Xiying Zhang

List of Publications by Year
in descending order

71 papers	4,451 citations	109137 35 h-index	106150 65 g-index
71 all docs	71 docs citations	71 times ranked	3194 citing authors

#	Article	IF	Citations
1	Determination of daily evaporation and evapotranspiration of winter wheat and maize by large-scale weighing lysimeter and micro-lysimeter. Agricultural and Forest Meteorology, 2002, 111, 109-120.	1.9	466
2	Effect of precipitation change on water balance and WUE of the winter wheatâ€“summer maize rotation in the North China Plain. Agricultural Water Management, 2010, 97, 1139-1145.	2.4	245
3	Dry matter, harvest index, grain yield and water use efficiency as affected by water supply in winter wheat. Irrigation Science, 2008, 27, 1-10.	1.3	199
4	Conserving groundwater for irrigation in the North China Plain. Irrigation Science, 2003, 21, 159-166.	1.3	181
5	Root Phenotyping for Drought Tolerance: A Review. Agronomy, 2018, 8, 241.	1.3	175
6	Improved Water Use Efficiency Associated with Cultivars and Agronomic Management in the North China Plain. Agronomy Journal, 2005, 97, 783-790.	0.9	161
7	An improved water use efficiency of cereals under temporal and spatial deficit irrigation in north China. Agricultural Water Management, 2010, 97, 66-74.	2.4	158
8	Root growth and soil water utilization of winter wheat in the North China Plain. Hydrological Processes, 2004, 18, 2275-2287.	1.1	157
9	Root size, distribution and soil water depletion as affected by cultivars and environmental factors. Field Crops Research, 2009, 114, 75-83.	2.3	141
10	Water use efficiency and evapotranspiration of winter wheat and its response to irrigation regime in the north China plain. Agricultural and Forest Meteorology, 2008, 148, 1848-1859.	1.9	136
11	Changes in evapotranspiration over irrigated winter wheat and maize in North China Plain over three decades. Agricultural Water Management, 2011, 98, 1097-1104.	2.4	136
12	Effects of harvest and sowing time on the performance of the rotation of winter wheatâ€“summer maize in the North China Plain. Industrial Crops and Products, 2007, 25, 239-247.	2.5	123
13	Contribution of cultivar, fertilizer and weather to yield variation of winter wheat over three decades: A case study in the North China Plain. European Journal of Agronomy, 2013, 50, 52-59.	1.9	115
14	Water use efficiency and associated traits in winter wheat cultivars in the North China Plain. Agricultural Water Management, 2010, 97, 1117-1125.	2.4	113
15	Performance of Double-Cropped Winter Wheat-Summer Maize under Minimum Irrigation in the North China Plain. Agronomy Journal, 2006, 98, 1620-1626.	0.9	112
16	Optimizing irrigation management for wheat to reduce groundwater depletion in the piedmont region of the Taihang Mountains in the North China Plain. Agricultural Water Management, 2006, 82, 25-44.	2.4	102
17	Quantifying the impact of irrigation on groundwater reserve and crop production â€“ A case study in the North China Plain. European Journal of Agronomy, 2015, 70, 48-56.	1.9	100
18	Responses of yield and WUE of winter wheat to water stress during the past three decadesâ€”A case study in the North China Plain. Agricultural Water Management, 2017, 179, 47-54.	2.4	100

#	Article	IF	Citations
19	Optimizing the yield of winter wheat by regulating water consumption during vegetative and reproductive stages under limited water supply. Irrigation Science, 2013, 31, 1103-1112.	1.3	95
20	Changes in water use efficiency and water footprint in grain production over the past 35 years: a case study in the North China Plain. Journal of Cleaner Production, 2016, 116, 71-79.	4.6	79
21	Impact of different cropping systems and irrigation schedules on evapotranspiration, grain yield and groundwater level in the North China Plain. Agricultural Water Management, 2019, 211, 202-209.	2.4	67
22	Determination of water consumption and the water-saving potential of three mulching methods in a jujube orchard. European Journal of Agronomy, 2012, 43, 87-95.	1.9	65
23	The effects of nitrogen supply and water regime on instantaneous WUE, time-integrated WUE and carbon isotope discrimination in winter wheat. Field Crops Research, 2013, 144, 236-244.	2.3	64
24	<scp>C</scp>hina's food security is threatened by the unsustainable use of water resources in <scp>N</scp>orth and <scp>N</scp>orthwest <scp>C</scp>hina. Food and Energy Security, 2014, 3, 7-18.	2.0	62
25	Assessing the contribution of weather and management to the annual yield variation of summer maize using APSIM in the North China Plain. Field Crops Research, 2016, 194, 94-102.	2.3	61
26	Assessing the performance of different irrigation systems on winter wheat under limited water supply. Agricultural Water Management, 2018, 196, 133-143.	2.4	61
27	Estimation of groundwater use by crop production simulated by DSSAT-wheat and DSSAT-maize models in the piedmont region of the North China Plain. Hydrological Processes, 2006, 20, 2787-2802.	1.1	49
28	Effects of straw and manure management on soil and crop performance in North China Plain. Catena, 2020, 187, 104359.	2.2	49
29	Modelling to increase the eco-efficiency of a wheatâ€“maize double cropping system. Agriculture, Ecosystems and Environment, 2015, 210, 36-46.	2.5	48
30	Climate change is expected to increase yield and water use efficiency of wheat in the North China Plain. Agricultural Water Management, 2019, 222, 193-203.	2.4	47
31	Responses of yield and water use efficiency to irrigation amount decided by pan evaporation for winter wheat. Agricultural Water Management, 2013, 129, 173-180.	2.4	45
32	Subsoil compaction and irrigation regimes affect the rootâ€“shoot relation and grain yield of winter wheat. Agricultural Water Management, 2015, 154, 59-67.	2.4	43
33	Optimising crop production and nitrate leaching in China: Measured and simulated effects of straw incorporation and nitrogen fertilisation. European Journal of Agronomy, 2016, 80, 32-44.	1.9	43
34	Acclimation to higher VPD and temperature minimized negative effects on assimilation and grain yield of wheat. Agricultural and Forest Meteorology, 2018, 248, 119-129.	1.9	40
35	Assessment of the sustainability of different cropping systems under three irrigation strategies in the North China Plain under climate change. Agricultural Systems, 2020, 178, 102745.	3.2	39
36	Selecting traits to increase winter wheat yield under climate change in the North China Plain. Field Crops Research, 2017, 207, 30-41.	2.3	34

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37	Application of a new method to evaluate crop water stress index. Irrigation Science, 2005, 24, 49-54.	1.3	32
38	Effects of different irrigation regimes on soil compaction in a winter wheatâ€“summer maize cropping system in the North China Plain. Catena, 2016, 137, 70-76.	2.2	32
39	Can mulching of maize straw complement deficit irrigation to improve water use efficiency and productivity of winter wheat in North China Plain?. Agricultural Water Management, 2019, 213, 1-11.	2.4	32
40	Incorporating root distribution factor to evaluate soil water status for winter wheat. Agricultural Water Management, 2015, 153, 32-41.	2.4	31
41	Incorporation of Soil Bulk Density in Simulating Root Distribution of Winter Wheat and Maize in Two Contrasting Soils. Soil Science Society of America Journal, 2012, 76, 638-647.	1.2	29
42	Web-based irrigation decision support system with limited inputs for farmers. Agricultural Water Management, 2018, 210, 279-285.	2.4	29
43	Effects of irrigation frequency under limited irrigation on root water uptake, yield and water use efficiency of winter wheat. Irrigation and Drainage, 2009, 58, 393-405.	0.8	28
44	Improving Winter Wheat Performance by Foliar Spray of ABA and FA Under Water Deficit Conditions. Journal of Plant Growth Regulation, 2016, 35, 83-96.	2.8	28
45	Nitrogen and carbon footprints of dairy farm systems in China and New Zealand, as influenced by productivity, feed sources and mitigations. Agricultural Water Management, 2019, 213, 155-163.	2.4	25
46	Impact of heat-wave at high and low VPD on photosynthetic components of wheat and their recovery. Environmental and Experimental Botany, 2018, 147, 138-146.	2.0	23
47	Crop rotation and N application rate affecting the performance of winter wheat under deficit irrigation. Agricultural Water Management, 2018, 210, 330-339.	2.4	20
48	Performance of a Double Cropping System under a Continuous Minimum Irrigation Strategy. Agronomy Journal, 2014, 106, 281-289.	0.9	17
49	Soil Water Regime Affecting Correlation of Carbon Isotope Discrimination with Yield and Waterâ€Use Efficiency of Winter Wheat. Crop Science, 2016, 56, 760-772.	0.8	17
50	Optimizing irrigation to reduce N leaching and maintain high crop productivity through the manipulation of soil water storage under summer monsoon climate. Field Crops Research, 2021, 265, 108110.	2.3	17
51	Spatial soil water and nutrient distribution affecting the water productivity of winter wheat. Agricultural Water Management, 2021, 256, 107114.	2.4	17
52	Improving water use efficiency in grain production of winter wheat and summer maize in the North China Plain: a review. Frontiers of Agricultural Science and Engineering, 2016, 3, 25.	0.9	17
53	Sensitivity of simulated crop yield and nitrate leaching of the wheat-maize cropping system in the North China Plain to model parameters. Agricultural and Forest Meteorology, 2018, 263, 25-40.	1.9	16
54	Are crop deep roots always beneficial for combating drought: A review of root structure and function, regulation and phenotyping. Agricultural Water Management, 2022, 271, 107781.	2.4	16

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55	Water productivity improvement in summer maize â€“ÂA case study in the North China Plain from 1980 to 2019. Agricultural Water Management, 2021, 247, 106728.	2.4	15
56	Effect of warming and nitrogen addition on evapotranspiration and water use efficiency in a wheat-soybean/fallow rotation from 2010 to 2014. Climatic Change, 2016, 139, 565-578.	1.7	13
57	Root efficiency and water use regulation relating to rooting depth of winter wheat. Agricultural Water Management, 2022, 269, 107710.	2.4	12
58	Components of feed affecting water footprint of feedlot dairy farm systems in Northern China. Journal of Cleaner Production, 2018, 183, 208-219.	4.6	11
59	Dynamic changes in leaf wax n-alkanes and Î´13C during leaf development in winter wheat under varied irrigation experiments. Organic Geochemistry, 2020, 146, 104054.	0.9	11
60	Electrical capacitance estimates crop root traits best under dry conditionsâ€”a case study in cotton (Gossypium hirsutum L.). Plant and Soil, 2021, 467, 549-567.	1.8	9
61	Assessing the Impact of Air Pollution on Grain Yield of Winter Wheat - A Case Study in the North China Plain. PLoS ONE, 2016, 11, e0162655.	1.1	9
62	Modelling agro-environmental variables under data availability limitations and scenario managements in an alluvial region of the North China Plain. Environmental Modelling and Software, 2019, 111, 94-107.	1.9	8
63	Increasing the Planting Uniformity Improves the Yield of Summer Maize. Agronomy Journal, 2017, 109, 1463-1475.	0.9	7
64	Performance of New Released Winter Wheat Cultivars in Yield: A Case Study in the North China Plain. Agronomy Journal, 2016, 108, 1346-1355.	0.9	5
65	OPTIMIZED TIMING OF USING CANOPY TEMPERATURE TO SELECT HIGH-YIELDING CULTIVARS OF WINTER WHEAT UNDER DIFFERENT WATER REGIMES. Experimental Agriculture, 2018, 54, 257-272.	0.4	4
66	Diurnal and Seasonal Mapping of Water Deficit Index and Evapotranspiration by an Unmanned Aerial System: A Case Study for Winter Wheat in Denmark. Remote Sensing, 2021, 13, 2998.	1.8	4
67	Intermittent Deep Tillage on Improving Soil Physical Properties and Crop Performance in an Intensive Cropping System. Agronomy, 2022, 12, 688.	1.3	3
68	Performance of double cropping silage maize with plastic mulch in the North China Plain. Agronomy Journal, 2020, 112, 4133-4146.	0.9	1
69	Open Field Simulating Nocturnal Warming on Summer Maize Performance in the North China Plain. Agronomy, 2021, 11, 992.	1.3	1
70	Root matters: Lying seeds flat with the crease down improves grain yield in winter wheat under drought stress. Plant and Soil, 0, , 1.	1.8	1
71	Root Growth and Distribution in Relation to Different Water Levels. Advances in Agricultural Systems Modeling, 0, , 45-65.	0.3	0