

# Fuqiang Tian

## List of Publications by Year in descending order

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116  
papers

4,347  
citations

94433

37  
h-index

128289

60  
g-index

119  
all docs

119  
docs citations

119  
times ranked

4861  
citing authors

#	ARTICLE	IF	CITATIONS
1	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. <i>Hydrological Sciences Journal</i> , 2019, 64, 1141-1158.	2.6	474
2	Ground validation of GPM IMERG and TRMM 3B42V7 rainfall products over southern Tibetan Plateau based on a high-density rain gauge network. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 910-924.	3.3	323
3	Sociohydrology: Scientific Challenges in Addressing the Sustainable Development Goals. <i>Water Resources Research</i> , 2019, 55, 6327-6355.	4.2	226
4	Generation of MODIS-like land surface temperatures under all-weather conditions based on a data fusion approach. <i>Remote Sensing of Environment</i> , 2020, 246, 111863.	11.0	127
5	Results of the DMIP 2 Oklahoma experiments. <i>Journal of Hydrology</i> , 2012, 418-419, 17-48.	5.4	97
6	Exploring the spatial variability of contributions from climate variation and change in catchment properties to streamflow decrease in a mesoscale basin by three different methods. <i>Journal of Hydrology</i> , 2014, 508, 170-180.	5.4	95
7	Urban signatures in the spatial clustering of summer heavy rainfall events over the Beijing metropolitan region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 1203-1217.	3.3	86
8	Urbanization and Climate Change: An Examination of Nonstationarities in Urban Flooding. <i>Journal of Hydrometeorology</i> , 2013, 14, 1791-1809.	1.9	79
9	Dam Construction in Lancang-Mekong River Basin Could Mitigate Future Flood Risk From Warming-Induced Intensified Rainfall. <i>Geophysical Research Letters</i> , 2017, 44, 10,378.	4.0	79
10	How Does the Evaluation of the GPM IMERG Rainfall Product Depend on Gauge Density and Rainfall Intensity?. <i>Journal of Hydrometeorology</i> , 2018, 19, 339-349.	1.9	79
11	Contrasting impacts of urban forms on the future thermal environment: example of Beijing metropolitan area. <i>Environmental Research Letters</i> , 2016, 11, 034018.	5.2	77
12	Impact of Urbanization on Heavy Convective Precipitation under Strong Large-Scale Forcing: A Case Study over the Milwaukee-Lake Michigan Region. <i>Journal of Hydrometeorology</i> , 2014, 15, 261-278.	1.9	74
13	Environmental and physiological controls on sap flow in a subhumid mountainous catchment in North China. <i>Agricultural and Forest Meteorology</i> , 2017, 240-241, 46-57.	4.8	74
14	Intercomparisons of Rainfall Estimates from TRMM and GPM Multisatellite Products over the Upper Mekong River Basin. <i>Journal of Hydrometeorology</i> , 2017, 18, 413-430.	1.9	74
15	Soil moisture controls on patterns of grass green-up in Inner Mongolia: an index based approach. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 805-815.	4.9	69
16	Increasing compound events of extreme hot and dry days during growing seasons of wheat and maize in China. <i>Scientific Reports</i> , 2018, 8, 16700.	3.3	68
17	Artificial neural network simulation for prediction of suspended sediment concentration in the River Ramganga, Ganges Basin, India. <i>International Journal of Sediment Research</i> , 2019, 34, 95-107.	3.5	68
18	Derivation of a Sigmoid Generalized Complementary Function for Evaporation With Physical Constraints. <i>Water Resources Research</i> , 2018, 54, 5050-5068.	4.2	60

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19	From channelization to restoration: Sociohydrologic modeling with changing community preferences in the K-issimee River Basin, Florida. <i>Water Resources Research</i> , 2016, 52, 1227-1244.	4.2	59
20	A nonlinear function approach for the normalized complementary relationship evaporation model. <i>Hydrological Processes</i> , 2012, 26, 3973-3981.	2.6	58
21	Crop coefficient for cotton under plastic mulch and drip irrigation based on eddy covariance observation in an arid area of northwestern China. <i>Agricultural Water Management</i> , 2016, 171, 21-30.	5.6	58
22	Exploring synergies in the water-food-energy nexus by using an integrated hydro-economic optimization model for the Lancang-Mekong River basin. <i>Science of the Total Environment</i> , 2020, 728, 137996.	8.0	58
23	Comparative diagnostic analysis of runoff generation processes in Oklahoma DMIP2 basins: The Blue River and the Illinois River. <i>Journal of Hydrology</i> , 2012, 418-419, 90-109.	5.4	56
24	Recent and future trends in sea surface temperature across the Persian Gulf and Gulf of Oman. <i>PLoS ONE</i> , 2019, 14, e0212790.	2.5	55
25	Soil particle size distribution and its relationship with soil water and salt under mulched drip irrigation in Xinjiang of China. <i>Science China Technological Sciences</i> , 2011, 54, 1568-1574.	4.0	52
26	Soil salt distribution under mulched drip irrigation in an arid area of northwestern China. <i>Journal of Arid Environments</i> , 2014, 104, 23-33.	2.4	49
27	Changes in seasonal maximum daily precipitation in China over the period 1961–2006. <i>International Journal of Climatology</i> , 2013, 33, 1646-1657.	3.5	47
28	Water and nutrient balances in a large tile-drained agricultural catchment: a distributed modeling study. <i>Hydrology and Earth System Sciences</i> , 2010, 14, 2259-2275.	4.9	45
29	Projected climate change impacts on future streamflow of the Yarlung Tsangpo-Brahmaputra River. <i>Global and Planetary Change</i> , 2019, 175, 144-159.	3.5	45
30	Development of a comprehensive framework for assessing the impacts of climate change and dam construction on flow regimes. <i>Journal of Hydrology</i> , 2020, 590, 125358.	5.4	45
31	A review of the complementary principle of evaporation: from the original linear relationship to generalized nonlinear functions. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 2269-2285.	4.9	45
32	A complementary relationship evaporation model referring to the Granger model and the advection–aridity model. <i>Hydrological Processes</i> , 2011, 25, 2094-2101.	2.6	44
33	Typhoon Nina and the August 1975 Flood over Central China. <i>Journal of Hydrometeorology</i> , 2017, 18, 451-472.	1.9	43
34	Model diagnostic analysis of seasonal switching of runoff generation mechanisms in the Blue River basin, Oklahoma. <i>Journal of Hydrology</i> , 2012, 418-419, 136-149.	5.4	41
35	Energy balance and canopy conductance for a cotton field under film mulched drip irrigation in an arid region of northwestern China. <i>Agricultural Water Management</i> , 2017, 179, 110-121.	5.6	41
36	Combined use of tracer approach and numerical simulation to estimate groundwater recharge in an alluvial aquifer system: A case study of Nasunogahara area, central Japan. <i>Journal of Hydrology</i> , 2014, 519, 833-847.	5.4	40

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37	Statistical characteristics of raindrop size distribution during rainy seasons in the Beijing urban area and implications for radar rainfall estimation. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 4153-4170.	4.9	40
38	Positive or negative correlation between actual and potential evaporation? Evaluating using a nonlinear complementary relationship model. <i>Water Resources Research</i> , 2014, 50, 1322-1336.	4.2	39
39	Evaluation of Temperature and Precipitation Simulations in CMIP6 Models Over the Tibetan Plateau. <i>Earth and Space Science</i> , 2021, 8, e2020EA001620.	2.6	39
40	The role of run-on for overland flow and the characteristics of runoff generation in the Loess Plateau, China. <i>Hydrological Sciences Journal</i> , 2012, 57, 1107-1117.	2.6	37
41	A need to revisit hydrologic responses to urbanization by incorporating the feedback on spatial rainfall patterns. <i>Urban Climate</i> , 2015, 12, 128-140.	5.7	34
42	Functional approach to exploring climatic and landscape controls of runoff generation: 1. Behavioral constraints on runoff volume. <i>Water Resources Research</i> , 2014, 50, 9300-9322.	4.2	32
43	Divergence of stable isotopes in tap water across China. <i>Scientific Reports</i> , 2017, 7, 43653.	3.3	30
44	Spatial and temporal variations of tap water $\delta^{18}O$ -excess in China. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 260, 1-14.	3.9	30
45	Comparing different methods for determining forest evapotranspiration and its components at multiple temporal scales. <i>Science of the Total Environment</i> , 2018, 633, 12-29.	8.0	28
46	Monitoring the spatio-temporal impact of small tributaries on the hydrochemical characteristics of Ramganga River, Ganges Basin, India. <i>International Journal of River Basin Management</i> , 2020, 18, 231-241.	2.7	28
47	Ecohydrological evolution model on riparian vegetation in hyperarid regions and its validation in the lower reach of Tarim River. <i>Hydrological Processes</i> , 2012, 26, 2049-2060.	2.6	27
48	Water Balance within Intensively Cultivated Alluvial Plain in an Arid Environment. <i>Water Resources Management</i> , 2007, 21, 1703-1715.	3.9	26
49	Thermodynamic watershed hydrological model: Constitutive relationship. <i>Science in China Series D: Earth Sciences</i> , 2008, 51, 1353-1369.	0.9	26
50	A numerical model for water and heat transport in freezing soils with nonequilibrium ice-water interfaces. <i>Water Resources Research</i> , 2016, 52, 7366-7381.	4.2	26
51	Estimation of suspended sediment load using three neural network algorithms in Ramganga River catchment of Ganga Basin, India. <i>Sustainable Water Resources Management</i> , 2019, 5, 1115-1131.	2.1	26
52	Socio-hydrologic modeling of the dynamics of cooperation in the transboundary Lancang-Mekong River. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 1883-1903.	4.9	26
53	Determinants of the Asymmetric Parameter in the Generalized Complementary Principle of Evaporation. <i>Water Resources Research</i> , 2020, 56, e2019WR026570.	4.2	25
54	Partitioning of Cotton Field Evapotranspiration under Mulched Drip Irrigation Based on a Dual Crop Coefficient Model. <i>Water (Switzerland)</i> , 2016, 8, 72.	2.7	24

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55	Structure and evolution of flash flood producing storms in a small urban watershed. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 3139-3152.	3.3	24
56	Stable Isotope Composition of River Waters across the World. <i>Water (Switzerland)</i> , 2019, 11, 1760.	2.7	24
57	Socio-hydrological perspectives of the co-evolution of humans and groundwater in Cangzhou, North China Plain. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 3619-3633.	4.9	23
58	Comparison of the Vegetation Effect on ET Partitioning Based on Eddy Covariance Method at Five Different Sites of Northern China. <i>Remote Sensing</i> , 2018, 10, 1755.	4.0	23
59	Urbanization Exacerbated Rainfall Over European Suburbs Under a Warming Climate. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095987.	4.0	23
60	Correcting the TRMM rainfall product for hydrological modelling in sparsely-gauged mountainous basins. <i>Hydrological Sciences Journal</i> , 2017, 62, 306-318.	2.6	21
61	Effect of Temporal Resolution of Rainfall on Simulation of Urban Flood Processes. <i>Water (Switzerland)</i> , 2018, 10, 880.	2.7	21
62	A Machine learning framework to predict reverse flow and water level: A case study of Tonle Sap Lake. <i>Journal of Hydrology</i> , 2021, 603, 127168.	5.4	21
63	Hydrologically Enhanced Distributed Urban Drainage Model and Its Application in Beijing City. <i>Journal of Hydrologic Engineering - ASCE</i> , 2012, 17, 667-678.	1.9	18
64	Dynamics and driving mechanisms of asymmetric human water consumption during alternating wet and dry periods. <i>Hydrological Sciences Journal</i> , 2019, 64, 507-524.	2.6	18
65	ThSSim: A novel tool for simulation of reservoir thermal stratification. <i>Scientific Reports</i> , 2019, 9, 18524.	3.3	18
66	The value of water isotope data on improving process understanding in a glacierized catchment on the Tibetan Plateau. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 3653-3673.	4.9	18
67	Sigmoid Generalized Complementary Equation for Evaporation Over Wet Surfaces: A Nonlinear Modification of the Priestley-Taylor Equation. <i>Water Resources Research</i> , 2021, 57, e2020WR028737.	4.2	18
68	News media coverage of conflict and cooperation dynamics of water events in the Lancang-Mekong River basin. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 1603-1615.	4.9	17
69	Planting and Irrigation Methods for Cotton in Southern Xinjiang, China. <i>Irrigation and Drainage</i> , 2016, 65, 461-468.	1.7	16
70	Climate More Important for Chinese Flood Changes Than Reservoirs and Land Use. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093061.	4.0	16
71	Effects of Plastic Mulch on Soil Heat Flux and Energy Balance in a Cotton Field in Northwest China. <i>Atmosphere</i> , 2016, 7, 107.	2.3	15
72	Rivers and reciprocity: perceptions and policy on international watercourses. <i>Water Policy</i> , 2016, 18, 803-825.	1.5	15

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73	Spatial Scale Effect of Surface Routing and Its Parameter Upscaling for Urban Flood Simulation Using a Grid-Based Model. <i>Water Resources Research</i> , 2020, 56, e2019WR025468.	4.2	15
74	A high-accuracy rainfall dataset by merging multiple satellites and dense gauges over the southern Tibetan Plateau for 2014–2019 warm seasons. <i>Earth System Science Data</i> , 2021, 13, 5455-5467.	9.9	15
75	Influence of Anionic Surfactant on Saturated Hydraulic Conductivity of Loamy Sand and Sandy Loam Soils. <i>Water (Switzerland)</i> , 2017, 9, 433.	2.7	14
76	Understanding the potential sources and environmental impacts of dissolved and suspended organic carbon in the diversified Ramganga River, Ganges Basin, India. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 379, 61-66.	1.0	14
77	Can we use precipitation isotope outputs of isotopic general circulation models to improve hydrological modeling in large mountainous catchments on the Tibetan Plateau?. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 6151-6172.	4.9	14
78	A land surface model incorporated with soil freeze/thaw and its application in GAME/Tibet. <i>Science in China Series D: Earth Sciences</i> , 2006, 49, 1311-1322.	0.9	13
79	Precipitation alters plastic film mulching impacts on soil respiration in an arid area of northwest China. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 3075-3086.	4.9	13
80	Attribution of the land surface temperature response to land-use conversions from bare land. <i>Global and Planetary Change</i> , 2020, 193, 103268.	3.5	13
81	PODMT3DMS-Tool: proper orthogonal decomposition linked to the MT3DMS model for nitrate simulation in aquifers. <i>Hydrogeology Journal</i> , 2020, 28, 1125-1142.	2.1	13
82	CART and PSO+KNN algorithms to estimate the impact of water level change on water quality in Poyang Lake, China. <i>Arabian Journal of Geosciences</i> , 2019, 12, 1.	1.3	12
83	Integration of Penman approach with complementary principle for evaporation research. <i>Hydrological Processes</i> , 2018, 32, 3051-3058.	2.6	11
84	Searching for an Optimized Single-objective Function Matching Multiple Objectives with Automatic Calibration of Hydrological Models. <i>Chinese Geographical Science</i> , 2019, 29, 934-948.	3.0	11
85	Comparison of formulating apparent potential evaporation with pan measurements and Penman methods. <i>Journal of Hydrology</i> , 2021, 592, 125816.	5.4	10
86	Enabling policy environment for water, food and energy security. <i>Irrigation and Drainage</i> , 2021, 70, 392-409.	1.7	10
87	At which timescale does the complementary principle perform best in evaporation estimation?. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 375-386.	4.9	10
88	Carbon budget for a plastic-film mulched and drip-irrigated cotton field in an oasis of Northwest China. <i>Agricultural and Forest Meteorology</i> , 2021, 306, 108447.	4.8	10
89	Insights from a joint analysis of Indian and Chinese monsoon rainfall data. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 2709-2715.	4.9	9
90	Current status and recent trend of irrigation water use in China *. <i>Irrigation and Drainage</i> , 2020, 69, 25-35.	1.7	9

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91	Analysis of the effect of regional lateral inflow on the flood peak of the Three Gorges Reservoir. <i>Science China Technological Sciences</i> , 2011, 54, 914-923.	4.0	8
92	Spatial Variability of Soil Moisture in a Forest Catchment: Temporal Trend and Contributors. <i>Forests</i> , 2016, 7, 154.	2.1	8
93	Understanding of Storm Runoff Generation in a Weathered, Fractured Granitoid Headwater Catchment in Northern China. <i>Water (Switzerland)</i> , 2019, 11, 123.	2.7	8
94	A two-dimensional Richards equation solver based on CVODE for variably saturated soil water movement. <i>Science China Technological Sciences</i> , 2011, 54, 3251-3264.	4.0	7
95	Spatio-temporal variations of soil moisture and salinity and their effects on cotton growth in a mulched drip irrigation field. <i>Irrigation and Drainage</i> , 2020, 69, 928-943.	1.7	7
96	Characteristics of soil water retention curve at macro-scale. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 2990-2996.	0.9	6
97	Comparison of Precipitation and Streamflow Correcting for Ensemble Streamflow Forecasts. <i>Water (Switzerland)</i> , 2018, 10, 177.	2.7	6
98	Evaluation of the ECMWF System 4 climate forecasts for streamflow forecasting in the Upper Hanjiang River Basin. <i>Hydrology Research</i> , 2018, 49, 1864-1879.	2.7	6
99	Reply to Comment by J. Szilagyi and R. Crago on "Derivation of a Sigmoid Generalized Complementary Function for Evaporation With Physical Constraints". <i>Water Resources Research</i> , 2019, 55, 1734-1736.	4.2	6
100	Triple isotope variations of monthly tap water in China. <i>Scientific Data</i> , 2020, 7, 336.	5.3	6
101	Hydrological characteristics and changes in the Nu-Salween River basin revealed with model-based reconstructed data. <i>Journal of Mountain Science</i> , 2021, 18, 2982-3002.	2.0	6
102	Determination of the asymmetric parameter in complementary relations of evaporation in alpine grasslands of the Tibetan Plateau. <i>Journal of Hydrology</i> , 2022, 605, 127306.	5.4	6
103	Spatial averaging infiltration model for layered soil. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 1050-1058.	0.9	5
104	Ecohydrological Separation Hypothesis: Review and Prospect. <i>Water (Switzerland)</i> , 2020, 12, 2077.	2.7	5
105	Nonsmooth Dynamic Behaviors Inherited from an Ecohydrological Model: Mutation, Bifurcation, and Chaos. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-9.	1.1	4
106	High-frequency monitoring of the occurrence of preferential flow on hillslopes and its relationship with rainfall features, soil moisture and landscape. <i>Hydrological Sciences Journal</i> , 2019, 64, 1385-1396.	2.6	4
107	Comment on "Free Formulation of the Complementary Relationship of Evaporation for Continental-Scale Hydrology" by J. Szilagyi et al.. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033403.	3.3	4
108	A multi-factor integrated method of calculation unit delineation for hydrological modeling in large mountainous basins. <i>Journal of Hydrology</i> , 2021, 597, 126180.	5.4	4

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109	A socio-hydrological framework for understanding conflict and cooperation with respect to transboundary rivers. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 2131-2146.	4.9	4
110	Climate Leads to Reversed Latitudinal Changes in Chinese Flood Peak Timing. <i>Earth's Future</i> , 2022, 10, .	6.3	4
111	A two-dimensional numerical model coupled with multiple hillslope hydrodynamic processes and its application to subsurface flow simulation. <i>Science China Technological Sciences</i> , 2013, 56, 2491-2500.	4.0	3
112	Improving satellite rainfall estimates over Tibetan plateau using in situ soil moisture observation and SMAP retrievals. , 2017, , .		3
113	Opening Configuration Design Effects on Pooled Stepped Chutes. <i>Journal of Hydraulic Engineering</i> , 2021, 147, 06021011.	1.5	2
114	Temporal and Spatial Signatures of Sediment Transport at the Watershed Scale: An Approach to Understand the Behavior of the Watershed. <i>Tecnologia Y Ciencias Del Agua</i> , 2019, 10, 18-45.	0.3	2
115	Improving Gpm Precipitation Data Over Yarlung Zangbo River Basin Using Smap Soil Moisture Retrievals. , 2018, , .		1
116	Prioritizing Design Parameters for Stepped Chutes and Shear Stress Distribution. <i>Water (Switzerland)</i> , 2021, 13, 1155.	2.7	0