Qiang Zhang

List of Publications by Year
in descending order

124 papers	6,285 citations	53751 45 h-index	82499 72 g-index
124 all docs	124 docs citations	124 times ranked	4564 citing authors

#	Article	IF	Citations
1	Coupled estimation of 500â€‰m and 8-day resolution global evapotranspiration and gross primary production in 2002â€"2017. Remote Sensing of Environment, 2019, 222, 165-182.	4.6	389
2	A spatial assessment of hydrologic alteration caused by dam construction in the middle and lower Yellow River, China. Hydrological Processes, 2008, 22, 3829-3843.	1.1	235
3	Influences of ENSO, NAO, IOD and PDO on seasonal precipitation regimes in the Yangtze River basin, China. International Journal of Climatology, 2015, 35, 3556-3567.	1.5	219
4	Response of vegetation to different time-scales drought across China: Spatiotemporal patterns, causes and implications. Global and Planetary Change, 2017, 152, 1-11.	1.6	168
5	Flood-induced mortality across the globe: Spatiotemporal pattern and influencing factors. Science of the Total Environment, 2018, 643, 171-182.	3.9	156
6	Variability of Water Resource in the Yellow River Basin of Past 50ÂYears, China. Water Resources Management, 2009, 23, 1157-1170.	1.9	138
7	Contribution of multiple climatic variables and human activities to streamflow changes across China. Journal of Hydrology, 2017, 545, 145-162.	2.3	134
8	Vegetation phenology on the Qinghai-Tibetan Plateau and its response to climate change (1982â€"2013). Agricultural and Forest Meteorology, 2018, 248, 408-417.	1.9	134
9	Spatio-temporal variations of precipitation extremes in Xinjiang, China. Journal of Hydrology, 2012, 434-435, 7-18.	2.3	133
10	Precipitation and streamflow changes in China: Changing patterns, causes and implications. Journal of Hydrology, 2011, 410, 204-216.	2.3	127
11	Evaluation of flood frequency under non-stationarity resulting from climate indices and reservoir indices in the East River basin, China. Journal of Hydrology, 2015, 527, 565-575.	2.3	111
12	Analysis of the periods of maximum consecutive wet days in China. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	108
13	Spatio-temporal relations between temperature and precipitation regimes: Implications for temperature-induced changes in the hydrological cycle. Global and Planetary Change, 2013, 111, 57-76.	1.6	107
14	Spatiotemporal behavior of floods and droughts and their impacts on agriculture in China. Global and Planetary Change, 2015, 131, 63-72.	1.6	107
15	Spatialâ€"temporal changes of precipitation structure across the Pearl River basin, China. Journal of Hydrology, 2012, 440-441, 113-122.	2.3	105
16	Spatial-temporal precipitation changes (1956â€"2000) and their implications for agriculture in China. Global and Planetary Change, 2012, 82-83, 86-95.	1.6	104
17	Copulaâ€based spatioâ€temporal patterns of precipitation extremes in China. International Journal of Climatology, 2013, 33, 1140-1152.	1.5	100
18	Statistical behaviours of precipitation regimes in China and their links with atmospheric circulation 1960â€"2005. International Journal of Climatology, 2011, 31, 1665-1678.	1.5	98

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19	Summer extreme precipitation in eastern China: Mechanisms and impacts. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2766-2778.	1.2	98
20	Regional Frequency Analysis of Droughts in China: A Multivariate Perspective. Water Resources Management, 2015, 29, 1767-1787.	1.9	96
21	SPI-based evaluation of drought events in Xinjiang, China. Natural Hazards, 2012, 64, 481-492.	1.6	95
22	Evaluation of impacts of climate change and human activities on streamflow in the Poyang Lake basin, China. Hydrological Processes, 2016, 30, 2562-2576.	1.1	91
23	The Impact of Tropical Cyclones on Extreme Precipitation over Coastal and Inland Areas of China and Its Association to ENSO. Journal of Climate, 2018, 31, 1865-1880.	1.2	78
24	Multisource data based agricultural drought monitoring and agricultural loss in China. Global and Planetary Change, 2019, 172, 298-306.	1.6	74
25	Modified Palmer Drought Severity Index: Model improvement and application. Environment International, 2019, 130, 104951.	4.8	72
26	Attribution of Global Soil Moisture Drying to Human Activities: A Quantitative Viewpoint. Geophysical Research Letters, 2019, 46, 2573-2582.	1.5	72
27	Changes in magnitude and frequency of heavy precipitation across China and its potential links to summer temperature. Journal of Hydrology, 2017, 547, 718-731.	2.3	71
28	Hydrologic alteration along the Middle and Upper East River (Dongjiang) basin, South China: a visually enhanced mining on the results of RVA method. Stochastic Environmental Research and Risk Assessment, 2010, 24, 9-18.	1.9	70
29	A remote sensing and artificial neural network-based integrated agricultural drought index: Index development and applications. Catena, 2020, 186, 104394.	2.2	70
30	Spatiotemporal properties of droughts and related impacts on agriculture in Xinjiang, China. International Journal of Climatology, 2015, 35, 1254-1266.	1.5	65
31	Agricultural drought monitoring across Inner Mongolia, China: Model development, spatiotemporal patterns and impacts. Journal of Hydrology, 2019, 571, 793-804.	2.3	63
32	An evaluation of impacts of DEM resolution and parameter correlation on TOPMODEL modeling uncertainty. Journal of Hydrology, 2010, 394, 370-383.	2.3	60
33	GCMsâ€based spatiotemporal evolution of climate extremes during the 21st century in China. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,017.	1.2	59
34	Xinanjiang model combined with Curve Number to simulate the effect of land use change on environmental flow. Journal of Hydrology, 2014, 519, 3142-3152.	2.3	58
35	Future joint probability behaviors of precipitation extremes across China: Spatiotemporal patterns and implications for flood and drought hazards. Global and Planetary Change, 2015, 124, 107-122.	1.6	58
36	Homogenization of precipitation and flow regimes across China: Changing properties, causes and implications. Journal of Hydrology, 2015, 530, 462-475.	2.3	55

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37	Hydrological responses to climatic changes in the Yellow River basin, China: Climatic elasticity and streamflow prediction. Journal of Hydrology, 2017, 554, 635-645.	2.3	55
38	Impacts of ENSO and ENSO Modoki+A regimes on seasonal precipitation variations and possible underlying causes in the Huai River basin, China. Journal of Hydrology, 2016, 533, 308-319.	2.3	54
39	Impact of urbanization on nonstationarity of annual and seasonal precipitation extremes in China. Journal of Hydrology, 2019, 575, 638-655.	2.3	54
40	Double increase in precipitation extremes across China in a 1.5ÂÂ°C/2.0ÂÂ°C warmer climate. Science of the Total Environment, 2020, 746, 140807.	3.9	52
41	Flood frequency analysis with consideration of hydrological alterations: Changing properties, causes and implications. Journal of Hydrology, 2014, 519, 803-813.	2.3	49
42	Magnitude, frequency and timing of floods in the Tarim River basin, China: Changes, causes and implications. Global and Planetary Change, 2016, 139, 44-55.	1.6	48
43	Spatial downscaling of <scp>TRMM</scp>â€based precipitation data using vegetative response in Xinjiang, China. International Journal of Climatology, 2017, 37, 3895-3909.	1.5	48
44	Nonparametric Integrated Agrometeorological Drought Monitoring: Model Development and Application. Journal of Geophysical Research D: Atmospheres, 2018, 123, 73-88.	1.2	48
45	Hydrological effects of climate variability and vegetation dynamics on annual fluvial water balance in global large river basins. Hydrology and Earth System Sciences, 2018, 22, 4047-4060.	1.9	48
46	Topography-based spatial patterns of precipitation extremes in the Poyang Lake basin, China: Changing properties and causes. Journal of Hydrology, 2014, 512, 229-239.	2.3	47
47	Max-stable based evaluation of impacts of climate indices on extreme precipitation processes across the Poyang Lake basin, China. Global and Planetary Change, 2014, 122, 271-281.	1.6	46
48	Stationarity of annual flood peaks during 1951â€“2010 in the Pearl River basin, China. Journal of Hydrology, 2014, 519, 3263-3274.	2.3	45
49	Intensifying effects of El NiÃ±oÂevents on winter precipitation extremes in southeastern China. Climate Dynamics, 2020, 54, 631-648.	1.7	44
50	Abrupt behaviors of the streamflow of the Pearl River basin and implications for hydrological alterations across the Pearl River Delta, China. Journal of Hydrology, 2009, 377, 274-283.	2.3	42
51	Hydrological effects of cropland and climatic changes in arid and semi-arid river basins: A case study from the Yellow River basin, China. Journal of Hydrology, 2017, 549, 547-557.	2.3	41
52	Evaluation of Remotely Sensed and Reanalysis Soil Moisture Against In Situ Observations on the Himalayanâ€Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7132-7148.	1.2	40
53	A new statistical downscaling approach for global evaluation of the CMIP5 precipitation outputs: Model development and application. Science of the Total Environment, 2019, 690, 1048-1067.	3.9	40
54	Spatiotemporal variations of pan evaporation in China during 1960â€“2005: changing patterns and causes. International Journal of Climatology, 2015, 35, 903-912.	1.5	39

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55	Future Changes in Floods and Water Availability across China: Linkage with Changing Climate and Uncertainties. Journal of Hydrometeorology, 2016, 17, 1295-1314.	0.7	38
56	Variations of dryness/wetness across China: Changing properties, drought risks, and causes. Global and Planetary Change, 2017, 155, 1-12.	1.6	38
57	Multisource Dataâ€Based Integrated Agricultural Drought Monitoring in the Huai River Basin, China. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,751.	1.2	38
58	Fractal-based evaluation of the effect of water reservoirs on hydrological processes: the dams in the Yangtze River as a case study. Stochastic Environmental Research and Risk Assessment, 2014, 28, 263-279.	1.9	37
59	Nonstationarity-based evaluation of flood frequency and flood risk in the Huai River basin, China. Journal of Hydrology, 2018, 567, 393-404.	2.3	36
60	Dynamic vulnerability of ecological systems to climate changes across the Qinghai-Tibet Plateau, China. Ecological Indicators, 2022, 134, 108483.	2.6	36
61	Intensification and Expansion of Soil Moisture Drying in Warm Season Over Eurasia Under Global Warming. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3765-3782.	1.2	35
62	Is Himalayan-Tibetan Plateau â€œdryingâ€? Historical estimations and future trends of surface soil moisture. Science of the Total Environment, 2019, 658, 374-384.	3.9	35
63	Drought risk assessment in China: Evaluation framework and influencing factors. Geography and Sustainability, 2020, 1, 220-228.	1.9	35
64	Spatiotemporal patterns of annual and seasonal precipitation extreme distributions across China and potential impact of tropical cyclones. International Journal of Climatology, 2017, 37, 3949-3962.	1.5	34
65	Decreased Streamflow in the Yellow River Basin, China: Climate Change or Humanâ€Induced?. Water (Switzerland), 2017, 9, 116.	1.2	34
66	Increasing population exposure to global warm-season concurrent dry and hot extremes under different warming levels. Environmental Research Letters, 2021, 16, 094002.	2.2	34
67	Tropical Cyclonic Rainfall in China: Changing Properties, Seasonality, and Causes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4476-4489.	1.2	31
68	Spatiotemporal impact of soil moisture on air temperature across the Tibet Plateau. Science of the Total Environment, 2019, 649, 1338-1348.	3.9	31
69	Nonstationarity in the occurrence rate of floods in the Tarim River basin, China, and related impacts of climate indices. Global and Planetary Change, 2016, 142, 1-13.	1.6	30
70	Nonâ€stationarities in the occurrence rate of heavy precipitation across China and its relationship to climate teleconnection patterns. International Journal of Climatology, 2017, 37, 4186-4198.	1.5	29
71	Impacts of anthropogenic warming and uneven regional socio-economic development on global river flood risk. Journal of Hydrology, 2020, 590, 125262.	2.3	29
72	Understanding the Mechanisms of Summer Extreme Precipitation Events in Xinjiang of Arid Northwest China. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034111.	1.2	29

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73	Changing spatiotemporal patterns of precipitation extremes in China during 2071â€"2100 based on Earth System Models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,537.	1.2	28
74	Reconstruction of high spatial resolution surface air temperature data across China: A new geo-intelligent multisource data-based machine learning technique. Science of the Total Environment, 2019, 665, 300-313.	3.9	28
75	Droughts across China: Drought factors, prediction and impacts. Science of the Total Environment, 2022, 803, 150018.	3.9	27
76	Regionalization-based spatiotemporal variations of precipitation regimes across China. Theoretical and Applied Climatology, 2013, 114, 203-212.	1.3	26
77	The Characteristics and Evaluation of Future Droughts across China through the CMIP6 Multi-Model Ensemble. Remote Sensing, 2022, 14, 1097.	1.8	26
78	Drying in the low-latitude Atlantic Ocean contributed to terrestrial water storage depletion across Eurasia. Nature Communications, 2022, 13, 1849.	5.8	26
79	Observational evidence of summer precipitation deficitâ€temperature coupling in China. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,040.	1.2	25
80	A global quantitation of factors affecting evapotranspiration variability. Journal of Hydrology, 2020, 584, 124688.	2.3	25
81	Abrupt behaviours of streamflow and sediment load variations of the Yangtze River basin, China. Hydrological Processes, 2013, 27, 444-452.	1.1	24
82	ENSO-induced drought hazards and wet spells and related agricultural losses across Anhui province, China. Natural Hazards, 2017, 89, 963-983.	1.6	24
83	Varying effects of mining development on ecological conditions and groundwater storage in dry region in Inner Mongolia of China. Journal of Hydrology, 2021, 597, 125759.	2.3	24
84	Modified drought severity index: Model improvement and its application in drought monitoring in China. Journal of Hydrology, 2022, 612, 128097.	2.3	24
85	Changes in siteâ€scale temperature extremes over China during 2071â€"2100 in CMIP5 simulations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2732-2749.	1.2	23
86	Timing of floods in southeastern China: Seasonal properties and potential causes. Journal of Hydrology, 2017, 552, 732-744.	2.3	23
87	Potential contributions of climate change and urbanization to precipitation trends across China at national, regional and local scales. International Journal of Climatology, 2019, 39, 2998-3012.	1.5	23
88	Variable Urbanization Warming Effects across Metropolitans of China and Relevant Driving Factors. Remote Sensing, 2020, 12, 1500.	1.8	23
89	Landfalling tropical cyclones activities in the south China: intensifying or weakening?. International Journal of Climatology, 2012, 32, 1815-1824.	1.5	22
90	Attribution of Dry and Wet Climatic Changes over Central Asia. Journal of Climate, 2022, 35, 1399-1421.	1.2	22

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91	Asymmetrical Shift Toward Less Light and More Heavy Precipitation in an Urban Agglomeration of East China: Intensification by Urbanization. Geophysical Research Letters, 2022, 49, .	1.5	22
92	Global Attribution of Runoff Variance Across Multiple Timescales. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13962-13974.	1.2	21
93	Deducing Climatic Elasticity to Assess Projected Climate Change Impacts on Streamflow Change across China. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,228.	1.2	20
94	Probabilistic forecasting of seasonal drought behaviors in the Huai River basin, China. Theoretical and Applied Climatology, 2017, 128, 667-677.	1.3	18
95	Nonstationarity-based evaluation of flood risk in the Pearl River basin: changing patterns, causes and implications. Hydrological Sciences Journal, 2017, 62, 246-258.	1.2	18
96	Nonstationarity and clustering of flood characteristics and relations with the climate indices in the Poyang Lake basin, China. Hydrological Sciences Journal, 2017, 62, 1809-1824.	1.2	18
97	Is the Pearl River basin, China, drying or wetting? Seasonal variations, causes and implications. Global and Planetary Change, 2018, 166, 48-61.	1.6	18
98	Attribution of streamflow changes across the globe based on the Budyko framework. Science of the Total Environment, 2021, 794, 148662.	3.9	18
99	Changing structure of the precipitation process during 1960â€"2005 in Xinjiang, China. Theoretical and Applied Climatology, 2012, 110, 229-244.	1.3	17
100	Eco-Hydrological Requirements in Arid and Semiarid Regions: Case Study of the Yellow River in China. Journal of Hydrologic Engineering - ASCE, 2013, 18, 689-697.	0.8	17
101	Temporal clustering of floods and impacts of climate indices in the Tarim River basin, China. Global and Planetary Change, 2016, 147, 12-24.	1.6	17
102	The changing nature and projection of floods across Australia. Journal of Hydrology, 2020, 584, 124703.	2.3	16
103	Changes in compound hot and dry day and population exposure across China under climate change. International Journal of Climatology, 2022, 42, 2935-2949.	1.5	15
104	Fractional contribution of global warming and regional urbanization to intensifying regional heatwaves across Eurasia. Climate Dynamics, 2022, 59, 1521-1537.	1.7	13
105	Snow Cover in the Three Stable Snow Cover Areas of China and Spatio-Temporal Patterns of the Future. Remote Sensing, 2022, 14, 3098.	1.8	13
106	Amplification of non-stationary drought to heatwave duration and intensity in eastern China: Spatiotemporal pattern and causes. Journal of Hydrology, 2022, 612, 128154.	2.3	13
107	Scaling and clustering effects of extreme precipitation distributions. Journal of Hydrology, 2012, 454-455, 187-194.	2.3	11
108	Hydrological Drought Regimes of the Huai River Basin, China: Probabilistic Behavior, Causes and Implications. Water (Switzerland), 2019, 11, 2390.	1.2	11

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109	Wintertime precipitation in eastern China and relation to the Madden-Julian oscillation: Spatiotemporal properties, impacts and causes. Journal of Hydrology, 2020, 582, 124477.	2.3	11
110	Attribution of NDVI Dynamics over the Globe from 1982 to 2015. Remote Sensing, 2022, 14, 2706.	1.8	11
111	Hydrological response to large-scale climate variability across the Pearl River basin, China: Spatiotemporal patterns and sensitivity. Global and Planetary Change, 2017, 149, 1-13.	1.6	10
112	The scenario-based variations and causes of future surface soil moisture across China in the twenty-first century. Environmental Research Letters, 2021, 16, 034061.	2.2	10
113	Impacts of Spatial Configuration of Land Surface Features on Land Surface Temperature across Urban Agglomerations, China. Remote Sensing, 2021, 13, 4008.	1.8	9
114	Mining can exacerbate global degradation of dryland. Geophysical Research Letters, 2021, 48, e2021GL094490.	1.5	9
115	Hydrological Processes in the Huaihe River Basin, China: Seasonal Variations, Causes and Implications. Chinese Geographical Science, 2018, 28, 636-653.	1.2	7
116	Nonstationary Ecological Instream Flow and Relevant Causes in the Huai River Basin, China. Water (Switzerland), 2021, 13, 484.	1.2	7
117	Stationâ€based nonâ€linear regression downscaling approach: A new monthly precipitation downscaling technique. International Journal of Climatology, 2021, 41, 5879-5898.	1.5	7
118	Global soil moisture drought identification and responses to natural and anthropogenic forcings. Journal of Hydrology, 2022, 610, 127993.	2.3	7
119	Spatiotemporal Patterns of Extreme Temperature across the Huai River Basin, China, during 1961â€"2014, and Regional Responses to Global Changes. Sustainability, 2018, 10, 1236.	1.6	6
120	Terrestrial Water Storage in China: Spatiotemporal Pattern and Driving Factors. Sustainability, 2019, 11, 6646.	1.6	6
121	Extreme sea levels along coastal China: uncertainties and implications. Stochastic Environmental Research and Risk Assessment, 2021, 35, 405-418.	1.9	6
122	Amplifying Flood Risk Across the Lower Yellow River Basin, China, Under Shared Socioeconomic Pathways. Frontiers in Earth Science, 2022, 10, .	0.8	5
123	Influence of land surface aridification on regional monsoon precipitation in East Asian summer monsoon transition zone. Theoretical and Applied Climatology, 2021, 144, 93-102.	1.3	4
124	Identification of Degradation Areas of Ecological Environment and Degradation Intensity Assessment in the Yellow River Basin. Frontiers in Earth Science, 0, 10, .	0.8	4