Zhenzhu Xu

List of Publications by Citations

53 papers	2,375 citations	24 h-index	48 g-index
69 ext. papers	2,895 ext. citations	4.9 avg, IF	5.34 L-index

#	Paper	IF	Citations
53	Responses of leaf stomatal density to water status and its relationship with photosynthesis in a grass. *Journal of Experimental Botany*, **2008**, 59, 3317-25	7	433
52	Plant responses to drought and rewatering. *Plant Signaling and Behavior*, **2010**, 5, 649-54	2.5	301
51	Combined effects of water stress and high temperature on photosynthesis, nitrogen metabolism and lipid peroxidation of a perennial grass Leymus chinensis. *Planta*, **2006**, 224, 1080-90	4.7	194
50	Elevated-CO2 Response of Stomata and Its Dependence on Environmental Factors. *Frontiers in Plant Science*, **2016**, 7, 657	6.2	168
49	Response and adaptation of photosynthesis, respiration, and antioxidant systems to elevated CO2 with environmental stress in plants. *Frontiers in Plant Science*, **2015**, 6, 701	6.2	120
48	Are plant growth and photosynthesis limited by pre-drought following rewatering in grass?. *Journal of Experimental Botany*, **2009**, 60, 3737-49	7	114
47	Biotic and abiotic factors controlling the spatial and temporal variation of soil respiration in an agricultural ecosystem. *Soil Biology and Biochemistry*, **2007**, 39, 418-425	7.5	100
46	Effects of elevated CO□warming and precipitation change on plant growth, photosynthesis and peroxidation in dominant species from North China grassland. *Planta*, **2014**, 239, 421-35	4.7	91
45	Interactive Effects of Elevated CO2, Drought, and Warming on Plants. *Journal of Plant Growth Regulation*, **2013**, 32, 692-707	4.7	76
44	Nitrogen Metabolism and Photosynthesis in Leymus chinensis in Response to Long-term Soil Drought. *Journal of Plant Growth Regulation*, **2006**, 25, 252-266	4.7	67
43	Maize leaf functional responses to drought episode and rewatering. *Agricultural and Forest Meteorology*, **2018**, 249, 57-70	5.8	49
42	Changes in Chlorophyll Fluorescence in Maize Plants with Imposed Rapid Dehydration at Different Leaf Ages. *Journal of Plant Growth Regulation*, **2008**, 27, 83-92	4.7	47
41	Effects of Soil Drought with Nocturnal Warming on Leaf Stomatal Traits and Mesophyll Cell Ultrastructure of a Perennial Grass. *Crop Science*, **2009**, 49, 1843-1851	2.4	43
40	Responses of photosynthetic capacity to soil moisture gradient in perennial rhizome grass and perennial bunchgrass. *BMC Plant Biology*, **2011**, 11, 21	5.3	40
39	Nitrogen Translocation in Wheat Plants Under Soil Water Deficit. *Plant and Soil*, **2006**, 280, 291-303	4.2	40
38	Theory and application for the promotion of wheat production in China: past, present and future. *Journal of the Science of Food and Agriculture*, **2013**, 93, 2339-50	4.3	38
37	Soil temperature and biotic factors drive the seasonal variation of soil respiration in a maize (Zea mays L.) agricultural ecosystem. *Plant and Soil*, **2007**, 291, 15-26	4.2	37

36	Combined effects of elevated CO2 and soil drought on carbon and nitrogen allocation of the desert shrub Caragana intermedia. *Plant and Soil*, **2007**, 301, 87-97	4.2	36
35	Photosynthetic Potential and its Association with Lipid Peroxidation in Response to High Temperature at Different Leaf Ages in Maize. *Journal of Plant Growth Regulation*, **2011**, 30, 41-50	4.7	28
34	Interactive effects of warming and increased precipitation on community structure and composition in an annual forb dominated desert steppe. *PLoS ONE*, **2013**, 8, e70114	3.7	27
33	Climatic warming shifts the soil nematode community in a desert steppe. *Climatic Change*, **2018**, 150, 243-258	4.5	26
32	Effects of warming and changing precipitation rates on soil respiration over two years in a desert steppe of northern China. *Plant and Soil*, **2016**, 400, 15-27	4.2	25
31	Tracking chlorophyll fluorescence as an indicator of drought and rewatering across the entire leaf lifespan in a maize field. *Agricultural Water Management*, **2019**, 211, 190-201	5.9	25
30	Vertical distributions of chlorophyll and nitrogen and their associations with photosynthesis under drought and rewatering regimes in a maize field. *Agricultural and Forest Meteorology*, **2019**, 272-273, 40-54	5.8	24
29	Excessive nitrogen application decreases grain yield and increases nitrogen loss in a wheat–soil system. *Acta Agriculturae Scandinavica - Section B Soil and Plant Science*, **2011**, 61, 681-692	1.1	21
28	Nitrogen metabolism in flag leaf and grain of wheat in response to irrigation regimes. *Journal of Plant Nutrition and Soil Science*, **2006**, 169, 118-126	2.3	19
27	Comparison of water vapour, heat and energy exchanges over agricultural and wetland ecosystems. *Hydrological Processes*, **2009**, 23, 2069-2080	3.3	18
26	Ecosystem responses to warming and watering in typical and desert steppes. *Scientific Reports*, **2016**, 6, 34801	4.9	17
25	Short- and long-term warming alters soil microbial community and relates to soil traits. *Applied Soil Ecology*, **2018**, 131, 22-28	5	16
24	Nitrogen deposition magnifies the sensitivity of desert steppe plant communities to large changes in precipitation. *Journal of Ecology*, **2020**, 108, 598-610	6	16
23	Forest litterfall and its composition: a new data set of observational data from China. *Ecology*, **2016**, 97, 1365-1365	4.6	15
22	Nitrogen cycles in terrestrial ecosystems: climate change impacts and mitigation. *Environmental Reviews*, **2016**, 24, 132-143	4.5	14
21	Elevated CO2 can modify the response to a water status gradient in a steppe grass: from cell organelles to photosynthetic capacity to plant growth. *BMC Plant Biology*, **2016**, 16, 157	5.3	13
20	Statistical characteristics of forest litterfall in China. *Science China Life Sciences*, **2018**, 61, 358-360	8.5	12
19	Effects of cotton field management practices on soil CO2 emission and C balance in an arid region of Northwest China. *Journal of Arid Land*, **2014**, 6, 468-477	2.2	10

18	Detection of Photosynthetic Performance of Stipa bungeana Seedlings under Climatic Change using Chlorophyll Fluorescence Imaging. *Frontiers in Plant Science*, **2015**, 6, 1254	6.2	8
17	Photosynthetic resistance and resilience under drought, flooding and rewatering in maize plants. *Photosynthesis Research*, **2021**, 148, 1-15	3.7	5
16	Sensitive indicators of Stipa bungeana response to precipitation under ambient and elevated CO concentration. *International Journal of Biometeorology*, **2018**, 62, 141-151	3.7	4
15	Interactive effects of elevated CO2 and precipitation change on leaf nitrogen of dominant Stipa L. species. *Ecology and Evolution*, **2015**, 5, 2956-65	2.8	4
14	Climatic warming enhances soil respiration resilience in an arid ecosystem. *Science of the Total Environment*, **2021**, 756, 144005	10.2	4
13	Climate warming-induced drought constrains vegetation productivity by weakening the temporal stability of the plant community in an arid grassland ecosystem. *Agricultural and Forest Meteorology* , **2021**, 307, 108526	5.8	4
12	Soil carbon release responses to long-term versus short-term climatic warming in an arid ecosystem. *Biogeosciences*, **2020**, 17, 781-792	4.6	3
11	The relationship between leaf and ecosystem CO2 exchanges in a maize field. *Acta Physiologiae Plantarum*, **2018**, 40, 1	2.6	3
10	Evaluation of restoration approaches on the Inner Mongolian Steppe based on criteria of the Society for Ecological Restoration. *Land Degradation and Development*, **2020**, 31, 285-296	4.4	3
9	A self-photoprotection mechanism helps Stipa baicalensis adapt to future climate change. *Scientific Reports*, **2016**, 6, 25839	4.9	3
8	Does precipitation mediate the effects of elevated CO 2 on plant growth in the grass species Stipa grandis ?. *Environmental and Experimental Botany*, **2016**, 131, 146-154	5.9	3
7	Responses of plant biomass and yield component in rice, wheat, and maize to climatic warming: a meta-analysis. *Planta*, **2020**, 252, 90	4.7	2
6	Growth variations of Dahurian larch plantations across northeast China: Understanding the effects of temperature and precipitation. *Journal of Environmental Management*, **2021**, 292, 112739	7.9	2
5	Effects of elevated CO2 on Stipa baicalensis photosynthesis depend on precipitation and growth phase. *Ecological Research*, **2019**, 34, 790-801	1.9	1
4	Temperature sensitivity increases with decreasing soil carbon quality in forest ecosystems across northeast China. *Climatic Change*, **2020**, 160, 373-384	4.5	1
3	Vertical distribution of gas exchanges and their integration throughout the entire canopy in a maize field. *Photosynthesis Research*, **2021**, 147, 269-281	3.7	1
2	Resistance, recovery, and resilience of desert steppe to precipitation alterations with nitrogen deposition. *Journal of Cleaner Production*, **2021**, 317, 128434	10.3	1
1	Driving mechanisms of climate-plant-soil patterns on the structure and function of different grasslands along environmental gradients in Tibetan and Inner Mongolian Plateaus in China. *Journal of Cleaner Production*, **2022**, 339, 130696	10.3	0