

Fucang Zhang

List of Publications by Year in descending order

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103
papers

5,189
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94433

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104
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docs citations

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times ranked

3048
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Growth, grain yield, water and nitrogen use efficiency of rainfed maize in response to straw mulching and urea blended with slow-release nitrogen fertilizer: A two-year field study. <i>Archives of Agronomy and Soil Science</i> , 2022, 68, 1554-1567. | 2.6 | 6 |
| 2 | Responses of yield, quality and water-nitrogen use efficiency of greenhouse sweet pepper to different drip fertigation regimes in Northwest China. <i>Agricultural Water Management</i> , 2022, 260, 107279. | 5.6 | 28 |
| 3 | Combined effects of ridge-furrow ratio and urea type on grain yield and water productivity of rainfed winter wheat on the Loess Plateau of China. <i>Agricultural Water Management</i> , 2022, 261, 107340. | 5.6 | 13 |
| 4 | Source-sink relationship and yield stability of two maize cultivars in response to water and fertilizer inputs in northwest China. <i>Agricultural Water Management</i> , 2022, 262, 107332. | 5.6 | 9 |
| 5 | Determining water use and crop coefficients of drip-irrigated cotton in south Xinjiang of China under various irrigation amounts. <i>Industrial Crops and Products</i> , 2022, 176, 114376. | 5.2 | 21 |
| 6 | Coupling effects of irrigation amount and nitrogen fertilizer type on grain yield, water productivity and nitrogen use efficiency of drip-irrigated maize. <i>Agricultural Water Management</i> , 2022, 261, 107389. | 5.6 | 21 |
| 7 | Quantifying grain yield, protein, nutrient uptake and utilization of winter wheat under various drip fertigation regimes. <i>Agricultural Water Management</i> , 2022, 261, 107380. | 5.6 | 8 |
| 8 | Combined effects of urea type and placement depth on grain yield, water productivity and nitrogen use efficiency of rain-fed spring maize in northern China. <i>Agricultural Water Management</i> , 2022, 262, 107442. | 5.6 | 15 |
| 9 | Maize leaf functional responses to blending urea and slow-release nitrogen fertilizer under various drip irrigation regimes. <i>Agricultural Water Management</i> , 2022, 262, 107396. | 5.6 | 16 |
| 10 | Combined effects of irrigation level and fertilization practice on yield, economic benefit and water-nitrogen use efficiency of drip-irrigated greenhouse tomato. <i>Agricultural Water Management</i> , 2022, 262, 107401. | 5.6 | 31 |
| 11 | Optimizing irrigation amount and potassium rate to simultaneously improve tuber yield, water productivity and plant potassium accumulation of drip-fertigated potato in northwest China. <i>Agricultural Water Management</i> , 2022, 264, 107493. | 5.6 | 28 |
| 12 | Interactive effects of plant density and nitrogen rate on grain yield, economic benefit, water productivity and nitrogen use efficiency of drip-fertigated maize in northwest China. <i>Agricultural Water Management</i> , 2022, 263, 107453. | 5.6 | 16 |
| 13 | Synchronizing nitrogen supply and uptake by rainfed maize using mixed urea and slow-release nitrogen fertilizer. <i>Nutrient Cycling in Agroecosystems</i> , 2022, 122, 157-171. | 2.2 | 4 |
| 14 | Yield and water productivity of crops, vegetables and fruits under subsurface drip irrigation: A global meta-analysis. <i>Agricultural Water Management</i> , 2022, 269, 107645. | 5.6 | 31 |
| 15 | Ridge-furrow plastic film mulching enhances grain yield and yield stability of rainfed maize by improving resources capture and use efficiency in a semi-humid drought-prone region. <i>Agricultural Water Management</i> , 2022, 269, 107654. | 5.6 | 21 |
| 16 | Effects of plant density, nitrogen rate and supplemental irrigation on photosynthesis, root growth, seed yield and water-nitrogen use efficiency of soybean under ridge-furrow plastic mulching. <i>Agricultural Water Management</i> , 2022, 268, 107688. | 5.6 | 34 |
| 17 | Effects of Soil Water Regulation on the Cotton Yield, Fiber Quality and Soil Salt Accumulation under Mulched Drip Irrigation in Southern Xinjiang, China. <i>Agronomy</i> , 2022, 12, 1246. | 3.0 | 5 |
| 18 | Quantifying nutrient stoichiometry and radiation use efficiency of two maize cultivars under various water and fertilizer management practices in northwest China. <i>Agricultural Water Management</i> , 2022, 271, 107772. | 5.6 | 7 |

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|----|---|-----|-----------|
| 19 | Quantifying source-sink relationships of drip-fertigated potato under various water and potassium supplies. <i>Field Crops Research</i> , 2022, 285, 108604. | 5.1 | 8 |
| 20 | Optimization of drip irrigation and fertilization regimes to enhance winter wheat grain yield by improving post-anthesis dry matter accumulation and translocation in northwest China. <i>Agricultural Water Management</i> , 2022, 271, 107782. | 5.6 | 16 |
| 21 | Spatial distribution and variability of soil salinity in film-mulched cotton fields under various drip irrigation regimes in southern Xinjiang of China. <i>Soil and Tillage Research</i> , 2022, 223, 105470. | 5.6 | 15 |
| 22 | Effects of plastic mulch and nitrogen fertilizer on the soil microbial community, enzymatic activity and yield performance in a dryland maize cropping system. <i>European Journal of Soil Science</i> , 2021, 72, 400-412. | 3.9 | 67 |
| 23 | Nitrogen application affects grain yield by altering the soil moisture and nitrate-N of maize/wheat cropping system in dryland areas of northwest China*. <i>Irrigation and Drainage</i> , 2021, 70, 16-26. | 1.7 | 7 |
| 24 | Determining irrigation amount and fertilization rate to simultaneously optimize grain yield, grain nitrogen accumulation and economic benefit of drip-fertigated spring maize in northwest China. <i>Agricultural Water Management</i> , 2021, 243, 106440. | 5.6 | 74 |
| 25 | Effects of farming practices on yield and crop water productivity of wheat, maize and potato in China: A meta-analysis. <i>Agricultural Water Management</i> , 2021, 243, 106444. | 5.6 | 30 |
| 26 | Evapotranspiration partitioning and water productivity of rainfed maize under contrasting mulching conditions in Northwest China. <i>Agricultural Water Management</i> , 2021, 243, 106473. | 5.6 | 49 |
| 27 | Estimation of daily maize transpiration using support vector machines, extreme gradient boosting, artificial and deep neural networks models. <i>Agricultural Water Management</i> , 2021, 245, 106547. | 5.6 | 100 |
| 28 | Optimization of water and fertilizer management improves yield, water, nitrogen, phosphorus and potassium uptake and use efficiency of cotton under drip fertigation. <i>Agricultural Water Management</i> , 2021, 245, 106662. | 5.6 | 38 |
| 29 | Responses of growth, fruit yield, quality and water productivity of greenhouse tomato to deficit drip irrigation. <i>Scientia Horticulturae</i> , 2021, 275, 109710. | 3.6 | 53 |
| 30 | Effects of Soil Water Deficit at Different Growth Stages on Maize Growth, Yield, and Water Use Efficiency under Alternate Partial Root-Zone Irrigation. <i>Water (Switzerland)</i> , 2021, 13, 148. | 2.7 | 32 |
| 31 | Nitrogen fertilizer management effects on soil nitrate leaching, grain yield and economic benefit of summer maize in Northwest China. <i>Agricultural Water Management</i> , 2021, 247, 106739. | 5.6 | 72 |
| 32 | Estimation of rainfed maize transpiration under various mulching methods using modified Jarvis-Stewart model and hybrid support vector machine model with whale optimization algorithm. <i>Agricultural Water Management</i> , 2021, 249, 106799. | 5.6 | 25 |
| 33 | Interactive effects of mulching practice and nitrogen rate on grain yield, water productivity, fertilizer use efficiency and greenhouse gas emissions of rainfed summer maize in northwest China. <i>Agricultural Water Management</i> , 2021, 248, 106778. | 5.6 | 65 |
| 34 | A global meta-analysis of yield and water use efficiency of crops, vegetables and fruits under full, deficit and alternate partial root-zone irrigation. <i>Agricultural Water Management</i> , 2021, 248, 106771. | 5.6 | 35 |
| 35 | Wheat straw mulching with nitrification inhibitor application improves grain yield and economic benefit while mitigating gaseous emissions from a dryland maize field in northwest China. <i>Field Crops Research</i> , 2021, 265, 108125. | 5.1 | 40 |
| 36 | Optimizing biochar application to improve soil physical and hydraulic properties in saline-alkali soils. <i>Science of the Total Environment</i> , 2021, 771, 144802. | 8.0 | 76 |

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|----|--|-----|-----------|
| 37 | Effects of nitrogen type on rainfed maize nutrient uptake and grain yield. <i>Agronomy Journal</i> , 2021, 113, 5454-5471. | 1.8 | 7 |
| 38 | Grain yield and greenhouse gas emissions from maize and wheat fields under plastic film and straw mulching: A meta-analysis. <i>Field Crops Research</i> , 2021, 270, 108210. | 5.1 | 38 |
| 39 | Optimization of irrigation and nitrogen fertilization increases ash salt accumulation and ions absorption of drip-fertigated sugar beet in saline-alkali soils. <i>Field Crops Research</i> , 2021, 271, 108247. | 5.1 | 13 |
| 40 | Salt Leaching with Brackish Water during Growing Season Improves Cotton Growth and Productivity, Water Use Efficiency and Soil Sustainability in Southern Xinjiang. <i>Water (Switzerland)</i> , 2021, 13, 2602. | 2.7 | 9 |
| 41 | Water productivity and seed cotton yield in response to deficit irrigation: A global meta-analysis. <i>Agricultural Water Management</i> , 2021, 255, 107027. | 5.6 | 30 |
| 42 | Response of yield, yield components and water-nitrogen use efficiency of winter wheat to different drip fertigation regimes in Northwest China. <i>Agricultural Water Management</i> , 2021, 255, 107034. | 5.6 | 23 |
| 43 | Blending urea and slow-release nitrogen fertilizer increases dryland maize yield and nitrogen use efficiency while mitigating ammonia volatilization. <i>Science of the Total Environment</i> , 2021, 790, 148058. | 8.0 | 54 |
| 44 | Medium-range forecasting of daily reference evapotranspiration across China using numerical weather prediction outputs downscaled by extreme gradient boosting. <i>Journal of Hydrology</i> , 2021, 601, 126664. | 5.4 | 26 |
| 45 | Evaluation of cotton N nutrition status based on critical N dilution curve, N uptake and residual under different drip fertigation regimes in Southern Xinjiang of China. <i>Agricultural Water Management</i> , 2021, 256, 107134. | 5.6 | 24 |
| 46 | Optimal irrigation amount and nitrogen rate improved seed cotton yield while maintaining fiber quality of drip-fertigated cotton in northwest China. <i>Industrial Crops and Products</i> , 2021, 170, 113710. | 5.2 | 29 |
| 47 | Optimization of irrigation amount and fertilization rate of drip-fertigated potato based on Analytic Hierarchy Process and Fuzzy Comprehensive Evaluation methods. <i>Agricultural Water Management</i> , 2021, 256, 107130. | 5.6 | 34 |
| 48 | Crop yield and water productivity under salty water irrigation: A global meta-analysis. <i>Agricultural Water Management</i> , 2021, 256, 107105. | 5.6 | 35 |
| 49 | Optimizing irrigation amount and fertilization rate of drip-fertigated spring maize in northwest China based on multi-level fuzzy comprehensive evaluation model. <i>Agricultural Water Management</i> , 2021, 257, 107157. | 5.6 | 24 |
| 50 | Sustainable high grain yield, nitrogen use efficiency and water productivity can be achieved in wheat-maize rotation system by changing irrigation and fertilization strategy. <i>Agricultural Water Management</i> , 2021, 258, 107177. | 5.6 | 9 |
| 51 | Effects of nitrogen supply on tomato yield, water use efficiency and fruit quality: A global meta-analysis. <i>Scientia Horticulturae</i> , 2021, 290, 110553. | 3.6 | 33 |
| 52 | Splitting and Length of Years for Improving Tree-Based Models to Predict Reference Crop Evapotranspiration in the Humid Regions of China. <i>Water (Switzerland)</i> , 2021, 13, 3478. | 2.7 | 5 |
| 53 | Hybrid support vector machines with heuristic algorithms for prediction of daily diffuse solar radiation in air-polluted regions. <i>Renewable Energy</i> , 2020, 145, 2034-2045. | 8.9 | 129 |
| 54 | Optimization of drip irrigation and fertilization regimes for high grain yield, crop water productivity and economic benefits of spring maize in Northwest China. <i>Agricultural Water Management</i> , 2020, 230, 105986. | 5.6 | 102 |

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|----|--|-----|-----------|
| 55 | Predicting daily diffuse horizontal solar radiation in various climatic regions of China using support vector machine and tree-based soft computing models with local and extrinsic climatic data. <i>Journal of Cleaner Production</i> , 2020, 248, 119264. | 9.3 | 57 |
| 56 | Modification of CSM-CROPGRO-Cotton model for simulating cotton growth and yield under various deficit irrigation strategies. <i>Computers and Electronics in Agriculture</i> , 2020, 179, 105843. | 7.7 | 13 |
| 57 | Deep placement of mixed controlled-release and conventional urea improves grain yield, nitrogen use efficiency of rainfed spring maize. <i>Archives of Agronomy and Soil Science</i> , 2020, , 1-11. | 2.6 | 8 |
| 58 | Ridge-furrow plastic mulching with a suitable planting density enhances rainwater productivity, grain yield and economic benefit of rainfed maize. <i>Journal of Arid Land</i> , 2020, 12, 181-198. | 2.3 | 32 |
| 59 | Combined application of soluble organic and chemical fertilizers in drip fertigation improves nitrogen use efficiency and enhances tomato yield and quality. <i>Journal of the Science of Food and Agriculture</i> , 2020, 100, 5422-5433. | 3.5 | 12 |
| 60 | Response Mechanism of Cotton Growth to Water and Nutrients under Drip Irrigation with Plastic Mulch in Southern Xinjiang. <i>Journal of Sensors</i> , 2020, 2020, 1-16. | 1.1 | 8 |
| 61 | Dynamic change and accumulation of grain macronutrient (N, P and K) concentrations in winter wheat under different drip fertigation regimes. <i>Field Crops Research</i> , 2020, 250, 107767. | 5.1 | 40 |
| 62 | A sustainable strategy of managing irrigation based on water productivity and residual soil nitrate in a no-tillage maize system. <i>Journal of Cleaner Production</i> , 2020, 262, 121279. | 9.3 | 29 |
| 63 | Interactive Effects of Water and Fertilizer on Yield, Soil Water and Nitrate Dynamics of Young Apple Tree in Semiarid Region of Northwest China. <i>Agronomy</i> , 2019, 9, 360. | 3.0 | 13 |
| 64 | Daily reference evapotranspiration prediction based on hybridized extreme learning machine model with bio-inspired optimization algorithms: Application in contrasting climates of China. <i>Journal of Hydrology</i> , 2019, 577, 123960. | 5.4 | 99 |
| 65 | Spatiotemporal trends of temperature and precipitation extremes across contrasting climatic zones of China during 1956–2015. <i>Theoretical and Applied Climatology</i> , 2019, 138, 1877-1897. | 2.8 | 22 |
| 66 | Light Gradient Boosting Machine: An efficient soft computing model for estimating daily reference evapotranspiration with local and external meteorological data. <i>Agricultural Water Management</i> , 2019, 225, 105758. | 5.6 | 160 |
| 67 | Potential of kernel-based nonlinear extension of Arps decline model and gradient boosting with categorical features support for predicting daily global solar radiation in humid regions. <i>Energy Conversion and Management</i> , 2019, 183, 280-295. | 9.2 | 95 |
| 68 | Throughfall and stemflow heterogeneity under the maize canopy and its effect on soil water distribution at the row scale. <i>Science of the Total Environment</i> , 2019, 660, 1367-1382. | 8.0 | 44 |
| 69 | Multi-objective optimization of water and fertilizer management for potato production in sandy areas of northern China based on TOPSIS. <i>Field Crops Research</i> , 2019, 240, 55-68. | 5.1 | 85 |
| 70 | Simulation of cotton growth and soil water content under film-mulched drip irrigation using modified CSM-CROPGRO-cotton model. <i>Agricultural Water Management</i> , 2019, 218, 124-138. | 5.6 | 52 |
| 71 | Effect of Irrigation Level and Irrigation Frequency on the Growth of Mini Chinese Cabbage and Residual Soil Nitrate Nitrogen. <i>Sustainability</i> , 2019, 11, 111. | 3.2 | 13 |
| 72 | Ridge-furrow plastic mulching with a suitable planting density enhances rainwater productivity, grain yield and economic benefit of rainfed maize. <i>Journal of Arid Land</i> , 2019, , 1. | 2.3 | 2 |

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|----|--|------|-----------|
| 73 | Optimal drip fertigation management improves yield, quality, water and nitrogen use efficiency of greenhouse cucumber. <i>Scientia Horticulturae</i> , 2019, 243, 357-366. | 3.6 | 73 |
| 74 | Effects of water and fertilizer management on grain filling characteristics, grain weight and productivity of drip-fertigated winter wheat. <i>Agricultural Water Management</i> , 2019, 213, 983-995. | 5.6 | 79 |
| 75 | Empirical and machine learning models for predicting daily global solar radiation from sunshine duration: A review and case study in China. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 100, 186-212. | 16.4 | 207 |
| 76 | Maize yield, rainwater and nitrogen use efficiency as affected by maize genotypes and nitrogen rates on the Loess Plateau of China. <i>Agricultural Water Management</i> , 2019, 213, 996-1003. | 5.6 | 40 |
| 77 | The Effects of Mulch and Nitrogen Fertilizer on the Soil Environment of Crop Plants. <i>Advances in Agronomy</i> , 2019, , 121-173. | 5.2 | 168 |
| 78 | The root nitrogen uptake response to partial nitrogen stress is related to previous nutritional status. <i>Plant Growth Regulation</i> , 2019, 87, 55-67. | 3.4 | 7 |
| 79 | Evaluation and development of empirical models for estimating daily and monthly mean daily diffuse horizontal solar radiation for different climatic regions of China. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 105, 168-186. | 16.4 | 119 |
| 80 | Comparison of Support Vector Machine and Extreme Gradient Boosting for predicting daily global solar radiation using temperature and precipitation in humid subtropical climates: A case study in China. <i>Energy Conversion and Management</i> , 2018, 164, 102-111. | 9.2 | 396 |
| 81 | Coupling effects of water and fertilizer on yield, water and fertilizer use efficiency of drip-fertigated cotton in northern Xinjiang, China. <i>Field Crops Research</i> , 2018, 219, 169-179. | 5.1 | 157 |
| 82 | Evaluation and development of temperature-based empirical models for estimating daily global solar radiation in humid regions. <i>Energy</i> , 2018, 144, 903-914. | 8.8 | 115 |
| 83 | Rainfall partitioning into throughfall, stemflow and interception loss by maize canopy on the semi-arid Loess Plateau of China. <i>Agricultural Water Management</i> , 2018, 195, 25-36. | 5.6 | 91 |
| 84 | New combined models for estimating daily global solar radiation based on sunshine duration in humid regions: A case study in South China. <i>Energy Conversion and Management</i> , 2018, 156, 618-625. | 9.2 | 116 |
| 85 | Daily pan evaporation modeling from local and cross-station data using three tree-based machine learning models. <i>Journal of Hydrology</i> , 2018, 566, 668-684. | 5.4 | 86 |
| 86 | Mulching mode and planting density affect canopy interception loss of rainfall and water use efficiency of dryland maize on the Loess Plateau of China. <i>Journal of Arid Land</i> , 2018, 10, 794-808. | 2.3 | 59 |
| 87 | Evaluation of SVM, ELM and four tree-based ensemble models for predicting daily reference evapotranspiration using limited meteorological data in different climates of China. <i>Agricultural and Forest Meteorology</i> , 2018, 263, 225-241. | 4.8 | 327 |
| 88 | Evaluating the effect of air pollution on global and diffuse solar radiation prediction using support vector machine modeling based on sunshine duration and air temperature. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 94, 732-747. | 16.4 | 83 |
| 89 | Optimization of Controlled Water and Nitrogen Fertigation on Greenhouse Culture of <i>Capsicum annum</i> . <i>Scientific World Journal</i> , The, 2018, 2018, 1-11. | 2.1 | 4 |
| 90 | Evaluation of Drip Fertigation Uniformity Affected by Injector Type, Pressure Difference and Lateral Layout. <i>Irrigation and Drainage</i> , 2017, 66, 520-529. | 1.7 | 33 |

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|-----|---|-----|-----------|
| 91 | Climate change effects on reference crop evapotranspiration across different climatic zones of China during 1956–2015. <i>Journal of Hydrology</i> , 2016, 542, 923-937. | 5.4 | 143 |
| 92 | Severity and duration of osmotic stress on partial root system: effects on root hydraulic conductance and root growth. <i>Plant Growth Regulation</i> , 2016, 79, 177-186. | 3.4 | 7 |
| 93 | Hydraulic conductivity and water-use efficiency of young pear tree under alternate drip irrigation. <i>Agricultural Water Management</i> , 2013, 119, 80-88. | 5.6 | 28 |
| 94 | Interactive effects of irrigation frequency and nitrogen addition on growth and water use of <i>Jatropha curcas</i> . <i>Biomass and Bioenergy</i> , 2013, 59, 234-242. | 5.7 | 11 |
| 95 | Effect of different drip irrigation methods and fertilization on growth, physiology and water use of young apple tree. <i>Scientia Horticulturae</i> , 2011, 129, 119-126. | 3.6 | 33 |
| 96 | Water-use efficiency and physiological responses of maize under partial root-zone irrigation. <i>Agricultural Water Management</i> , 2010, 97, 1156-1164. | 5.6 | 52 |
| 97 | Effects of alternate partial root-zone irrigation on soil microorganism and maize growth. <i>Plant and Soil</i> , 2008, 302, 45-52. | 3.7 | 49 |
| 98 | Alternate Application of Osmotic and Nitrogen Stresses to Partial Root System: Effects on Root Growth and Nitrogen Use Efficiency. <i>Journal of Plant Nutrition</i> , 2006, 29, 2079-2092. | 1.9 | 11 |
| 99 | Nitrogen Fertilization on Uptake of Soil Inorganic Phosphorus Fractions in the Wheat Root Zone. <i>Soil Science Society of America Journal</i> , 2004, 68, 1890-1895. | 2.2 | 26 |
| 100 | Estimating Temperature Effects on Water Flow in Variably Saturated Soils using Activation Energy. <i>Soil Science Society of America Journal</i> , 2003, 67, 1327-1333. | 2.2 | 17 |
| 101 | Benefits of CO ₂ enrichment on crop plants are modified by soil water status. <i>Plant and Soil</i> , 2002, 238, 69-77. | 3.7 | 68 |
| 102 | A simulation model of water dynamics in winter wheat field and its application in a semiarid region. <i>Agricultural Water Management</i> , 2001, 49, 115-129. | 5.6 | 35 |
| 103 | Effects of shallow water table on capillary contribution, evapotranspiration, and crop coefficient of maize and winter wheat in a semi-arid region. <i>Australian Journal of Agricultural Research</i> , 2001, 52, 317. | 1.5 | 25 |