Zhiming Qi

List of Publications by Year
in descending order

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89 papers	1,769 citations	257450 24 h-index	330143 37 g-index
89 all docs	89 docs citations	89 times ranked	1808 citing authors

#	Article	IF	Citations
1	Calibration and validation of DRAINMOD to design subsurface drainage systems for Iowa's tile landscapes. Agricultural Water Management, 2006, 85, 221-232.	5.6	114
2	Irrigation Scheduling Approaches and Applications: A Review. Journal of Irrigation and Drainage Engineering - ASCE, 2020, 146, .	1.0	94
3	An integrated soil-crop system model for water and nitrogen management in North China. Scientific Reports, 2016, 6, 25755.	3.3	74
4	Soil Water Dynamics under Winter Rye Cover Crop in Central Iowa. Vadose Zone Journal, 2010, 9, 53.	2.2	68
5	Simulation of maize evapotranspiration: An inter-comparison among 29 maize models. Agricultural and Forest Meteorology, 2019, 271, 264-284.	4.8	62
6	Development of an irrigation scheduling software based on model predicted crop water stress. Computers and Electronics in Agriculture, 2017, 143, 208-221.	7.7	58
7	Modeling the impacts of climate change on nitrogen losses and crop yield in a subsurface drained field. Climatic Change, 2015, 129, 323-335.	3.6	56
8	Nitrateâ€Nitrogen Losses through Subsurface Drainage under Various Agricultural Land Covers. Journal of Environmental Quality, 2011, 40, 1578-1585.	2.0	53
9	Simulating impacts of climate change on cotton yield and water requirement using RZWQM2. Agricultural Water Management, 2019, 222, 231-241.	5.6	49
10	Soil water dynamics under various agricultural land covers on a subsurface drained field in north-central Iowa, USA. Agricultural Water Management, 2011, 98, 665-674.	5.6	46
11	Using bootstrap ELM and LSSVM models to estimate river ice thickness in the Mackenzie River Basin in the Northwest Territories, Canada. Journal of Hydrology, 2019, 577, 123903.	5.4	39
12	Development of the DNDC model to improve soil hydrology and incorporate mechanistic tile drainage: A comparative analysis with RZWQM2. Environmental Modelling and Software, 2020, 123, 104577.	4.5	39
13	Global sensitivity and uncertainty analysis of nitrate leaching and crop yield simulation under different water and nitrogen management practices. Computers and Electronics in Agriculture, 2017, 142, 201-210.	7.7	36
14	Evaluation of a new irrigation decision support system in improving cotton yield and water productivity in an arid climate. Agricultural Water Management, 2020, 234, 106139.	5.6	34
15	Impacts of climate change and human activities on vegetation NDVI in Chinaâ€™s Mu Us Sandy Land during 2000â€“2019. Ecological Indicators, 2022, 142, 109164.	6.3	33
16	Effects of alternate wetting and drying irrigation on yield, water and nitrogen use, and greenhouse gas emissions in rice paddy fields. Journal of Cleaner Production, 2022, 349, 131487.	9.3	32
17	Land-use impacts on profile distribution of labile and recalcitrant carbon in the Ili River Valley, northwest China. Science of the Total Environment, 2017, 586, 1038-1045.	8.0	30
18	Mitigating greenhouse gas emissions in subsurface-drained field using RZWQM2. Science of the Total Environment, 2019, 646, 377-389.	8.0	30

#	ARTICLE	IF	CITATIONS
19	Assessing climate change impacts on greenhouse gas emissions, N losses in drainage and crop production in a subsurface drained field. Science of the Total Environment, 2020, 705, 135969.	8.0	29
20	Neural network soil moisture model for irrigation scheduling. Computers and Electronics in Agriculture, 2021, 180, 105801.	7.7	29
21	RZWQM2 simulated management practices to mitigate climate change impacts on nitrogen losses and corn production. Environmental Modelling and Software, 2016, 84, 99-111.	4.5	28
22	Can nitrate contaminated groundwater be remediated by optimizing flood irrigation rate with high nitrate water in a desert oasis using the WHCNS model?. Journal of Environmental Management, 2016, 181, 16-25.	7.8	28
23	Simulating Nitrate-Nitrogen Concentration from a Subsurface Drainage System in Response to Nitrogen Application Rates Using RZWQM2. Journal of Environmental Quality, 2012, 41, 289-295.	2.0	27
24	Effects of permanent ground cover on soil moisture in jujube orchards under sloping ground: A simulation study. Agricultural Water Management, 2014, 138, 68-77.	5.6	27
25	A Model-Based Real-Time Decision Support System for Irrigation Scheduling to Improve Water Productivity. Agronomy, 2019, 9, 686.	3.0	26
26	P immobilizing materials for lake internal loading control: A review towards future developments. Critical Reviews in Environmental Science and Technology, 2019, 49, 518-552.	12.8	25
27	Simulating Dryland Water Availability and Spring Wheat Production in the Northern Great Plains. Agronomy Journal, 2013, 105, 37-50.	1.8	23
28	Optimizing Irrigation Rates for Cotton Production in an Extremely Arid Area Using RZWQM2-Simulated Water Stress. Transactions of the ASABE, 2017, 60, 2041-2052.	1.1	23
29	Modeling phosphorus losses from soils amended with cattle manures and chemical fertilizers. Science of the Total Environment, 2018, 639, 580-587.	8.0	23
30	Modeling hourly subsurface drainage using steady-state and transient methods. Journal of Hydrology, 2017, 550, 516-526.	5.4	20
31	Calibration of an agricultural-hydrological model (RZWQM2) using surrogate global optimization. Journal of Hydrology, 2017, 544, 456-466.	5.4	20
32	Assessing the Impacts of Climate Variability on Fertilizer Management Decisions for Reducing Nitrogen Losses from Corn Silage Production. Journal of Environmental Quality, 2019, 48, 1006-1015.	2.0	20
33	Assessing agricultural drought at a regional scale using LULC classification, SPI, and vegetation indices: case study in a rainfed agro-ecosystem in Central Mexico. Geomatics, Natural Hazards and Risk, 2016, 7, 1460-1488.	4.3	19
34	Towards an improved methodology for modelling climate change impacts on cropping systems in cool climates. Science of the Total Environment, 2020, 728, 138845.	8.0	19
35	Simulating crop yield, surface runoff, tile drainage and phosphorus loss in a clay loam soil of the Lake Erie region using EPIC. Agricultural Water Management, 2018, 204, 212-221.	5.6	18
36	A general non-rectangular hyperbola equation for photosynthetic light response curve of rice at various leaf ages. Scientific Reports, 2019, 9, 9909.	3.3	18

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37	Development and evaluation of a phosphorus (P) module in RZWQM2 for phosphorus management in agricultural fields. Environmental Modelling and Software, 2019, 113, 48-58.	4.5	18
38	Comparing hydrological frameworks for simulating crop biomass, water and nitrogen dynamics in a tile drained soybean-corn system: Cascade vs computational approach. Journal of Hydrology X, 2019, 2, 100015.	1.6	18
39	Effect of biochar on fate and transport of manure-borne estrogens in sandy soil. Journal of Environmental Sciences, 2018, 73, 162-176.	6.1	17
40	Simulating phosphorus loss to subsurface tile drainage flow: a review. Environmental Reviews, 2017, 25, 150-162.	4.5	15
41	Modeling of phosphorus loss from field to watershed: A review. Journal of Environmental Quality, 2020, 49, 1203-1224.	2.0	15
42	Evaluating equilibrium and nonâ€equilibrium transport of ammonium in a loam soil column. Hydrological Processes, 2018, 32, 80-92.	2.6	13
43	Modeling and Mitigating Phosphorus Losses from a Tileâ€Drained and Manured Field Using RZWQM2â€P. Journal of Environmental Quality, 2019, 48, 995-1005.	2.0	13
44	Nitrification inhibitor DMPP offsets the increase in N2O emission induced by soil salinity. Biology and Fertility of Soils, 2020, 56, 1211-1217.	4.3	13
45	Coordinate descent based agricultural model calibration and optimized input management. Computers and Electronics in Agriculture, 2020, 172, 105353.	7.7	13
46	Development and evaluation of the carbonâ€“nitrogen cycle module for the GPFARM-Range model. Computers and Electronics in Agriculture, 2012, 83, 1-10.	7.7	12
47	Response of N2O emissions to biochar amendment in a cultivated sandy loam soil during freeze-thaw cycles. Scientific Reports, 2016, 6, 35411.	3.3	12
48	Comparison of RZWQM2 and DNDC Models to Simulate Greenhouse Gas Emissions under Combined Inorganic/Organic Fertilization in a Subsurface-Drained Field. Transactions of the ASABE, 2020, 63, 771-787.	1.1	12
49	Lime application to reduce phosphorus release in different textured intact and small repacked soil columns. Journal of Soils and Sediments, 2020, 20, 2053-2066.	3.0	12
50	Modeling impacts of climate change on crop yield and phosphorus loss in a subsurface drained field of Lake Erie region, Canada. Agricultural Systems, 2021, 190, 103110.	6.1	12
51	Simulating hydrologic cycle and crop production in a subsurface drained and sub-irrigated field in Southern Quebec using RZWQM2. Computers and Electronics in Agriculture, 2018, 146, 31-42.	7.7	11
52	Effects of residue removal and tillage on greenhouse gas emissions in continuous corn systems as simulated with RZWQM2. Journal of Environmental Management, 2021, 285, 112097.	7.8	11
53	Optimizing Irrigation Strategies to Improve Water Use Efficiency of Cotton in Northwest China Using RZWQM2. Agriculture (Switzerland), 2022, 12, 383.	3.1	11
54	Phosphorus Loss Mitigation in Leachate and Surface Runoff from Clay Loam Soil Using Four Lime-Based Materials. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	10

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55	An economic analysis software for evaluating best management practices to mitigate greenhouse gas emissions from cropland. Agricultural Systems, 2021, 186, 102950.	6.1	10
56	Comparing Simulated Nitrate-Nitrogen Concentration In Subsurface Drainage Using Drainmod-N II and RZWQM2. Irrigation and Drainage, 2017, 66, 238-251.	1.7	9
57	Modeling climate change impact on streamflow as affected by snowmelt in Nicolet River Watershed, Quebec. Computers and Electronics in Agriculture, 2020, 178, 105756.	7.7	9
58	Soil Test Phosphorus and Phosphorus Availability of Swine Manures with Longâ€Term Application. Agronomy Journal, 2018, 110, 1943-1950.	1.8	8
59	Drainage N Loads Under Climate Change with Winter Rye Cover Crop in a Northern Mississippi River Basin Corn-Soybean Rotation. Sustainability, 2020, 12, 7630.	3.2	8
60	Impact of Silver Nanoparticles in Wastewater on Heavy Metal Transport in Soil and Uptake by Radish Plants. Water, Air, and Soil Pollution, 2021, 232, 1.	2.4	8
61	Differential physio-biochemical and yield responses of Camelina sativa L. under varying irrigation water regimes in semi-arid climatic conditions. PLoS ONE, 2020, 15, e0242441.	2.5	8
62	Iron (Fe) metal-organic frameworks: A new class of superior and sustainable phosphate adsorbents. Journal of Environmental Chemical Engineering, 2021, 9, 106849.	6.7	8
63	Managing Fertigation Frequency and Level to Mitigate N2O and CO2 Emissions and NH3 Volatilization from Subsurface Drip-Fertigated Field in a Greenhouse. Agronomy, 2022, 12, 1414.	3.0	8
64	Modeling Phosphorus Losses through Surface Runoff and Subsurface Drainage Using ICECREAM. Journal of Environmental Quality, 2018, 47, 203-211.	2.0	7
65	Lime Amendments to Enhance Soil Phosphorus Adsorption Capacity and to Reduce Phosphate Desorption. Water, Air, and Soil Pollution, 2021, 232, 1.	2.4	7
66	Soil carbon and nitrous oxide dynamics in corn (Zea mays L.) production under different nitrogen, tillage and residue management practices. Field Crops Research, 2022, 277, 108421.	5.1	7
67	Simulating Carbon Dioxide Effects on Range Plant Growth and Water Use with GPFARM-Range Model. Rangeland Ecology and Management, 2015, 68, 423-431.	2.3	5
68	Effect of biochar on the fate and transport of manure-borne progesterone in soil. Ecological Engineering, 2016, 97, 231-241.	3.6	5
69	Soil degassing during watering: An overlooked soil N2O emission process. Environmental Pollution, 2018, 242, 257-263.	7.5	5
70	Yield Comparisons between Cotton Variety Xin Nong Mian 1 and Its Transgenic ScALDH21 Lines under Different Water Deficiencies in a Desert-Oasis Ecotone. Agronomy, 2021, 11, 1019.	3.0	5
71	Evaluating the Neural Network Ensemble Method in Predicting Soil Moisture in Agricultural Fields. Agronomy, 2021, 11, 1521.	3.0	5
72	Automatic variable rate fertilisation system for improved fertilisation uniformity in paddy fields. Biosystems Engineering, 2022, 219, 56-67.	4.3	5

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73	Changes in Canada's Phosphorus Cycle 1961â€“2018: Surpluses and Deficits. Global Biogeochemical Cycles, 2022, 36, .	4.9	5
74	Enhanced N2O Production Induced by Soil Salinity at a Specific Range. International Journal of Environmental Research and Public Health, 2020, 17, 5169.	2.6	4
75	Evaluating RZ-SHAW model for simulating surface runoff and subsurface tile drainage under regular and controlled drainage with subirrigation in southern Ontario. Agricultural Water Management, 2020, 237, 106179.	5.6	4
76	Responses of cotton photosynthesis and growth to a new irrigation control method under deficit irrigation. Field Crops Research, 2022, 275, 108373.	5.1	4
77	RZWQM2 Simulated Drip Fertigation Management to Improve Water and Nitrogen Use Efficiency of Maize in a Solar Greenhouse. Agriculture (Switzerland), 2022, 12, 672.	3.1	4
78	Modeling tillage and manure application on soil phosphorous loss under climate change. Nutrient Cycling in Agroecosystems, 2022, 122, 219-239.	2.2	3
79	Long-term trends of climate change and its impact on crop growing season on Montreal Island. Journal of Water and Climate Change, 2017, 8, 78-88.	2.9	2
80	Effect of meteorological data quality control and data adjustment on the reference evapotranspiration: a case study in Jafariye, Iran. Theoretical and Applied Climatology, 2020, 141, 331-342.	2.8	2
81	Agricultural system modeling: current achievements, innovations, and future roadmap. Arabian Journal of Geosciences, 2022, 15, 1.	1.3	2
82	Poverty reduction through water interventions: A review of approaches in subâ€Saharan Africa and South Asia. Irrigation and Drainage, 2022, 71, 539-558.	1.7	2
83	Evaluating the performance of DRAINMOD using soil hydraulic parameters derived by various methods. Agricultural Water Management, 2015, 155, 48-52.	5.6	1
84	<i>Water stress based deficit irrigation scheduling using RZWQM2 model for maize in Colorado</i>. , 2017, , .		1
85	Comment on â€œOxygen Regulates Nitrous Oxide Production Directly in Agricultural Soilsâ€• Environmental Science & Technology, 2020, 54, 2558-2559.	10.0	1
86	<i>Sensor data driven parameter estimation for Agricultural Model using Coordinate Descent </i>. , 2018, , .		0
87	Modelling Water Quality in Subsurface Drained Cropland Using the Root Zone Water Quality Model (RZWQM). Advances in Agricultural Systems Modeling, 2019, , 237-269.	0.3	0
88	<i>Towards improving the DNDC model for simulating soil hydrology and tile drainage</i>. , 2019, , .		0
89	<i>Economic analysis software for evaluating best management practices to mitigate greenhouse gas emissions from cropland</i>. , 2020, , .		0