts and RNA- directed DNA methylation in Arabidopsis. <i>Current Biology</i> , 2010 , 20, 951-6	6.3	167
381	A genomics approach towards salt stress tolerance. <i>Plant Physiology and Biochemistry</i> , 2001 , 39, 295-311	5.4	164
380	Before and beyond ABA: upstream sensing and internal signals that determine ABA accumulation and response under abiotic stress. <i>Biochemical Society Transactions</i> , 2005 , 33, 375-9	5.1	163
379	Mutations in a subfamily of abscisic acid receptor genes promote rice growth and productivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 6058-6063	11.5	163
378	Interaction of osmotic stress, temperature, and abscisic acid in the regulation of gene expression in Arabidopsis. <i>Plant Physiology</i> , 1999 , 119, 205-12	6.6	161
377	Development of germ-line-specific CRISPR-Cas9 systems to improve the production of heritable gene modifications in Arabidopsis. <i>Plant Biotechnology Journal</i> , 2016 , 14, 519-32	11.6	158
376	A histone acetyltransferase regulates active DNA demethylation in Arabidopsis. <i>Science</i> , 2012 , 336, 1445-8	9.3	157
375	Mechanisms of Plant Responses and Adaptation to Soil Salinity. <i>Innovation(China)</i> , 2020 , 1, 100017	17.8	156
374	Interaction of SOS2 with nucleoside diphosphate kinase 2 and catalases reveals a point of connection between salt stress and H2O2 signaling in Arabidopsis thaliana. <i>Molecular and Cellular Biology</i> , 2007 , 27, 7771-80	4.8	156
373	Na ⁺ /H ⁺ exchange activity in the plasma membrane of Arabidopsis. <i>Plant Physiology</i> , 2003 , 132, 1041-52	6.6	156
372	HOS10 encodes an R2R3-type MYB transcription factor essential for cold acclimation in plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 9966-71	11.5	156
371	Precise A/T to G/C Base Editing in the Rice Genome. <i>Molecular Plant</i> , 2018 , 11, 627-630	14.4	155
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