Xiangnan Li

List of Publications by Citations

80 papers	1,442 citations	22 h-index	34 g-index
86 ext. papers	2,132 ext. citations	4.9 avg, IF	5.11 L-index

#	Paper	IF	Citations
80	Melatonin enhances cold tolerance in drought-primed wild-type and abscisic acid-deficient mutant barley. *Journal of Pineal Research*, **2016**, 61, 328-39	10.4	101
79	Cold priming drives the sub-cellular antioxidant systems to protect photosynthetic electron transport against subsequent low temperature stress in winter wheat. *Plant Physiology and Biochemistry*, **2014**, 82, 34-43	5.4	91
78	Induction of chilling tolerance in wheat during germination by pre-soaking seed with nitric oxide and gibberellin. *Plant Growth Regulation*, **2013**, 71, 31-40	3.2	81
77	Melatonin alleviates low PS I-limited carbon assimilation under elevated CO and enhances the cold tolerance of offspring in chlorophyll b-deficient mutant wheat. *Journal of Pineal Research*, **2018**, 64, e12453	10.4	77
76	Wheat plant selection for high yields entailed improvement of leaf anatomical and biochemical traits including tolerance to non-optimal temperature conditions. *Photosynthesis Research*, **2018**, 136, 245-255	3.7	70
75	Salt response of photosynthetic electron transport system in wheat cultivars with contrasting tolerance *Plant, Soil and Environment*, **2016**, 62, 515-521	2.2	47
74	Nano-ZnO-Induced Drought Tolerance Is Associated with Melatonin Synthesis and Metabolism in Maize. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	44
73	Melatonin Improves the Photosynthetic Carbon Assimilation and Antioxidant Capacity in Wheat Exposed to Nano-ZnO Stress. *Molecules*, **2017**, 22,	4.8	40
72	Physiological, proteomic and transcriptional responses of wheat to combination of drought or waterlogging with late spring low temperature. *Functional Plant Biology*, **2014**, 41, 690-703	2.7	39
71	ABA-mediated modulation of elevated CO on stomatal response to drought. *Current Opinion in Plant Biology*, **2020**, 56, 174-180	9.9	37
70	ABA signaling and stomatal control in tomato plants exposure to progressive soil drying under ambient and elevated atmospheric CO 2 concentration. *Environmental and Experimental Botany*, **2017**, 139, 99-104	5.9	35
69	Winter Wheat Photosynthesis and Grain Yield Responses to Spring Freeze. *Agronomy Journal*, **2015**, 107, 1002-1010	2.2	35
68	Drought priming at vegetative stage improves the antioxidant capacity and photosynthesis performance of wheat exposed to a short-term low temperature stress at jointing stage. *Plant and Soil*, **2015**, 393, 307-318	4.2	34
67	Cold Priming Induced Tolerance to Subsequent Low Temperature Stress is Enhanced by Melatonin Application during Recovery in Wheat. *Molecules*, **2018**, 23,	4.8	32
66	Exogenous Abscisic Acid Application During Grain Filling in Winter Wheat Improves Cold Tolerance of Offspring's Seedlings. *Journal of Agronomy and Crop Science*, **2014**, 200, 467-478	3.9	32
65	Interactive Effects of Elevated CO and N Fertilization on Yield and Quality of Tomato Grown Under Reduced Irrigation Regimes. *Frontiers in Plant Science*, **2018**, 9, 328	6.2	29
64	Wheat plants exposed to winter warming are more susceptible to low temperature stress in the spring. *Plant Growth Regulation*, **2015**, 77, 11-19	3.2	27

63	Drought Priming at Vegetative Growth Stage Enhances Nitrogen-Use Efficiency Under Post-Anthesis Drought and Heat Stress in Wheat. *Journal of Agronomy and Crop Science*, **2017**, 203, 29-40	3.9	25
62	Nano-ZnO alleviates drought stress via modulating the plant water use and carbohydrate metabolism in maize. *Archives of Agronomy and Soil Science*, **2021**, 67, 245-259	2	24
61	ABA-mediated regulation of leaf and root hydraulic conductance in tomato grown at elevated CO is associated with altered gene expression of aquaporins. *Horticulture Research*, **2019**, 6, 104	7.7	23
60	Drought Stress Memory and Drought Stress Tolerance in Plants: Biochemical and Molecular Basis **2016**, 17-44		23
59	Interactive effects of CO2 concentration elevation and nitrogen fertilization on water and nitrogen use efficiency of tomato grown under reduced irrigation regimes. *Agricultural Water Management*, **2018**, 202, 174-182	5.9	22
58	Nano-ZnO priming induces salt tolerance by promoting photosynthetic carbon assimilation in wheat. *Archives of Agronomy and Soil Science*, **2020**, 66, 1259-1273	2	21
57	Metabolomics Analysis of Soybean Hypocotyls in Response to Infection. *Frontiers in Plant Science*, **2018**, 9, 1530	6.2	21
56	Effect of the transgenerational exposure to elevated CO 2 on the drought response of winter wheat: Stomatal control and water use efficiency. *Environmental and Experimental Botany*, **2017**, 136, 78-84	5.9	20
55	Spring Freeze Effect on Wheat Yield is Modulated by Winter Temperature Fluctuations: Evidence from Meta-Analysis and Simulating Experiment. *Journal of Agronomy and Crop Science*, **2015**, 201, 288-300	3.9	20
54	Salicylic Acid Alleviates Aluminum Toxicity in Soybean Roots through Modulation of Reactive Oxygen Species Metabolism. *Frontiers in Chemistry*, **2017**, 5, 96	5	19
53	Soil warming enhances the hidden shift of elemental stoichiometry by elevated CO2 in wheat. *Scientific Reports*, **2016**, 6, 23313	4.9	18
52	Mechano-stimulated modifications in the chloroplast antioxidant system and proteome changes are associated with cold response in wheat. *BMC Plant Biology*, **2015**, 15, 219	5.3	18
51	Responses of carbohydrate metabolism enzymes in leaf and spike to CO2 elevation and nitrogen fertilization and their relations to grain yield in wheat. *Environmental and Experimental Botany*, **2019**, 164, 149-156	5.9	17
50	Effect of Shading from Jointing to Maturity on High Molecular Weight Glutenin Subunit Accumulation and Glutenin Macropolymer Concentration in Grain of Winter Wheat. *Journal of Agronomy and Crop Science*, **2012**, 198, 68-79	3.9	17
49	Effects of elevated atmospheric CO2 on leaf gas exchange response to progressive drought in barley and tomato plants with different endogenous ABA levels. *Plant and Soil*, **2020**, 447, 431-446	4.2	17
48	Polystyrene microplastics disturb the redox homeostasis, carbohydrate metabolism and phytohormone regulatory network in barley. *Journal of Hazardous Materials*, **2021**, 415, 125614	12.8	17
47	Spatial distribution patterns of protein and starch in wheat grain affect baking quality of bread and biscuit. *Journal of Cereal Science*, **2018**, 79, 362-369	3.8	16
46	Soil microbial community and activity are affected by integrated agricultural practices in China. *European Journal of Soil Science*, **2018**, 69, 924-935	3.4	16

45	Elevated CO2 modulates the effects of drought and heat stress on plant water relations and grain yield in wheat. *Journal of Agronomy and Crop Science*, **2019**, 205, 362-371	3.9	15
44	Combined high light and heat stress induced complex response in tomato with better leaf cooling after heat priming. *Plant Physiology and Biochemistry*, **2020**, 151, 1-9	5.4	15
43	Effect of multigenerational exposure to elevated atmospheric CO2 concentration on grain quality in wheat. *Environmental and Experimental Botany*, **2019**, 157, 310-319	5.9	15
42	Genome-wide association study of four yield-related traits at the R6 stage in soybean. *BMC Genetics* , **2019**, 20, 39	2.6	14
41	Arbuscular mycorrhiza improves nitrogen use efficiency in soybean grown under partial root-zone drying irrigation. *Archives of Agronomy and Soil Science*, **2019**, 65, 269-279	2	13
40	Arbuscular mycorrhiza enhances nutrient accumulation in wheat exposed to elevated CO2 and soil salinity. *Journal of Plant Nutrition and Soil Science*, **2018**, 181, 836-846	2.3	12
39	Variations in Protein Concentration and Nitrogen Sources in Different Positions of Grain in Wheat. *Frontiers in Plant Science*, **2016**, 7, 942	6.2	11
38	Dynamics of amino acid carbon and nitrogen and relationship with grain protein in wheat under elevated CO 2 and soil warming. *Environmental and Experimental Botany*, **2016**, 132, 121-129	5.9	10
37	Melatonin Modulates Plant Tolerance to Heavy Metal Stress: Morphological Responses to Molecular Mechanisms. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	9
36	Drought priming improved water status, photosynthesis and water productivity of cowpea during post-anthesis drought stress. *Agricultural Water Management*, **2021**, 245, 106565	5.9	9
35	Diversity and composition of arbuscular mycorrhizal fungal communities in the cropland black soils of China. *Global Ecology and Conservation*, **2020**, 22, e00964	2.8	7
34	Cold Tolerance of Photosynthetic Electron Transport System Is Enhanced in Wheat Plants Grown Under Elevated CO. *Frontiers in Plant Science*, **2018**, 9, 933	6.2	7
33	Changes in photosynthesis and respiratory metabolism of maize seedlings growing under low temperature stress may be regulated by arbuscular mycorrhizal fungi. *Plant Physiology and Biochemistry*, **2020**, 154, 1-10	5.4	6
32	Genome-Wide Association Studies of Soybean Seed Hardness in the Chinese Mini Core Collection. *Plant Molecular Biology Reporter*, **2018**, 36, 605-617	1.7	6
31	Salt Priming Protects Photosynthetic Electron Transport against Low-Temperature-Induced Damage in Wheat. *Sensors*, **2019**, 20,	3.8	6
30	Salt acclimation induced salt tolerance in wild-type and chlorophyl b-deficient mutant wheat. *Plant, Soil and Environment*, **2021**, 67, 26-32	2.2	6
29	Melatonin reduces nanoplastic uptake, translocation, and toxicity in wheat. *Journal of Pineal Research*, **2021**, 71, e12761	10.4	6
28	Effect of the transgenerational exposure to elevated CO2 on low temperature tolerance of winter wheat: Chloroplast ultrastructure and carbohydrate metabolism. *Journal of Agronomy and Crop Science*, **2020**, 206, 773-783	3.9	5

27	Endogenous ABA level modulates the effects of CO2 elevation and soil water deficit on growth, water and nitrogen use efficiencies in barley and tomato plants. *Agricultural Water Management*, **2021**, 249, 106808	5.9	5
26	Elevated carbon dioxide alleviates the negative impact of drought on wheat by modulating plant metabolism and physiology. *Agricultural Water Management*, **2021**, 250, 106804	5.9	5
25	Winter Soil Warming Exacerbates the Impacts of Spring Low Temperature Stress on Wheat. *Journal of Agronomy and Crop Science*, **2016**, 202, 554-563	3.9	5
24	Abscisic acid-mimicking ligand AMF4 induced cold tolerance in wheat by altering the activities of key carbohydrate metabolism enzymes. *Plant Physiology and Biochemistry*, **2020**, 157, 284-290	5.4	4
23	Accumulation of High-Molecular-Weight Glutenin Subunits in Superior and Inferior Grains of a Winter Wheat, Yangmai 158. *Cereal Chemistry*, **2017**, 94, 508-512	2.4	3
22	Variation in concentrations of high-molecular-weight glutenin subunits and macropolymers in wheat grains of a recombinant inbred lines population and in two contrasting eco-sites in China. *Journal of the Science of Food and Agriculture*, **2012**, 92, 2188-94	4.3	3
21	The Alleviation of Photosynthetic Damage in Tomato under Drought and Cold Stress by High CO and Melatonin. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	3
20	Wide–Narrow Row Planting Pattern Increases Root Lodging Resistance by Adjusting Root Architecture and Root Physiological Activity in Maize (Zea mays L.) in Northeast China. *Agriculture (Switzerland)*, **2021**, 11, 517	3	3
19	Salt acclimation induced salt tolerance in wild-type and abscisic acid-deficient mutant barley. *Plant, Soil and Environment*, **2019**, 65, 516-521	2.2	3
18	Modulation of photosynthate supply by CO2 elevation affects the post-head-emergence frost-induced grain yield loss in wheat. *Journal of Agronomy and Crop Science*, **2019**, 205, 54-64	3.9	3
17	Anthropogenic land use changes diversity and structure of arbuscular mycorrhizal fungal communities at 100-m scale in northeast China. *Archives of Agronomy and Soil Science*, **2021**, 67, 778-792	2	3
16	Induction of Low Temperature Tolerance in Wheat by Pre-Soaking and Parental Treatment with Melatonin. *Molecules*, **2021**, 26,	4.8	3
15	Soil properties and geography shape arbuscular mycorrhizal fungal communities in black land of China. *Applied Soil Ecology*, **2021**, 167, 104109	5	3
14	Induction of cross tolerance by cold priming and acclimation in plants: Physiological, biochemical and molecular mechanisms **2020**, 183-201		2
13	Simulation of Stomatal Conductance and Water Use Efficiency of Tomato Leaves Exposed to Different Irrigation Regimes and Air CO Concentrations by a Modified "Ball-Berry" Model. *Frontiers in Plant Science*, **2018**, 9, 445	6.2	2
12	Genome-wide association studies of plant architecture-related traits and 100-seed weight in soybean landraces. *BMC Genomic Data*, **2021**, 22, 10	0	2
11	Genome-wide association analysis for yield-related traits at the R6 stage in a Chinese soybean mini core collection. *Genes and Genomics*, **2021**, 43, 897-912	2.1	2
10	Conditional and unconditional QTL analyses of seed hardness in vegetable soybean (Glycine max L. Merr.). *Euphytica*, **2018**, 214, 1	2.1	2

9	Relationship between endophytic microbial diversity and grain quality in wheat exposed to multi-generational CO elevation. *Science of the Total Environment*, **2021**, 776, 146029	10.2	2
8	Excessive nitrogen application under moderate soil water deficit decreases photosynthesis, respiration, carbon gain and water use efficiency of maize. *Plant Physiology and Biochemistry*, **2021**, 166, 1065-1075	5.4	2
7	Reducing nitrogen rate and increasing plant density benefit processing quality by modifying the spatial distribution of protein bodies and gluten proteins in endosperm of a soft wheat cultivar. *Field Crops Research*, **2020**, 253, 107831	5.5	1
6	Low temperature tolerance is depressed in wild-type and abscisic acid-deficient mutant barley grown in Cd-contaminated soil. *Journal of Hazardous Materials*, **2022**, 430, 128489	12.8	1
5	Low temperature tolerance is impaired by polystyrene nanoplastics accumulated in cells of barley (Hordeum vulgare L.) plants. *Journal of Hazardous Materials*, **2021**, 426, 127826	12.8	0
4	Husk Leaf Senescence Characteristics of Spring Maize (Zea mays L.) Cultivated in Two Row Directions and Three Plant Spacings in Northeast China. *Agronomy*, **2020**, 10, 1216	3.6	0
3	Comparative Analysis of Arbuscular Mycorrhizal Fungal Communities between Farmland and Woodland in the Black Soil Region of Northeast China. *Agriculture (Switzerland)*, **2021**, 11, 866	3	0
2	Effects of Elevated Atmospheric CO2 Concentration on Phragmites australis and Wastewater Treatment Efficiency in Constructed Wetlands. *Water (Switzerland)*, **2021**, 13, 2500	3	0
1	Crop exposure to cold stress: responses in physiological, biochemical and molecular levels **2022**, 1-19		