Xuebin Zhang

List of Publications by Citations

88 papers	16,722 citations	47 h-index	91 g-index
91 ext. papers	19,670 ext. citations	7.8 avg, IF	6.72 L-index

#	Paper	IF	Citations
88	Global observed changes in daily climate extremes of temperature and precipitation. *Journal of Geophysical Research*, **2006**, 111,		2250
87	Human contribution to more-intense precipitation extremes. *Nature*, **2011**, 470, 378-81	50.4	1341
86	Indices for monitoring changes in extremes based on daily temperature and precipitation data. *Wiley Interdisciplinary Reviews: Climate Change*, **2011**, 2, 851-870	8.4	933
85	Climate extremes indices in the CMIP5 multimodel ensemble: Part 2. Future climate projections. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 2473-2493	4.4	866
84	Climate extremes indices in the CMIP5 multimodel ensemble: Part 1. Model evaluation in the present climate. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 1716-1733	4.4	852
83	Updated analyses of temperature and precipitation extreme indices since the beginning of the twentieth century: The HadEX2 dataset. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 2098-2118	4.4	791
82	Temperature and precipitation trends in Canada during the 20th century. *Atmosphere - Ocean*, **2000**, 38, 395-429	1.5	766
81	Detection of human influence on twentieth-century precipitation trends. *Nature*, **2007**, 448, 461-5	50.4	743
80	Changes in Temperature and Precipitation Extremes in the IPCC Ensemble of Global Coupled Model Simulations. *Journal of Climate*, **2007**, 20, 1419-1444	4.4	739
79	Changes in Climate Extremes and their Impacts on the Natural Physical Environment109-230		709
78	Changes in temperature and precipitation extremes in the CMIP5 ensemble. *Climatic Change*, **2013**, 119, 345-357	4.5	652
77	Future climate risk from compound events. *Nature Climate Change*, **2018**, 8, 469-477	21.4	530
76	Trends in Canadian streamflow. *Water Resources Research*, **2001**, 37, 987-998	5.4	526
75	Rapid increase in the risk of extreme summer heat in Eastern China. *Nature Climate Change*, **2014**, 4, 1082-1085	21.4	373
74	Characteristics of Daily and Extreme Temperatures over Canada. *Journal of Climate*, **2001**, 14, 1959-1976	4.4	295
73	Avoiding Inhomogeneity in Percentile-Based Indices of Temperature Extremes. *Journal of Climate*, **2005**, 18, 1641-1651	4.4	279
72	Projected Changes in Temperature and Precipitation Extremes in China by the CMIP5 Multimodel Ensembles. *Journal of Climate*, **2014**, 27, 6591-6611	4.4	224

71	Detection and attribution of climate change: a regional perspective. *Wiley Interdisciplinary Reviews: Climate Change*, **2010**, 1, 192-211	8.4	206
70	Contribution of urbanization to warming in China. *Nature Climate Change*, **2016**, 6, 706-709	21.4	204
69	Changes in temperature and precipitation extremes in western central Africa, Guinea Conakry, and Zimbabwe, 1955–2006. *Journal of Geophysical Research*, **2009**, 114,		192
68	Attributing intensification of precipitation extremes to human influence. *Geophysical Research Letters*, **2013**, 40, 5252-5257	4.9	174
67	Anthropogenic Influence on Long Return Period Daily Temperature Extremes at Regional Scales. *Journal of Climate*, **2011**, 24, 881-892	4.4	174
66	Monte Carlo Experiments on the Detection of Trends in Extreme Values. *Journal of Climate*, **2004**, 17, 1945-1952	4.4	165
65	Observed Trends in Canada's Climate and Influence of Low-Frequency Variability Modes. *Journal of Climate*, **2015**, 28, 4545-4560	4.4	159
64	Changes in North American extremes derived from daily weather data. *Journal of Geophysical Research*, **2008**, 113,		145
63	Percentile indices for assessing changes in heavy precipitation events. *Climatic Change*, **2016**, 137, 201-216	4.5	140
62	Large near-term projected snowpack loss over the western United States. *Nature Communications*, **2017**, 8, 14996	17.4	138
61	Complexity in estimating past and future extreme short-duration rainfall. *Nature Geoscience*, **2017**, 10, 255-259	18.3	135
60	The Influence of Large-Scale Climate Variability on Winter Maximum Daily Precipitation over North America. *Journal of Climate*, **2010**, 23, 2902-2915	4.4	125
59	Toward Regional-Scale Climate Change Detection. *Journal of Climate*, **2003**, 16, 793-797	4.4	85
58	Anthropogenic intensification of short-duration rainfall extremes. *Nature Reviews Earth & Environment*, **2021**, 2, 107-122	30.2	83
57	Detecting human influence on extreme temperatures in China. *Geophysical Research Letters*, **2013**, 40, 1171-1176	4.9	82
56	Risks from Climate Extremes Change Differently from 1.5°C to 2.0°C Depending on Rarity. *Earth's Future*, **2018**, 6, 704-715	7.9	81
55	Comment on "Applicability of prewhitening to eliminate the influence of serial correlation on the Mann-Kendall test" by Sheng Yue and Chun Yuan Wang. *Water Resources Research*, **2004**, 40,	5.4	80
54	Multimodel Detection and Attribution of Extreme Temperature Changes. *Journal of Climate*, **2013**, 26, 7430-7451	4.4	73

53	Evaluation of the CMIP6 multi-model ensemble for climate extreme indices. *Weather and Climate Extremes*, **2020**, 29, 100269	6	71
52	Human influence on Arctic sea ice detectable from early 1990s onwards. *Geophysical Research Letters*, **2008**, 35,	4.9	70
51	Downscaling and Projection of Winter Extreme Daily Precipitation over North America. *Journal of Climate*, **2008**, 21, 923-937	4.4	65
50	Anthropogenic climate change detected in European renewable freshwater resources. *Nature Climate Change*, **2017**, 7, 813-816	21.4	64
49	Multimodel Multisignal Climate Change Detection at Regional Scale. *Journal of Climate*, **2006**, 19, 4294-4307	4.4	57
48	Attribution of extreme temperature changes during 1951–2010. *Climate Dynamics*, **2016**, 46, 1769-1782	4.2	55
47	Globally observed trends in mean and extreme river flow attributed to climate change. *Science*, **2021**, 371, 1159-1162	33.3	55
46	Development of an Updated Global Land In Situ-Based Data Set of Temperature and Precipitation Extremes: HadEX3. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD032263	4.4	54
45	Additional risk in extreme precipitation in China from 1.5 °C to 2.0 °C global warming levels. *Science Bulletin*, **2018**, 63, 228-234	10.6	53
44	Signal detectability in extreme precipitation changes assessed from twentieth century climate simulations. *Climate Dynamics*, **2009**, 32, 95-111	4.2	52
43	Human influence has intensified extreme precipitation in North America. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 13308-13313	11.5	48
42	Causes of Robust Seasonal Land Precipitation Changes*. *Journal of Climate*, **2013**, 26, 6679-6697	4.4	48
41	Understanding the Dynamics of Future Changes in Extreme Precipitation Intensity. *Geophysical Research Letters*, **2018**, 45, 2870-2878	4.9	39
40	A Global, Continental, and Regional Analysis of Changes in Extreme Precipitation. *Journal of Climate*, **2021**, 34, 243-258	4.4	39
39	El Niño–Southern Oscillation influence on winter maximum daily precipitation in California in a spatial model. *Water Resources Research*, **2011**, 47,	5.4	36
38	Observed Trends in Severe Weather Conditions Based on Humidex, Wind Chill, and Heavy Rainfall Events in Canada for 1953–2012. *Atmosphere - Ocean*, **2015**, 53, 383-397	1.5	35
37	Changes in Annual Extremes of Daily Temperature and Precipitation in CMIP6 Models. *Journal of Climate*, **2021**, 34, 3441-3460	4.4	35
36	Detection of anthropogenic influence on the intensity of extreme temperatures in China. *International Journal of Climatology*, **2017**, 37, 1229-1237	3.5	34

35	Anthropogenic influence on the frequency of extreme temperatures in China. *Geophysical Research Letters*, **2016**, 43, 6511-6518	4.9	34
34	How Much Information Is Required to Well Constrain Local Estimates of Future Precipitation Extremes?. *Earth's Future*, **2019**, 7, 11-24	7.9	33
33	Attributing northern high-latitude precipitation change over the period 1966–2005 to human influence. *Climate Dynamics*, **2015**, 45, 1713-1726	4.2	32
32	Changing growing season observed in Canada. *Climatic Change*, **2012**, 112, 339-353	4.5	32
31	Observed changes in temperature extremes over Asia and their attribution. *Climate Dynamics*, **2018**, 51, 339-353	4.2	30
30	Climate change impacts on Canadian yields of spring wheat, canola and maize for global warming levels of 1.5 °C, 2.0 °C, 2.5 °C and 3.0 °C. *Environmental Research Letters*, **2019**, 14, 074005	6.2	29
29	Larger Increases in More Extreme Local Precipitation Events as Climate Warms. *Geophysical Research Letters*, **2019**, 46, 6885-6891	4.9	29
28	Substantial Increase in Heat Wave Risks in China in a Future Warmer World. *Earth's Future*, **2018**, 6, 1528-1538	7.9	23
27	On the Emergence of Anthropogenic Signal in Extreme Precipitation Change Over China. *Geophysical Research Letters*, **2018**, 45, 9179-9185	4.9	22
26	Recent Very Hot Summers in Northern Hemispheric Land Areas Measured by Wet Bulb Globe Temperature Will Be the Norm Within 20 Years. *Earth's Future*, **2017**, 5, 1203-1216	7.9	21
25	Evaluating model-simulated variability in temperature extremes using modified percentile indices. *International Journal of Climatology*, **2014**, 34, 3304-3311	3.5	18
24	Causes of drying trends in northern hemispheric land areas in reconstructed soil moisture data. *Climatic Change*, **2016**, 134, 255-267	4.5	17
23	Indices of Canada's future climate for general and agricultural adaptation applications. *Climatic Change*, **2018**, 148, 249-263	4.5	16
22	Contribution of Global warming and Urbanization to Changes in Temperature Extremes in Eastern China. *Geophysical Research Letters*, **2019**, 46, 11426-11434	4.9	15
21	Widespread persistent changes to temperature extremes occurred earlier than predicted. *Scientific Reports*, **2018**, 8, 1007	4.9	15
20	Human influence on Canadian temperatures. *Climate Dynamics*, **2019**, 52, 479-494	4.2	15
19	Importance of Framing for Extreme Event Attribution: The Role of Spatial and Temporal Scales. *Earth's Future*, **2019**, 7, 1192-1204	7.9	14
18	Multimodel detection and attribution of changes in warm and cold spell durations. *Environmental Research Letters*, **2018**, 13, 074013	6.2	14

17	Determining the Anthropogenic Greenhouse Gas Contribution to the Observed Intensification of Extreme Precipitation. *Geophysical Research Letters*, **2020**, 47, e2019GL086875	4.9	12
16	Human influence on frequency of temperature extremes. *Environmental Research Letters*, **2020**, 15, 064014	6.2	12
15	Rapid Warming in Summer Wet Bulb Globe Temperature in China with Human-Induced Climate Change. *Journal of Climate*, **2020**, 33, 5697-5711	4.4	12
14	Understanding human influence on climate change in China.. *National Science Review*, **2022**, 9, nwab113	10.8	10
13	Automated selection of r for the r largest order statistics approach with adjustment for sequential testing. *Statistics and Computing*, **2017**, 27, 1435-1451	1.8	8
12	Strong Influence of Eddy Length on Boreal Summertime Extreme Precipitation Projections. *Geophysical Research Letters*, **2018**, 45, 10,665-10,672	4.9	8
11	An Evaluation of Block-Maximum-Based Estimation of Very Long Return Period Precipitation Extremes with a Large Ensemble Climate Simulation. *Journal of Climate*, **2020**, 33, 6957-6970	4.4	7
10	A Comparison of Intra-Annual and Long-Term Trend Scaling of Extreme Precipitation with Temperature in a Large-Ensemble Regional Climate Simulation. *Journal of Climate*, **2020**, 33, 9233-9245	4.4	7
9	Probable maximum precipitation in a warming climate over North America in CanRCM4 and CRCM5. *Climatic Change*, **2020**, 158, 611-629	4.5	6
8	Risks of temperature extremes over China under 1.5 °C and 2 °C global warming. *Advances in Climate Change Research*, **2020**, 11, 172-184	4.1	6
7	Quantifying the human influence on the intensity of extreme 1- and 5-day precipitation amounts at global, continental, and regional scales. *Journal of Climate*, **2021**, 1-51	4.4	1
6	A bivariate approach to estimating the probability of very extreme precipitation events. *Weather and Climate Extremes*, **2020**, 30, 100290	6	1
5	On the Optimal Design of Field Significance Tests for Changes in Climate Extremes. *Geophysical Research Letters*, **2021**, 48, e2021GL092831	4.9	1
4	Improving the Estimation of Human Climate Influence by Selecting Appropriate Forcing Simulations. *Geophysical Research Letters*, **2021**, 48, e2021GL095500	4.9	0
3	On estimating long period wind speed return levels from annual maxima. *Weather and Climate Extremes*, **2021**, 34, 100388	6	0
2	Human influence on daily temperature variability over land. *Environmental Research Letters*, **2021**, 16, 094026	6.2	0
1	Using a model comparison to support the interpretation of extreme event attribution. *Weather and Climate Extremes*, **2022**, 36, 100444	6	