Xiaogang He

List of Publications by Citations

234 papers	**14,852** citations
56 h-index	**118** g-index
245 ext. papers	**17,263** ext. citations
4.4 avg, IF	**6.63** L-index

#	Paper	IF	Citations
234	The TRMM Multisatellite Precipitation Analysis (TMPA): Quasi-Global, Multiyear, Combined-Sensor Precipitation Estimates at Fine Scales. *Journal of Hydrometeorology*, **2007**, 8, 38-55	3.7	5064
233	Precipitation Estimation from Remotely Sensed Imagery Using an Artificial Neural Network Cloud Classification System. *Journal of Applied Meteorology and Climatology*, **2004**, 43, 1834-1853		506
232	Evaluation of TRMM Multisatellite Precipitation Analysis (TMPA) and Its Utility in Hydrologic Prediction in the La Plata Basin. *Journal of Hydrometeorology*, **2008**, 9, 622-640	3.7	385
231	Evaluation of GPM Day-1 IMERG and TMPA Version-7 legacy products over Mainland China at multiple spatiotemporal scales. *Journal of Hydrology*, **2016**, 533, 152-167	6	319
230	Statistical and hydrological evaluation of TRMM-based Multi-satellite Precipitation Analysis over the Wangchu Basin of Bhutan: Are the latest satellite precipitation products 3B42V7 ready for use in ungauged basins?. *Journal of Hydrology*, **2013**, 499, 91-99	6	254
229	A global landslide catalog for hazard applications: method, results, and limitations. *Natural Hazards*, **2010**, 52, 561-575	3	227
228	Drought and flood monitoring for a large karst plateau in Southwest China using extended GRACE data. *Remote Sensing of Environment*, **2014**, 155, 145-160	13.2	215
227	Hydrologic evaluation of Multisatellite Precipitation Analysis standard precipitation products in basins beyond its inclined latitude band: A case study in Laohahe basin, China. *Water Resources Research*, **2010**, 46,	5.4	199
226	Vegetation Greening and Climate Change Promote Multidecadal Rises of Global Land Evapotranspiration. *Scientific Reports*, **2015**, 5, 15956	4.9	180
225	Global View Of Real-Time Trmm Multisatellite Precipitation Analysis: Implications For Its Successor Global Precipitation Measurement Mission. *Bulletin of the American Meteorological Society*, **2015**, 96, 283-296	6.1	171
224	Satellite Remote Sensing and Hydrologic Modeling for Flood Inundation Mapping in Lake Victoria Basin: Implications for Hydrologic Prediction in Ungauged Basins. *IEEE Transactions on Geoscience and Remote Sensing*, **2011**, 49, 85-95	8.1	169
223	Statistical and Hydrological Comparisons between TRMM and GPM Level-3 Products over a Midlatitude Basin: Is Day-1 IMERG a Good Successor for TMPA 3B42V7?. *Journal of Hydrometeorology*, **2016**, 17, 121-137	3.7	163
222	Use of satellite remote sensing data in the mapping of global landslide susceptibility. *Natural Hazards*, **2007**, 43, 245-256	3	159
221	The coupled routing and excess storage (CREST) distributed hydrological model. *Hydrological Sciences Journal*, **2011**, 56, 84-98	3.5	152
220	Have GRACE satellites overestimated groundwater depletion in the Northwest India Aquifer?. *Scientific Reports*, **2016**, 6, 24398	4.9	150
219	Deriving scaling factors using a global hydrological model to restore GRACE total water storage changes for China's Yangtze River Basin. *Remote Sensing of Environment*, **2015**, 168, 177-193	13.2	147
218	Similarity and difference of the two successive V6 and V7 TRMM multisatellite precipitation analysis performance over China. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 13,060-13,074	4.4	147

217	Early assessment of Integrated Multi-satellite Retrievals for Global Precipitation Measurement over China. *Atmospheric Research*, **2016**, 176-177, 121-133	5.4	142
216	Evaluation of Global Flood Detection Using Satellite-Based Rainfall and a Hydrologic Model. *Journal of Hydrometeorology*, **2012**, 13, 1268-1284	3.7	139
215	Evaluation of the potential of NASA multi-satellite precipitation analysis in global landslide hazard assessment. *Geophysical Research Letters*, **2006**, 33,	4.9	137
214	Quantitative assessment of climate change and human impacts on long-term hydrologic response: a case study in a sub-basin of the Yellow River, China. *International Journal of Climatology*, **2010**, 30, 2130-2137	3.5	136
213	Have satellite precipitation products improved over last two decades? A comprehensive comparison of GPM IMERG with nine satellite and reanalysis datasets. *Remote Sensing of Environment*, **2020**, 240, 111697	13.2	130
212	A first approach to global runoff simulation using satellite rainfall estimation. *Water Resources Research*, **2007**, 43,	5.4	127
211	Assessment of evolving TRMM-based multisatellite real-time precipitation estimation methods and their impacts on hydrologic prediction in a high latitude basin. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		120
210	Comparison of PERSIANN and V7 TRMM Multi-satellite Precipitation Analysis (TMPA) products with rain gauge data over Iran. *International Journal of Remote Sensing*, **2013**, 34, 8156-8171	3.1	120
209	A digitized global flood inventory (1998‑2008): compilation and preliminary results. *Natural Hazards*, **2010**, 55, 405-422	3	119
208	Flood and landslide applications of near real-time satellite rainfall products. *Natural Hazards*, **2007**, 43, 285-294	3	119
207	Evaluation of the real-time TRMM-based multi-satellite precipitation analysis for an operational flood prediction system in Nzoia Basin, Lake Victoria, Africa. *Natural Hazards*, **2009**, 50, 109-123	3	118
206	Improved modeling of snow and glacier melting by a progressive two-stage calibration strategy with GRACE and multisource data: How snow and glacier meltwater contributes to the runoff of the Upper Brahmaputra River basin?. *Water Resources Research*, **2017**, 53, 2431-2466	5.4	108
205	Evaluation of the successive V6 and V7 TRMM multisatellite precipitation analysis over the Continental United States. *Water Resources Research*, **2013**, 49, 8174-8186	5.4	108
204	Similarity and Error Intercomparison of the GPM and Its Predecessor-TRMM Multisatellite Precipitation Analysis Using the Best Available Hourly Gauge Network over the Tibetan Plateau. *Remote Sensing*, **2016**, 8, 569	5	97
203	Bayesian multimodel estimation of global terrestrial latent heat flux from eddy covariance, meteorological, and satellite observations. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 4521-4545	4.4	93
202	The FLASH Project: Improving the Tools for Flash Flood Monitoring and Prediction across the United States. *Bulletin of the American Meteorological Society*, **2017**, 98, 361-372	6.1	91
201	Prototyping an experimental early warning system for rainfall-induced landslides in Indonesia using satellite remote sensing and geospatial datasets. *Landslides*, **2010**, 7, 317-324	6.6	91
200	Multiregional Satellite Precipitation Products Evaluation over Complex Terrain. *Journal of Hydrometeorology*, **2016**, 17, 1817-1836	3.7	87

199	Spatial downscaling of precipitation using adaptable random forests. *Water Resources Research*, **2016**, 52, 8217-8237	5.4	82
198	Multiscale Hydrologic Applications of the Latest Satellite Precipitation Products in the Yangtze River Basin using a Distributed Hydrologic Model. *Journal of Hydrometeorology*, **2015**, 16, 407-426	3.7	81
197	Accounting for spatiotemporal errors of gauges: A critical step to evaluate gridded precipitation products. *Journal of Hydrology*, **2018**, 559, 294-306	6	78
196	A lake data set for the Tibetan Plateau from the 1960s, 2005, and 2014. *Scientific Data*, **2016**, 3, 160039	8.2	73
195	Advances in landslide nowcasting: evaluation of a global and regional modeling approach. *Environmental Earth Sciences*, **2012**, 66, 1683-1696	2.9	71
194	Precipitation Extremes Estimated by GPCP and TRMM: ENSO Relationships. *Journal of Hydrometeorology*, **2007**, 8, 678-689	3.7	71
193	Intensification of hydrological drought in California by human water management. *Geophysical Research Letters*, **2017**, 44, 1777-1785	4.9	70
192	Statistical assessment and hydrological utility of the latest multi-satellite precipitation analysis IMERG in Ganjiang River basin. *Atmospheric Research*, **2017**, 183, 212-223	5.4	69
191	Evaluation of Version-7 TRMM Multi-Satellite Precipitation Analysis Product during the Beijing Extreme Heavy Rainfall Event of 21 July 2012. *Water (Switzerland)*, **2014**, 6, 32-44	3	68
190	A Unified Flash Flood Database across the United States. *Bulletin of the American Meteorological Society*, **2013**, 94, 799-805	6.1	67
189	Performance evaluation of radar and satellite rainfalls for Typhoon Morakot over Taiwan: Are remote-sensing products ready for gauge denial scenario of extreme events?. *Journal of Hydrology*, **2013**, 506, 4-13	6	66
188	Performance of Optimally Merged Multisatellite Precipitation Products Using the Dynamic Bayesian Model Averaging Scheme Over the Tibetan Plateau. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 814-834	4.4	66
187	Analysis of flash flood disaster characteristics in China from 2011 to 2015. *Natural Hazards*, **2018**, 90, 407-420	3	65
186	Predicting global landslide spatiotemporal distribution: Integrating landslide susceptibility zoning techniques and real-time satellite rainfall estimates. *International Journal of Sediment Research*, **2008**, 23, 249-257	3	62
185	Water balance-based actual evapotranspiration reconstruction from ground and satellite observations over the conterminous United States. *Water Resources Research*, **2015**, 51, 6485-6499	5.4	61
184	Probabilistic precipitation rate estimates with ground-based radar networks. *Water Resources Research*, **2015**, 51, 1422-1442	5.4	61
183	Hydro-Climatological Drought Analyses and Projections Using Meteorological and Hydrological Drought Indices: A Case Study in Blue River Basin, Oklahoma. *Water Resources Management*, **2012**, 26, 2761-2779	3.7	61
182	Comprehensive evaluation of four high-resolution satellite precipitation products under diverse climate conditions in Iran. *Hydrological Sciences Journal*, **2016**, 61, 420-440	3.5	60

181	Evaluation of TRIGRS (transient rainfall infiltration and grid-based regional slope-stability analysis)'s predictive skill for hurricane-triggered landslides: a case study in Macon County, North Carolina. *Natural Hazards*, **2011**, 58, 325-339	3	58
180	Evaluation of Tools Used for Monitoring and Forecasting Flash Floods in the United States. *Weather and Forecasting*, **2012**, 27, 158-173	2.1	58
179	Evaluation of a satellite-based global flood monitoring system. *International Journal of Remote Sensing*, **2010**, 31, 3763-3782	3.1	57
178	Comprehensive evaluation of Ensemble Multi-Satellite Precipitation Dataset using the Dynamic Bayesian Model Averaging scheme over the Tibetan plateau. *Journal of Hydrology*, **2018**, 556, 634-644	6	56
177	VSDI: a visible and shortwave infrared drought index for monitoring soil and vegetation moisture based on optical remote sensing. *International Journal of Remote Sensing*, **2013**, 34, 4585-4609	3.1	55
176	Intercomparison of Rainfall Estimates from Radar, Satellite, Gauge, and Combinations for a Season of Record Rainfall. *Journal of Applied Meteorology and Climatology*, **2010**, 49, 437-452	2.7	54
175	Global intercomparison and regional evaluation of GPM IMERG Version-03, Version-04 and its latest Version-05 precipitation products: Similarity, difference and improvements. *Journal of Hydrology*, **2018**, 564, 342-356	6	53
174	CONUS-Wide Evaluation of National Weather Service Flash Flood Guidance Products. *Weather and Forecasting*, **2014**, 29, 377-392	2.1	52
173	A comprehensive data set of lake surface water temperature over the Tibetan Plateau derived from MODIS LST products 2001-2015. *Scientific Data*, **2017**, 4, 170095	8.2	51
172	Susceptibility evaluation and mapping of China's landslides based on multi-source data. *Natural Hazards*, **2013**, 69, 1477-1495	3	50
171	Evaluation of the ERA5 reanalysis precipitation dataset over Chinese Mainland. *Journal of Hydrology*, **2021**, 595, 125660	6	50
170	Mapping Flash Flood Severity in the United States. *Journal of Hydrometeorology*, **2017**, 18, 397-411	3.7	49
169	Quantitative assessment of climate and human impacts on surface water resources in a typical semi-arid watershed in the middle reaches of the Yellow River from 1985 to 2006. *International Journal of Climatology*, **2015**, 35, 97-113	3.5	46
168	Error-Component Analysis of TRMM-Based Multi-Satellite Precipitation Estimates over Mainland China. *Remote Sensing*, **2016**, 8, 440	5	45
167	First evaluation of the climatological calibration algorithm in the real-time TMPA precipitation estimates over two basins at high and low latitudes. *Water Resources Research*, **2013**, 49, 2461-2472	5.4	44
166	Documentation of multifactorial relationships between precipitation and topography of the Tibetan Plateau using spaceborne precipitation radars. *Remote Sensing of Environment*, **2018**, 208, 82-96	13.2	43
165	Assessment of shallow landslides from Hurricane Mitch in central America using a physically based model. *Environmental Earth Sciences*, **2012**, 66, 1697-1705	2.9	43
164	Evaluation of high-resolution precipitation estimates from satellites during July 2012 Beijing flood event using dense rain gauge observations. *PLoS ONE*, **2014**, 9, e89681	3.7	40

163 A Global Drought and Flood Catalogue from 1950 to 2016. *Bulletin of the American Meteorological Society*, **2020**, 101, E508-E535 — 6.1 — 39

162 Uncertainty analysis of five satellite-based precipitation products and evaluation of three optimally merged multi-algorithm products over the Tibetan Plateau. *International Journal of Remote Sensing*, **2014**, 35, 6843-6858 — 3.1 — 39

161 New Multisite Cascading Calibration Approach for Hydrological Models: Case Study in the Red River Basin Using the VIC Model. *Journal of Hydrologic Engineering - ASCE*, **2016**, 21, 05015019 — 1.8 — 37

160 Improvement of Multi-Satellite Real-Time Precipitation Products for Ensemble Streamflow Simulation in a Middle Latitude Basin in South China. *Water Resources Management*, **2014**, 28, 2259-2278 — 3.7 — 35

159 Similarities and differences between three coexisting spaceborne radars in global rainfall and snowfall estimation. *Water Resources Research*, **2017**, 53, 3835-3853 — 5.4 — 34

158 Integrated approaches to understanding and reducing drought impact on food security across scales. *Current Opinion in Environmental Sustainability*, **2019**, 40, 43-54 — 7.2 — 33

157 Comparison analysis of six purely satellite-derived global precipitation estimates. *Journal of Hydrology*, **2020**, 581, 124376 — 6 — 33

156 Exploring Deep Neural Networks to Retrieve Rain and Snow in High Latitudes Using Multisensor and Reanalysis Data. *Water Resources Research*, **2018**, 54, 8253-8278 — 5.4 — 32

155 Development of an NRCS curve number global dataset using the latest geospatial remote sensing data for worldwide hydrologic applications. *Remote Sensing Letters*, **2017**, 8, 528-536 — 2.3 — 31

154 Hydrometeorological Analysis and Remote Sensing of Extremes: Was the July 2012 Beijing Flood Event Detectable and Predictable by Global Satellite Observing and Global Weather Modeling Systems?. *Journal of Hydrometeorology*, **2015**, 16, 381-395 — 3.7 — 31

153 Water security implications of coal-fired power plants financed through China's Belt and Road Initiative. *Energy Policy*, **2019**, 132, 1101-1109 — 7.2 — 31

152 Future increases in irrigation water requirement challenge the water-food nexus in the northeast farming region of China. *Agricultural Water Management*, **2019**, 213, 594-604 — 5.9 — 31

151 Observed radiative cooling over the Tibetan Plateau for the past three decades driven by snow cover-induced surface albedo anomaly. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 6170-6185 — 4.4 — 28

150 Mudslide-caused ecosystem degradation following Wenchuan earthquake 2008. *Geophysical Research Letters*, **2009**, 36, — 4.9 — 28

149 Monitoring urban greenness dynamics using multiple endmember spectral mixture analysis. *PLoS ONE*, **2014**, 9, e112202 — 3.7 — 27

148 Analyzing projected changes and trends of temperature and precipitation in the southern USA from 16 downscaled global climate models. *Theoretical and Applied Climatology*, **2012**, 109, 345-360 — 3 — 27

147 Systematic Anomalies Over Inland Water Bodies of High Mountain Asia in TRMM Precipitation Estimates: No Longer a Problem for the GPM Era?. *IEEE Geoscience and Remote Sensing Letters*, **2016**, 13, 1762-1766 — 4.1 — 27

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145	Development of a coupled hydrological-geotechnical framework for rainfall-induced landslides prediction. *Journal of Hydrology*, **2016**, 543, 395-405	6	26
144	Error analysis of multi-satellite precipitation estimates with an independent raingauge observation network over a medium-sized humid basin. *Hydrological Sciences Journal*, **2016**, 1-18	3.5	26
143	Responses of land evapotranspiration to Earth greening in CMIP5 Earth System Models. *Environmental Research Letters*, **2016**, 11, 104006	6.2	26
142	Evaluating the Performance of Merged Multi-Satellite Precipitation Products Over a Complex Terrain. *Water Resources Management*, **2015**, 29, 4885-4901	3.7	25
141	Research Framework to Bridge from the Global Precipitation Measurement Mission Core Satellite to the Constellation Sensors Using Ground-Radar-Based National Mosaic QPE. *Geophysical Monograph Series*, **2014**, 61-79	1.1	25
140	Solar and wind energy enhances drought resilience and groundwater sustainability. *Nature Communications*, **2019**, 10, 4893	17.4	24
139	Spatial Temporal Changes of Water Resources in a Typical Semiarid Basin of North China over the Past 50 Years and Assessment of Possible Natural and Socioeconomic Causes. *Journal of Hydrometeorology*, **2013**, 14, 1009-1034	3.7	24
138	Impacts of Polarimetric Radar Observations on Hydrologic Simulation. *Journal of Hydrometeorology*, **2010**, 11, 781-796	3.7	24
137	Spatio-temporal analysis and simulation on shallow rainfall-induced landslides in China using landslide susceptibility dynamics and rainfall I-D thresholds. *Science China Earth Sciences*, **2017**, 60, 720-732	4.6	23
136	Model test study on monitoring dynamic process of slope failure through spatial sensor network. *Environmental Earth Sciences*, **2015**, 74, 3315-3332	2.9	23
135	Characterizing Spatiotemporal Variations of Hourly Rainfall by Gauge and Radar in the Mountainous Three Gorges Region. *Journal of Applied Meteorology and Climatology*, **2014**, 53, 873-889	2.7	23
134	In Quest of Calibration Density and Consistency in Hydrologic Modeling: Distributed Parameter Calibration against Streamflow Characteristics. *Water Resources Research*, **2019**, 55, 7784-7803	5.4	22
133	A Methodology to Monitor Urban Expansion and Green Space Change Using a Time Series of Multi-Sensor SPOT and Sentinel-2A Images. *Remote Sensing*, **2019**, 11, 1230	5	22
132	Lagged Compound Occurrence of Droughts and Pluvials Globally Over the Past Seven Decades. *Geophysical Research Letters*, **2020**, 47, e2020GL087924	4.9	22
131	Empirical conversion of the vertical profile of reflectivity from Ku-band to S-band frequency. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 1814-1825	4.4	21
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126	Evaluation of latest TMPA and CMORPH precipitation products with independent rain gauge observation networks over high-latitude and low-latitude basins in China. *Chinese Geographical Science*, **2016**, 26, 439-455	2.9	20
125	Hydrological Variability and Uncertainty of Lower Missouri River Basin Under Changing Climate. *Journal of the American Water Resources Association*, **2014**, 50, 246-260	2.1	20
124	Climate Change and Hydrological Response in the Trans-State Oologah Lake Watershed–Evaluating Dynamically Downscaled NARCCAP and Statistically Downscaled CMIP3 Simulations with VIC Model. *Water Resources Management*, **2014**, 28, 3291-3305	3.7	20
123	Similarities and Improvements of GPM Dual-Frequency Precipitation Radar (DPR) upon TRMM Precipitation Radar (PR) in Global Precipitation Rate Estimation, Type Classification and Vertical Profiling. *Remote Sensing*, **2017**, 9, 1142	5	19
122	A comprehensive flash flood defense system in China: overview, achievements, and outlook. *Natural Hazards*, **2018**, 92, 727-740	3	19
121	A cascading flash flood guidance system: development and application in Yunnan Province, China. *Natural Hazards*, **2016**, 84, 2071-2093	3	19
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118	The Diurnal Cycle of Precipitation in Regional Spectral Model Simulations over West Africa: Sensitivities to Resolution and Cumulus Schemes. *Weather and Forecasting*, **2015**, 30, 424-445	2.1	18
117	Cross-Examination of Similarity, Difference and Deficiency of Gauge, Radar and Satellite Precipitation Measuring Uncertainties for Extreme Events Using Conventional Metrics and Multiplicative Triple Collocation. *Remote Sensing*, **2020**, 12, 1258	5	18
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114	A Framework to Evaluate Community Resilience to Urban Floods: A Case Study in Three Communities. *Sustainability*, **2020**, 12, 1521	3.6	17
113	Study on Applicability of Conceptual Hydrological Models for Flood Forecasting in Humid, Semi-Humid Semi-Arid and Arid Basins in China. *Water (Switzerland)*, **2017**, 9, 719	3	17
112	A systematic assessment and reduction of parametric uncertainties for a distributed hydrological model. *Journal of Hydrology*, **2018**, 564, 697-711	6	17
111	Bare Surface Soil Moisture Estimation Using Double-Angle and Dual-Polarization L-Band Radar Data. *IEEE Transactions on Geoscience and Remote Sensing*, **2013**, 51, 3931-3942	8.1	17
110	Investigation of inducements and defenses of flash floods and urban waterlogging in Fuzhou, China, from 1950 to 2010. *Natural Hazards*, **2018**, 91, 803-818	3	16

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105	Investigation of potential sea level rise impact on the Nile Delta, Egypt using digital elevation models. *Environmental Monitoring and Assessment*, **2015**, 187, 649	3.1	15
104	Effects of 4D-Var Data Assimilation Using Remote Sensing Precipitation Products in a WRF Model over the Complex Terrain of an Arid Region River Basin. *Remote Sensing*, **2017**, 9, 963	5	15
103	Probabilistic precipitation rate estimates with space-based infrared sensors. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 191-205	6.4	15
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93	Evaluation of a Method to Enhance Real-Time, Ground Radar-Based Rainfall Estimates Using Climatological Profiles of Reflectivity from Space. *Journal of Hydrometeorology*, **2016**, 17, 761-775	3.7	12
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89	Can Remote Sensing Technologies Capture the Extreme Precipitation Event and Its Cascading Hydrological Response? A Case Study of Hurricane Harvey Using EF5 Modeling Framework. *Remote Sensing*, **2020**, 12, 445	5	11
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86	A public Cloud-based China Landslide Inventory Database (CsLID): development, zone, and spatiotemporal analysis for significant historical events, 1949-2011. *Journal of Mountain Science*, **2016**, 13, 1275-1285	2.1	11
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