Wen-Hao Zhang

List of Publications by Year
in descending order

117 papers	8,553 citations	50170 46 h-index	46693 89 g-index
121 all docs	121 docs citations	121 times ranked	8406 citing authors

#	Article	IF	Citations
1	A R2R3-type MYB gene, OsMYB2, is involved in salt, cold, and dehydration tolerance in rice. Journal of Experimental Botany, 2012, 63, 2541-2556.	2.4	649
2	Nitric Reductase-Dependent Nitric Oxide Production Is Involved in Cold Acclimation and Freezing Tolerance in Arabidopsis Â Â. Plant Physiology, 2009, 151, 755-767.	2.3	464
3	Nitric Oxide Synthase-Dependent Nitric Oxide Production Is Associated with Salt Tolerance in Arabidopsis. Plant Physiology, 2007, 144, 206-217.	2.3	362
4	Physiological mechanisms underlying OsNAC5-dependent tolerance of rice plants to abiotic stress. Planta, 2011, 234, 331-345.	1.6	305
5	Identification of drought-responsive microRNAs in Medicago truncatula by genome-wide high-throughput sequencing. BMC Genomics, 2011, 12, 367.	1.2	291
6	The identification of aluminium-resistance genes provides opportunities for enhancing crop production on acid soils. Journal of Experimental Botany, 2011, 62, 9-20.	2.4	272
7	Aluminium-induced inhibition of root elongation in Arabidopsis is mediated by ethylene and auxin. Journal of Experimental Botany, 2010, 61, 347-356.	2.4	255
8	Role of dynamics of intracellular calcium in aluminiumâ€toxicity syndrome. New Phytologist, 2003, 159, 295-314.	3.5	235
9	Inhibition of Water Channels by HgCl2 in Intact Wheat Root Cells1. Plant Physiology, 1999, 120, 849-858.	2.3	233
10	<i>OsMYB2P-1</i>, an R2R3 MYB Transcription Factor, Is Involved in the Regulation of Phosphate-Starvation Responses and Root Architecture in Rice Â Â Â. Plant Physiology, 2012, 159, 169-183.	2.3	231
11	<i>OsWRKY74</i>, a WRKY transcription factor, modulates tolerance to phosphate starvation in rice. Journal of Experimental Botany, 2016, 67, 947-960.	2.4	223
12	Inhibition of nitric oxide synthase (NOS) underlies aluminumâ€induced inhibition of root elongation in Hibiscus moscheutos. New Phytologist, 2007, 174, 322-331.	3.5	193
13	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.	1.6	181
14	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.	4.2	179
15	Malate-Permeable Channels and Cation Channels Activated by Aluminum in the Apical Cells of Wheat Roots. Plant Physiology, 2001, 125, 1459-1472.	2.3	177
16	Review: Nutrient loading of developing seeds. Functional Plant Biology, 2007, 34, 314.	1.1	170
17	A novel soil manganese mechanism drives plant species loss with increased nitrogen deposition in a temperate steppe. Ecology, 2016, 97, 65-74.	1.5	165
18	Boron toxicity is alleviated by hydrogen sulfide in cucumber (Cucumis sativus L.) seedlings. Planta, 2010, 231, 1301-1309.	1.6	158

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19	Identification of aluminum-responsive microRNAs in Medicago truncatula by genome-wide high-throughput sequencing. Planta, 2012, 235, 375-386.	1.6	156
20	The ameliorative effect of silicon on soybean seedlings grown in potassium-deficient medium. Annals of Botany, 2010, 105, 967-973.	1.4	155
21	Nitric oxide is involved in phosphorus deficiencyâ€induced clusterâ€root development and citrate exudation in white lupin. New Phytologist, 2010, 187, 1112-1123.	3.5	147
22	Ethylene is involved in nitrateâ€dependent root growth and branching in <i>Arabidopsis thaliana</i>. New Phytologist, 2009, 184, 918-931.	3.5	140
23	Aluminum-Induced Ethylene Production is Associated with Inhibition of Root Elongation in Lotus japonicus L.. Plant and Cell Physiology, 2007, 48, 1229-1235.	1.5	124
24	Cold acclimation-induced freezing tolerance of<i>Medicago truncatula</i>seedlings is negatively regulated by ethylene. Physiologia Plantarum, 2014, 152, 115-129.	2.6	117
25	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.	2.8	108
26	Efficient acquisition of iron confers greater tolerance to saline-alkaline stress in rice (<i>Oryza) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	2.4	92
27	Nitric Oxide is Involved in Nitrate-induced Inhibition of Root Elongation in Zea mays. Annals of Botany, 2007, 100, 497-503.	1.4	81
28	Phosphorus deficiency-induced reduction in root hydraulic conductivity in Medicago falcata is associated with ethylene production. Environmental and Experimental Botany, 2009, 67, 172-177.	2.0	79
29	Comparative studies on tolerance of Medicago truncatula and Medicago falcata to freezing. Planta, 2011, 234, 445-457.	1.6	78
30	Characterization of the TaALMT1 Protein as an Al3+-Activated Anion Channel in Transformed Tobacco (Nicotiana tabacum L.) Cells. Plant and Cell Physiology, 2008, 49, 1316-1330.	1.5	77
31	Novel phosphate deficiency-responsive long non-coding RNAs in the legume model plant Medicago truncatula. Journal of Experimental Botany, 2017, 68, 5937-5948.	2.4	77
32	Brassinosteroids are involved in response of cucumber (Cucumis sativus) to iron deficiency. Annals of Botany, 2012, 110, 681-688.	1.4	73
33	Citrate exudation from white lupin induced by phosphorus deficiency differs from that induced by aluminum. New Phytologist, 2007, 176, 581-589.	3.5	72
34	Citrate-Permeable Channels in the Plasma Membrane of Cluster Roots from White Lupin. Plant Physiology, 2004, 136, 3771-3783.	2.3	71
35	Ameliorative effect of brassinosteroid and ethylene on germination of cucumber seeds in the presence of sodium chloride. Plant Growth Regulation, 2011, 65, 407-413.	1.8	66
36	Heavily intensified grazing reduces root production in an Inner Mongolia temperate steppe. Agriculture, Ecosystems and Environment, 2015, 200, 143-150.	2.5	64

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37	Alleviation of salt stress-induced inhibition of seed germination in cucumber (Cucumis sativus L.) by ethylene and glutamate. Journal of Plant Physiology, 2010, 167, 1152-1156.	1.6	61
38	A novel Medicago truncatula HD-Zip gene, MtHB2, is involved in abiotic stress responses. Environmental and Experimental Botany, 2012, 80, 1-9.	2.0	61
39	Elevated CO₂ decreases the response of the ethylene signaling pathway in <i><scp>M</scp>edicago truncatula</i> and increases the abundance of the pea aphid. New Phytologist, 2014, 201, 279-291.	3.5	61
40	CIPK23 is involved in iron acquisition of Arabidopsis by affecting ferric chelate reductase activity. Plant Science, 2016, 246, 70-79.	1.7	59
41	Spatial and temporal effects of nitrogen addition on root life span of <i>Leymus chinensis </i>in a typical steppe of Inner Mongolia. Functional Ecology, 2008, 22, 583-591.	1.7	58
42	Differential responses of grasses and forbs led to marked reduction in belowâ€ground productivity in temperate steppe following chronic N deposition. Journal of Ecology, 2015, 103, 1570-1579.	1.9	57
43	Aluminium induces an increase in cytoplasmic calcium in intact wheat root apical cells. Functional Plant Biology, 1999, 26, 401.	1.1	56
44	Glutamate Receptor Homolog3.4 is Involved in Regulation of Seed Germination Under Salt Stress in Arabidopsis. Plant and Cell Physiology, 2018, 59, 978-988.	1.5	52
45	Comparative studies on tolerance of rice genotypes differing in their tolerance to moderate salt stress. BMC Plant Biology, 2017, 17, 141.	1.6	51
46	Ethylene negatively regulates aluminium-induced malate efflux from wheat roots and tobacco cells transformed with TaALMT1. Journal of Experimental Botany, 2014, 65, 2415-2426.	2.4	49
47	Brassinosteroids are involved in Fe homeostasis in rice (Oryza sativa L.). Journal of Experimental Botany, 2015, 66, 2749-2761.	2.4	49
48	Multiâ€dimensional patterns of variation in root traits among coexisting herbaceous species in temperate steppes. Journal of Ecology, 2018, 106, 2320-2331.	1.9	49
49	Stimulation of root acid phosphatase by phosphorus deficiency is regulated by ethylene in Medicago falcata. Environmental and Experimental Botany, 2011, 71, 114-120.	2.0	47
50	Efflux of photosynthate and acid from developing seed coats ofPhaseolus vulgarisL.: a chemiosmotic analysis of pump-driven efflux. Journal of Experimental Botany, 1995, 46, 539-549.	2.4	45
51	A rice F-box gene, OsFbx352, is involved in glucose-delayed seed germination in rice. Journal of Experimental Botany, 2012, 63, 5559-5568.	2.4	45
52	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.	1.8	45
53	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.	1.1	44
54	Plant stomatal closure improves aphid feeding under elevated <scp>CO</scp>₂. Global Change Biology, 2015, 21, 2739-2748.	4.2	43

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55	Ethylene activates a plasma membrane Ca 2+ â€permeable channel in tobacco suspension cells. New Phytologist, 2007, 174, 507-515.	3.5	42
56	Arbuscular mycorrhizal fungal communities associated with two dominant species differ in their responses to longâ€term nitrogen addition in temperate grasslands. Functional Ecology, 2018, 32, 1575-1588.	1.7	39
57	The genome of a wild Medicago species provides insights into the tolerant mechanisms of legume forage to environmental stress. BMC Biology, 2021, 19, 96.	1.7	39
58	A receptor-like protein RMC is involved in regulation of iron acquisition in rice. Journal of Experimental Botany, 2013, 64, 5009-5020.	2.4	36
59	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, 528-539.	1.5	36
60	Root anatomical traits determined leafâ€level physiology and responses to precipitation change of herbaceous species in a temperate steppe. New Phytologist, 2021, 229, 1481-1491.	3.5	36
61	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.	2.0	35
62	The response of root traits to precipitation change of herbaceous species in temperate steppes. Functional Ecology, 2019, 33, 2030-2041.	1.7	35
63	Calmodulin-like gene MtCML40 is involved in salt tolerance by regulating MtHKTs transporters in Medicago truncatula. Environmental and Experimental Botany, 2019, 157, 79-90.	2.0	35
64	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.	2.0	32
65	Gibberellins regulate iron deficiency-response by influencing iron transport and translocation in rice seedlings (<i>Oryza sativa</i>). Annals of Botany, 2017, 119, mcw250.	1.4	32
66	Nonselective Currents and Channels in Plasma Membranes of Protoplasts from Coats of Developing Seeds of Bean. Plant Physiology, 2002, 128, 388-399.	2.3	31
67	A Medicago truncatula EF-Hand Family Gene, MtCaMP1, Is Involved in Drought and Salt Stress Tolerance. PLoS ONE, 2013, 8, e58952.	1.1	30
68	Belowâ€groundâ€mediated and phaseâ€dependent processes drive nitrogenâ€evoked community changes in grasslands. Journal of Ecology, 2020, 108, 1874-1887.	1.9	29
69	Identification of tissue-specific and cold-responsive lncRNAs in Medicago truncatula by high-throughput RNA sequencing. BMC Plant Biology, 2020, 20, 99.	1.6	29
70	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.	1.1	28
71	Processes at the soilâ€"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.	1.9	27
72	Aluminium Effects on Pollen Germination and Tube Growth of Chamelaucium uncinatum. A Comparison with Other Ca2+Antagonists. Annals of Botany, 1999, 84, 559-564.	1.4	26

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73	Medicago truncatula ecotypes A17 and R108 differed in their response to iron deficiency. Journal of Plant Physiology, 2014, 171, 639-647.	1.6	24
74	Root trait-mediated belowground competition and community composition of a temperate steppe under nitrogen enrichment. Plant and Soil, 2019, 437, 341-354.	1.8	24
75	A Small GTPase, OsRab6a, is Involved in the Regulation of Iron Homeostasis in Rice. Plant and Cell Physiology, 2016, 57, 1271-1280.	1.5	23
76	An integrated belowground traitâ€based understanding of nitrogenâ€driven plant diversity loss. Global Change Biology, 2022, 28, 3651-3664.	4.2	22
77	Higher endogenous bioactive gibberellins and Î±-amylase activity confer greater tolerance of rice seed germination to saline-alkaline stress. Environmental and Experimental Botany, 2019, 162, 357-363.	2.0	21
78	Effect of low oxygen concentration on the electrical properties of cortical cells of wheat roots. Journal of Plant Physiology, 1997, 150, 567-572.	1.6	20
79	Glucose-induced inhibition of seed germination in Lotus japonicus is alleviated by nitric oxide and spermine. Journal of Plant Physiology, 2009, 166, 213-218.	1.6	20
80	Rhizosphere bacterial communities of dominant steppe plants shift in response to a gradient of simulated nitrogen deposition. Frontiers in Microbiology, 2015, 6, 789.	1.5	20
81	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.	1.3	19
82	Water translocation between ramets of strawberry during soil drying and its effects on photosynthetic performance. Physiologia Plantarum, 2009, 137, 225-234.	2.6	18
83	Expression of a Medicago falcata small GTPase gene, MfARL1 enhanced tolerance to salt stress in Arabidopsis thaliana. Plant Physiology and Biochemistry, 2013, 63, 227-235.	2.8	17
84	Using anatomical traits to understand root functions across root orders of herbaceous species in a temperate steppe. New Phytologist, 2022, 234, 422-434.	3.5	17
85	Fast activation of a time-dependent outward current in protoplasts derived from coats of developing Phaseolus vulgaris seeds. Planta, 2000, 211, 894-898.	1.6	15
86	Wheat genotypes differing in aluminum tolerance differ in their growth response to <scp>CO</scp>₂ enrichment in acid soils. Ecology and Evolution, 2013, 3, 1440-1448.	0.8	15
87	Genome variations account for different response to three mineral elements between Medicago truncatula ecotypes Jemalong A17 and R108. BMC Plant Biology, 2014, 14, 122.	1.6	15
88	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.	2.4	15
89	Pulsing Cl- channels in coat cells of developing bean seeds linked to hypo-osmotic turgor regulation. Journal of Experimental Botany, 2004, 55, 993-1001.	2.4	13
90	Systemic regulation of sulfur homeostasis in Medicago truncatula. Planta, 2014, 239, 79-96.	1.6	13

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91	Clonality-dependent dynamic change of plant community in temperate grasslands under nitrogen enrichment. Oecologia, 2019, 189, 255-266.	0.9	13
92	Rhizome Severing Increases Root Lifespan of Leymus chinensis in a Typical Steppe of Inner Mongolia. PLoS ONE, 2010, 5, e12125.	1.1	13
93	Sulfur deficiency had different effects on<i>Medicago truncatula</i>ecotypes A17 and R108 in terms of growth, root morphology and nutrient contents. Journal of Plant Nutrition, 2016, 39, 301-314.	0.9	12
94	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.	0.9	11
95	Physiological and proteomic analyses for seed dormancy and release in the perennial grass of Leymus chinensis. Environmental and Experimental Botany, 2019, 162, 95-102.	2.0	11
96	Genome-wide analysis of the GlutathioneÂS-Transferase family in wild Medicago ruthenica and drought-tolerant breeding application ofÂMruGSTU39 gene in cultivated alfalfa. Theoretical and Applied Genetics, 2021, 135, 853.	1.8	11
97	Water permeability in wheat root protoplasts determined from nuclear magnetic resonance relaxation times. Plant Science, 1996, 118, 97-105.	1.7	10
98	Calcium-dependent K current in plasma membranes of dermal cells of developing bean cotyledons. Plant, Cell and Environment, 2004, 27, 251-262.	2.8	10
99	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.	1.8	10
100	Enhanced accumulation of gibberellins rendered rice seedlings sensitive to ammonium toxicity. Journal of Experimental Botany, 2020, 71, 1514-1526.	2.4	10
101	Ambient nitrogen deposition drives plantâ€diversity decline by nitrogen accumulation in a closed grassland ecosystem. Journal of Applied Ecology, 2021, 58, 1888-1898.	1.9	10
102	Differences in spatial and temporal root lifespan of three Stipa grasslands in northern China. Biogeochemistry, 2017, 132, 293-306.	1.7	9
103	Carbon allocation patterns in forbs and grasses differ in responses to mowing and nitrogen fertilization in a temperate grassland. Ecological Indicators, 2022, 135, 108588.	2.6	7
104	Carbonate-Induced Chemical Reductants Are Responsible for Iron Acquisition in Strategy I Wild Herbaceous Plants Native to Calcareous Grasslands. Plant and Cell Physiology, 2022, 63, 770-784.	1.5	6
105	Integrative taxonomy recognized a new cryptic species within <i>Stipa grandis</i> from Loess Plateau of China. Journal of Systematics and Evolution, 2022, 60, 901-913.	1.6	5
106	Actin filaments modulate hypoosmotic-responsive K+ efflux channels in specialised cells of developing bean seed coats. Functional Plant Biology, 2007, 34, 874.	1.1	4
107	Priorities for the development of alfalfa pasture in northern China. Fundamental Research, 2023, 3, 225-228.	1.6	4
108	A Dual-Purpose Model for Spring-Sown Oats in Cold Regions of Northern China. Agronomy, 2019, 9, 721.	1.3	3

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109	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.	2.6	3
110	New development phase of JPE. Journal of Plant Ecology, 2020, 13, 1-2.	1.2	2
111	A new model of two-sown regime for oat forage production in an alpine region of northern China. Environmental Science and Pollution Research, 2022, , .	2.7	2
112	Genome-Wide Identification of MicroRNAs in Medicago truncatula by High-Throughput Sequencing. Methods in Molecular Biology, 2013, 1069, 67-80.	0.4	1
113	Major advances in plant ecology research in China (2020). Journal of Plant Ecology, 2021, 14, 995-1001.	1.2	1
114	Comparative studies on adaptive strategies of <I>Medicago falcata</I> and <I>M. truncatula</I> to phosphorus deficiency in soil. Chinese Journal of Plant Ecology, 2011, 35, 632-640.	0.3	1
115	The response of two nutrient acquisition strategies: root traits and leaf nutrient resorption and their relationships to long-term mowing in a temperate steppe. Plant and Soil, 0, , .	1.8	1
116	A glimpse of environmental plant science in China. Environmental and Experimental Botany, 2016, 129, 1-3.	2.0	0
117	Linkage of vegetation and abiotic attributes to grazing effects on biogeographical patterns of arbuscular mycorrhizal fungal communities in temperate grasslands. Plant and Soil, 0, , .	1.8	0