Wen-Hao Zhang

List of Publications by Citations

114 papers	6,498 citations	40 h-index	79 g-index
121 ext. papers	7,715 ext. citations	5.5 avg, IF	6.04 L-index

#	Paper	IF	Citations
114	A R2R3-type MYB gene, OsMYB2, is involved in salt, cold, and dehydration tolerance in rice. *Journal of Experimental Botany*, **2012**, 63, 2541-56	7	464
113	Nitric reductase-dependent nitric oxide production is involved in cold acclimation and freezing tolerance in Arabidopsis. *Plant Physiology*, **2009**, 151, 755-67	6.6	376
112	Nitric oxide synthase-dependent nitric oxide production is associated with salt tolerance in Arabidopsis. *Plant Physiology*, **2007**, 144, 206-17	6.6	297
111	Identification of drought-responsive microRNAs in Medicago truncatula by genome-wide high-throughput sequencing. *BMC Genomics*, **2011**, 12, 367	4.5	253
110	Physiological mechanisms underlying OsNAC5-dependent tolerance of rice plants to abiotic stress. *Planta*, **2011**, 234, 331-45	4.7	245
109	The identification of aluminium-resistance genes provides opportunities for enhancing crop production on acid soils. *Journal of Experimental Botany*, **2011**, 62, 9-20	7	234
108	Inhibition of water channels by HgCl2 in intact wheat root cells. *Plant Physiology*, **1999**, 120, 849-58	6.6	216
107	Role of dynamics of intracellular calcium in aluminium-toxicity syndrome. *New Phytologist*, **2003**, 159, 295-314	9.8	201
106	Aluminium-induced inhibition of root elongation in Arabidopsis is mediated by ethylene and auxin. *Journal of Experimental Botany*, **2010**, 61, 347-56	7	200
105	Inhibition of nitric oxide synthase (NOS) underlies aluminum-induced inhibition of root elongation in Hibiscus moscheutos. *New Phytologist*, **2007**, 174, 322-331	9.8	178
104	OsMYB2P-1, an R2R3 MYB transcription factor, is involved in the regulation of phosphate-starvation responses and root architecture in rice. *Plant Physiology*, **2012**, 159, 169-83	6.6	175
103	Malate-permeable channels and cation channels activated by aluminum in the apical cells of wheat roots. *Plant Physiology*, **2001**, 125, 1459-72	6.6	159
102	OsWRKY74, a WRKY transcription factor, modulates tolerance to phosphate starvation in rice. *Journal of Experimental Botany*, **2016**, 67, 947-60	7	146
101	Increased temperature and precipitation interact to affect root production, mortality, and turnover in a temperate steppe: implications for ecosystem C cycling. *Global Change Biology*, **2010**, 16, 1306-1316	11.4	146
100	Identification of aluminum-responsive microRNAs in Medicago truncatula by genome-wide high-throughput sequencing. *Planta*, **2012**, 235, 375-86	4.7	144
99	Review: Nutrient loading of developing seeds. *Functional Plant Biology*, **2007**, 34, 314-331	2.7	143
98	Boron toxicity is alleviated by hydrogen sulfide in cucumber (Cucumis sativus L.) seedlings. *Planta*, **2010**, 231, 1301-9	4.7	142

97	Nitric oxide is involved in phosphorus deficiency-induced cluster-root development and citrate exudation in white lupin. *New Phytologist*, **2010**, 187, 1112-1123	9.8	127
96	The ameliorative effect of silicon on soybean seedlings grown in potassium-deficient medium. *Annals of Botany*, **2010**, 105, 967-73	4.1	122
95	Identification and characterization of long non-coding RNAs involved in osmotic and salt stress in Medicago truncatula using genome-wide high-throughput sequencing. *BMC Plant Biology*, **2015**, 15, 131	5.3	116
94	A novel soil manganese mechanism drives plant species loss with increased nitrogen deposition in a temperate steppe. *Ecology*, **2016**, 97, 65-74	4.6	103
93	Ethylene is involved in nitrate-dependent root growth and branching in Arabidopsis thaliana. *New Phytologist*, **2009**, 184, 918-31	9.8	103
92	Determination of intracellular Ca2+ in cells of intact wheat roots: loading of acetoxymethyl ester of Fluo-3 under low temperature. *Plant Journal*, **1998**, 15, 147-151	6.9	92
91	Aluminum-induced ethylene production is associated with inhibition of root elongation in Lotus japonicus L. *Plant and Cell Physiology*, **2007**, 48, 1229-35	4.9	91
90	Cold acclimation-induced freezing tolerance of Medicago truncatula seedlings is negatively regulated by ethylene. *Physiologia Plantarum*, **2014**, 152, 115-29	4.6	83
89	Nitric oxide is involved in nitrate-induced inhibition of root elongation in Zea mays. *Annals of Botany*, **2007**, 100, 497-503	4.1	75
88	Citrate-permeable channels in the plasma membrane of cluster roots from white lupin. *Plant Physiology*, **2004**, 136, 3771-83	6.6	70
87	Comparative studies on tolerance of Medicago truncatula and Medicago falcata to freezing. *Planta*, **2011**, 234, 445-57	4.7	69
86	Phosphorus deficiency-induced reduction in root hydraulic conductivity in Medicago falcata is associated with ethylene production. *Environmental and Experimental Botany*, **2009**, 67, 172-177	5.9	69
85	Characterization of the TaALMT1 protein as an Al3+-activated anion channel in transformed tobacco (Nicotiana tabacum L.) cells. *Plant and Cell Physiology*, **2008**, 49, 1316-30	4.9	67
84	Brassinosteroids are involved in response of cucumber (Cucumis sativus) to iron deficiency. *Annals of Botany*, **2012**, 110, 681-8	4.1	64
83	Citrate exudation from white lupin induced by phosphorus deficiency differs from that induced by aluminum. *New Phytologist*, **2007**, 176, 581-589	9.8	58
82	Elevated CO2 decreases the response of the ethylene signaling pathway in Medicago truncatula and increases the abundance of the pea aphid. *New Phytologist*, **2014**, 201, 279-291	9.8	54
81	Efficient acquisition of iron confers greater tolerance to saline-alkaline stress in rice (Oryza sativa L.). *Journal of Experimental Botany*, **2016**, 67, 6431-6444	7	53
80	Spatial and temporal effects of nitrogen addition on root life span of Leymus chinensis in a typical steppe of Inner Mongolia. *Functional Ecology*, **2008**, 22, 583-591	5.6	49

79	A novel Medicago truncatula HD-Zip gene, MtHB2, is involved in abiotic stress responses. *Environmental and Experimental Botany*, **2012**, 80, 1-9	5.9	43
78	Aluminium induces an increase in cytoplasmic calcium in intact wheat root apical cells. *Functional Plant Biology*, **1999**, 26, 401	2.7	42
77	Brassinosteroids are involved in Fe homeostasis in rice (Oryza sativa L.). *Journal of Experimental Botany*, **2015**, 66, 2749-61	7	41
76	CIPK23 is involved in iron acquisition of Arabidopsis by affecting ferric chelate reductase activity. *Plant Science*, **2016**, 246, 70-79	5.3	41
75	Novel phosphate deficiency-responsive long non-coding RNAs in the legume model plant Medicago truncatula. *Journal of Experimental Botany*, **2017**, 68, 5937-5948	7	41
74	Alleviation of salt stress-induced inhibition of seed germination in cucumber (Cucumis sativus L.) by ethylene and glutamate. *Journal of Plant Physiology*, **2010**, 167, 1152-6	3.6	40
73	Ethylene negatively regulates aluminium-induced malate efflux from wheat roots and tobacco cells transformed with TaALMT1. *Journal of Experimental Botany*, **2014**, 65, 2415-26	7	38
72	Ameliorative effect of brassinosteroid and ethylene on germination of cucumber seeds in the presence of sodium chloride. *Plant Growth Regulation*, **2011**, 65, 407-413	3.2	38
71	Heavily intensified grazing reduces root production in an Inner Mongolia temperate steppe. *Agriculture, Ecosystems and Environment*, **2015**, 200, 143-150	5.7	37
70	Stimulation of root acid phosphatase by phosphorus deficiency is regulated by ethylene in Medicago falcata. *Environmental and Experimental Botany*, **2011**, 71, 114-120	5.9	37
69	Ethylene activates a plasma membrane Ca(2+)-permeable channel in tobacco suspension cells. *New Phytologist*, **2007**, 174, 507-515	9.8	37
68	Differential responses of grasses and forbs led to marked reduction in below-ground productivity in temperate steppe following chronic N deposition. *Journal of Ecology*, **2015**, 103, 1570-1579	6	34
67	Efflux of photosynthate and acid from developing seed coats of Phaseolus vulgaris L.: a chemiosmotic analysis of pump-driven efflux. *Journal of Experimental Botany*, **1995**, 46, 539-549	7	34
66	Glutamate Receptor Homolog3.4 is Involved in Regulation of Seed Germination Under Salt Stress in Arabidopsis. *Plant and Cell Physiology*, **2018**, 59, 978-988	4.9	30
65	The RING Finger E3 Ligase SpRing is a Positive Regulator of Salt Stress Signaling in Salt-Tolerant Wild Tomato Species. *Plant and Cell Physiology*, **2016**, 57, 528-39	4.9	30
64	Plant stomatal closure improves aphid feeding under elevated CO. *Global Change Biology*, **2015**, 21, 2739-2748	9.4	30
63	The achene mucilage hydrated in desert dew assists seed cells in maintaining DNA integrity: adaptive strategy of desert plant Artemisia sphaerocephala. *PLoS ONE*, **2011**, 6, e24346	3.7	30
62	Comparative studies on tolerance of rice genotypes differing in their tolerance to moderate salt stress. *BMC Plant Biology*, **2017**, 17, 141	5.3	29

61	A receptor-like protein RMC is involved in regulation of iron acquisition in rice. *Journal of Experimental Botany*, **2013**, 64, 5009-20	7	28
60	Nonselective currents and channels in plasma membranes of protoplasts from coats of developing seeds of bean. *Plant Physiology*, **2002**, 128, 388-99	6.6	27
59	Sodium extrusion associated with enhanced expression of SOS1 underlies different salt tolerance between Medicago falcata and Medicago truncatula seedlings. *Environmental and Experimental Botany*, **2015**, 110, 46-55	5.9	26
58	A Medicago truncatula EF-hand family gene, MtCaMP1, is involved in drought and salt stress tolerance. *PLoS ONE*, **2013**, 8, e58952	3.7	26
57	A rice F-box gene, OsFbx352, is involved in glucose-delayed seed germination in rice. *Journal of Experimental Botany*, **2012**, 63, 5559-68	7	25
56	Effects of increased nitrogen deposition and precipitation on seed and seedling production of Potentilla tanacetifolia in a temperate steppe ecosystem. *PLoS ONE*, **2011**, 6, e28601	3.7	25
55	Aluminium Effects on Pollen Germination and Tube Growth of Chamelaucium uncinatum. A Comparison with Other Ca2+Antagonists. *Annals of Botany*, **1999**, 84, 559-564	4.1	24
54	Arbuscular mycorrhizal fungal communities associated with two dominant species differ in their responses to long-term nitrogen addition in temperate grasslands. *Functional Ecology*, **2018**, 32, 1575-1588	5.6	23
53	Multi-dimensional patterns of variation in root traits among coexisting herbaceous species in temperate steppes. *Journal of Ecology*, **2018**, 106, 2320-2331	6	23
52	Gibberellins regulate iron deficiency-response by influencing iron transport and translocation in rice seedlings (Oryza sativa). *Annals of Botany*, **2017**, 119, 945-956	4.1	22
51	Armet, an aphid effector protein, induces pathogen resistance in plants by promoting the accumulation of salicylic acid. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2019**, 374, 20180314	5.8	19
50	Effect of low oxygen concentration on the electrical properties of cortical cells of wheat roots. *Journal of Plant Physiology*, **1997**, 150, 567-72	3.6	19
49	Glutamate receptors are involved in mitigating effects of amino acids on seed germination of Arabidopsis thaliana under salt stress. *Environmental and Experimental Botany*, **2016**, 130, 68-78	5.9	18
48	Calmodulin-like gene MtCML40 is involved in salt tolerance by regulating MtHKTs transporters in Medicago truncatula. *Environmental and Experimental Botany*, **2019**, 157, 79-90	5.9	18
47	Medicago truncatula ecotypes A17 and R108 differed in their response to iron deficiency. *Journal of Plant Physiology*, **2014**, 171, 639-47	3.6	17
46	Glucose-induced inhibition of seed germination in Lotus japonicus is alleviated by nitric oxide and spermine. *Journal of Plant Physiology*, **2009**, 166, 213-8	3.6	17
45	Water translocation between ramets of strawberry during soil drying and its effects on photosynthetic performance. *Physiologia Plantarum*, **2009**, 137, 225-34	4.6	17
44	Identification of tissue-specific and cold-responsive lncRNAs in Medicago truncatula by high-throughput RNA sequencing. *BMC Plant Biology*, **2020**, 20, 99	5.3	15

43	Fast activation of a time-dependent outward current in protoplasts derived from coats of developing Phaseolus vulgaris seeds. *Planta*, **2000**, 211, 894-8	4.7	15
42	Below-ground-mediated and phase-dependent processes drive nitrogen-evoked community changes in grasslands. *Journal of Ecology*, **2020**, 108, 1874-1887	6	14
41	Disruption of metal ion homeostasis in soils is associated with nitrogen deposition-induced species loss in an Inner Mongolia steppe. *Biogeosciences*, **2015**, 12, 3499-3512	4.6	13
40	Systemic regulation of sulfur homeostasis in Medicago truncatula. *Planta*, **2014**, 239, 79-96	4.7	13
39	Pulsing Cl- channels in coat cells of developing bean seeds linked to hypo-osmotic turgor regulation. *Journal of Experimental Botany*, **2004**, 55, 993-1001	7	13
38	Wheat genotypes differing in aluminum tolerance differ in their growth response to CO2 enrichment in acid soils. *Ecology and Evolution*, **2013**, 3, 1440-8	2.8	12
37	Expression of a Medicago falcata small GTPase gene, MfARL1 enhanced tolerance to salt stress in Arabidopsis thaliana. *Plant Physiology and Biochemistry*, **2013**, 63, 227-35	5.4	11
36	Rhizosphere bacterial communities of dominant steppe plants shift in response to a gradient of simulated nitrogen deposition. *Frontiers in Microbiology*, **2015**, 6, 789	5.7	11
35	A Small GTPase, OsRab6a, is Involved in the Regulation of Iron Homeostasis in Rice. *Plant and Cell Physiology*, **2016**, 57, 1271-80	4.9	11
34	Root trait-mediated belowground competition and community composition of a temperate steppe under nitrogen enrichment. *Plant and Soil*, **2019**, 437, 341-354	4.2	11
33	The response of root traits to precipitation change of herbaceous species in temperate steppes. *Functional Ecology*, **2019**, 33, 2030-2041	5.6	10
32	Water permeability in wheat root protoplasts determined from nuclear magnetic resonance relaxation times. *Plant Science*, **1996**, 118, 97-105	5.3	10
31	Rhizome severing increases root lifespan of Leymus chinensis in a typical steppe of Inner Mongolia. *PLoS ONE*, **2010**, 5, e12125	3.7	10
30	Application of molybdenum fertilizer enhanced quality and production of alfalfa in northern China under non-irrigated conditions. *Journal of Plant Nutrition*, **2018**, 41, 1009-1019	2.3	8
29	Artemisia frigida and Stipa krylovii, two dominant species in Inner Mongolia steppe, differed in their responses to elevated atmospheric CO2 concentration. *Plant and Soil*, **2016**, 409, 117-129	4.2	8
28	Sulfur deficiency had different effects on Medicago truncatula ecotypes A17 and R108 in terms of growth, root morphology and nutrient contents. *Journal of Plant Nutrition*, **2016**, 39, 301-314	2.3	8
27	Genome variations account for different response to three mineral elements between Medicago truncatula ecotypes Jemalong A17 and R108. *BMC Plant Biology*, **2014**, 14, 122	5.3	8
26	Calcium-dependent K current in plasma membranes of dermal cells of developing bean cotyledons. *Plant, Cell and Environment*, **2004**, 27, 251-262	8.4	8

25	Differences in spatial and temporal root lifespan of three Stipa grasslands in northern China. *Biogeochemistry*, **2017**, 132, 293-306	3.8	7
24	Higher endogenous bioactive gibberellins and α-amylase activity confer greater tolerance of rice seed germination to saline-alkaline stress. *Environmental and Experimental Botany*, **2019**, 162, 357-363	5.9	7
23	Physiological and proteomic analyses for seed dormancy and release in the perennial grass of Leymus chinensis. *Environmental and Experimental Botany*, **2019**, 162, 95-102	5.9	7
22	Enhanced accumulation of gibberellins rendered rice seedlings sensitive to ammonium toxicity. *Journal of Experimental Botany*, **2020**, 71, 1514-1526	7	7
21	Clonality-dependent dynamic change of plant community in temperate grasslands under nitrogen enrichment. *Oecologia*, **2019**, 189, 255-266	2.9	7
20	Root anatomical traits determined leaf-level physiology and responses to precipitation change of herbaceous species in a temperate steppe. *New Phytologist*, **2021**, 229, 1481-1491	9.8	7
19	A rice small GTPase, Rab6a, is involved in the regulation of grain yield and iron nutrition in response to CO2 enrichment. *Journal of Experimental Botany*, **2020**, 71, 5680-5688	7	6
18	Processes at the soil–root interface determine the different responses of nutrient limitation and metal toxicity in forbs and grasses to nitrogen enrichment. *Journal of Ecology*, **2021**, 109, 927-938	6	6
17	The genome of a wild Medicago species provides insights into the tolerant mechanisms of legume forage to environmental stress. *BMC Biology*, **2021**, 19, 96	7.3	5
16	Actin filaments modulate hypoosmotic-responsive K efflux channels in specialised cells of developing bean seed coats. *Functional Plant Biology*, **2007**, 34, 874-884	2.7	3
15	New development phase of JPE. *Journal of Plant Ecology*, **2020**, 13, 1-2	1.7	2
14	Genome-wide analysis of the Glutathione S-Transferase family in wild Medicago ruthenica and drought-tolerant breeding application of MruGSTU39 gene in cultivated alfalfa. *Theoretical and Applied Genetics*, **2021**, 135, 853	6	2
13	Differences in spatial and temporal root lifespan of temperate steppes across Inner Mongolia grasslands		2
12	Ambient nitrogen deposition drives plant-diversity decline by nitrogen accumulation in a closed grassland ecosystem. *Journal of Applied Ecology*, **2021**, 58, 1888-1898	5.8	2
11	A Dual-Purpose Model for Spring-Sown Oats in Cold Regions of Northern China. *Agronomy*, **2019**, 9, 721	3.6	2
10	Integrative taxonomy recognized a new cryptic species within Stipa grandis from Loess Plateau of China. *Journal of Systematics and Evolution*, **2021**,	2.9	2
9	An integrated belowground trait-based understanding of nitrogen driven plant diversity loss.. *Global Change Biology*, **2022**,	11.4	2
8	Transcriptomic profiling of genes and pathways associated with osmotic and salt stress responses in Medicago truncatula **2020**, 1062-1068		1

7	Comparative studies on adaptive strategies of Medicago falcata and M. truncatula to phosphorus deficiency in soil. *Chinese Journal of Plant Ecology*, **2011**, 35, 632-640	1.2	1
6	Aboveground productivity and community stability tend to keep stable under long-term fencing and nitrogen fertilization on restoration of degraded grassland. *Ecological Indicators*, **2022**, 140, 108971	5.8	1
5	Genome-wide identification of microRNAs in Medicago truncatula by high-throughput sequencing. *Methods in Molecular Biology*, **2013**, 1069, 67-80	1.4	0
4	Carbon allocation patterns in forbs and grasses differ in responses to mowing and nitrogen fertilization in a temperate grassland. *Ecological Indicators*, **2022**, 135, 108588	5.8	0
3	Priorities for the development of alfalfa pasture in northern China. *Fundamental Research*, **2022**,		0
2	Major advances in plant ecology research in China (2020). *Journal of Plant Ecology*, **2021**, 14, 995-1001	1.7	
1	A glimpse of environmental plant science in China. *Environmental and Experimental Botany*, **2016**, 129, 1-3	5.9	