Zhi-Bin Luo

List of Publications by Year
in descending order

41 papers	3,331 citations	201674 27 h-index	265206 42 g-index
43 all docs	43 docs citations	43 times ranked	3108 citing authors

#	Article	IF	Citations
1	Heavy metal accumulation and signal transduction in herbaceous and woody plants: Paving the way for enhancing phytoremediation efficiency. Biotechnology Advances, 2016, 34, 1131-1148.	11.7	283
2	Overexpression of bacterial Î³â€glutamylcysteine synthetase mediates changes in cadmium influx, allocation and detoxification in poplar. New Phytologist, 2015, 205, 240-254.	7.3	214
3	Net cadmium flux and accumulation reveal tissueâ€specific oxidative stress and detoxification in Populus Ã— canescens. Physiologia Plantarum, 2011, 143, 50-63.	5.2	194
4	A Transcriptomic Network Underlies Microstructural and Physiological Responses to Cadmium in Populus Ã— canescens Â Â Â. Plant Physiology, 2013, 162, 424-439.	4.8	187
5	Upgrading Root Physiology for Stress Tolerance by Ectomycorrhizas: Insights from Metabolite and Transcriptional Profiling into Reprogramming for Stress Anticipation. Plant Physiology, 2009, 151, 1902-1917.	4.8	186
6	Nitrogen metabolism of two contrasting poplar species during acclimation to limiting nitrogen availability. Journal of Experimental Botany, 2013, 64, 4207-4224.	4.8	180
7	Cadmium tolerance in six poplar species. Environmental Science and Pollution Research, 2013, 20, 163-174.	5.3	157
8	N-fertilization has different effects on the growth, carbon and nitrogen physiology, and wood properties of slow- and fast-growing Populus species. Journal of Experimental Botany, 2012, 63, 6173-6185.	4.8	131
9	Global poplar root and leaf transcriptomes reveal links between growth and stress responses under nitrogen starvation and excess. Tree Physiology, 2015, 35, 1283-1302.	3.1	131
10	Exogenous abscisic acid alleviates zinc uptake and accumulation in <scp>P</scp>opulusâ€‰Ã—â€‰canescens exposed to excess zinc. Plant, Cell and Environment, 2015, 38, 207-223.	5.7	129
11	The role of ectomycorrhizas in heavy metal stress tolerance of host plants. Environmental and Experimental Botany, 2014, 108, 47-62.	4.2	125
12	Ectomycorrhizas with <scp>P</scp>axillus involutus enhance cadmium uptake and tolerance in <scp>P</scp>opulusâ€‰Ã—â€‰canescens. Plant, Cell and Environment, 2014, 37, 627-642.	5.7	118
13	Physiological and molecular mechanisms of heavy metal accumulation in nonmycorrhizal versus mycorrhizal plants. Plant, Cell and Environment, 2019, 42, 1087-1103.	5.7	113
14	Net fluxes of ammonium and nitrate in association with H+ fluxes in fine roots of Populus popularis. Planta, 2013, 237, 919-931.	3.2	112
15	Phosphorus and nitrogen physiology of two contrasting poplar genotypes when exposed to phosphorus and/or nitrogen starvation. Tree Physiology, 2016, 36, 22-38.	3.1	103
16	Abscisic acid enhances lead translocation from the roots to the leaves and alleviates its toxicity in Populusâ€‰Ã—â€‰canescens. Journal of Hazardous Materials, 2019, 362, 275-285.	12.4	88
17	Exogenous glutathione enhances cadmium accumulation and alleviates its toxicity in Populus Ã— canescens. Tree Physiology, 2017, 37, 1697-1712.	3.1	79
18	Anatomical, physiological and transcriptional responses of two contrasting poplar genotypes to drought and reâ€watering. Physiologia Plantarum, 2014, 151, 480-494.	5.2	72

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19	Comparative transcriptomic analysis reveals the roles of overlapping heat-/drought-responsive genes in poplars exposed to high temperature and drought. Scientific Reports, 2017, 7, 43215.	3.3	72
20	Influence of free air CO2 enrichment (EUROFACE) and nitrogen fertilisation on the anatomy of juvenile wood of three poplar species after coppicing. Trees - Structure and Function, 2005, 19, 109-118.	1.9	68
21	Carbon-based secondary metabolites and internal nitrogen pools in Populus nigra under Free Air CO2 Enrichment (FACE) and nitrogen fertilisation. Plant and Soil, 2008, 304, 45-57.	3.7	66
22	Wood composition and energy content in a poplar short rotation plantation on fertilized agricultural land in a future CO₂ atmosphere. Global Change Biology, 2009, 15, 38-47.	9.5	66
23	The ectomycorrhizal fungus (Paxillus involutus) modulates leaf physiology of poplar towards improved salt tolerance. Environmental and Experimental Botany, 2011, 72, 304-311.	4.2	55
24	Ectomycorrhizal fungus (Paxillus involutus) and hydrogels affect performance of Populus euphratica exposed to drought stress. Annals of Forest Science, 2009, 66, 106-106.	2.0	52
25	Changes in carbon, nutrients and stoichiometric relations under different soil depths, plant tissues and ages in black locust plantations. Acta Physiologiae Plantarum, 2013, 35, 2951-2964.	2.1	48
26	Carbon partitioning to mobile and structural fractions in poplar wood under elevated CO2 (EUROFACE) and N fertilization. Global Change Biology, 2006, 12, 272-283.	9.5	41
27	Phenylalanine as a nitrogen source induces root growth and nitrogen-use efficiency in Populus Ã—canescens. Tree Physiology, 2018, 38, 66-82.	3.1	38
28	Physiological and transcriptional regulation in poplar roots and leaves during acclimation to high temperature and drought. Physiologia Plantarum, 2016, 157, 38-53.	5.2	29
29	Competing Endogenous RNA Networks Underlying Anatomical and Physiological Characteristics of Poplar Wood in Acclimation to Low Nitrogen Availability. Plant and Cell Physiology, 2019, 60, 2478-2495.	3.1	26
30	The importance of slope aspect and stand age on the photosynthetic carbon fixation capacity of forest: a case study with black locust (Robinia pseudoacacia) plantations on the Loess Plateau. Acta Physiologiae Plantarum, 2011, 33, 419-429.	2.1	23
31	The conserved salt-responsive genes in the roots of PopulusÃ—canescens and Arabidopsis thaliana. Environmental and Experimental Botany, 2016, 129, 48-56.	4.2	23
32	Phosphorus assimilation of Chinese fir from two provenances during acclimation to changing phosphorus availability. Environmental and Experimental Botany, 2018, 153, 21-34.	4.2	22
33	Dissecting MicroRNAâ€“mRNA Regulatory Networks Underlying Sulfur Assimilation and Cadmium Accumulation in Poplar Leaves. Plant and Cell Physiology, 2020, 61, 1614-1630.	3.1	17
34	Sulfur nutrition stimulates lead accumulation and alleviates its toxicity in Populus deltoides. Tree Physiology, 2018, 38, 1724-1741.	3.1	15
35	Lead exposure-induced defense responses result in low lead translocation from the roots to aerial tissues of two contrasting poplar species. Environmental Pollution, 2021, 271, 116346.	7.5	14
36	Uncovering the physiological mechanisms that allow nitrogen availability to affect drought acclimation in Catalpa bungei. Tree Physiology, 2017, 37, 1453-1456.	3.1	10

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37	Physiological characteristics and RNA sequencing in two root zones with contrasting nitrate assimilation of Populus Ã— canescens. Tree Physiology, 2020, 40, 1392-1404.	3.1	9
38	Physiological Characteristics and Transcriptomic Dissection in Two Root Segments with Contrasting Net Fluxes of Ammonium and Nitrate of Poplar Under Low Nitrogen Availability. Plant and Cell Physiology, 2022, 63, 30-44.	3.1	9
39	Sulfur metabolism, organic acid accumulation and phytohormone regulation are crucial physiological processes modulating the different tolerance to Pb stress of two contrasting poplars. Tree Physiology, 2022, 42, 1799-1811.	3.1	7
40	Genome-Wide Identification and Characterization of Long Noncoding RNAs in Populus Ã— canescens Roots Treated With Different Nitrogen Fertilizers. Frontiers in Plant Science, 2022, 13, .	3.6	3
41	Identification and Functional Prediction of Poplar Root circRNAs Involved in Treatment With Different Forms of Nitrogen. Frontiers in Plant Science, 0, 13, .	3.6	2