Eric F Wood

List of Publications by Citations

Source: https://exaly.com/author-pdf/975265/eric-f-wood-publications-by-citations.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

396 papers

42,526 citations

105 h-index

197 g-index

421 ext. papers

48,425 ext. citations

5.7 avg, IF

7.58 L-index

#	Paper	IF	Citations
396	A simple hydrologically based model of land surface water and energy fluxes for general circulation models. <i>Journal of Geophysical Research</i> , 1994 , 99, 14415		2485
395	Recent decline in the global land evapotranspiration trend due to limited moisture supply. <i>Nature</i> , 2010 , 467, 951-4	50.4	1382
394	Development of a 50-Year High-Resolution Global Dataset of Meteorological Forcings for Land Surface Modeling. <i>Journal of Climate</i> , 2006 , 19, 3088-3111	4.4	1347
393	Present and future Kppen-Geiger climate classification maps at 1-km resolution. <i>Scientific Data</i> , 2018 , 5, 180214	8.2	1241
392	Little change in global drought over the past 60 years. <i>Nature</i> , 2012 , 491, 435-8	50.4	1217
391	The multi-institution North American Land Data Assimilation System (NLDAS): Utilizing multiple GCIP products and partners in a continental distributed hydrological modeling system. <i>Journal of Geophysical Research</i> , 2004 , 109,		847
390	Projected changes in drought occurrence under future global warming from multi-model, multi-scenario, IPCC AR4 simulations. <i>Climate Dynamics</i> , 2008 , 31, 79-105	4.2	804
389	Estimation of the Generalized Extreme-Value Distribution by the Method of Probability-Weighted Moments. <i>Technometrics</i> , 1985 , 27, 251-261	1.4	801
388	Surface soil moisture parameterization of the VIC-2L model: Evaluation and modification. <i>Global and Planetary Change</i> , 1996 , 13, 195-206	4.2	635
387	Past and future changes in climate and hydrological indicators in the US Northeast. <i>Climate Dynamics</i> , 2007 , 28, 381-407	4.2	597
386	The North American Multimodel Ensemble: Phase-1 Seasonal-to-Interannual Prediction; Phase-2 toward Developing Intraseasonal Prediction. <i>Bulletin of the American Meteorological Society</i> , 2014 , 95, 585-601	6.1	578
385	Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water. <i>Water Resources Research</i> , 2011 , 47,	5.4	520
384	Hydro-Climatological Trends in the Continental United States, 1948-88. <i>Journal of Climate</i> , 1994 , 7, 586	-6 ₁ 0.7	510
383	Effects of spatial variability and scale with implications to hydrologic modeling. <i>Journal of Hydrology</i> , 1988 , 102, 29-47	6	492
382	Bias correction of monthly precipitation and temperature fields from Intergovernmental Panel on Climate Change AR4 models using equidistant quantile matching. <i>Journal of Geophysical Research</i> , 2010 , 115,		455
381	Multiscale modeling of spatially variable water and energy balance processes. <i>Water Resources Research</i> , 1994 , 30, 3061-3078	5.4	440
380	Global Trends and Variability in Soil Moisture and Drought Characteristics, 1950 2 000, from Observation-Driven Simulations of the Terrestrial Hydrologic Cycle. <i>Journal of Climate</i> , 2008 , 21, 432-45	58 ^{1.4}	425

379	A land-surface hydrology parameterization with subgrid variability for general circulation models. Journal of Geophysical Research, 1992 , 97, 2717		403
378	Predicting the Discharge of Global Rivers. <i>Journal of Climate</i> , 2001 , 14, 3307-3323	4.4	390
377	Continental-scale water and energy flux analysis and validation for the North American Land Data Assimilation System project phase 2 (NLDAS-2): 1. Intercomparison and application of model products. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		373
376	The future of evapotranspiration: Global requirements for ecosystem functioning, carbon and climate feedbacks, agricultural management, and water resources. <i>Water Resources Research</i> , 2017 , 53, 2618-2626	5.4	344
375	Global-scale evaluation of 22 precipitation datasets using gauge observations and hydrological modeling. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 6201-6217	5.5	337
374	Streamflow simulation for continental-scale river basins. Water Resources Research, 1997, 33, 711-724	5.4	334
373	On hydrologic similarity: 2. A scaled model of storm runoff production. <i>Water Resources Research</i> , 1987 , 23, 2266-2278	5.4	327
372	One-dimensional statistical dynamic representation of subgrid spatial variability of precipitation in the two-layer variable infiltration capacity model. <i>Journal of Geophysical Research</i> , 1996 , 101, 21403-21	422	325
371	Global estimates of evapotranspiration for climate studies using multi-sensor remote sensing data: Evaluation of three process-based approaches. <i>Remote Sensing of Environment</i> , 2011 , 115, 801-823	13.2	318
370	A Drought Monitoring and Forecasting System for Sub-Sahara African Water Resources and Food Security. <i>Bulletin of the American Meteorological Society</i> , 2014 , 95, 861-882	6.1	301
369	The assimilation of remotely sensed soil brightness temperature imagery into a land surface model using Ensemble Kalman filtering: a case study based on ESTAR measurements during SGP97. <i>Advances in Water Resources</i> , 2003 , 26, 137-149	4.7	296
368	Real-time and retrospective forcing in the North American Land Data Assimilation System (NLDAS) project. <i>Journal of Geophysical Research</i> , 2003 , 108,		284
367	Contribution of land surface initialization to subseasonal forecast skill: First results from a multi-model experiment. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	280
366	The Effect of Soil Thermal Conductivity Parameterization on Surface Energy Fluxes and Temperatures. <i>Journals of the Atmospheric Sciences</i> , 1998 , 55, 1209-1224	2.1	272
365	Global intercomparison of 12 land surface heat flux estimates. <i>Journal of Geophysical Research</i> , 2011 , 116,		271
364	Cabauw Experimental Results from the Project for Intercomparison of Land-Surface Parameterization Schemes. <i>Journal of Climate</i> , 1997 , 10, 1194-1215	4.4	271
363	Characteristics of global and regional drought, 1950\(\mathbb{Q}\)000: Analysis of soil moisture data from off-line simulation of the terrestrial hydrologic cycle. <i>Journal of Geophysical Research</i> , 2007 , 112,		271
362	Evaluation of global observations-based evapotranspiration datasets and IPCC AR4 simulations. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	267

361	A pan-arctic evaluation of changes in river discharge during the latter half of the 20th century. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	261
360	Scale influences on the remote estimation of evapotranspiration using multiple satellite sensors. <i>Remote Sensing of Environment</i> , 2006 , 105, 271-285	13.2	260
359	Twenty-three unsolved problems in hydrology (UPH) 🖟 community perspective. <i>Hydrological Sciences Journal</i> , 2019 , 64, 1141-1158	3.5	259
358	Anthropogenic warming exacerbates European soil moisture droughts. <i>Nature Climate Change</i> , 2018 , 8, 421-426	21.4	258
357	MSWEP V2 Global 3-Hourly 0.1° Precipitation: Methodology and Quantitative Assessment. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 473-500	6.1	257
356	Benchmark products for land evapotranspiration: LandFlux-EVAL multi-data set synthesis. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 3707-3720	5.5	253
355	Analysis of the Arctic System for Freshwater Cycle Intensification: Observations and Expectations. Journal of Climate, 2010 , 23, 5715-5737	4.4	253
354	Photosynthetic seasonality of global tropical forests constrained by hydroclimate. <i>Nature Geoscience</i> , 2015 , 8, 284-289	18.3	251
353	Global and Continental Drought in the Second Half of the Twentieth Century: SeverityAreaDuration Analysis and Temporal Variability of Large-Scale Events. <i>Journal of Climate</i> , 2009 , 22, 1962-1981	4.4	249
352	Winter floods in Britain are connected to atmospheric rivers. <i>Geophysical Research Letters</i> , 2011 , 38, n/a	а-ф,/за	243
351	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2(c) RedArkansas River basin experiment:: 1. Experiment description and summary intercomparisons. <i>Global and Planetary Change</i> , 1998 , 19, 115-135	4.2	243
350	The Second Phase of the Global LandAtmosphere Coupling Experiment: Soil Moisture Contributions to Subseasonal Forecast Skill. <i>Journal of Hydrometeorology</i> , 2011 , 12, 805-822	3.7	242
349	A simulated soil moisture based drought analysis for the United States. <i>Journal of Geophysical Research</i> , 2004 , 109,		239
348	The Future of Earth Observation in Hydrology. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 3879-391	4 5.5	235
347	Catchment geomorphology and the dynamics of runoff contributing areas. <i>Journal of Hydrology</i> , 1983 , 65, 139-158	6	231
346	Estimation of the Generalized Extreme-Value Distribution by the Method of Probability-Weighted Mon	nents	231
345	Vegetation control on water and energy balance within the Budyko framework. <i>Water Resources Research</i> , 2013 , 49, 969-976	5.4	216
344	Hyper-resolution global hydrological modelling: what is next?. <i>Hydrological Processes</i> , 2015 , 29, 310-320	3.3	215

343	Similarity and scale in catchment storm response. Reviews of Geophysics, 1990, 28, 1	23.1	213
342	The detection of atmospheric rivers in atmospheric reanalyses and their links to British winter floods and the large-scale climatic circulation. <i>Journal of Geophysical Research</i> , 2012 , 117,		200
341	Evaluation of SMOS Soil Moisture Products Over Continental U.S. Using the SCAN/SNOTEL Network. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 1572-1586	8.1	197
340	Decreasing river discharge in northern Canada. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	189
339	Water Resources Implications of Global Warming: A U.S. Regional Perspective. <i>Climatic Change</i> , 1999 , 43, 537-579	4.5	187
338	The energy balance over land and oceans: an assessment based on direct observations and CMIP5 climate models. <i>Climate Dynamics</i> , 2015 , 44, 3393-3429	4.2	185
337	Climate mitigation from vegetation biophysical feedbacks during the past three decades. <i>Nature Climate Change</i> , 2017 , 7, 432-436	21.4	181
336	Correction of Global Precipitation Products for Orographic Effects. <i>Journal of Climate</i> , 2006 , 19, 15-38	4.4	176
335	Surface radiation budgets in support of the GEWEX Continental-Scale International Project (GCIP) and the GEWEX Americas Prediction Project (GAPP), including the North American Land Data Assimilation System (NLDAS) project. <i>Journal of Geophysical Research</i> , 2003 , 108,		174
334	Characteristics and Trends of River Discharge into Hudson, James, and Ungava Bays, 1964\(\bar{\pi}\)000. Journal of Climate, 2005 , 18, 2540-2557	4.4	173
333	The WACMOS-ET project IPart 2: Evaluation of global terrestrial evaporation data sets. <i>Hydrology</i> and Earth System Sciences, 2016 , 20, 823-842	5.5	170
332	Daily evaluation of 26 precipitation datasets using Stage-IV gauge-radar data for the CONUS. <i>Hydrology and Earth System Sciences</i> , 2019 , 23, 207-224	5.5	169
331	Contaminated groundwater remediation design using simulation, optimization, and sensitivity theory: 1. Model development. <i>Water Resources Research</i> , 1988 , 24, 431-441	5.4	164
330	The Observed State of the Water Cycle in the Early Twenty-First Century. <i>Journal of Climate</i> , 2015 , 28, 8289-8318	4.4	162
329	Inroads of remote sensing into hydrologic science during the WRR era. <i>Water Resources Research</i> , 2015 , 51, 7309-7342	5.4	162
328	Observation operators for the direct assimilation of TRMM microwave imager retrieved soil moisture. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	162
327	An Agenda for Land Surface Hydrology Research and a Call for the Second International Hydrological Decade. <i>Bulletin of the American Meteorological Society</i> , 1999 , 80, 2043-2058	6.1	160
326	Application of a macroscale hydrologic model to estimate the water balance of the Arkansas-Red River Basin. <i>Journal of Geophysical Research</i> , 1996 , 101, 7449-7459		160

325	Data Assimilation for Estimating the Terrestrial Water Budget Using a Constrained Ensemble Kalman Filter. <i>Journal of Hydrometeorology</i> , 2006 , 7, 534-547	3.7	156
324	Multisource Estimation of Long-Term Terrestrial Water Budget for Major Global River Basins. Journal of Climate, 2012 , 25, 3191-3206	4.4	155
323	Modeling Evapotranspiration during SMACEX: Comparing Two Approaches for Local- and Regional-Scale Prediction. <i>Journal of Hydrometeorology</i> , 2005 , 6, 910-922	3.7	155
322	Closing the terrestrial water budget from satellite remote sensing. <i>Geophysical Research Letters</i> , 2009 , 36, n/a-n/a	4.9	153
321	Effect of regional heterogeneity on flood frequency estimation. <i>Water Resources Research</i> , 1987 , 23, 313-323	5.4	148
320	An appraisal of the regional flood frequency procedure in the UK Flood Studies Report. <i>Hydrological Sciences Journal</i> , 1985 , 30, 85-109	3.5	148
319	Detection of Intensification in Global- and Continental-Scale Hydrological Cycles: Temporal Scale of Evaluation. <i>Journal of Climate</i> , 2003 , 16, 535-547	4.4	145
318	Evaluation of the North American Land Data Assimilation System over the southern Great Plains during the warm season. <i>Journal of Geophysical Research</i> , 2003 , 108,		144
317	High-performance Earth system modeling with NASA/GSFCE Land Information System. <i>Innovations in Systems and Software Engineering</i> , 2007 , 3, 157-165	1.1	143
316	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) RedArkansas River basin experiment:. <i>Global and Planetary Change</i> , 1998 , 19, 161-179	4.2	137
315	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 2. Evaluation of model simulated snow water equivalent. <i>Journal of Geophysical Research</i> , 2003 , 108,		137
314	POLARIS: A 30-meter probabilistic soil series map of the contiguous United States. <i>Geoderma</i> , 2016 , 274, 54-67	6.7	136
313	Estimation of regional terrestrial water cycle using multi-sensor remote sensing observations and data assimilation. <i>Remote Sensing of Environment</i> , 2008 , 112, 1282-1294	13.2	133
312	An efficient calibration method for continental-scale land surface modeling. <i>Water Resources Research</i> , 2008 , 44,	5.4	131
311	A first look at Climate Forecast System version 2 (CFSv2) for hydrological seasonal prediction. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	130
310	Multiple Effects of Changes in Arctic Snow Cover. <i>Ambio</i> , 2011 , 40, 32-45	6.5	129
309	Evaluation of multi-model simulated soil moisture in NLDAS-2. <i>Journal of Hydrology</i> , 2014 , 512, 107-12	5 6	128
308	Streamflow and water balance intercomparisons of four land surface models in the North American Land Data Assimilation System project. <i>Journal of Geophysical Research</i> , 2004 , 109,		126

307	Multi-model, multi-sensor estimates of global evapotranspiration: climatology, uncertainties and trends. <i>Hydrological Processes</i> , 2011 , 25, 3993-4010	3.3	124
306	Observational evidence of an intensifying hydrological cycle in northern Canada. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	124
305	Numerical evaluation of iterative and noniterative methods for the solution of the nonlinear Richards equation. <i>Water Resources Research</i> , 1991 , 27, 1147-1163	5.4	122
304	Reconciling the global terrestrial water budget using satellite remote sensing. <i>Remote Sensing of Environment</i> , 2011 , 115, 1850-1865	13.2	121
303	A soil-vegetation-atmosphere transfer scheme for modeling spatially variable water and energy balance processes. <i>Journal of Geophysical Research</i> , 1997 , 102, 4303-4324		120
302	Satellite Remote Sensing for Water Resources Management: Potential for Supporting Sustainable Development in Data-Poor Regions. <i>Water Resources Research</i> , 2018 , 54, 9724-9758	5.4	120
301	HYDROLOGICAL MODELING OF CONTINENTAL-SCALE BASINS. <i>Annual Review of Earth and Planetary Sciences</i> , 1997 , 25, 279-300	15.3	119
300	On hydrological heterogeneity ICatchment morphology and catchment response. <i>Journal of Hydrology</i> , 1988 , 100, 353-375	6	119
299	The WACMOS-ET project [Part´1: Tower-scale evaluation of four remote-sensing-based evapotranspiration algorithms. <i>Hydrology and Earth System Sciences</i> , 2016 , 20, 803-822	5.5	119
298	Soil moisture estimates from TRMM Microwave Imager observations over the Southern United States. <i>Remote Sensing of Environment</i> , 2003 , 85, 507-515	13.2	118
297	A reversal in global terrestrial stilling and its implications for wind energy production. <i>Nature Climate Change</i> , 2019 , 9, 979-985	21.4	115
296	Validation of the North American Land Data Assimilation System (NLDAS) retrospective forcing over the southern Great Plains. <i>Journal of Geophysical Research</i> , 2003 , 108,		113
295	Monitoring and predicting the 2007 U.S. drought. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	111
294	Multimodel seasonal forecasting of global drought onset. <i>Geophysical Research Letters</i> , 2013 , 40, 4900-	4 <u>9.0</u> ,5	105
293	CFSv2-Based Seasonal Hydroclimatic Forecasts over the Conterminous United States. <i>Journal of Climate</i> , 2013 , 26, 4828-4847	4.4	105
292	Using TRMM/TMI to Retrieve Surface Soil Moisture over the Southern United States from 1998 to 2002. <i>Journal of Hydrometeorology</i> , 2006 , 7, 23-38	3.7	105
291	The GEWEX LandFlux project: evaluation of model evaporation using tower-based and globally gridded forcing data. <i>Geoscientific Model Development</i> , 2016 , 9, 283-305	6.3	103
290	Terrestrial hydrological controls on land surface phenology of African savannas and woodlands. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1652-1669	3.7	101

289	The Influence of Hydrologic Modeling on the Predicted Local Weather: Two-Way Coupling of a Mesoscale Weather Prediction Model and a Land Surface Hydrologic Model. <i>Journal of Hydrometeorology</i> , 2002 , 3, 505-523	3.7	100
288	Bayesian merging of multiple climate model forecasts for seasonal hydrological predictions. Journal of Geophysical Research, 2007, 112,		99
287	ECOSTRESS: NASA's Next Generation Mission to Measure Evapotranspiration From the International Space Station. <i>Water Resources Research</i> , 2020 , 56, e2019WR026058	5.4	98
286	Climate change alters low flows in Europe under global warming of 1.5, 2, and 3 °C. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 1017-1032	5.5	96
285	The role of initial conditions and forcing uncertainties in seasonal hydrologic forecasting. <i>Journal of Geophysical Research</i> , 2009 , 114,		95
284	Evaluation of the Tropical Rainfall Measuring Mission Multi-Satellite Precipitation Analysis (TMPA) for assessment of large-scale meteorological drought. <i>Remote Sensing of Environment</i> , 2015 , 159, 181-1	19 ^{13.2}	94
283	Estimating the water budget of major US river basins via remote sensing. <i>International Journal of Remote Sensing</i> , 2010 , 31, 3955-3978	3.1	94
282	Relative Accuracy of Log Pearson III Procedures. <i>Journal of Hydraulic Engineering</i> , 1985 , 111, 1043-1056	1.8	93
281	Improving soil moisture retrievals from a physically-based radiative transfer model. <i>Remote Sensing of Environment</i> , 2014 , 140, 130-140	13.2	91
280	Assessing the skill of satellite-based precipitation estimates in hydrologic applications. <i>Water Resources Research</i> , 2010 , 46,	5.4	91
279	Effects of Digital Elevation Model Accuracy on Hydrologic Predictions. <i>Remote Sensing of Environment</i> , 2000 , 74, 432-444	13.2	91
278	A derived flood frequency distribution using Horton Order Ratios. <i>Water Resources Research</i> , 1982 , 18, 1509-1518	5.4	91
277	A detailed model for simulation of catchment scale subsurface hydrologic processes. <i>Water Resources Research</i> , 1993 , 29, 1601-1620	5.4	90
276	Comparison of Two Methods for Estimating the Sampling-Related Uncertainty of Satellite Rainfall Averages Based on a Large Radar Dataset. <i>Journal of Climate</i> , 2003 , 16, 3759-3778	4.4	89
275	Global analysis of seasonal streamflow predictability using an ensemble prediction system and observations from 6192 small catchments worldwide. <i>Water Resources Research</i> , 2013 , 49, 2729-2746	5.4	87
274	A review on climate-model-based seasonal hydrologic forecasting: physical understanding and system development. <i>Wiley Interdisciplinary Reviews: Water</i> , 2015 , 2, 523-536	5.7	86
273	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 1. Evaluation of model-simulated snow cover extent. <i>Journal of Geophysical Research</i> , 2003 , 108,		83
272	Evaluation of historical and future simulations of precipitation and temperature in central Africa from CMIP5 climate models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 130-152	4.4	82

(2004-2010)

271	Quantifying uncertainty in a remote sensing-based estimate of evapotranspiration over continental USA. <i>International Journal of Remote Sensing</i> , 2010 , 31, 3821-3865	3.1	82	
270	Use of Bayesian Merging Techniques in a Multimodel Seasonal Hydrologic Ensemble Prediction System for the Eastern United States. <i>Journal of Hydrometeorology</i> , 2008 , 9, 866-884	3.7	82	
269	Effects of Spatial Variability and Scale on Areally Averaged Evapotranspiration. <i>Water Resources Research</i> , 1995 , 31, 699-712	5.4	82	
268	Four decades of microwave satellite soil moisture observations: Part 1. A review of retrieval algorithms. <i>Advances in Water Resources</i> , 2017 , 109, 106-120	4.7	80	
267	Dynamic-Model-Based Seasonal Prediction of Meteorological Drought over the Contiguous United States. <i>Journal of Hydrometeorology</i> , 2012 , 13, 463-482	3.7	80	
266	Modeling ground heat flux in land surface parameterization schemes. <i>Journal of Geophysical Research</i> , 1999 , 104, 9581-9600		80	
265	Highland cropland expansion and forest loss in Southeast Asia in the twenty-first century. <i>Nature Geoscience</i> , 2018 , 11, 556-562	18.3	80	
264	Global Reconstruction of Naturalized River Flows at 2.94 Million Reaches. <i>Water Resources Research</i> , 2019 , 55, 6499-6516	5.4	79	
263	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Red-Arkansas River basin experiment:. <i>Global and Planetary Change</i> , 1998 , 19, 137-159	4.2	79	
262	Regional flood frequency estimation and network design. Water Resources Research, 1981, 17, 1167-11	7 3 .4	79	
261	An initial assessment of SMAP soil moisture retrievals using high-resolution model simulations and in situ observations. <i>Geophysical Research Letters</i> , 2016 , 43, 9662-9668	4.9	79	
260	On the sources of global land surface hydrologic predictability. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 2781-2796	5.5	78	
259	An intercomparison of soil moisture fields in the North American Land Data Assimilation System (NLDAS). <i>Journal of Geophysical Research</i> , 2004 , 109,		78	
258	Drought		78	
257	Multi-model ensemble projections of European river floods and high flows at 1.5, 2, and 3 degrees global warming. <i>Environmental Research Letters</i> , 2018 , 13, 014003	6.2	77	
256	. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010 , 3, 111-123	4.7	77	
255	Copula-Derived Observation Operators for Assimilating TMI and AMSR-E Retrieved Soil Moisture into Land Surface Models. <i>Journal of Hydrometeorology</i> , 2007 , 8, 413-429	3.7	76	
254	Teleconnection between the Arctic Oscillation and Hudson Bay river discharge. <i>Geophysical Research Letters</i> , 2004 , 31,	4.9	76	

253	Evapotranspiration and runoff from large land areas: Land surface hydrology for atmospheric general circulation models. <i>Surveys in Geophysics</i> , 1991 , 12, 179-204	7.6	76
252	Seasonal Forecasting of Global Hydrologic Extremes: System Development and Evaluation over GEWEX Basins. <i>Bulletin of the American Meteorological Society</i> , 2015 , 96, 1895-1912	6.1	74
251	Observed LandAtmosphere Coupling from Satellite Remote Sensing and Reanalysis. <i>Journal of Hydrometeorology</i> , 2011 , 12, 1221-1254	3.7	73
250	Bayesian inference and decision making for extreme hydrologic events. <i>Water Resources Research</i> , 1975 , 11, 533-542	5.4	72
249	A Multiscale Ensemble Filtering System for Hydrologic Data Assimilation. Part I: Implementation and Synthetic Experiment. <i>Journal of Hydrometeorology</i> , 2009 , 10, 794-806	3.7	71
248	A daily hydroclimatological data set for the continental United States. <i>Water Resources Research</i> , 1991 , 27, 1657-1663	5.4	71
247	A Global Intercomparison of Modeled and Observed LandAtmosphere Coupling*. <i>Journal of Hydrometeorology</i> , 2012 , 13, 749-784	3.7	70
246	Land surface model spin-up behavior in the North American Land Data Assimilation System (NLDAS). <i>Journal of Geophysical Research</i> , 2003 , 108,		70
245	An illustrative example of the use of multiattribute utility theory for water resource planning. Water Resources Research, 1977 , 13, 705-712	5.4	69
244	Spatial Heterogeneity and Scale in the Infiltration Response of Catchments. <i>Water Science and Technology Library</i> , 1986 , 81-106	0.3	68
243	Impact of model structure and parameterization on PenmanMonteith type evaporation models. <i>Journal of Hydrology</i> , 2015 , 525, 521-535	6	67
242	Evaluation of AMSR-E-Derived Soil Moisture Retrievals Using Ground-Based and PSR Airborne Data during SMEX02. <i>Journal of Hydrometeorology</i> , 2005 , 6, 864-877	3.7	67
241	Sensitivity of a GCM Simulation of Global Climate to the Representation of Land-Surface Hydrology. Journal of Climate, 1994 , 7, 1218-1239	4.4	67
240	Application of multiscale water and energy balance models on a tallgrass prairie. <i>Water Resources Research</i> , 1994 , 30, 3079-3093	5.4	66
239	The Value of Coarse-Scale Soil Moisture Observations for Regional Surface Energy Balance Modeling. <i>Journal of Hydrometeorology</i> , 2002 , 3, 467-482	3.7	64
238	Probabilistic Seasonal Forecasting of African Drought by Dynamical Models. <i>Journal of Hydrometeorology</i> , 2013 , 14, 1706-1720	3.7	63
237	A Bayesian approach to analyzing uncertainty among flood frequency models. <i>Water Resources Research</i> , 1975 , 11, 839-843	5.4	62
236	A catchment scale water balance model for FIFE. <i>Journal of Geophysical Research</i> , 1992 , 97, 18997		61

235	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 17-40	5.5	61
234	Vegetative and Atmospheric Corrections for the Soil Moisture Retrieval from Passive Microwave Remote Sensing Data: Results from the Southern Great Plains Hydrology Experiment 1997. <i>Journal of Hydrometeorology</i> , 2001 , 2, 181-192	3.7	59
233	On the condition number of covariance matrices in kriging, estimation, and simulation of random fields. <i>Mathematical Geosciences</i> , 1994 , 26, 99-133		59
232	High-resolution modeling of the spatial heterogeneity of soil moisture: Applications in network design. <i>Water Resources Research</i> , 2015 , 51, 619-638	5.4	58
231	An analysis of the effects of parameter uncertainty in deterministic hydrologic models. <i>Water Resources Research</i> , 1976 , 12, 925-932	5.4	58
230	Prospects for Advancing Drought Understanding, Monitoring, and Prediction. <i>Journal of Hydrometeorology</i> , 2015 , 16, 1636-1657	3.7	57
229	Development of a High-Resolution Gridded Daily Meteorological Dataset over Sub-Saharan Africa: Spatial Analysis of Trends in Climate Extremes. <i>Journal of Climate</i> , 2014 , 27, 5815-5835	4.4	57
228	Application of USDM statistics in NLDAS-2: Optimal blended NLDAS drought index over the continental United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 2947-2965	4.4	57
227	Anthropogenic Intensification of Southern African Flash Droughts as Exemplified by the 2015/16 Season. <i>Bulletin of the American Meteorological Society</i> , 2018 , 99, S86-S90	6.1	56
226	Evaluation of AMSR-E soil moisture results using the in-situ data over the Little River Experimental Watershed, Georgia. <i>Remote Sensing of Environment</i> , 2008 , 112, 3142-3152	13.2	56
225	Long-Term Regional Estimates of Evapotranspiration for Mexico Based on Downscaled ISCCP Data. Journal of Hydrometeorology, 2010 , 11, 253-275	3.7	55
224	A Multiscale Ensemble Filtering System for Hydrologic Data Assimilation. Part II: Application to Land Surface Modeling with Satellite Rainfall Forcing. <i>Journal of Hydrometeorology</i> , 2009 , 10, 1493-1506	;3·7	55
223	Using a Microwave Emission Model to Estimate Soil Moisture from ESTAR Observations during SGP99. <i>Journal of Hydrometeorology</i> , 2004 , 5, 49-63	3.7	55
222	Evaluation of a distributed catchment scale water balance model. <i>Water Resources Research</i> , 1993 , 29, 1805-1817	5.4	55
221	A distributed parameter approach for evaluating the accuracy of groundwater model predictions: 1. Theory. <i>Water Resources Research</i> , 1988 , 24, 1037-1047	5.4	55
220	Downscaling precipitation or bias-correcting streamflow? Some implications for coupled general circulation model (CGCM)-based ensemble seasonal hydrologic forecast. <i>Water Resources Research</i> , 2012 , 48,	5.4	54
219	A multiple model assessment of seasonal climate forecast skill for applications. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	54
218	Effects of soil moisture aggregation on surface evaporative fluxes. <i>Journal of Hydrology</i> , 1997 , 190, 397-	d 12	54

217	. IEEE Transactions on Geoscience and Remote Sensing, 2015 , 53, 3507-3521	8.1	53
216	Scaling Water and Energy Fluxes in Climate Systems: Three Land-Atmospheric Modeling Experiments. <i>Journal of Climate</i> , 1993 , 6, 839-857	4.4	53
215	A multidimensional model of nonstationary space-time rainfall at the catchment scale. <i>Water Resources Research</i> , 1987 , 23, 1289-1299	5.4	53
214	WRF ensemble downscaling seasonal forecasts of China winter precipitation during 1982 2 008. <i>Climate Dynamics</i> , 2012 , 39, 2041-2058	4.2	52
213	Multiobjective calibration of land surface model evapotranspiration predictions using streamflow observations and spaceborne surface radiometric temperature retrievals. <i>Journal of Geophysical Research</i> , 2003 , 108,		52
212	A probabilistic framework for assessing drought recovery. <i>Geophysical Research Letters</i> , 2013 , 40, 3637-	-36 4 2	51
211	A Climate Data Record (CDR) for the global terrestrial water budget: 1984\(\mathbb{Q}\)010. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 241-263	5.5	51
210	A Prototype Global Drought Information System Based on Multiple Land Surface Models. <i>Journal of Hydrometeorology</i> , 2014 , 15, 1661-1676	3.7	49
209	Hydrologic controls of large floods in a small basin: central Appalachian case study. <i>Journal of Hydrology</i> , 1994 , 156, 285-309	6	49
208	Bias Correction of Global High-Resolution Precipitation Climatologies Using Streamflow Observations from 9372 Catchments. <i>Journal of Climate</i> , 2020 , 33, 1299-1315	4.4	49
207	HydroBlocks: a field-scale resolving land surface model for application over continental extents. <i>Hydrological Processes</i> , 2016 , 30, 3543-3559	3.3	49
206	Observed changes in pan-arctic cold-season minimum monthly river discharge. <i>Climate Dynamics</i> , 2010 , 35, 923-939	4.2	48
205	Multi-scale dynamics of soil moisture variability observed during SGP'97. <i>Geophysical Research Letters</i> , 1999 , 26, 3485-3488	4.9	48
204	Temporal Variability of LandAtmosphere Coupling and Its Implications for Drought over the Southeast United States. <i>Journal of Hydrometeorology</i> , 2013 , 14, 622-635	3.7	47
203	On Hydrologic Similarity: 1. Derivation of the Dimensionless Flood Frequency Curve. <i>Water Resources Research</i> , 1986 , 22, 1549-1554	5.4	47
202	Impacts of recent drought and warm years on water resources and electricity supply worldwide. <i>Environmental Research Letters</i> , 2016 , 11, 124021	6.2	47
201	Observed twentieth century land surface air temperature and precipitation covariability. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	45
200	Correction of the High-Latitude Rain Day Anomaly in the NCEPNCAR Reanalysis for Land Surface Hydrological Modeling. <i>Journal of Climate</i> , 2004 , 17, 3814-3828	4.4	45

199	Four decades of microwave satellite soil moisture observations: Part 2. Product validation and inter-satellite comparisons. <i>Advances in Water Resources</i> , 2017 , 109, 236-252	4.7	44	
198	The Influence of Atlantic Tropical Cyclones on Drought over the Eastern United States (1980\(\mathbb{\textit{0}}\)007). Journal of Climate, 2013, 26, 3067-3086	4.4	44	
197	Surface Energy and Water Balance for the Arkansas R ed River Basin from the ECMWF Reanalysis. <i>Journal of Climate</i> , 1998 , 11, 2881-2897	4.4	44	
196	Validation of Noah-Simulated Soil Temperature in the North American Land Data Assimilation System Phase 2. <i>Journal of Applied Meteorology and Climatology</i> , 2013 , 52, 455-471	2.7	43	
195	Scaling characteristics of spatial patterns of soil moisture from distributed modelling. <i>Advances in Water Resources</i> , 2007 , 30, 2145-2150	4.7	43	
194	A remote sensing observatory for hydrologic sciences: A genesis for scaling to continental hydrology. <i>Water Resources Research</i> , 2006 , 42,	5.4	43	
193	POLARIS Soil Properties: 30-m Probabilistic Maps of Soil Properties Over the Contiguous United States. <i>Water Resources Research</i> , 2019 , 55, 2916-2938	5.4	41	
192	Representation of Terrestrial Hydrology and Large-Scale Drought of the Continental United States from the North American Regional Reanalysis. <i>Journal of Hydrometeorology</i> , 2012 , 13, 856-876	3.7	41	
191	Changes in drought risk over the contiguous United States (1901\(\mathbb{D}\)012): The influence of the Pacific and Atlantic Oceans. <i>Geophysical Research Letters</i> , 2014 , 41, 5897-5903	4.9	40	
190	A soil-vegetation-atmosphere transfer scheme for the modeling of water and energy balance processes in high latitudes: 1. Model improvements. <i>Journal of Geophysical Research</i> , 1999 , 104, 27811-	27822	40	
189	A Global Drought and Flood Catalogue from 1950 to 2016. <i>Bulletin of the American Meteorological Society</i> , 2020 , 101, E508-E535	6.1	39	
188	Impact of Accuracy, Spatial Availability, and Revisit Time of Satellite-Derived Surface Soil Moisture in a Multiscale Ensemble Data Assimilation System. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2010 , 3, 49-56	4.7	39	
187	WATERSHED WEIGHTING OF EXPORT COEFFICIENTS TO MAP CRITICAL PHOSPHOROUS LOADING AREAS1. <i>Journal of the American Water Resources Association</i> , 2003 , 39, 165-181	2.1	39	
186	Potential for downscaling soil moisture maps derived from spaceborne imaging radar data. <i>Journal of Geophysical Research</i> , 2000 , 105, 2203-2212		39	
185	Comparison and evaluation of gridded radiation products across northern Eurasia. <i>Environmental Research Letters</i> , 2009 , 4, 045008	6.2	38	
184	The Northern Eurasia Earth Science Partnership: An Example of Science Applied to Societal Needs. <i>Bulletin of the American Meteorological Society</i> , 2009 , 90, 671-688	6.1	38	
183	Detection Time for Plausible Changes in Annual Precipitation, Evapotranspiration, and Streamflow in Three Mississippi River Sub-Basins. <i>Climatic Change</i> , 2005 , 72, 17-36	4.5	38	
182	Reduced Moisture Transport Linked to Drought Propagation Across North America. <i>Geophysical Research Letters</i> , 2019 , 46, 5243-5253	4.9	37	

181	CFSv2-based sub-seasonal precipitation and temperature forecast skill over the contiguous United States. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 1477-1490	5.5	37
180	Estimation of the Terrestrial Water Budget over Northern Eurasia through the Use of Multiple Data Sources. <i>Journal of Climate</i> , 2011 , 24, 3272-3293	4.4	36
179	A distributed parameter approach for evaluating the accuracy of groundwater model predictions: 2. Application to groundwater flow. <i>Water Resources Research</i> , 1988 , 24, 1048-1060	5.4	36
178	An adaptive algorithm for analyzing short-term structural and parameter changes in hydrologic prediction models. <i>Water Resources Research</i> , 1978 , 14, 577-581	5.4	36
177	Deriving Vegetation Phenological Time and Trajectory Information Over Africa Using SEVIRI Daily LAI. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 1113-1130	8.1	35
176	Depiction of drought over sub-Saharan Africa using reanalyses precipitation data sets. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 10,555	4.4	35
175	Bias Correction of Historical and Future Simulations of Precipitation and Temperature for China from CMIP5 Models. <i>Journal of Hydrometeorology</i> , 2018 , 19, 609-623	3.7	34
174	Hydrologic post-processing of MOPEX streamflow simulations. <i>Journal of Hydrology</i> , 2014 , 508, 147-15	56 6	34
173	Maximizing spatial congruence of observed and DEM-delineated overland flow networks. <i>International Journal of Geographical Information Science</i> , 2003 , 17, 699-713	4.1	34
172	Improved sub-seasonal meteorological forecast skill using weighted multi-model ensemble simulations. <i>Environmental Research Letters</i> , 2016 , 11, 094007	6.2	33
171	Flood and drought hydrologic monitoring: the role of model parameter uncertainty. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 3239-3251	5.5	33
170	Connectivity between Eurasian snow cover extent and Canadian snow water equivalent and river discharge. <i>Journal of Geophysical Research</i> , 2005 , 110,		33
169	Modeling Snow-Cover Heterogeneity over Complex Arctic Terrain for Regional and Global Climate Models*. <i>Journal of Hydrometeorology</i> , 2004 , 5, 33-48	3.7	33
168	Sensitivity of Latent Heat Flux from PILPS Land-Surface Schemes to Perturbations of Surface Air Temperature. <i>Journals of the Atmospheric Sciences</i> , 1998 , 55, 1909-1927	2.1	33
167	Impact of land-atmospheric coupling in CFSv2 on drought prediction. Climate Dynamics, 2014, 43, 421-	4 34 2	32
166	Soil moisture retrieval during the Southern Great Plains Hydrology Experiment 1999: A comparison between experimental remote sensing data and operational products. <i>Water Resources Research</i> , 2004 , 40,	5.4	32
165	Scaling, soil moisture and evapotranspiration in runoff models. <i>Advances in Water Resources</i> , 1994 , 17, 25-34	4.7	32
164	Scaling behaviour of hydrological fluxes and variables: Empirical studies using a hydrological model and remote sensing data. <i>Hydrological Processes</i> , 1995 , 9, 331-346	3.3	32

(2001-2013)

163	Seasonal coupling of canopy structure and function in African tropical forests and its environmental controls. <i>Ecosphere</i> , 2013 , 4, art35	3.1	32	
162	Correction of real-time satellite precipitation with satellite soil moisture observations. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 4275-4291	5.5	31	
161	Relative sensitivity of the Atlantic meridional overturning circulation to river discharge into Hudson Bay and the Arctic Ocean. <i>Journal of Geophysical Research</i> , 2007 , 112, n/a-n/a		31	
160	Uncertainties, Correlations, and Optimal Blends of Drought Indices from the NLDAS Multiple Land Surface Model Ensemble. <i>Journal of Hydrometeorology</i> , 2014 , 15, 1636-1650	3.7	30	
159	Initial soil moisture retrievals from AMSR-E: Multiscale comparison using in situ data and rainfall patterns over Iowa. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	30	
158	Soil moisture estimation over grass-covered areas using AIRSAR. <i>International Journal of Remote Sensing</i> , 1994 , 15, 2323-2333	3.1	30	
157	Analyzing hydrologic uncertainty and its impact upon decision making in water resources. <i>Advances in Water Resources</i> , 1978 , 1, 299-305	4.7	30	
156	Development and Evaluation of a Pan-European Multimodel Seasonal Hydrological Forecasting System. <i>Journal of Hydrometeorology</i> , 2019 , 20, 99-115	3.7	30	
155	Validation of SMAP soil moisture for the SMAPVEX15 field campaign using a hyper-resolution model. <i>Water Resources Research</i> , 2017 , 53, 3013-3028	5.4	29	
154	A large-area, spatially continuous assessment of land cover map error and its impact on downstream analyses. <i>Global Change Biology</i> , 2018 , 24, 322-337	11.4	29	
153	Integrating weather and climate prediction: Toward seamless hydrologic forecasting. <i>Geophysical Research Letters</i> , 2014 , 41, 5891-5896	4.9	29	
152	Evaluation of summer temperature and precipitation predictions from NCEP CFSv2 retrospective forecast over China. <i>Climate Dynamics</i> , 2013 , 41, 2213-2230	4.2	29	
151	Up-scaling effects in passive microwave remote sensing: ESTAR 1.4 GHz measurements during SGP '97. <i>Geophysical Research Letters</i> , 1999 , 26, 879-882	4.9	29	
150	IDENTIFYING MULTIVARIATE TIME SERIES MODELS. Journal of Time Series Analysis, 1982, 3, 153-164	0.8	29	
149	An analysis of flood levee reliability. Water Resources Research, 1977, 13, 665-671	5.4	29	
148	Development and Analysis of a Long-Term, Global, Terrestrial Land Surface Temperature Dataset Based on HIRS Satellite Retrievals. <i>Journal of Climate</i> , 2016 , 29, 3589-3606	4.4	29	
147	Reconciling agriculture, carbon and biodiversity in a savannah transformation frontier. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016 , 371,	5.8	28	
146	Representing elevation uncertainty in runoff modelling and flowpath mapping. <i>Hydrological Processes</i> , 2001 , 15, 2223-2236	3.3	27	

145	On hydrologic similarity: 3. A dimensionless flood frequency model using a generalized geomorphologic unit hydrograph and partial area runoff generation. <i>Water Resources Research</i> , 1990 , 26, 43-58	5.4	27
144	Combining hyper-resolution land surface modeling with SMAP brightness temperatures to obtain 30-m soil moisture estimates. <i>Remote Sensing of Environment</i> , 2020 , 242, 111740	13.2	26
143	Optimization of a Radiative Transfer Forward Operator for Simulating SMOS Brightness Temperatures over the Upper Mississippi Basin. <i>Journal of Hydrometeorology</i> , 2015 , 16, 1109-1134	3.7	26
142	Did a skillful prediction of sea surface temperatures help or hinder forecasting of the 2012 Midwestern US drought?. <i>Environmental Research Letters</i> , 2014 , 9, 034005	6.2	26
141	Reply to comment by Keith J. Beven and Hannah L. Cloke on Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water Water Resources Research, 2012, 48,	5.4	26
140	Seasonal hydrologic predictions of low-flow conditions over eastern USA during the 2007 drought. <i>Atmospheric Science Letters</i> , 2008 , 9, 61-66	2.4	26
139	Sensitivity of the thermohaline circulation to Arctic Ocean runoff. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	26
138	A soil-vegetation-atmosphere transfer scheme for the modeling of water and energy balance processes in high latitudes: 2. Application and validation. <i>Journal of Geophysical Research</i> , 1999 , 104, 27823-27839		26
137	Strategies for large-scale, distributed hydrologic simulation. <i>Applied Mathematics and Computation</i> , 1988 , 27, 23-37	2.7	26
136	Identification of multivariate time series and multivariate input-output models. <i>Water Resources Research</i> , 1982 , 18, 937-946	5.4	26
135	Deriving global parameter estimates for the Noah land surface model using FLUXNET and machine learning. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 13,218	4.4	25
134	On the clustering of climate models in ensemble seasonal forecasting. <i>Geophysical Research Letters</i> , 2012 , 39,	4.9	25
133	Assessing the idealized predictability of precipitation and temperature in the NCEP Climate Forecast System. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	25
132	Solar and wind energy enhances drought resilience and groundwater sustainability. <i>Nature Communications</i> , 2019 , 10, 4893	17.4	24
131	Triple collocation: Beyond three estimates and separation of structural/non-structural errors. <i>Remote Sensing of Environment</i> , 2015 , 171, 299-310	13.2	24
130	Continental-scale impacts of intra-seasonal rainfall variability on simulated ecosystem responses in Africa. <i>Biogeosciences</i> , 2014 , 11, 6939-6954	4.6	24
129	An Initial Assessment of SMOS Derived Soil Moisture over the Continental United States. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2012 , 5, 1448-1457	4.7	24
128	Multimodel Analysis of Energy and Water Fluxes: Intercomparisons between Operational Analyses, a Land Surface Model, and Remote Sensing. <i>Journal of Hydrometeorology</i> , 2012 , 13, 3-26	3.7	24

127	Global Scale Hydrology: Advances in Land Surface Modeling. <i>Reviews of Geophysics</i> , 1991 , 29, 193-201	23.1	24	
126	Parameter estimation of multiple input-output time series models: Application to rainfall-runoff processes. <i>Water Resources Research</i> , 1982 , 18, 1352-1364	5.4	24	
125	Accelerating forest loss in Southeast Asian Massif in the 21st century: A case study in Nan Province, Thailand. <i>Global Change Biology</i> , 2018 , 24, 4682-4695	11.4	24	
124	Creating consistent datasets by combining remotely-sensed data and land surface model estimates through Bayesian uncertainty post-processing: The case of Land Surface Temperature from HIRS. <i>Remote Sensing of Environment</i> , 2015 , 170, 290-305	13.2	23	
123	A multiscale analysis of drought and pluvial mechanisms for the Southeastern United States. Journal of Geophysical Research D: Atmospheres, 2014 , 119, 7348-7367	4.4	23	
122	The Water Budget of the Kuparuk River Basin, Alaska*. <i>Journal of Hydrometeorology</i> , 2005 , 6, 633-655	3.7	23	
121	Impact of Soil Moisture Aggregation on Surface Energy Flux Prediction During SGP'97. <i>Geophysical Research Letters</i> , 2002 , 29, 8-1	4.9	23	
120	In Quest of Calibration Density and Consistency in Hydrologic Modeling: Distributed Parameter Calibration against Streamflow Characteristics. <i>Water Resources Research</i> , 2019 , 55, 7784-7803	5.4	22	
119	Hydrological Forecasts and Projections for Improved Decision-Making in the Water Sector in Europe. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 2451-2472	6.1	22	
118	Inverse streamflow routing. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 4577-4588	5.5	22	
117	A soil-canopy-atmosphere model for use in satellite microwave remote sensing. <i>Journal of Geophysical Research</i> , 1997 , 102, 6911-6927		22	
116	The impact of the SSM/I antenna gain function on land surface parameter retrieval. <i>Geophysical Research Letters</i> , 1999 , 26, 3481-3484	4.9	22	
115	Determinants of the ratio of actual to potential evapotranspiration. <i>Global Change Biology</i> , 2019 , 25, 1326	11.4	21	
114	Evapotranspiration and Runoff from Large Land Areas: Land Surface Hydrology for Atmospheric General Circulation Models 1991 , 179-204		21	
113	Developing a drought-monitoring index for the contiguous US using SMAP. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 6611-6626	5.5	21	
112	Forecasting the Hydroclimatic Signature of the 2015/16 El Nie Event on the Western United States. <i>Journal of Hydrometeorology</i> , 2017 , 18, 177-186	3.7	20	
111	Global Estimates of Reach-Level Bankfull River Width Leveraging Big Data Geospatial Analysis. <i>Geophysical Research Letters</i> , 2020 , 47, e2019GL086405	4.9	20	
110	Long-term, non-anthropogenic groundwater storage changes simulated by three global-scale hydrological models. <i>Scientific Reports</i> , 2019 , 9, 10746	4.9	20	

109	Global Fully Distributed Parameter Regionalization Based on Observed Streamflow From 4,229 Headwater Catchments. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031485	4.4	20
108	Deforestation-induced warming over tropical mountain regions regulated by elevation. <i>Nature Geoscience</i> , 2021 , 14, 23-29	18.3	20
107	A Framework for Diagnosing Seasonal Prediction through Canonical Event Analysis. <i>Monthly Weather Review</i> , 2015 , 143, 2404-2418	2.4	19
106	Validation of AIRS/AMSU-A water vapor and temperature data with in situ aircraft observations from the surface to UT/LS from 87°NB7°S. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 6816-6836	4.4	19
105	Mixed finite element simulation of saturated groundwater flow using a multigrid accelerated domain decomposition technique. <i>Water Resources Research</i> , 1993 , 29, 3145-3157	5.4	19
104	The universal structure of the groundwater flow equations. Water Resources Research, 1994 , 30, 1407-1	1451.29	19
103	The WACMOS-ET project Part 2: Evaluation of global terrestrial evaporation data sets		19
102	A global near-real-time soil moisture index monitor for food security using integrated SMOS and SMAP. <i>Remote Sensing of Environment</i> , 2020 , 246, 111864	13.2	18
101	An Evaluation of Satellite Remote Sensing Data Products for Land Surface Hydrology: Atmospheric Infrared Sounder*. <i>Journal of Hydrometeorology</i> , 2010 , 11, 1234-1262	3.7	18
100	On Creating Global Gridded Terrestrial Water Budget Estimates from Satellite Remote Sensing. <i>Surveys in Geophysics</i> , 2016 , 37, 249-268	7.6	17
99	An Approach to Constructing a Homogeneous Time Series of Soil Moisture Using SMOS. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 393-405	8.1	17
98	Benchmark products for land evapotranspiration: LandFlux-EVAL multi-dataset synthesis		17
97	Role of Moisture Transport and Recycling in Characterizing Droughts: Perspectives from Two Recent U.S. Droughts and the CFSv2 System. <i>Journal of Hydrometeorology</i> , 2019 , 20, 139-154	3.7	16
96	The Importance of Classification Differences and Spatial Resolution of Land Cover Data in the Uncertainty in Model Results over Boreal Ecosystems. <i>Journal of Hydrometeorology</i> , 2000 , 1, 255-266	3.7	16
95	Simulated sensitivity of African terrestrial ecosystem photosynthesis to rainfall frequency, intensity, and rainy season length. <i>Environmental Research Letters</i> , 2018 , 13, 025013	6.2	16
94	The Attribution of LandAtmosphere Interactions on the Seasonal Predictability of Drought. <i>Journal of Hydrometeorology</i> , 2015 , 16, 793-810	3.7	15
93	Internationally coordinated multi-mission planning is now critical to sustain the space-based rainfall observations needed for managing floods globally. <i>Environmental Research Letters</i> , 2015 , 10, 024010	6.2	15
92	Simultaneous retrieval of global scale Vegetation Optical Depth, surface roughness, and soil moisture using X-band AMSR-E observations. <i>Remote Sensing of Environment</i> , 2019 , 234, 111473	13.2	15

(2007-2014)

91	Changing water availability during the African maize-growing season, 1979\(\mathbb{Q}\)010. <i>Environmental Research Letters</i> , 2014 , 9, 075005	6.2	15
90	The role of winter precipitation and temperature on northern Eurasian streamflow trends. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		15
89	Hydrologic variability and its influence on long-term peat dynamics. <i>Water Resources Research</i> , 2010 , 46,	5.4	15
88	Analysis of snow in the 20th and 21st century Geophysical Fluid Dynamics Laboratory coupled climate model simulations. <i>Journal of Geophysical Research</i> , 2006 , 111,		15
87	Simulation of daily precipitation in the Pacific Northwest using a weather classification scheme. <i>Surveys in Geophysics</i> , 1991 , 12, 127-142	7.6	15
86	On the morphology of summer algae dynamics in non-stratified lakes. <i>Ecological Modelling</i> , 1979 , 6, 117	- 3 31	15
85	Projected Seasonal Changes in Large-Scale Global Precipitation and Temperature Extremes Based on the CMIP5 Ensemble. <i>Journal of Climate</i> , 2020 , 33, 5651-5671	4.4	15
84	Modeling the Large-Scale Dynamics of Saturated Groundwater Flow Using Spatial-Filtering Theory: 1. Theoretical Development. <i>Water Resources Research</i> , 1996 , 32, 1269-1280	5.4	14
83	Estimating storm areal average rainfall intensity in field experiments. <i>Water Resources Research</i> , 1994 , 30, 2119-2131	5.4	14
82	Flood Risks in Sinking Delta Cities: Time for a Reevaluation?. <i>Earth& Future</i> , 2020 , 8, e2020EF001614	7.9	14
81	Global terrestrial stilling: does Earth greening play a role?. <i>Environmental Research Letters</i> , 2018 , 13, 124013	6.2	14
80	Impact of satellite based PAR on estimates of terrestrial net primary productivity. <i>International Journal of Remote Sensing</i> , 2010 , 31, 5221-5237	3.1	13
79	The Terrestrial Water Cycle: Modeling and Data Assimilation across Catchment Scales. <i>Journal of Hydrometeorology</i> , 2006 , 7, 309-311	3.7	13
78	Timescales of land surface evapotranspiration response in the PILPS phase 2(c). <i>Global and Planetary Change</i> , 2003 , 38, 81-91	4.2	13
77	Global-Scale Evaluation of 22 Precipitation Datasets Using Gauge Observations and Hydrological Modeling. <i>Advances in Global Change Research</i> , 2020 , 625-653	1.2	13
76	Improving Understanding of the Global Hydrologic Cycle 2013 , 151-184		13
75	Diurnal cycles of evaporation using a two-layer hydrological model. <i>Journal of Hydrology</i> , 1998 , 204, 37-5	561	12
74	Multidecadal High-Resolution Hydrologic Modeling of the Arkansas R ed River Basin. <i>Journal of Hydrometeorology</i> , 2007 , 8, 1111-1127	3.7	12

73	Satellite-derived digital elevation model accuracy: hydrological modelling requirements. Hydrological Processes, 2000 , 14, 177-194	3.3	12
72	On the relationship between kriging and state estimation. Water Resources Research, 1982, 18, 432-438	5.4	12
71	On the design of Hydrologio Data Networks. <i>Eos</i> , 1978 , 59, 772	1.5	12
70	Global-scale evaluation of 23 precipitation datasets using gauge observations and hydrological modelin	g	12
69	A new vector-based global river network dataset accounting for variable drainage density. <i>Scientific Data</i> , 2021 , 8, 28	8.2	12
68	Rapid and large-scale mapping of flood inundation via integrating spaceborne synthetic aperture radar imagery with unsupervised deep learning. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2021 , 178, 36-50	11.8	12
67	Spatial and Temporal Scaling Behavior of Surface Shortwave Downward Radiation Based on MODIS and In Situ Measurements. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2008 , 5, 542-546	4.1	11
66	Multicriteria analysis of water allocation in a river basin: The Tchebycheff Approach. <i>Water Resources Research</i> , 1983 , 19, 865-875	5.4	11
65	Filtering of partitioned large scale hydrological systems / Le filtrage d'un systine hydrologique de grande dimension, divisien sous-bassins. <i>Hydrological Sciences Bulletin Des Sciences Hydrologiques</i> , 1981 , 26, 33-46		11
64	On the sources of global land surface hydrologic predictability		11
63	Multimodel Estimation of Snow Microwave Emission during CLPX 2003 Using Operational Parameterization of Microphysical Snow Characteristics. <i>Journal of Hydrometeorology</i> , 2008 , 9, 1491-15	035 ⁷	10
62	Partitioned state and parameter estimation for real-time flood forecasting. <i>Applied Mathematics and Computation</i> , 1985 , 17, 357-374	2.7	10
61	Global runoff anomalies over 1993\(\textit{D}\)009 estimated from coupled Land\(\textit{D}\)cean\(\textit{A}\)tmosphere water budgets and its relation with climate variability. Hydrology and Earth System Sciences, 2012, 16, 3647-36	5 85	10
60	The Reliability of Global Remote Sensing Evapotranspiration Products over Amazon. <i>Remote Sensing</i> , 2020 , 12, 2211	5	10
59	Enhancing SWOT discharge assimilation through spatiotemporal correlations. <i>Remote Sensing of Environment</i> , 2019 , 234, 111450	13.2	9
58	Estimation of the Generalized Extreme-Value Distribution by the Method of Probability Weighted Moments. 1984 ,		9
57	Spatiotemporal assimilation[hterpolation of discharge records through inverse streamflow routing. <i>Hydrology and Earth System Sciences</i> , 2020 , 24, 293-305	5.5	8
56	MANAGEMENT MODEL FOR CONTROLLING NITRATE CONTAMINATION IN THE NEW JERSEY PINE BARRENS AQUIFER1. Journal of the American Water Resources Association, 1980 , 16, 971-978	2.1	8

55	Climate change alters low flows in Europe under a 1.5, 2, and 3 degree global warming		8
54	Overview of the North American Land Data Assimilation System (NLDAS) 2013 , 337-377		7
53	Stream network morphology and storm response in humid catchments. <i>Hydrological Processes</i> , 1995 , 9, 575-587	3.3	7
52	BISTAB: A portable bifurcation and stability analysis package. <i>Applied Mathematics and Computation</i> , 1984 , 15, 343-355	2.7	7
51	A Study of Scale Effects in Flood Frequency Response. Water Science and Technology Library, 1986, 133-	15.8	7
50	A statistical approach to station discontinuance. Water Resources Research, 1979 , 15, 1859-1866	5.4	7
49	The GEWEX LandFlux project: evaluation of model evaporation using tower-based and globally-gridded forcing data		7
48	Daily evaluation of 26 precipitation datasets using Stage-IV gauge-radar data for the CONUS		7
47	The WACMOS-ET project IPart 1: Tower-scale evaluation of four remote sensing-based evapotranspiration algorithms		7
46	On Creating Global Gridded Terrestrial Water Budget Estimates from Satellite Remote Sensing. <i>Space Sciences Series of ISSI</i> , 2016 , 59-78	0.1	7
45	Doubling of annual forest carbon loss over the tropics during the early twenty-first century. <i>Nature Sustainability</i> ,	22.1	7
44	Development and Validation of a Long-Term, Global, Terrestrial Sensible Heat Flux Dataset. <i>Journal of Climate</i> , 2018 , 31, 6073-6095	4.4	6
43	Model Calibration Based on Random Environmental Fluctuations. <i>Journal of Environmental Engineering, ASCE</i> , 1988 , 114, 1136-1145	2	6
42	The Future of Earth Observation in Hydrology		6
41	SMAP-HydroBlocks, a 30-m satellite-based soil moisture dataset for the conterminous US. <i>Scientific Data</i> , 2021 , 8, 264	8.2	6
40	Field-scale soil moisture bridges the spatial-scale gap between drought monitoring and agricultural yields. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 1827-1847	5.5	6
39	Global-Scale Estimation of Land Surface Heat Fluxes from Space 2013 , 249-282		5
38	Transient flow routing in channel networks. Water Resources Research, 1975, 11, 423-430	5.4	5

37	Global Evaluation of Seasonal Precipitation and Temperature Forecasts from NMME. <i>Journal of Hydrometeorology</i> , 2020 , 21, 2473-2486	3.7	5
36	PPDIST, global 0.1° daily and 3-hourly precipitation probability distribution climatologies for 1979-2018. <i>Scientific Data</i> , 2020 , 7, 302	8.2	5
35	Satellite Flood Inundation Assessment and Forecast Using SMAP and Landsat. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 6707-6715	4.7	5
34	Assessing GFDL high-resolution climate model water and energy budgets from AMIP simulations over Africa. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 8444-8459	4.4	4
33	Sources of Uncertainty in Economic Analyses of Management Strategies for Controlling Groundwater Contamination. <i>American Journal of Agricultural Economics</i> , 1986 , 68, 1234-1239	3.1	4
32	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors		4
31	Global Reach-level 3-hourly River Flood Reanalysis (1980-2019). <i>Bulletin of the American Meteorological Society</i> , 2021 , 1-49	6.1	4
30	Assessment of a High-Resolution Climate Model for Surface Water and Energy Flux Simulations over Global Land: An Intercomparison with Reanalyses. <i>Journal of Hydrometeorology</i> , 2018 , 19, 1115-11	2 8 97	3
29	Modeling the Large-Scale Dynamics of Saturated Groundwater Flow Using Spatial-Filtering Theory: 2. Numerical Evaluation. <i>Water Resources Research</i> , 1996 , 32, 1281-1288	5.4	3
28	Bifurcation analysis of rainfall infiltration. Water Resources Research, 1981, 17, 216-222	5.4	3
27	A Climate Data Record (CDR) for the global terrestrial water budget: 19842010		3
26	Sensitivity and Uncertainty of a Long-Term, High-Resolution, Global, Terrestrial Sensible Heat Flux Data Set. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 4988-5000	4.4	2
25	Research to Advance Drought Monitoring and Prediction Capabilities. <i>Drought and Water Crises</i> , 2017 , 127-140		2
24	Continental-scale impacts of intra-seasonal rainfall variability on simulated ecosystem responses in Afri	ca	2
23	Spatiotemporal Assimilation/Interpolation of Discharge Records through Inverse Streamflow Routing		2
22	A SMAP-Based Drought Monitoring Index for the United States		2
21	Supplementary material to "Daily evaluation of 26 precipitation datasets using Stage-IV gauge-radar data for the CONUS"		2
20	Flood and drought hydrologic monitoring: the role of model parameter uncertainty		2

19	Reducing Solar Radiation Forcing Uncertainty and Its Impact on Surface Energy and Water Fluxes. Journal of Hydrometeorology, 2021 , 22, 813-829	3.7	2
18	Effect of Structural Uncertainty in Passive Microwave Soil Moisture Retrieval Algorithm. <i>Sensors</i> , 2020 , 20,	3.8	1
17	Assessing Seasonal Climate Forecasts Over Africa to Support Decision-Making. World Scientific Series on Asia-Pacific Weather and Climate, 2018 , 1-15		1
16	Seasonal Drought Forecasting on the Example of the USA 2015 , 1-9		1
15	Design of a soil sampling study to determine the habitability of the emergency declaration area, Love Canal, New York. <i>Environmetrics</i> , 2007 , 1, 89-119	1.3	1
14	Remote Sensing in Hydrological Modeling 2000 , 85-102		1
13	Closure to IRelative Accuracy of Log Pearson III Procedures Iby James R. Wallis and Eric F. Wood (July, 1985, Vol. 111, No. 7). <i>Journal of Hydraulic Engineering</i> , 1987 , 113, 1210-1214	1.8	1
12	IUGG Quadrennial Report Overviews: Hydrology 1979¶982. <i>Eos</i> , 1983 , 64, 457	1.5	1
11	Multiobjective Decision Analysis With Engineering and Business Applications. <i>Eos</i> , 1983 , 64, 486	1.5	1
10	Estimation of the parameters of the Markovian representation of the autoregressive-moving average model. <i>Biometrika</i> , 1981 , 68, 320-322	2	1
9	Correction of real-time satellite precipitation with satellite soil moisture observations		1
8	Global runoff over 1993I2009 estimated from coupled land-ocean-atmosphere water budgets and its relation with climate variability		1
7	Improved multi-model ensemble forecasts of Iran's precipitation and temperature using a hybrid dynamical-statistical approach during fall and winter seasons. <i>International Journal of Climatology</i> , 2021 , 41, 5698	3.5	1
6	Strengthening Flood and Drought Risk Management Tools for the Lake Chad Basin 2021 , 387-405		1
5	Synergistic Satellite Assessment of Global Vegetation Health in Relation to ENSO-Induced Droughts and Pluvials. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2020JG006006	3.7	O
4	Multisensor Global Retrievals of Evapotranspiration for Climate Studies Using the Surface Energy Budget System. <i>Remote Sensing and Digital Image Processing</i> , 2010 , 747-778	0.2	
3	The International Water Cycle Workshop. <i>Eos</i> , 2005 , 86, 47	1.5	
2	Reply [to flomment on R egional flood frequency estimation and network design®y Noel P. Greis and Eric F. Wood¶ <i>Water Resources Research</i> , 1983 , 19, 1346-1346	5.4	

Seasonal Drought Forecasting on the Example of the USA **2019**, 1279-1287