Xiang Zhang

List of Publications by Year
in descending order

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69 papers	2,523 citations	218381 26 h-index	205818 48 g-index
71 all docs	71 docs citations	71 times ranked	2569 citing authors

#	Article	IF	Citations
1	A new propagation-based framework to enhance competency in regional drought monitoring. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 73, 1975404.	0.8	9
2	Classifying diurnal changes of cyanobacterial blooms in Lake Taihu to identify hot patterns, seasons and hotspots based on hourly GOCI observations. Journal of Environmental Management, 2022, 310, 114782.	3.8	25
3	Development of an assessment framework for the proposed Multi-Scalar Seasonally Amalgamated Regional Standardized Precipitation Evapotranspiration Index (MSARSPEI) for regional drought classifications in global warming context. Journal of Environmental Management, 2022, 312, 114951.	3.8	4
4	Tracing anomalies in moisture recycling and transport to two record-breaking droughts over the Mid-to-Lower Reaches of the Yangtze River. Journal of Hydrology, 2022, 609, 127787.	2.3	14
5	A Novel Fusion Method for Generating Surface Soil Moisture Data With High Accuracy, High Spatial Resolution, and High Spatioâ€Temporal Continuity. Water Resources Research, 2022, 58, .	1.7	15
6	Generating high-accuracy and cloud-free surface soil moisture at 1 km resolution by point-surface data fusion over the Southwestern U.S.. Agricultural and Forest Meteorology, 2022, 321, 108985.	1.9	11
7	Greenhouse Gas Emissions Drive Global Dryland Expansion but Not Spatial Patterns of Change in Aridification. Journal of Climate, 2022, 35, 2901-2917.	1.2	8
8	Urbanization-induced drought modification: Example over the Yangtze River Basin, China. Urban Climate, 2022, 44, 101231.	2.4	13
9	In-situ and triple-collocation based evaluations of eight global root zone soil moisture products. Remote Sensing of Environment, 2021, 254, 112248.	4.6	77
10	Statistical analysis of modified Hargreaves equation for precise estimation of reference evapotranspiration. Tellus, Series A: Dynamic Meteorology and Oceanography, 2021, 73, 1-12.	0.8	5
11	A Novel Strategy to Reconstruct NDVI Time-Series with High Temporal Resolution from MODIS Multi-Temporal Composite Products. Remote Sensing, 2021, 13, 1397.	1.8	11
12	8-Day and Daily Maximum and Minimum Air Temperature Estimation via Machine Learning Method on a Climate Zone to Global Scale. Remote Sensing, 2021, 13, 2355.	1.8	7
13	Prediction of Drought Severity Using Model-Based Clustering. Mathematical Problems in Engineering, 2021, 2021, 1-10.	0.6	9
14	Development of Hybrid Methods for Prediction of Principal Mineral Resources. Mathematical Problems in Engineering, 2021, 2021, 1-17.	0.6	2
15	Regional and Seasonal Precipitation and Drought Trends in Gangaâ€"Brahmaputra Basin. Water (Switzerland), 2021, 13, 2218.	1.2	7
16	Next-Generation Soil Moisture Sensor Web: High-Density In Situ Observation Over NB-IoT. IEEE Internet of Things Journal, 2021, 8, 13367-13383.	5.5	12
17	Evaluation of six satellite- and model-based surface soil temperature datasets using global ground-based observations. Remote Sensing of Environment, 2021, 264, 112605.	4.6	38
18	Is satellite Sun-Induced Chlorophyll Fluorescence more indicative than vegetation indices under drought condition?. Science of the Total Environment, 2021, 792, 148396.	3.9	17

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19	Assessment of Four Model-Based Surface Soil Temperature Products Unsing Global Dense in Situ Observations. , 2021, , .		0
20	Generating 1 km Spatially Seamless and Temporally Continuous Air Temperature Based on Deep Learning over Yangtze River Basin, China. Remote Sensing, 2021, 13, 3904.	1.8	7
21	A Genetic Algorithmâ€"Assisted Deep Neural Network Model for Merging Microwave and Infrared Daily Sea Surface Temperature Products. Frontiers in Environmental Science, 2021, 9, .	1.5	1
22	The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804.	1.9	116
23	Drought propagation modification after the construction of the Three Gorges Dam in the Yangtze River Basin. Journal of Hydrology, 2021, 603, 127138.	2.3	39
24	Prediction for Various Drought Classes Using Spatiotemporal Categorical Sequences. Complexity, 2021, 2021, 1-11.	0.9	9
25	Logistic Regression Analysis for Spatial Patterns of Drought Persistence. Complexity, 2021, 2021, 1-13.	0.9	9
26	Quantitative analysis of agricultural drought propagation process in the Yangtze River Basin by using cross wavelet analysis and spatial autocorrelation. Agricultural and Forest Meteorology, 2020, 280, 107809.	1.9	98
27	Annual large-scale urban land mapping based on Landsat time series in Google Earth Engine and OpenStreetMap data: A case study in the middle Yangtze River basin. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 159, 337-351.	4.9	67
28	Spatial Configuration and Extent Explains the Urban Heat Mitigation Potential due to Green Spaces: Analysis over Addis Ababa, Ethiopia. Remote Sensing, 2020, 12, 2876.	1.8	18
29	Continental drought monitoring using satellite soil moisture, data assimilation and an integrated drought index. Remote Sensing of Environment, 2020, 250, 112028.	4.6	94
30	Mapping Paddy Rice Fields by Combining Multi-Temporal Vegetation Index and Synthetic Aperture Radar Remote Sensing Data Using Google Earth Engine Machine Learning Platform. Remote Sensing, 2020, 12, 2992.	1.8	20
31	Potential Precipitation Predictability Decreases Under Future Warming. Geophysical Research Letters, 2020, 47, e2020GL090798.	1.5	9
32	An Ontology-Based Framework for Integrating Remote Sensing Imagery, Image Products, and In Situ Observations. Journal of Sensors, 2020, 2020, 1-12.	0.6	3
33	Drought propagation in Northern China Plain: A comparative analysis of GLDAS and MERRA-2 datasets. Journal of Hydrology, 2020, 588, 125026.	2.3	56
34	A risk assessment method for remote sensing of cyanobacterial blooms in inland waters. Science of the Total Environment, 2020, 740, 140012.	3.9	17
35	Improving Global Monthly and Daily Precipitation Estimation by Fusing Gauge Observations, Remote Sensing, and Reanalysis Data Sets. Water Resources Research, 2020, 56, e2019WR026444.	1.7	64
36	A data-driven multi-model ensemble for deterministic and probabilistic precipitation forecasting at seasonal scale. Climate Dynamics, 2020, 54, 3355-3374.	1.7	26

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37	Urbanization in Small Cities and Their Significant Implications on Landscape Structures: The Case in Ethiopia. Sustainability, 2020, 12, 1235.	1.6	24
38	Assessment and management of nonpoint source pollution based on multicriteria analysis. Environmental Science and Pollution Research, 2019, 26, 27073-27086.	2.7	7
39	Urban drought challenge to 2030 sustainable development goals. Science of the Total Environment, 2019, 693, 133536.	3.9	147
40	Fast and Automatic Reconstruction of Semantically Rich 3D Indoor Maps from Low-quality RGB-D Sequences. Sensors, 2019, 19, 533.	2.1	11
41	Urban Expansion in Ethiopia from 1987 to 2017: Characteristics, Spatial Patterns, and Driving Forces. Sustainability, 2019, 11, 2973.	1.6	69
42	Satellite surface soil moisture from SMAP, SMOS, AMSR2 and ESA CCI: A comprehensive assessment using global ground-based observations. Remote Sensing of Environment, 2019, 231, 111215.	4.6	186
43	Sensor web - Enabled flood event process detection and instant service. Environmental Modelling and Software, 2019, 117, 29-42.	1.9	10
44	Multilayer Soil Moisture Mapping at a Regional Scale from Multisource Data via a Machine Learning Method. Remote Sensing, 2019, 11, 284.	1.8	23
45	Spatiotemporal Changes in China's Terrestrial Water Storage From GRACE Satellites and Its Possible Drivers. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11976-11993.	1.2	44
46	Improving the North American multi-model ensemble (NMME) precipitation forecasts at local areas using wavelet and machine learning. Climate Dynamics, 2019, 53, 601-615.	1.7	42
47	Global drought trends under 1.5 and 2 Â°C warming. International Journal of Climatology, 2019, 39, 2375-2385.	1.5	100
48	A comparison of large-scale climate signals and the North American Multi-Model Ensemble (NMME) for drought prediction in China. Journal of Hydrology, 2018, 557, 378-390.	2.3	26
49	A combined model for river health evaluation based upon the physical, chemical, and biological elements. Ecological Indicators, 2018, 84, 416-424.	2.6	42
50	An evaluation of statistical, NMME and hybrid models for drought prediction in China. Journal of Hydrology, 2018, 566, 235-249.	2.3	65
51	Geospatial sensor web: A cyber-physical infrastructure for geoscience research and application. Earth-Science Reviews, 2018, 185, 684-703.	4.0	50
52	Droughts in India from 1981 to 2013 and Implications to Wheat Production. Scientific Reports, 2017, 7, 44552.	1.6	80
53	Spatial scale and seasonal dependence of land use impacts on riverine water quality in the Huai River basin, China. Environmental Science and Pollution Research, 2017, 24, 20995-21010.	2.7	38
54	Multi-sensor integrated framework and index for agricultural drought monitoring. Remote Sensing of Environment, 2017, 188, 141-163.	4.6	116

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55	NIR-Red Spectra-Based Disaggregation of SMAP Soil Moisture to 250 m Resolution Based on OzNet in Southeastern Australia. Remote Sensing, 2017, 9, 51.	1.8	21
56	A Machine Learning Based Reconstruction Method for Satellite Remote Sensing of Soil Moisture Images with In Situ Observations. Remote Sensing, 2017, 9, 484.	1.8	29
57	Gauging the Severity of the 2012 Midwestern U.S. Drought for Agriculture. Remote Sensing, 2017, 9, 767.	1.8	8
58	Reconstruction of GF-1 Soil Moisture Observation Based on Satellite and <italic>In Situ</italic> Sensor Collaboration Under Full Cloud Contamination. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5185-5202.	2.7	19
59	Characterizing and explaining spatio-temporal variation of water quality in a highly disturbed river by multi-statistical techniques. SpringerPlus, 2016, 5, 1171.	1.2	28
60	Influences of anthropogenic activities and topography on water quality in the highly regulated Huai River basin, China. Environmental Science and Pollution Research, 2016, 23, 21460-21474.	2.7	36
61	Integrated open geospatial web service enabled cyber-physical information infrastructure for precision agriculture monitoring. Computers and Electronics in Agriculture, 2015, 111, 78-91.	3.7	71
62	Spaceborne Earth-Observing Optical Sensor Static Capability Index for Clustering. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5504-5518.	2.7	3
63	Automatic BIM component extraction from point clouds of existing buildings for sustainability applications. Automation in Construction, 2015, 56, 1-13.	4.8	213
64	Quantitative evaluation of observation capability of GF-1 wide field of view sensors for soil moisture inversion. Journal of Applied Remote Sensing, 2015, 9, 097097.	0.6	18
65	Integrated geosptial sensor web for agricultural soil moisture monitoring. , 2015, , .		2
66	Spatial Pattern and Temporal Variation Law-Based Multi-Sensor Collaboration Method for Improving Regional Soil Moisture Monitoring Capabilities. Remote Sensing, 2014, 6, 12309-12333.	1.8	7
67	A Dynamic Observation Capability Index for Quantitatively Pre-Evaluating Diverse Optical Imaging Satellite Sensors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 515-530.	2.3	13
68	Using SensorML to construct a geoprocessing e-Science workflow model under a sensor web environment. Computers and Geosciences, 2012, 47, 119-129.	2.0	25
69	GEOSPATIAL SENSOR WEB ADAPTOR FOR INTEGRATING DIVERSE INTERNET OF THINGS PROTOCOLS WITHIN SMART CITY. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-4-2020, 115-121.	0.0	2