

# Yijian Zeng

## List of Publications by Year in descending order

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Version: 2024-02-01

81  
papers

2,717  
citations

218677

26  
h-index

189892

50  
g-index

107  
all docs

107  
docs citations

107  
times ranked

2743  
citing authors

#	ARTICLE	IF	CITATIONS
1	Validation of SMAP surface soil moisture products with core validation sites. Remote Sensing of Environment, 2017, 191, 215-231.	11.0	503
2	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. Journal of Hydrometeorology, 2017, 18, 2621-2645.	1.9	196
3	The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804.	4.9	116
4	Evaluation of ECMWF's soil moisture analyses using observations on the Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5304-5318.	3.3	114
5	Development and analysis of the Soil Water Infiltration Global database. Earth System Science Data, 2018, 10, 1237-1263.	9.9	85
6	First Assessment of Sentinel-1A Data for Surface Soil Moisture Estimations Using a Coupled Water Cloud Model and Advanced Integral Equation Model over the Tibetan Plateau. Remote Sensing, 2017, 9, 714.	4.0	77
7	A simulation analysis of the advective effect on evaporation using a two-phase heat and mass flow model. Water Resources Research, 2011, 47, .	4.2	73
8	Blending Satellite Observed, Model Simulated, and in Situ Measured Soil Moisture over Tibetan Plateau. Remote Sensing, 2016, 8, 268.	4.0	70
9	Numerical analysis of air-water-heat flow in unsaturated soil: Is it necessary to consider airflow in land surface models?. Journal of Geophysical Research, 2011, 116, .	3.3	68
10	Diurnal soil water dynamics in the shallow vadose zone (field site of China University of Geosciences,) Tj ETQq0 0 0,rgBT /Overlock 10 Tf	1.2	67
11	Validation of Soil Moisture Data Products From the NASA SMAP Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 364-392.	4.9	62
12	Estimation of human-induced changes in terrestrial water storage through integration of <sc>GRACE</sc> satellite detection and hydrological modeling: A case study of the <sc>Y</sc> <sc>R</sc> river basin. Water Resources Research, 2015, 51, 8494-8516.	4.2	60
13	Liquid Vapor Air Flow in the Frozen Soil. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7393-7415.	3.3	57
14	Analysis of soil hydraulic and thermal properties for land surface modeling over the Tibetan Plateau. Earth System Science Data, 2018, 10, 1031-1061.	9.9	52
15	Status of accuracy in remotely sensed and in-situ agricultural water productivity estimates: A review. Remote Sensing of Environment, 2019, 234, 111413.	11.0	49
16	Diurnal pattern of the drying front in desert and its application for determining the effective infiltration. Hydrology and Earth System Sciences, 2009, 13, 703-714.	4.9	45
17	The effect of different evapotranspiration methods on portraying soil water dynamics and ET partitioning in a semi-arid environment in Northwest China. Hydrology and Earth System Sciences, 2016, 20, 975-990.	4.9	43
18	Evaluation of <sc>WaPOR V2</sc> evapotranspiration products across Africa. Hydrological Processes, 2020, 34, 3200-3221.	2.6	41

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19	Estimation of Penetration Depth from Soil Effective Temperature in Microwave Radiometry. Remote Sensing, 2018, 10, 519.	4.0	38
20	Status of the Tibetan Plateau observatory (Tibet-Obs) and a 10-year (2009–2019) surface soil moisture dataset. Earth System Science Data, 2021, 13, 3075-3102.	9.9	38
21	L-Band Microwave Emission of Soil Freeze–Thaw Process in the Third Pole Environment. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 5324-5338.	6.3	36
22	Quantifying Long-Term Land Surface and Root Zone Soil Moisture over Tibetan Plateau. Remote Sensing, 2020, 12, 509.	4.0	36
23	Analysis of current validation practices in Europe for space-based climate data records of essential climate variables. International Journal of Applied Earth Observation and Geoinformation, 2015, 42, 150-161.	2.8	35
24	An improved two-layer algorithm for estimating effective soil temperature in microwave radiometry using in situ temperature and soil moisture measurements. Remote Sensing of Environment, 2014, 152, 356-363.	11.0	34
25	Analysis of plant root–induced preferential flow and pore-water pressure variation by a dual-permeability model. Canadian Geotechnical Journal, 2017, 54, 1537-1552.	2.8	34
26	Temperature signals in tree-ring oxygen isotope series from the northern slope of the Himalaya. Earth and Planetary Science Letters, 2019, 506, 455-465.	4.4	30
27	Understanding the mass, momentum, and energy transfer in the frozen soil with three levels of model complexities. Hydrology and Earth System Sciences, 2020, 24, 4813-4830.	4.9	30
28	Effects of anthropogenic revegetation on the water and carbon cycles of a desert steppe ecosystem. Agricultural and Forest Meteorology, 2021, 300, 108339.	4.8	29
29	An Overview of European Efforts in Generating Climate Data Records. Bulletin of the American Meteorological Society, 2018, 99, 349-359.	3.3	26
30	Towards a Traceable Climate Service: Assessment of Quality and Usability of Essential Climate Variables. Remote Sensing, 2019, 11, 1186.	4.0	26
31	Development of the Hydrus-1D freezing module and its application in simulating the coupled movement of water, vapor, and heat. Journal of Hydrology, 2021, 598, 126250.	5.4	26
32	Comparison of single- and dual-permeability models in simulating the unsaturated hydro-mechanical behavior in a rainfall-triggered landslide. Landslides, 2018, 15, 2449-2464.	5.4	25
33	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. Reviews of Geophysics, 2021, 59, e2020RG000715.	23.0	24
34	Detecting the effect of urban land use on extreme precipitation in the Netherlands. Weather and Climate Extremes, 2017, 17, 36-46.	4.1	23
35	Parameter Optimization of a Discrete Scattering Model by Integration of Global Sensitivity Analysis Using SMAP Active and Passive Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 1084-1099.	6.3	22
36	Carbon use efficiency of terrestrial ecosystems in desert/grassland biome transition zone: A case in Ningxia province, northwest China. Ecological Indicators, 2021, 120, 106971.	6.3	22

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37	Study of Snow Dynamics at Subgrid Scale in Semiarid Environments Combining Terrestrial Photography and Data Assimilation Techniques. <i>Journal of Hydrometeorology</i> , 2015, 16, 563-578.	1.9	21
38	Urban impacts on air temperature and precipitation over The Netherlands. <i>Climate Research</i> , 2018, 75, 95-109.	1.1	21
39	Interaction of soil water and groundwater during the freezing–thawing cycle: field observations and numerical modeling. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 4243-4257.	4.9	20
40	Multiyear in-situ L-band microwave radiometry of land surface processes on the Tibetan Plateau. <i>Scientific Data</i> , 2020, 7, 317.	5.3	18
41	Assimilation of Cosmic-Ray Neutron Counts for the Estimation of Soil Ice Content on the Eastern Tibetan Plateau. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031529.	3.3	17
42	Response of Extreme Precipitation to Urbanization over the Netherlands. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 645-661.	1.5	16
43	Mapping Water Infiltration Rate Using Ground and UAV Hyperspectral Data: A Case Study of Alento, Italy. <i>Remote Sensing</i> , 2021, 13, 2606.	4.0	15
44	In Situ Observation-Constrained Global Surface Soil Moisture Using Random Forest Model. <i>Remote Sensing</i> , 2021, 13, 4893.	4.0	15
45	Attributing seasonal variation of daily extreme precipitation events across The Netherlands. <i>Weather and Climate Extremes</i> , 2016, 14, 56-66.	4.1	14
46	Influence of Spatial Resolution on Remote Sensing-Based Irrigation Performance Assessment Using WaPOR Data. <i>Remote Sensing</i> , 2020, 12, 2949.	4.0	14
47	Integrated modeling of canopy photosynthesis, fluorescence, and the transfer of energy, mass, and momentum in the soil–plant–atmosphere continuum (STEMMUS–SCOPE v1.0.0). <i>Geoscientific Model Development</i> , 2021, 14, 1379-1407.	3.6	14
48	A Closed-Form Expression of Soil Temperature Sensing Depth at L-Band. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019, 57, 4889-4897.	6.3	13
49	The role of vadose zone physics in the ecohydrological response of a Tibetan meadow to freeze–thaw cycles. <i>Cryosphere</i> , 2020, 14, 4653-4673.	3.9	13
50	New evidence for the links between the local water cycle and the underground wet sand layer of a mega-dune in the Badain Jaran Desert, China. <i>Journal of Arid Land</i> , 2014, 6, 371.	2.3	12
51	A reappraisal of global soil effective temperature schemes. <i>Remote Sensing of Environment</i> , 2016, 183, 144-153.	11.0	12
52	Climate-driven change of nitrogen retention–attenuation near irrigated fields: multi-model projections for Central Asia. <i>Environmental Earth Sciences</i> , 2017, 76, 1.	2.7	12
53	An Integrative Information Aqueduct to Close the Gaps between Satellite Observation of Water Cycle and Local Sustainable Management of Water Resources. <i>Water (Switzerland)</i> , 2020, 12, 1495.	2.7	12
54	Seasonal variation and controlling factors of evapotranspiration over dry semi-humid cropland in Guanzhong Plain, China. <i>Agricultural Water Management</i> , 2022, 259, 107242.	5.6	12

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55	The impact of non-isothermal soil moisture transport on evaporation fluxes in a maize cropland. <i>Journal of Hydrology</i> , 2018, 561, 833-847.	5.4	11
56	A Geostatistical Approach to Map Near-Surface Soil Moisture Through Hyperspatial Resolution Thermal Inertia. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021, 59, 5352-5369.	6.3	11
57	Reply to comment by Binayak P. Mohanty and Zhenlei Yang on "A simulation analysis of the advective effect on evaporation using a two-phase heat and mass flow model". <i>Water Resources Research</i> , 2013, 49, 7836-7840.	4.2	10
58	Deep convolutional neural networks for estimating maize above-ground biomass using multi-source UAV images: a comparison with traditional machine learning algorithms. <i>Precision Agriculture</i> , 2023, 24, 92-113.	6.0	10
59	Determination of the Optimal Mounting Depth for Calculating Effective Soil Temperature at L-Band: Maqu Case. <i>Remote Sensing</i> , 2016, 8, 476.	4.0	9
60	Simulations of coupled non-isothermal soil moisture transport and evaporation fluxes in a forest area. <i>Journal of Hydrology and Hydromechanics</i> , 2017, 65, 410-425.	2.0	8
61	An Air-to-Soil Transition Model for Discrete Scattering-Emission Modelling at L-Band. <i>Journal of Remote Sensing</i> , 2021, 2021, .	6.7	7
62	Monitoring Water and Energy Cycles at Climate Scale in the Third Pole Environment (CLIMATE-TPE). <i>Remote Sensing</i> , 2021, 13, 3661.	4.0	7
63	In-Situ Monitoring and Characteristic Analysis of Freezing-Thawing Cycles in a Deep Vadose Zone. <i>Water (Switzerland)</i> , 2020, 12, 1261.	2.7	6
64	A first investigation of hydrogeology and hydrogeophysics of the Maqu catchment in the Yellow River source region. <i>Earth System Science Data</i> , 2021, 13, 4727-4757.	9.9	6
65	Classification of High Resolution Urban Remote Sensing Images Using Deep Networks by Integration of Social Media Photos. , 2018, , .		5
66	Coupled Dynamics in Soil. <i>Springer Theses</i> , 2013, , .	0.1	4
67	Determining representative sample size for validation of continuous, large continental remote sensing data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021, 94, 102235.	2.8	4
68	Soil hydrothermal modeling in a dry alpine agricultural zone: The effect of soil airflow. <i>Geoderma</i> , 2021, 402, 115354.	5.1	4
69	Identification of varied soil hydraulic properties in a seasonal tropical rainforest. <i>Catena</i> , 2022, 212, 106104.	5.0	3
70	Development and validation of the GCOM-W AMSR2 soil moisture product. , 2016, , .		2
71	Experimental study of the effect of shallow groundwater table on soil thermal properties. <i>Frontiers of Earth Science</i> , 2016, 10, 29-37.	2.1	2
72	Quantify the Pore Water Velocity Distribution by a Celerity Function. <i>Geofluids</i> , 2018, 2018, 1-19.	0.7	2

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73	Modeling Directional Brightness Temperature (DBT) over Crop Canopy with Effects of Intra-Row Heterogeneity. <i>Remote Sensing</i> , 2020, 12, 2667.	4.0	2
74	STEMMUS-UEB v1.0.0: integrated modeling of snowpack and soil water and energy transfer with three complexity levels of soil physical processes. <i>Geoscientific Model Development</i> , 2021, 14, 7345-7376.	3.6	2
75	Physiological Responses of Typical Wetland Plants Following Flooding Process—From an Eco-Hydrological Model Perspective. <i>Frontiers in Ecology and Evolution</i> , 2022, 10, .	2.2	2
76	Preface: Land Surface Processes and Interactions—From HCMM to Sentinel Missions and Beyond. <i>Remote Sensing</i> , 2017, 9, 788.	4.0	0
77	An Experimental Study on Separating Temperature and Emissivity of a Nonisothermal Surface. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2019, 16, 1610-1614.	3.1	0
78	A Modified Interactive Spectral Smooth Temperature Emissivity Separation Algorithm for Low-Temperature Surface. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020, 58, 7643-7653.	6.3	0
79	How Airflow Affects Soil Water Dynamics. <i>Springer Theses</i> , 2013, , 99-121.	0.1	0
80	Impact of Model Physics on Retrieving Soil Moisture and Soil Temperature. <i>Springer Theses</i> , 2013, , 123-157.	0.1	0
81	Application of Diurnal Soil Water Dynamics in Determining Effective Precipitation. <i>Springer Theses</i> , 2013, , 41-60.	0.1	0