Quan J Wang

List of Publications by Year in descending order

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148 papers	5,697 citations	42 h-index	91884 69 g-index
153	153	153	4012 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	The Genetic Algorithm and Its Application to Calibrating Conceptual Rainfall-Runoff Models. Water Resources Research, 1991, 27, 2467-2471.	4.2	488
2	A review of advances in flash flood forecasting. Hydrological Processes, 2011, 25, 2771-2784.	2.6	331
3	A Review of Quantitative Precipitation Forecasts and Their Use in Short- to Medium-Range Streamflow Forecasting. Journal of Hydrometeorology, 2011, 12, 713-728.	1.9	215
4	A Bayesian joint probability modeling approach for seasonal forecasting of streamflows at multiple sites. Water Resources Research, 2009, 45, .	4.2	195
5	Multisite probabilistic forecasting of seasonal flows for streams with zero value occurrences. Water Resources Research, 2011, 47, .	4.2	146
6	How Suitable is Quantile Mapping For Postprocessing GCM Precipitation Forecasts?. Journal of Climate, 2017, 30, 3185-3196.	3.2	135
7	Using genetic algorithms to optimise model parameters. Environmental Modelling and Software, 1997, 12, 27-34.	4.5	130
8	A logâ \in sinh transformation for data normalization and variance stabilization. Water Resources Research, 2012, 48, .	4.2	127
9	Post-processing rainfall forecasts from numerical weather prediction models for short-term streamflow forecasting. Hydrology and Earth System Sciences, 2013, 17, 3587-3603.	4.9	120
10	LH moments for statistical analysis of extreme events. Water Resources Research, 1997, 33, 2841-2848.	4.2	117
11	The POT model described by the generalized Pareto distribution with Poisson arrival rate. Journal of Hydrology, 1991, 129, 263-280.	5.4	115
12	Evidence for Using Lagged Climate Indices to Forecast Australian Seasonal Rainfall. Journal of Climate, 2012, 25, 1230-1246.	3.2	115
13	Evaluation of numerical weather prediction model precipitation forecasts for short-term streamflow forecasting purpose. Hydrology and Earth System Sciences, 2013, 17, 1913-1931.	4.9	103
14	The utility of L-moment ratio diagrams for selecting a regional probability distribution. Hydrological Sciences Journal, 2001, 46, 147-155.	2.6	96
15	Merging Seasonal Rainfall Forecasts from Multiple Statistical Models through Bayesian Model Averaging. Journal of Climate, 2012, 25, 5524-5537.	3.2	88
16	Estimation of the GEV distribution from censored samples by method of partial probability weighted moments. Journal of Hydrology, 1990, 120, 103-114.	5.4	81
17	An ANN-based emulation modelling framework for flood inundation modelling: Application, challenges and future directions. Environmental Modelling and Software, 2020, 124, 104587.	4.5	79
18	A Bayesian Approach to Predictor Selection for Seasonal Streamflow Forecasting. Journal of Hydrometeorology, 2012, 13, 155-171.	1.9	78

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19	Monthly versus daily water balance models in simulating monthly runoff. Journal of Hydrology, 2011, 404, 166-175.	5.4	77
20	Quantifying parameter uncertainty in stochastic models using the Box–Cox transformation. Journal of Hydrology, 2002, 265, 246-257.	5.4	74
21	Unbiased estimation of probability weighted moments and partial probability weighted moments from systematic and historical flood information and their application to estimating the GEV distribution. Journal of Hydrology, 1990, 120, 115-124.	5 . 4	66
22	Reliable long-range ensemble streamflow forecasts: Combining calibrated climate forecasts with a conceptual runoff model and a staged error model. Water Resources Research, 2016, 52, 8238-8259.	4.2	64
23	Direct Sample Estimators of L Moments. Water Resources Research, 1996, 32, 3617-3619.	4.2	62
24	Contribution from frozen soil meltwater to runoff in an in-land river basin under water scarcity by isotopic tracing in northwestern China. Global and Planetary Change, 2016, 136, 41-51.	3 . 5	62
25	Improving Precipitation Forecasts by Generating Ensembles through Postprocessing. Monthly Weather Review, 2015, 143, 3642-3663.	1.4	61
26	Contributions of local terrestrial evaporation and transpiration to precipitation using \hat{l}' 18 O and D-excess as a proxy in Shiyang inland river basin in China. Global and Planetary Change, 2016, 146, 140-151.	3 . 5	61
27	Monthly and seasonal streamflow forecasts using rainfallâ€runoff modeling and historical weather data. Water Resources Research, 2011, 47, .	4.2	57
28	Improving statistical forecasts of seasonal streamflows using hydrological model output. Hydrology and Earth System Sciences, 2013, 17, 579-593.	4.9	57
29	Understanding and predicting deep percolation under surface irrigation. Water Resources Research, 2008, 44, .	4.2	56
30	A System for Continuous Hydrological Ensemble Forecasting (SCHEF) to lead times of 9 days. Journal of Hydrology, 2014, 519, 2832-2846.	5. 4	56
31	Ensemble dressing for hydrological applications. Hydrological Processes, 2013, 27, 106-116.	2.6	55
32	Seasonal Forecasts of Australian Rainfall through Calibration and Bridging of Coupled GCM Outputs. Monthly Weather Review, 2014, 142, 1758-1770.	1.4	52
33	Combining the strengths of statistical and dynamical modeling approaches for forecasting Australian seasonal rainfall. Journal of Geophysical Research, 2012, 117, .	3.3	50
34	A Bayesian modelling method for post-processing daily sub-seasonal to seasonal rainfall forecasts from global climate models and evaluation for 12ÂAustralian catchments. Hydrology and Earth System Sciences, 2018, 22, 1615-1628.	4.9	50
35	Quantifying predictive uncertainty of streamflow forecasts based on a Bayesian joint probability model. Journal of Hydrology, 2015, 528, 329-340.	5.4	49
36	Error reduction and representation in stages (ERRIS) in hydrological modelling for ensemble streamflow forecasting. Hydrology and Earth System Sciences, 2016, 20, 3561-3579.	4.9	49

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37	A strategy to overcome adverse effects of autoregressive updating of streamflow forecasts. Hydrology and Earth System Sciences, 2015, 19, 1-15.	4.9	48
38	Using partial probability weighted moments to fit the extreme value distributions to censored samples. Water Resources Research, 1996, 32, 1767-1771.	4.2	46
39	Effective use of general circulation model outputs for forecasting monthly rainfalls to long lead times. Water Resources Research, 2013, 49, 5427-5436.	4.2	46
40	The influence from the shrinking cryosphere and strengthening evopotranspiration on hydrologic process in a cold basin, Qilian Mountains. Global and Planetary Change, 2016, 144, 119-128.	3.5	46
41	Application of a Hybrid Statistical–Dynamical System to Seasonal Prediction of North American Temperature and Precipitation. Monthly Weather Review, 2019, 147, 607-625.	1.4	46
42	Ensemble forecasting of sub-seasonal to seasonal streamflow by a Bayesian joint probability modelling approach. Journal of Hydrology, 2016, 541, 839-849.	5.4	45
43	Assessment of an ensemble seasonal streamflow forecasting system for Australia. Hydrology and Earth System Sciences, 2017, 21, 6007-6030.	4.9	45
44	Artificial neural network based hybrid modeling approach for flood inundation modeling. Journal of Hydrology, 2021, 592, 125605.	5.4	44
45	An evaluation of ECMWF SEAS5 seasonal climate forecasts for Australia using a new forecast calibration algorithm. Environmental Modelling and Software, 2019, 122, 104550.	4.5	43
46	Assimilation of stream discharge for flood forecasting: The benefits of accounting for routing time lags. Water Resources Research, 2013, 49, 1887-1900.	4.2	42
47	An integrated error parameter estimation and lag-aware data assimilation scheme for real-time flood forecasting. Journal of Hydrology, 2014, 519, 2722-2736.	5.4	42
48	A method for coupling daily and monthly time scales in stochastic generation of rainfall series. Journal of Hydrology, 2007, 346, 122-130.	5.4	40
49	Seasonal precipitation forecasts over China using monthly large-scale oceanic-atmospheric indices. Journal of Hydrology, 2014, 519, 792-802.	5.4	40
50	Calibrating hourly rainfall-runoff models with daily forcings for streamflow forecasting applications in meso-scale catchments. Environmental Modelling and Software, 2016, 76, 20-36.	4.5	40
51	Ensemble forecasting of monthly and seasonal reference crop evapotranspiration based on global climate model outputs. Agricultural and Forest Meteorology, 2019, 264, 114-124.	4.8	39
52	Water balance comparison between a dry and a wet landfill â€" a full-scale experiment. Journal of Hydrology, 2001, 251, 29-48.	5.4	37
53	A Bayesian Joint Probability Approach for flood record augmentation. Water Resources Research, 2001, 37, 1707-1712.	4.2	36
54	Model averaging methods to merge operational statistical and dynamic seasonal streamflow forecasts in <scp>A</scp> ustralia. Water Resources Research, 2015, 51, 1797-1812.	4.2	36

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55	Ensemble forecasts of monthly catchment rainfall out to long lead times by post-processing coupled general circulation model output. Journal of Hydrology, 2014, 519, 2920-2931.	5.4	35
56	Statistical calibration and bridging of ECMWF System4 outputs for forecasting seasonal precipitation over China. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7116-7135.	3.3	35
57	Approaches for Quantifying and Managing Diffuse Phosphorus Exports at the Farm/Small Catchment Scale. Journal of Environmental Quality, 2009, 38, 1968-1980.	2.0	34
58	Assimilation of stream discharge for flood forecasting: Updating a semidistributed model with an integrated data assimilation scheme. Water Resources Research, 2015, 51, 3238-3258.	4.2	34
59	Quantitative evaluation on the influence from cryosphere meltwater on runoff in an inland river basin of China. Global and Planetary Change, 2016, 143, 189-195.	3.5	32
60	An evaluation of daily precipitation from a regional atmospheric reanalysis over Australia. Hydrology and Earth System Sciences, 2019, 23, 3387-3403.	4.9	31
61	A dual-pass error-correction technique for forecasting streamflow. Journal of Hydrology, 2011, 405, 367-381.	5.4	30
62	Using higher probability weighted moments for flood frequency analysis. Journal of Hydrology, 1997, 194, 95-106.	5.4	29
63	Calibration, Bridging, and Merging to Improve GCM Seasonal Temperature Forecasts in Australia. Monthly Weather Review, 2016, 144, 2421-2441.	1.4	29
64	Stable isotope composition of precipitation in the south and north slopes of Wushaoling Mountain, northwestern China. Atmospheric Research, 2016, 182, 87-101.	4.1	29
65	A Bayesian network approach to knowledge integration and representation of farm irrigation: 1. Model development. Water Resources Research, 2009, 45, .	4.2	25
66	Improved error modelling for streamflow forecasting at hourly time steps by splitting hydrographs into rising and falling limbs. Journal of Hydrology, 2017, 555, 586-599.	5.4	25
67	Accounting for seasonal dependence in hydrological model errors and prediction uncertainty. Water Resources Research, 2013, 49, 5913-5929.	4.2	24
68	Engendering stakeholder ownership in scenario planning. Technological Forecasting and Social Change, 2015, 91, 250-263.	11.6	23
69	A Seasonally Coherent Calibration (SCC) Model for Postprocessing Numerical Weather Predictions. Monthly Weather Review, 2019, 147, 3633-3647.	1.4	23
70	Generalized extreme value distribution fitted by LH moments for low-flow frequency analysis. Water Resources Research, 2007, 43, .	4.2	22
71	Approximate Goodness-of-Fit Tests of fitted generalized extreme value distributions using LH moments. Water Resources Research, 1998, 34, 3497-3502.	4.2	21
72	The challenge of forecasting high streamflows 1–3 months in advance with lagged climate indices in southeast Australia. Natural Hazards and Earth System Sciences, 2014, 14, 219-233.	3.6	21

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73	A Bayesian modelling approach to forecasting short-term reference crop evapotranspiration from GCM outputs. Agricultural and Forest Meteorology, 2019, 269-270, 88-101.	4.8	21
74	Toward Accurate and Reliable Forecasts of Australian Seasonal Rainfall by Calibrating and Merging Multiple Coupled GCMs. Monthly Weather Review, 2013, 141, 4554-4563.	1.4	20
75	Bayesian networks for decision analyses — an application to irrigation system selection. Australian Journal of Experimental Agriculture, 2004, 44, 145.	1.0	19
76	Seasonal Forecasts of Unregulated Inflows into the Murray River, Australia. Water Resources Management, 2013, 27, 2747-2769.	3.9	17
77	A Bayesian joint probability post-processor for reducing errors and quantifying uncertainty in monthly streamflow predictions. Hydrology and Earth System Sciences, 2013, 17, 795-804.	4.9	17
78	Does improved SSTA prediction ensure better seasonal rainfall forecasts?. Water Resources Research, 2015, 51, 3370-3383.	4.2	17
79	A hybrid stochastic-weather-generation method for temporal disaggregation of precipitation with consideration of seasonality and within-month variations. Stochastic Environmental Research and Risk Assessment, 2016, 30, 1705-1724.	4.0	17
80	An evaluation of numerical weather prediction based rainfall forecasts. Hydrological Sciences Journal, 2016, 61, 2704-2717.	2.6	17
81	Seasonal streamflow forecasting in the upper Indus Basin of Pakistan: an assessment of methods. Hydrology and Earth System Sciences, 2018, 22, 3533-3549.	4.9	17
82	The value of model averaging and dynamical climate model predictions for improving statistical seasonal streamflow forecasts over Australia. Water Resources Research, 2013, 49, 6671-6687.	4.2	16
83	On the importance of soil moisture in calibration of rainfall–runoff models: two case studies. Hydrological Sciences Journal, 2018, 63, 1292-1312.	2.6	16
84	On the Joint Calibration of Multivariate Seasonal Climate Forecasts from GCMs. Monthly Weather Review, 2020, 148, 437-456.	1.4	16
85	A Data Censoring Approach for Predictive Error Modeling of Flow in Ephemeral Rivers. Water Resources Research, 2020, 56, e2019WR026128.	4.2	16
86	A lysimeter study of the water balance of border-check irrigated perennial pasture. Australian Journal of Experimental Agriculture, 2004, 44, 151.	1.0	15
87	Options for management of saline groundwater in an irrigated farming system. Australian Journal of Experimental Agriculture, 2004, 44, 181.	1.0	14
88	Optimising seasonal streamflow forecast lead time for operational decision making in Australia. Hydrology and Earth System Sciences, 2016, 20, 4117-4128.	4.9	14
89	Which precipitation forecasts to use? Deterministic versus coarserâ€resolution ensemble <scp>NWP</scp> models. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 900-913.	2.7	14
90	Calibrating Hourly Precipitation Forecasts with Daily Observations. Journal of Hydrometeorology, 2020, 21, 1655-1673.	1.9	14

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91	Estimating hydraulic parameters for a surface irrigation model from field conditions. Australian Journal of Experimental Agriculture, 2004, 44, 173.	1.0	13
92	Simulating the water balance of border-check irrigated pasture on a cracking soil. Australian Journal of Experimental Agriculture, 2004, 44, 163.	1.0	13
93	Impacts of urbanization on precipitation patterns in the greater Beijing–Tianjin–Hebei metropolitan region in northern China. Environmental Research Letters, 2021, 16, 014042.	5.2	13
94	Estimating groundwater-river connectivity factor for quantifying changes in irrigation return flows in the Murray–Darling Basin. Australian Journal of Water Resources, 2020, 24, 121-138.	2.7	12
95	Extending a joint probability modelling approach for post-processing ensemble precipitation forecasts from numerical weather prediction models. Journal of Hydrology, 2022, 605, 127285.	5.4	11
96	Limiting cases of water fluxes at the land surface. Journal of Hydrology, 1994, 155, 429-440.	5.4	10
97	An economic analysis of conversion from border-check to centre pivot irrigation on dairy farms in the Murray Dairy Region, Australia. Irrigation Science, 2007, 26, 9-20.	2.8	10
98	Frequency analysis of water consumption for metropolitan area of Melbourne. Journal of Hydrology, 2001, 247, 72-84.	5.4	9
99	A Bayesian method for multi-site stochastic data generation: Dealing with non-concurrent and missing data, variable transformation and parameter uncertainty. Environmental Modelling and Software, 2008, 23, 412-421.	4.5	9
100	A method to extend temporal coverage of high quality precipitation datasets by calibrating reanalysis estimates. Journal of Hydrology, 2020, 581, 124355.	5.4	9
101	Post-processing sub-seasonal precipitation forecasts at various spatiotemporal scales across China during boreal summer monsoon. Journal of Hydrology, 2021, 598, 125742.	5.4	9
102	Upskilling Lowâ€Fidelity Hydrodynamic Models of Flood Inundation Through Spatial Analysis and Gaussian Process Learning. Water Resources Research, 2022, 58, .	4.2	9
103	A Variable-Correlation Model to Characterize Asymmetric Dependence for Postprocessing Short-Term Precipitation Forecasts. Monthly Weather Review, 2020, 148, 241-257.	1.4	8
104	A noise adaptive approach for nodal water demand estimation in water distribution systems. Water Research, 2021, 192, 116837.	11.3	8
105	Propagating reliable estimates of hydrological forecast uncertainty to many lead times. Journal of Hydrology, 2021, 603, 126798.	5.4	8
106	Potential cumulative impacts on river flow volume from increased groundwater extraction under the Murray-Darling Basin Plan. Australian Journal of Water Resources, 2020, 24, 105-120.	2.7	7
107	An improved workflow for calibration and downscaling of GCM climate forecasts for agricultural applications – A case study on prediction of sugarcane yield in Australia. Agricultural and Forest Meteorology, 2020, 291, 107991.	4.8	7
108	Reliable hourly streamflow forecasting with emphasis on ephemeral rivers. Journal of Hydrology, 2021, 598, 125739.	5.4	7

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109	Embedding trend into seasonal temperature forecasts through statistical calibration of <pre><scp>GCM</scp></pre> /scp> outputs. International Journal of Climatology, 2021, 41, E1553.	3.5	7
110	An error model for long-range ensemble forecasts of ephemeral rivers. Advances in Water Resources, 2021, 151, 103891.	3.8	7
111	Going with the Trend: Forecasting Seasonal Climate Conditions under Climate Change. Monthly Weather Review, 2021, 149, 2513-2522.	1.4	7
112	Comment on "An investigation of the relationship between ponded and constant flux rainfall infiltration―by A. Poulovassilis et al Water Resources Research, 1993, 29, 1335-1337.	4.2	6
113	Relationship between hydraulic and basic properties for irrigated soils in southeast Australia. Journal of Plant Nutrition and Soil Science, 2011, 174, 81-92.	1.9	6
114	Temporally varied error modelling for improving simulations and quantifying uncertainty. Journal of Hydrology, 2020, 586, 124914.	5 . 4	6
115	Assessing the Impact of Irrigation Efficiency Projects on Return Flows in the South-Eastern Murray–Darling Basin, Australia. Water (Switzerland), 2021, 13, 1366.	2.7	6
116	Achieving effective calibration of precipitation forecasts over a continental scale. Journal of Hydrology: Regional Studies, 2021, 35, 100818.	2.4	6
117	Introducing longâ€ŧerm trends into subseasonal temperature forecasts through trendâ€aware postprocessing. International Journal of Climatology, 2022, 42, 4972-4988.	3.5	6
118	An analysis framework to evaluate irrigation decisions using short-term ensemble weather forecasts. Irrigation Science, 2023, 41, 155-171.	2.8	6
119	Unbiased plotting positions for historical flood information. Journal of Hydrology, 1991, 124, 197-205.	5.4	5
120	A Bayesian network approach to knowledge integration and representation of farm irrigation: 2. Model validation. Water Resources Research, 2009, 45, .	4.2	5
121	Productivity and water use of grazed subsurface drip irrigated perennial pasture in Australia. Irrigation Science, 2015, 33, 141-152.	2.8	5
122	Factors Influencing the Performance of Regression-Based Statistical Postprocessing Models for Short-Term Precipitation Forecasts. Weather and Forecasting, 2019, 34, 2067-2084.	1.4	5
123	Coupling forecast calibration and dataâ€driven downscaling for generating reliable, highâ€resolution, multivariate seasonal climate forecast ensembles at multiple sites. International Journal of Climatology, 2020, 40, 2479-2496.	3 . 5	5
124	Ability of an Australian reanalysis dataset to characterise sub-daily precipitation. Hydrology and Earth System Sciences, 2020, 24, 2951-2962.	4.9	5
125	The politicisation of science in the Murray-Darling Basin, Australia: discussion of  Scientific integrity, public policy and water governance'. Australian Journal of Water Resources, 2021, 25, 141-158.	2.7	5
126	Rapid prediction of flood inundation by interpolation between flood library maps for real-time applications. Journal of Hydrology, 2022, 609, 127735.	5 . 4	5

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127	Power transformation of variables for post-processing precipitation forecasts: Regionally versus locally optimized parameter values. Journal of Hydrology, 2022, 610, 127912.	5.4	5
128	Temporal disaggregation of daily rainfall measurements using regional reanalysis for hydrological applications. Journal of Hydrology, 2022, 610, 127867.	5.4	5
129	Calibrating anomalies improves forecasting of daily reference crop evapotranspiration. Journal of Hydrology, 2022, 610, 128009.	5.4	5
130	Evaluation and Statistical Postâ€Processing of Two Precipitation Reforecast Products During Summer in the Mainland of China. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	5
131	A Bayesian network approach to knowledge integration and representation of farm irrigation: 3. Spatial application. Water Resources Research, 2009, 45, .	4.2	4
132	Efficient River Management using Stochastic MPC and Ensemble Forecast of Uncertain In-flows ⎠âŽThe first and the third authors acknowledge the financial support from the Australian Research Council Linkage Project (LP130100605) and the Brescia Smart Living Project (MIURSCN00416) respectively IFAC-PapersOnLine, 2018, 51, 37-42.	0.9	4
133	Deterministic and probabilistic evaluation of raw and post-processing monthly precipitation forecasts: a case study of China. Journal of Hydroinformatics, 2021, 23, 914-934.	2.4	4
134	Bias-correcting input variables enhances forecasting of reference crop evapotranspiration. Hydrology and Earth System Sciences, 2021, 25, 4773-4788.	4.9	4
135	Stepâ€Function Response of Muskingum Reach. Journal of Irrigation and Drainage Engineering - ASCE, 1993, 119, 410-415.	1.0	3
136	Python program for spatial reduction and reconstruction method in flood inundation modelling. MethodsX, 2021, 8, 101527.	1.6	2
137	Comparison of weather radar, numerical weather prediction and gauge-based rainfall estimates. , 0, , .		2
138	Selecting reference streamflow forecasts to demonstrate the performance of NWP-forced streamflow forecasts. , 0, , .		1
139	Closure to "Stepâ€Function Response of Muskingum Reach―by J. C. I. Dooge, M. Perumal, and Q. J. Wang (March/April, 1993, Vol. 119, No. 2). Journal of Irrigation and Drainage Engineering - ASCE, 1994, 120, 697-701.	1.0	O
140	Minimisation or remediation: A cost benefit comparison of two approaches for managing irrigation-induced deep percolation. Agricultural Water Management, 2008, 95, 163-170.	5.6	0
141	A Bayesian hierarchical spatio-temporal rainfall model. Journal of Applied Statistics, 2019, 46, 217-229.	1.3	0
142	Using the Schaake shuffle when calibrating ensemble means can be problematic. Journal of Hydrology, 2020, 587, 124991.	5.4	0
143	A stochastic weather generation method for temporal precipitation simulation. , 0, , .		O
144	Challenges for including error updating in real-time hydrological error models. , 0, , .		0

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145	Evaluation of downscaled POAMA M24 for monthly and 3-monthly streamflow forecasts., 0,,.		0
146	A strategy for quality controlling hourly rainfall observations and its impact on hourly streamflow simulations. , 0, , .		0
147	Reconstructing climate trends adds skills to seasonal reference crop evapotranspiration forecasting. Hydrology and Earth System Sciences, 2022, 26, 941-954.	4.9	O
148	Parsimonious Gap-Filling Models for Sub-Daily Actual Evapotranspiration Observations from Eddy-Covariance Systems. Remote Sensing, 2022, 14, 1286.	4.0	0