Jan Seibert

List of Publications by Citations

241 papers	13,988 citations	62 h-index	111 g-index
305 ext. papers	15,842 ext. citations	4.6 avg, IF	7 L-index

#	Paper	IF	Citations
241	Bias correction of regional climate model simulations for hydrological climate-change impact studies: Review and evaluation of different methods. *Journal of Hydrology*, **2012**, 456-457, 12-29	6	930
240	The role of topography on catchment-scale water residence time. *Water Resources Research*, **2005**, 41,	5.4	495
239	On the calculation of the topographic wetness index: evaluation of different methods based on field observations. *Hydrology and Earth System Sciences*, **2006**, 10, 101-112	5.5	461
238	On the dialog between experimentalist and modeler in catchment hydrology: Use of soft data for multicriteria model calibration. *Water Resources Research*, **2002**, 38, 23-1-23-14	5.4	423
237	Teaching hydrological modeling with a user-friendly catchment-runoff-model software package. *Hydrology and Earth System Sciences*, **2012**, 16, 3315-3325	5.5	273
236	Regionalisation of parameters for a conceptual rainfall-runoff model. *Agricultural and Forest Meteorology*, **1999**, 98-99, 279-293	5.8	268
235	Resolving the Double Paradox of rapidly mobilized old water with highly variable responses in runoff chemistry. *Hydrological Processes*, **2004**, 18, 185-189	3.3	265
234	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. *Hydrological Sciences Journal*, **2019**, 64, 1141-1158	3.5	259
233	How old is streamwater? Open questions in catchment transit time conceptualization, modelling and analysis. *Hydrological Processes*, **2010**, 24, 1745-1754	3.3	243
232	Is bias correction of regional climate model (RCM) simulations possible for non-stationary conditions?. *Hydrology and Earth System Sciences*, **2013**, 17, 5061-5077	5.5	239
231	Multi-criteria calibration of a conceptual runoff model using a genetic algorithm. *Hydrology and Earth System Sciences*, **2000**, 4, 215-224	5.5	231
230	Regional Climate Models for Hydrological Impact Studies at the Catchment Scale: A Review of Recent Modeling Strategies. *Geography Compass*, **2010**, 4, 834-860	2.4	226
229	A new triangular multiple flow direction algorithm for computing upslope areas from gridded digital elevation models. *Water Resources Research*, **2007**, 43,	5.4	220
228	Aqua Incognita: the unknown headwaters. *Hydrological Processes*, **2008**, 22, 1239-1242	3.3	213
227	Prediction uncertainty of conceptual rainfall-runoff models caused by problems in identifying model parameters and structure. *Hydrological Sciences Journal*, **1999**, 44, 779-797	3.5	202
226	Topographical influences on soil properties in boreal forests. *Geoderma*, **2007**, 141, 139-148	6.7	200
225	How does landscape structure influence catchment transit time across different geomorphic provinces?. *Hydrological Processes*, **2009**, 23, 945-953	3.3	182

224	The role of catchment scale and landscape characteristics for runoff generation of boreal streams. *Journal of Hydrology*, **2007**, 344, 198-209	6	181
223	Modeling spatial patterns of saturated areas: A comparison of the topographic wetness index and a dynamic distributed model. *Journal of Hydrology*, **2009**, 373, 15-23	6	175
222	Linking soil- and stream-water chemistry based on a Riparian Flow-Concentration Integration Model. *Hydrology and Earth System Sciences*, **2009**, 13, 2287-2297	5.5	172
221	Estimation of Parameter Uncertainty in the HBV Model **1997**, 28, 247-262		167
220	Calibration of hydrological models using flow-duration curves. *Hydrology and Earth System Sciences*, **2011**, 15, 2205-2227	5.5	165
219	Effects of DEM resolution on the calculation of topographical indices: TWI and its components. *Journal of Hydrology*, **2007**, 347, 79-89	6	165
218	Hydrological flow paths during snowmelt: Congruence between hydrometric measurements and oxygen 18 in meltwater, soil water, and runoff. *Water Resources Research*, **2004**, 40,	5.4	160
217	Gauging the ungauged basin: how many discharge measurements are needed?. *Hydrology and Earth System Sciences*, **2009**, 13, 883-892	5.5	157
216	Scale effects on headwater catchment runoff timing, flow sources, and groundwater-streamflow relations. *Water Resources Research*, **2004**, 40,	5.4	157
215	A new topographic index to quantify downslope controls on local drainage. *Water Resources Research*, **2004**, 40,	5.4	148
214	Assessing the impact of land use change on hydrology by ensemble modeling (LUCHEM). I: Model intercomparison with current land use. *Advances in Water Resources*, **2009**, 32, 129-146	4.7	141
213	Robust changes and sources of uncertainty in the projected hydrological regimes of Swiss catchments. *Water Resources Research*, **2014**, 50, 7541-7562	5.4	140
212	Evaluation of different downscaling techniques for hydrological climate-change impact studies at the catchment scale. *Climate Dynamics*, **2011**, 37, 2087-2105	4.2	139
211	Distributed assessment of contributing area and riparian buffering along stream networks. *Water Resources Research*, **2003**, 39,	5.4	130
210	Spatial and Temporal Variability in Growing-Season Net Ecosystem Carbon Dioxide Exchange at a Large Peatland in Ontario, Canada. *Ecosystems*, **2005**, 8, 430-441	3.9	130
209	On the relationships between catchment scale and streamwater mean residence time. *Hydrological Processes*, **2003**, 17, 175-181	3.3	129
208	Groundwater dynamics along a hillslope: A test of the steady state hypothesis. *Water Resources Research*, **2003**, 39,	5.4	121
207	Dissolved inorganic carbon export across the soil/stream interface and its fate in a boreal headwater stream. *Environmental Science & Technology*, **2009**, 43, 7364-9	10.3	118

206	Reliability of Model Predictions Outside Calibration Conditions **2003**, 34, 477-492		113
205	Cross-regional prediction of long-term trajectory of stream water DOC response to climate change. *Geophysical Research Letters*, **2012**, 39,	4.9	110
204	Stage-discharge uncertainty derived with a non-stationary rating curve in the Choluteca River, Honduras. *Hydrological Processes*, **2011**, 25, 603-613	3.3	110
203	Riparian zone hydrology and soil water total organic carbon (TOC): implications for spatial variability and upscaling of lateral riparian TOC exports. *Biogeosciences*, **2012**, 9, 3901-3916	4.6	109
202	Assessing the impact of land use change on hydrology by ensemble modelling (LUCHEM) II: Ensemble combinations and predictions. *Advances in Water Resources*, **2009**, 32, 147-158	4.7	108
201	Inter-catchment comparison to assess the influence of topography and soils on catchment transit times in a geomorphic province; the Cairngorm mountains, Scotland. *Hydrological Processes*, **2009**, 23, 1874-1886	3.3	107
200	On the need for benchmarks in hydrological modelling. *Hydrological Processes*, **2001**, 15, 1063-1064	3.3	102
199	Does model performance improve with complexity? A case study with three hydrological models. *Journal of Hydrology*, **2015**, 523, 147-159	6	100
198	Wetland occurrence in relation to topography: a test of topographic indices as moisture indicators. *Agricultural and Forest Meteorology*, **1999**, 98-99, 325-340	5.8	95
197	On the value of glacier mass balances for hydrological model calibration. *Journal of Hydrology*, **2010** , 385, 238-246	6	92
196	Estimation of permafrost thawing rates in a sub-arctic catchment using recession flow analysis. *Hydrology and Earth System Sciences*, **2009**, 13, 595-604	5.5	88
195	Inter-comparison of hydro-climatic regimes across northern catchments: synchronicity, resistance and resilience. *Hydrological Processes*, **2010**, 24, 3591-3602	3.3	88
194	Modeling spatial patterns of saturated areas: An evaluation of different terrain indices. *Water Resources Research*, **2004**, 40,	5.4	88
193	The value of multiple data set calibration versus model complexity for improving the performance of hydrological models in mountain catchments. *Water Resources Research*, **2015**, 51, 1939-1958	5.4	85
192	Land-cover impacts on streamflow: a change-detection modelling approach that incorporates parameter uncertainty. *Hydrological Sciences Journal*, **2010**, 55, 316-332	3.5	85
191	Comparison of hydrological model structures based on recession and low flow simulations. *Hydrology and Earth System Sciences*, **2011**, 15, 3447-3459	5.5	84
190	Multi-criterial validation of TOPMODEL in a mountainous catchment. *Hydrological Processes*, **1999**, 13, 1603-1620	3.3	82
189	Dynamics of stream water TOC concentrations in a boreal headwater catchment: Controlling factors and implications for climate scenarios. *Journal of Hydrology*, **2009**, 373, 44-56	6	77

188	Simulating interactions between saturated and unsaturated storage in a conceptual runoff model. *Hydrological Processes*, **2003**, 17, 379-390	3.3	77
187	A test of TOPMODEL'a ability to predict spatially distributed groundwater levels. *Hydrological Processes*, **1997**, 11, 1131-1144	3.3	76
186	Catchment water storage variation with elevation. *Hydrological Processes*, **2017**, 31, 2000-2015	3.3	72
185	Accelerating advances in continental domain hydrologic modeling. *Water Resources Research*, **2015**, 51, 10078-10091	5.4	70
184	Continuous long-term measurements of soil-plant-atmosphere variables at a forest site. *Agricultural and Forest Meteorology*, **1999**, 98-99, 53-73	5.8	69
183	Assessing the impact of land use change on hydrology by ensemble modeling (LUCHEM) III: Scenario analysis. *Advances in Water Resources*, **2009**, 32, 159-170	4.7	68
182	Water storage in a till catchment. II: Implications of transmissivity feedback for flow paths and turnover times. *Hydrological Processes*, **2011**, 25, 3950-3959	3.3	67
181	Regional water balance modelling in the NOPEX area: development and application of monthly water balance models. *Journal of Hydrology*, **1996**, 180, 211-236	6	66
180	Evaluating model performance: towards a non-parametric variant of the Kling-Gupta efficiency. *Hydrological Sciences Journal*, **2018**, 63, 1941-1953	3.5	64
179	Temporal sampling strategies and uncertainty in calibrating a conceptual hydrological model for a small boreal catchment. *Hydrological Processes*, **2009**, 23, 3093-3109	3.3	62
178	Stable oxygen and hydrogen isotopes in sub-Arctic lake waters from northern Sweden. *Journal of Hydrology*, **2009**, 376, 143-151	6	60
177	Flood-type classification in mountainous catchments using crisp and fuzzy decision trees. *Water Resources Research*, **2015**, 51, 7959-7976	5.4	56
176	Riparian soil temperature modification of the relationship between flow and dissolved organic carbon concentration in a boreal stream. *Water Resources Research*, **2011**, 47,	5.4	56
175	Catchment-scale estimates of flow path partitioning and water storage based on transit time and runoff modelling. *Hydrological Processes*, **2011**, 25, 3960-3976	3.3	56
174	A drought index accounting for snow. *Water Resources Research*, **2014**, 50, 7861-7872	5.4	55
173	Effects of wildfire on catchment runoff response: a modelling approach to detect changes in snow-dominated forested catchments **2010**, 41, 378-390		55
172	Upper and lower benchmarks in hydrological modelling. *Hydrological Processes*, **2018**, 32, 1120-1125	3.3	54
171	Controls on snowmelt water mean transit times in northern boreal catchments. *Hydrological Processes*, **2010**, 24, 1672-1684	3.3	52

170	Use of color maps and wavelet coherence to discern seasonal and interannual climate influences on streamflow variability in northern catchments. *Water Resources Research*, **2013**, 49, 6194-6207	5.4	50
169	Specific discharge variability in a boreal landscape. *Water Resources Research*, **2012**, 48,	5.4	50
168	Conceptualization in catchment modelling: simply learning?. *Hydrological Processes*, **2008**, 22, 2389-2393	3.3	50
167	Catchments on the cusp? Structural and functional change in northern ecohydrology. *Hydrological Processes*, **2013**, 27, 766-774	3.3	49
166	Flood type specific construction of synthetic design hydrographs. *Water Resources Research*, **2017**, 53, 1390-1406	5.4	47
165	Spatial variation in discharge and concentrations of organic carbon in a catchment network of boreal streams in northern Sweden. *Journal of Hydrology*, **2007**, 342, 72-87	6	47
164	Topographic controls on shallow groundwater levels in a steep, prealpine catchment: When are the TWI assumptions valid?. *Water Resources Research*, **2014**, 50, 6067-6080	5.4	46
163	Landscape controls on spatiotemporal discharge variability in a boreal catchment. *Water Resources Research*, **2016**, 52, 6541-6556	5.4	46
162	How uncertainty analysis of streamflow data can reduce costs and promote robust decisions in water management applications. *Water Resources Research*, **2017**, 53, 5220-5228	5.4	43
161	Snow redistribution for the hydrological modeling of alpine catchments. *Wiley Interdisciplinary Reviews: Water*, **2017**, 4, e1232	5.7	43
160	Forest harvest increases runoff most during low flows in two boreal streams. *Ambio*, **2009**, 38, 357-63	6.5	42
159	Spatial heterogeneity of the spring flood acid pulse in a boreal stream network. *Science of the Total Environment*, **2008**, 407, 708-22	10.2	42
158	Bivariate return periods and their importance for flood peak and volume estimation. *Wiley Interdisciplinary Reviews: Water*, **2016**, 3, 819-833	5.7	41
157	Gauging the Ungauged Basin: Relative Value of Soft and Hard Data. *Journal of Hydrologic Engineering - ASCE*, **2015**, 20,	1.8	40
156	Hillslope–riparian-stream connectivity and flow directions at the Panola Mountain Research Watershed. *Hydrological Processes*, **2015**, 29, 3556-3574	3.3	40
155	Importance of maximum snow accumulation for summer low flows in humid catchments. *Hydrology and Earth System Sciences*, **2016**, 20, 859-874	5.5	40
154	Location and density of rain gauges for the estimation of spatial varying precipitation. *Geografiska Annaler, Series A: Physical Geography*, **2015**, 97, 167-179	1.1	39
153	Assessing the benefit of snow data assimilation for runoff modeling in Alpine catchments. *Hydrology and Earth System Sciences*, **2016**, 20, 3895-3905	5.5	39

152	Comparison of threshold hydrologic response across northern catchments. *Hydrological Processes*, **2015**, 29, 3575-3591	3.3	39
151	Geostatistical investigation into the temporal evolution of spatial structure in a shallow water table. *Hydrology and Earth System Sciences*, **2006**, 10, 113-125	5.5	39
150	Modeling of Future Changes in Seasonal Snowpack and Impacts on Summer Low Flows in Alpine Catchments. *Water Resources Research*, **2018**, 54, 538-556	5.4	38
149	Smiling in the rain: Seven reasons to be positive about uncertainty in hydrological modelling. *Hydrological Processes*, **2013**, 27, 1117-1122	3.3	38
148	Impact of social preparedness on flood early warning systems. *Water Resources Research*, **2017**, 53, 522-534	5.4	37
147	Spatial variability in the isotopic composition of rainfall in a small headwater catchment and its effect on hydrograph separation. *Journal of Hydrology*, **2017**, 547, 755-769	6	37
146	Model Calibration Criteria for Estimating Ecological Flow Characteristics. *Water (Switzerland)*, **2015**, 7, 2358-2381	3	37
145	Virtual Staff Gauges for Crowd-Based Stream Level Observations. *Frontiers in Earth Science*, **2019**, 7,	3.5	37
144	Multiscale calibration and validation of a conceptual rainfall-runoff model. *Physics and Chemistry of the Earth*, **2000**, 25, 59-64		36
143	Contributing sources to baseflow in pre-alpine headwaters using spatial snapshot sampling. *Hydrological Processes*, **2015**, 29, 5321-5336	3.3	35
142	Variability of groundwater levels and total organic carbon in the riparian zone of a boreal catchment. *Journal of Geophysical Research*, **2011**, 116,		35
141	Evolution of soil solution aluminum during transport along a forested boreal hillslope. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		34
140	Propagation of biases in climate models from the synoptic to the regional scale: Implications for bias adjustment. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 2075-2089	4.4	34
139	Effects of univariate and multivariate bias correction on hydrological impact projections in alpine catchments. *Hydrology and Earth System Sciences*, **2019**, 23, 1339-1354	5.5	33
138	Regional water balance modelling using flow-duration curves with observational uncertainties. *Hydrology and Earth System Sciences*, **2014**, 18, 2993-3013	5.5	33
137	Bias correction for hydrological impact studies beyond the daily perspective. *Hydrological Processes*, **2014**, 28, 4823-4828	3.3	33
136	Expansion and contraction of the flowing stream network alter hillslope flowpath lengths and the shape of the travel time distribution. *Hydrology and Earth System Sciences*, **2019**, 23, 4825-4834	5.5	33
135	Change in winter climate will affect dissolved organic carbon and water fluxes in mid-to-high latitude catchments. *Hydrological Processes*, **2013**, 27, 700-709	3.3	32

134	Appropriate temporal resolution of precipitation data for discharge modelling in pre-alpine catchments. *Hydrological Sciences Journal*, **2018**, 63, 1-16	3.5	31
133	Groundwater dynamics in a till hillslope: flow directions, gradients and delay. *Hydrological Processes*, **2011**, 25, 1899-1909	3.3	30
132	Value of different precipitation data for flood prediction in an alpine catchment: A Bayesian approach. *Journal of Hydrology*, **2018**, 556, 961-971	6	29
131	Hydrological change detection using modeling: Half a century of runoff from four rivers in the Blue Nile Basin. *Water Resources Research*, **2013**, 49, 3842-3851	5.4	28
130	Distribution of soil moisture and groundwater levels at patch and catchment scales. *Agricultural and Forest Meteorology*, **1999**, 98-99, 305-324	5.8	28
129	Information content of stream level class data for hydrological model calibration. *Hydrology and Earth System Sciences*, **2017**, 21, 4895-4905	5.5	27
128	Irrigania – a web-based game about sharing water resources. *Hydrology and Earth System Sciences*, **2012**, 16, 2523-2530	5.5	27
127	Water storage in a till catchment. I: Distributed modelling and relationship to runoff. *Hydrological Processes*, **2011**, 25, 3937-3949	3.3	27
126	Streamflow characteristics from modeled runoff time series – importance of calibration criteria selection. *Hydrology and Earth System Sciences*, **2017**, 21, 5443-5457	5.5	26
125	Modelling rating curves using remotely sensed LiDAR data. *Hydrological Processes*, **2012**, 26, 1427-1434	3.3	26
124	Evaporation and storage of intercepted rain analysed by comparing two models applied to a boreal forest. *Agricultural and Forest Meteorology*, **1999**, 98-99, 595-604	5.8	26
123	Pre-event water contributions to runoff events of different magnitude in pre-alpine headwaters **2017**, 48, 28-47		25
122	Predictability of low flow – An assessment with simulation experiments. *Journal of Hydrology*, **2014**, 519, 1383-1393	6	25
121	Quantifying sensitivity to droughts – an experimental modeling approach. *Hydrology and Earth System Sciences*, **2015**, 19, 1371-1384	5.5	25
120	Seasonal and runoff-related changes in total organic carbon concentrations in the River Öre, Northern Sweden. *Aquatic Sciences*, **2008**, 70, 21-29	2.5	25
119	Effective precipitation duration for runoff peaks based on catchment modelling. *Journal of Hydrology*, **2018**, 556, 510-522	6	25
118	Is groundwater response timing in a pre-alpine catchment controlled more by topography or by rainfall?. *Hydrological Processes*, **2016**, 30, 1036-1051	3.3	24
117	Continuous long-term measurements of soil–plant–atmosphere variables at an agricultural site. *Agricultural and Forest Meteorology*, **1999**, 98-99, 75-102	5.8	24

116	The assumption of uniform specific discharge: unsafe at any time?. *Hydrological Processes*, **2016**, 30, 3978-3988	3.3	24
115	Prediction of hydrographs and flow-duration curves in almost ungauged catchments: Which runoff measurements are most informative for model calibration?. *Journal of Hydrology*, **2017**, 554, 613-622	6	23
114	HELPing FRIENDs in PUBs: charting a course for synergies within international water research programmes in gauged and ungauged basins. *Hydrological Processes*, **2006**, 20, 1867-1874	3.3	23
113	Hydrological Modeling to Evaluate Climate Model Simulations and Their Bias Correction. *Journal of Hydrometeorology*, **2018**, 19, 1321-1337	3.7	22
112	Toward catchment hydro-biogeochemical theories. *Wiley Interdisciplinary Reviews: Water*, **2021**, 8, e1495	5.7	22
111	Synthetic design hydrographs for ungauged catchments: a comparison of regionalization methods. *Stochastic Environmental Research and Risk Assessment*, **2018**, 32, 1993-2023	3.5	21
110	Tracer Hydrology **2011**, 215-236		21
109	New Approach to the Measurement of Interception Evaporation. *Journal of Atmospheric and Oceanic Technology*, **1997**, 14, 1023-1035	2	21
108	Nitrogen source apportionment modeling and the effect of land-use class related runoff contributions **2007**, 38, 317-331		21
107	Your work is my boundary condition!. *Journal of Hydrology*, **2019**, 571, 235-243	6	21
106	Testing the Waters: Mobile Apps for Crowdsourced Streamflow Data. *Eos*, **2018**, 99,	1.5	21
105	Magic components—why quantifying rain, snowmelt, and icemelt in river discharge is not easy. *Hydrological Processes*, **2018**, 32, 160-166	3.3	21
104	Technical note: Representing glacier geometry changes in a semi-distributed hydrological model. *Hydrology and Earth System Sciences*, **2018**, 22, 2211-2224	5.5	21
103	Sensing with boots and trousers—qualitative field observations of shallow soil moisture patterns. *Hydrological Processes*, **2012**, 26, 4112-4120	3.3	20
102	Ensemble modelling of nitrogen fluxes: data fusion for a Swedish meso-scale catchment. *Hydrology and Earth System Sciences*, **2010**, 14, 2383-2397	5.5	20
101	Test of statistical means for the extrapolation of soil depth point information using overlays of spatial environmental data and bootstrapping techniques. *Hydrological Processes*, **2009**, 23, 3017-3029	3.3	20
100	Reducing systematic errors in rainfall measurements using a new type of gauge. *Agricultural and Forest Meteorology*, **1999**, 98-99, 341-348	5.8	20
99	Global Fully Distributed Parameter Regionalization Based on Observed Streamflow From 4,229 Headwater Catchments. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031485	4.4	20

98	How informative are stream level observations in different geographic regions?. *Hydrological Processes*, **2016**, 30, 2498-2508	3.3	20
97	The role of landscape properties, storage and evapotranspiration on variability in streamflow recessions in a boreal catchment. *Journal of Hydrology*, **2019**, 570, 315-328	6	20
96	The CrowdWater game: A playful way to improve the accuracy of crowdsourced water level class data. *PLoS ONE*, **2019**, 14, e0222579	3.7	19
95	The long-term hydrology of East Africa's water tower: statistical change detection in the watersheds of the Abbay Basin. *Regional Environmental Change*, **2014**, 14, 321-331	4.3	19
94	Is bias correction of Regional Climate Model (RCM) simulations possible for non-stationary conditions?		19
93	Sub-daily runoff predictions using parameters calibrated on the basis of data with a daily temporal resolution. *Journal of Hydrology*, **2017**, 550, 399-411	6	18
92	Hydrological model calibration with uncertain discharge data. *Hydrological Sciences Journal*, **2020**, 1-16	3.5	18
91	Bivariate analysis of floods in climate impact assessments. *Science of the Total Environment*, **2018**, 616-617, 1392-1403	10.2	18
90	Calculating terrain indices along streams: A new method for separating stream sides. *Water Resources Research*, **2010**, 46,	5.4	18
89	Can a regionalized model parameterisation be improved with a limited number of runoff measurements?. *Journal of Hydrology*, **2015**, 529, 49-61	6	17
88	Crowd-Based Observations of Riverine Macroplastic Pollution. *Frontiers in Earth Science*, **2020**, 8,	3.5	17
87	Citizens AND HYdrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. *Hydrological Sciences Journal*, **2021**, 1-18	3.5	17
86	True colors of experimental identification of hydrological processes at a hillslope prone to slide. *Hydrology and Earth System Sciences*, **2014**, 18, 875-892	5.5	16
85	Using landscape characteristics to define an adjusted distance metric for improving kriging interpolations. *International Journal of Geographical Information Science*, **2010**, 24, 723-740	4.1	16
84	Understanding conditions behind speleothem formation in Korallgrottan, northwestern Sweden. *Journal of Hydrology*, **2007**, 347, 13-22	6	16
83	The role of soil pH in linking groundwater flow and plant species density in boreal forest landscapes. *Ecography*, **2006**, 29, 515-524	6.5	16
82	Hydrological change modeling: Challenges and opportunities. *Hydrological Processes*, **2016**, 30, 4966-4973	3.3	16
81	Progressive water deficits during multiyear droughts in basins with long hydrological memory in Chile. *Hydrology and Earth System Sciences*, **2021**, 25, 429-446	5.5	16

80	Value of uncertain streamflow observations for hydrological modelling. *Hydrology and Earth System Sciences*, **2018**, 22, 5243-5257	5.5	16
79	Rapid transformation of inorganic to organic and plant-available phosphorous in soils of a glacier forefield. *Geoderma*, **2012**, 189-190, 215-226	6.7	15
78	Preface "Hydrology education in a changing world". *Hydrology and Earth System Sciences*, **2013**, 17, 1393-1399	5.5	15
77	When should stream water be sampled to be most informative for event-based, multi-criteria model calibration? **2017**, 48, 1566-1584		14
76	Water storage dynamics in a till hillslope: the foundation for modeling flows and turnover times. *Hydrological Processes*, **2017**, 31, 4-14	3.3	14
75	Distributed conceptual modelling in a Swedish lowland catchment: a multi-criteria model assessment **2013**, 44, 318-333		14
74	Conceptual Modelling to Assess Hydrological Impacts and Evaluate Environmental Flow Scenarios in Montane River Systems Regulated for Hydropower. *River Research and Applications*, **2015**, 31, 1066-1081	2.3	13
73	Measuring the significance of a divide to local drainage patterns. *International Journal of Geographical Information Science*, **2013**, 27, 1453-1468	4.1	13
72	Runoff generation in a pre-alpine catchment: A discussion between a tracer and a shallow groundwater hydrologist. *Cuadernos De Investigacion Geografica*, **2018**, 44, 429	2.5	13
71	Aqua temporaria incognita. *Hydrological Processes*, **2020**, 34, 5704-5711	3.3	12
70	Flood-type trend analysis for alpine catchments. *Hydrological Sciences Journal*, **2020**, 65, 1281-1299	3.5	12
69	An approach for including consideration of stream water dissolved organic carbon in long term forest planning. *Ambio*, **2009**, 38, 387-93	6.5	12
68	Value of a Limited Number of Discharge Observations for Improving Regionalization: A Large-Sample Study Across the United States. *Water Resources Research*, **2019**, 55, 363-377	5.4	12
67	Accuracy of crowdsourced streamflow and stream level class estimates. *Hydrological Sciences Journal*, **2020**, 65, 823-841	3.5	12
66	Representative sets of design hydrographs for ungauged catchments: A regional approach using probabilistic region memberships. *Advances in Water Resources*, **2018**, 112, 235-244	4.7	11
65	Value of Crowd-Based Water Level Class Observations for Hydrological Model Calibration. *Water Resources Research*, **2020**, 56, e2019WR026108	5.4	11
64	Snow and Ice in the Hydrosphere **2015**, 99-137		10
63	Identification of Flood Reactivity Regions via the Functional Clustering of Hydrographs. *Water Resources Research*, **2018**, 54, 1852-1867	5.4	10

62	Assessing the degree of detail of temperature-based snow routines for runoff modelling in mountainous areas in central Europe. *Hydrology and Earth System Sciences*, **2020**, 24, 4441-4461	5.5	10
61	Influence of hydro-meteorological data spatial aggregation on streamflow modelling. *Journal of Hydrology*, **2016**, 541, 1212-1220	6	10
60	Historical glacier outlines from digitized topographic maps of the Swiss Alps. *Earth System Science Data*, **2018**, 10, 805-814	10.5	9
59	Teaching hydrological modeling with a user-friendly catchment-runoff-model software package		9
58	The quest for an improved dialog between modeler and experimentalist. *Water Science and Application*, **2003**, 301-315		9
57	Validation and Over-ParameterizationExperiences from Hydrological Modeling. *Simulation Foundations, Methods and Applications*, **2019**, 811-834	0.6	8
56	Hydroclimatic and hydrochemical controls on Plecoptera diversity and distribution in northern freshwater ecosystems. *Hydrobiologia*, **2012**, 693, 39-53	2.4	8
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