List of Publications by Year in descending order

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IAN SEIREDT

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | 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. | 5.4 | 1,315 |
| 2 | 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. | 4.9 | 624 |
| 3 | The role of topography on catchment-scale water residence time. Water Resources Research, 2005, 41, . | 4.2 | 571 |
| 4 | 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. | 4.2 | 476 |
| 5 | Twenty-three unsolved problems in hydrology (UPH) – a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158. | 2.6 | 474 |
| 6 | Teaching hydrological modeling with a user-friendly catchment-runoff-model software package. Hydrology and Earth System Sciences, 2012, 16, 3315-3325. | 4.9 | 369 |
| 7 | Is bias correction of regional climate model (RCM) simulations possible for non-stationary conditions?. Hydrology and Earth System Sciences, 2013, 17, 5061-5077. | 4.9 | 306 |
| 8 | Resolving the Double Paradox of rapidly mobilized old water with highly variable responses in runoff chemistry. Hydrological Processes, 2004, 18, 185-189. | 2.6 | 300 |
| 9 | Regionalisation of parameters for a conceptual rainfall-runoff model. Agricultural and Forest Meteorology, 1999, 98-99, 279-293. | 4.8 | 298 |
| 10 | Regional Climate Models for Hydrological Impact Studies at the Catchment Scale: A Review of Recent Modeling Strategies. Geography Compass, 2010, 4, 834-860. | 2.7 | 288 |
| 11 | Multi-criteria calibration of a conceptual runoff model using a genetic algorithm. Hydrology and Earth System Sciences, 2000, 4, 215-224. | 4.9 | 282 |
| 12 | How old is streamwater? Open questions in catchment transit time conceptualization, modelling and analysis. Hydrological Processes, 2010, 24, 1745-1754. | 2.6 | 276 |
| 13 | A new triangular multiple flow direction algorithm for computing upslope areas from gridded digital elevation models. Water Resources Research, 2007, 43, . | 4.2 | 275 |
| 14 | Topographical influences on soil properties in boreal forests. Geoderma, 2007, 141, 139-148. | 5.1 | 251 |
| 15 | <i>Aqua Incognita</i> : the unknown headwaters. Hydrological Processes, 2008, 22, 1239-1242. | 2.6 | 246 |
| 16 | Prediction uncertainty of conceptual rainfall-runoff models caused by problems in identifying model parameters and structure. Hydrological Sciences Journal, 1999, 44, 779-797. | 2.6 | 226 |
| 17 | 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. | 5.4 | 223 |
| 18 | How does landscape structure influence catchment transit time across different geomorphic provinces?. Hydrological Processes, 2009, 23, 945-953. | 2.6 | 207 |

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|----|---|------|-----------|
| 19 | Calibration of hydrological models using flow-duration curves. Hydrology and Earth System Sciences, 2011, 15, 2205-2227. | 4.9 | 203 |
| 20 | The role of catchment scale and landscape characteristics for runoff generation of boreal streams. Journal of Hydrology, 2007, 344, 198-209. | 5.4 | 202 |
| 21 | Estimation of Parameter Uncertainty in the HBV Model. Hydrology Research, 1997, 28, 247-262. | 2.7 | 201 |
| 22 | Effects of DEM resolution on the calculation of topographical indices: TWI and its components. Journal of Hydrology, 2007, 347, 79-89. | 5.4 | 201 |
| 23 | Linking soil- and stream-water chemistry based on a Riparian Flow-Concentration Integration Model. Hydrology and Earth System Sciences, 2009, 13, 2287-2297. | 4.9 | 197 |
| 24 | Gauging the ungauged basin: how many discharge measurements are needed?. Hydrology and Earth System Sciences, 2009, 13, 883-892. | 4.9 | 196 |
| 25 | Robust changes and sources of uncertainty in the projected hydrological regimes of Swiss catchments. Water Resources Research, 2014, 50, 7541-7562. | 4.2 | 182 |
| 26 | A new topographic index to quantify downslope controls on local drainage. Water Resources Research, 2004, 40, . | 4.2 | 177 |
| 27 | 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. | 3.8 | 177 |
| 28 | Hydrological flow paths during snowmelt: Congruence between hydrometric measurements and oxygen 18 in meltwater, soil water, and runoff. Water Resources Research, 2004, 40, . | 4.2 | 176 |
| 29 | Scale effects on headwater catchment runoff timing, flow sources, and groundwater-streamflow relations. Water Resources Research, 2004, 40, . | 4.2 | 176 |
| 30 | Plant Species Numbers Predicted by a Topography-based Groundwater Flow Index. Ecosystems, 2005, 8, 430-441. | 3.4 | 160 |
| 31 | Evaluation of different downscaling techniques for hydrological climate-change impact studies at the catchment scale. Climate Dynamics, 2011, 37, 2087-2105. | 3.8 | 160 |
| 32 | Distributed assessment of contributing area and riparian buffering along stream networks. Water Resources Research, 2003, 39, . | 4.2 | 147 |
| 33 | On the relationships between catchment scale and streamwater mean residence time. Hydrological Processes, 2003, 17, 175-181. | 2.6 | 144 |
| 34 | Dissolved Inorganic Carbon Export Across the Soil/Stream Interface and Its Fate in a Boreal Headwater Stream. Environmental Science & Technology, 2009, 43, 7364-7369. | 10.0 | 138 |
| 35 | Reliability of Model Predictions Outside Calibration Conditions. Hydrology Research, 2003, 34, 477-492. | 2.7 | 135 |
| 36 | Groundwater dynamics along a hillslope: A test of the steady state hypothesis. Water Resources Research, 2003, 39, . | 4.2 | 133 |

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|----|--|-----|-----------|
| 37 | Does model performance improve with complexity? A case study with three hydrological models. Journal of Hydrology, 2015, 523, 147-159. | 5.4 | 132 |
| 38 | Stageâ€discharge uncertainty derived with a nonâ€stationary rating curve in the Choluteca River, Honduras. Hydrological Processes, 2011, 25, 603-613. | 2.6 | 129 |
| 39 | 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. | 3.8 | 128 |
| 40 | Crossâ€regional prediction of longâ€term trajectory of stream water DOC response to climate change. Geophysical Research Letters, 2012, 39, . | 4.0 | 127 |
| 41 | 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. | 3.3 | 121 |
| 42 | Interâ€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. | 2.6 | 115 |
| 43 | Evaluating model performance: towards a non-parametric variant of the Kling-Gupta efficiency. Hydrological Sciences Journal, 2018, 63, 1941-1953. | 2.6 | 113 |
| 44 | On the need for benchmarks in hydrological modelling. Hydrological Processes, 2001, 15, 1063-1064. | 2.6 | 112 |
| 45 | 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. | 4.2 | 109 |
| 46 | Modeling spatial patterns of saturated areas: An evaluation of different terrain indices. Water Resources Research, 2004, 40, . | 4.2 | 107 |
| 47 | Wetland occurrence in relation to topography: a test of topographic indices as moisture indicators. Agricultural and Forest Meteorology, 1999, 98-99, 325-340. | 4.8 | 106 |
| 48 | On the value of glacier mass balances for hydrological model calibration. Journal of Hydrology, 2010, 385, 238-246. | 5.4 | 105 |
| 49 | Comparison of hydrological model structures based on recession and low flow simulations. Hydrology and Earth System Sciences, 2011, 15, 3447-3459. | 4.9 | 104 |
| 50 | Interâ€comparison of hydroâ€climatic regimes across northern catchments: synchronicity, resistance and resilience. Hydrological Processes, 2010, 24, 3591-3602. | 2.6 | 103 |
| 51 | Catchment water storage variation with elevation. Hydrological Processes, 2017, 31, 2000-2015. | 2.6 | 103 |
| 52 | Accelerating advances in continental domain hydrologic modeling. Water Resources Research, 2015, 51, 10078-10091. | 4.2 | 102 |
| 53 | Estimation of permafrost thawing rates in a sub-arctic catchment using recession flow analysis. Hydrology and Earth System Sciences, 2009, 13, 595-604. | 4.9 | 101 |
| 54 | Land-cover impacts on streamflow: a change-detection modelling approach that incorporates parameter uncertainty. Hydrological Sciences Journal, 2010, 55, 316-332. | 2.6 | 94 |

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|----|--|-----|-----------|
| 55 | Multi-criterial validation of TOPMODEL in a mountainous catchment. Hydrological Processes, 1999, 13, 1603-1620. | 2.6 | 93 |
| 56 | Floodâ€ŧype classification in mountainous catchments using crisp and fuzzy decision trees. Water Resources Research, 2015, 51, 7959-7976. | 4.2 | 88 |
| 57 | A test of TOPMODEL'a ability to predict spatially distributed groundwater levels. Hydrological Processes, 1997, 11, 1131-1144. | 2.6 | 87 |
| 58 | Simulating interactions between saturated and unsaturated storage in a conceptual runoff model. Hydrological Processes, 2003, 17, 379-390. | 2.6 | 87 |
| 59 | Assessing the impact of land use change on hydrology by ensemble modeling (LUCHEM) III: Scenario analysis. Advances in Water Resources, 2009, 32, 159-170. | 3.8 | 87 |
| 60 | Upper and lower benchmarks in hydrological modelling. Hydrological Processes, 2018, 32, 1120-1125. | 2.6 | 85 |
| 61 | 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. | 5.4 | 84 |
| 62 | Regional water balance modelling in the NOPEX area: development and application of monthly water balance models. Journal of Hydrology, 1996, 180, 211-236. | 5.4 | 82 |
| 63 | Water storage in a till catchment. II: Implications of transmissivity feedback for flow paths and turnover times. Hydrological Processes, 2011, 25, 3950-3959. | 2.6 | 80 |
| 64 | Continuous long-term measurements of soil-plant-atmosphere variables at a forest site. Agricultural and Forest Meteorology, 1999, 98-99, 53-73. | 4.8 | 78 |
| 65 | A drought index accounting for snow. Water Resources Research, 2014, 50, 7861-7872. | 4.2 | 78 |
| 66 | Effects of wildfire on catchment runoff response: a modelling approach to detect changes in snow-dominated forested catchments. Hydrology Research, 2010, 41, 378-390. | 2.7 | 73 |
| 67 | Topographic controls on shallow groundwater levels in a steep, prealpine catchment: When are the TWI assumptions valid?. Water Resources Research, 2014, 50, 6067-6080. | 4.2 | 72 |
| 68 | Stable oxygen and hydrogen isotopes in sub-Arctic lake waters from northern Sweden. Journal of Hydrology, 2009, 376, 143-151. | 5.4 | 70 |
| 69 | Temporal sampling strategies and uncertainty in calibrating a conceptual hydrological model for a small boreal catchment. Hydrological Processes, 2009, 23, 3093-3109. | 2.6 | 69 |
| 70 | Progressive water deficits during multiyear droughts in basins with long hydrological memory in Chile. Hydrology and Earth System Sciences, 2021, 25, 429-446. | 4.9 | 67 |
| 71 | Conceptualization in catchment modelling: simply learning?. Hydrological Processes, 2008, 22, 2389-2393. | 2.6 | 65 |
| 72 | Flood type specific construction of synthetic design hydrographs. Water Resources Research, 2017, 53, 1390-1406. | 4.2 | 65 |

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|----|---|-----|-----------|
| 73 | Toward catchment hydroâ€biogeochemical theories. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1495. | 6.5 | 65 |
| 74 | Catchmentâ€scale estimates of flow path partitioning and water storage based on transit time and runoff modelling. Hydrological Processes, 2011, 25, 3960-3976. | 2.6 | 64 |
| 75 | Bivariate return periods and their importance for flood peak and volume estimation. Wiley Interdisciplinary Reviews: Water, 2016, 3, 819-833. | 6.5 | 63 |
| 76 | Snow redistribution for the hydrological modeling of alpine catchments. Wiley Interdisciplinary Reviews: Water, 2017, 4, e1232. | 6.5 | 63 |
| 77 | Effects of univariate and multivariate bias correction on hydrological impact projections in alpine catchments. Hydrology and Earth System Sciences, 2019, 23, 1339-1354. | 4.9 | 63 |
| 78 | Virtual Staff Gauges for Crowd-Based Stream Level Observations. Frontiers in Earth Science, 2019, 7, . | 1.8 | 63 |
| 79 | Controls on snowmelt water mean transit times in northern boreal catchments. Hydrological Processes, 2010, 24, 1672-1684. | 2.6 | 62 |
| 80 | Riparian soil temperature modification of the relationship between flow and dissolved organic carbon concentration in a boreal stream. Water Resources Research, 2011, 47, . | 4.2 | 62 |
| 81 | Hillslope–riparianâ€stream connectivity and flow directions at the Panola Mountain Research Watershed. Hydrological Processes, 2015, 29, 3556-3574. | 2.6 | 62 |
| 82 | Gauging the Ungauged Basin: Relative Value of Soft and Hard Data. Journal of Hydrologic Engineering - ASCE, 2015, 20, . | 1.9 | 60 |
| 83 | How uncertainty analysis of streamflow data can reduce costs and promote robust decisions in water management applications. Water Resources Research, 2017, 53, 5220-5228. | 4.2 | 60 |
| 84 | Importance of maximum snow accumulation for summer low flows in humid catchments. Hydrology and Earth System Sciences, 2016, 20, 859-874. | 4.9 | 60 |
| 85 | 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. | 4.2 | 59 |
| 86 | Location and density of rain gauges for the estimation of spatial varying precipitation. Geografiska Annaler, Series A: Physical Geography, 2015, 97, 167-179. | 1.5 | 58 |
| 87 | Landscape controls on spatiotemporal discharge variability in a boreal catchment. Water Resources Research, 2016, 52, 6541-6556. | 4.2 | 58 |
| 88 | Specific discharge variability in a boreal landscape. Water Resources Research, 2012, 48, . | 4.2 | 56 |
| 89 | Catchments on the cusp? Structural and functional change in northern ecohydrology. Hydrological Processes, 2013, 27, 766-774. | 2.6 | 55 |
| 90 | Comparison of threshold hydrologic response across northern catchments. Hydrological Processes, 2015, 29, 3575-3591. | 2.6 | 55 |

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|-----|---|-----|-----------|
| 91 | 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. | 4.9 | 54 |
| 92 | Forest Harvest Increases Runoff Most during Low Flows in Two Boreal Streams. Ambio, 2009, 38, 357-363. | 5.5 | 53 |
| 93 | 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. | 5.4 | 52 |
| 94 | 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. | 5.4 | 52 |
| 95 | Modeling of Future Changes in Seasonal Snowpack and Impacts on Summer Low Flows in Alpine Catchments. Water Resources Research, 2018, 54, 538-556. | 4.2 | 52 |
| 96 | Assessing the benefit of snow data assimilation for runoff modeling in Alpine catchments. Hydrology and Earth System Sciences, 2016, 20, 3895-3905. | 4.9 | 50 |
| 97 | Spatial heterogeneity of the spring flood acid pulse in a boreal stream networkâ [~] †. Science of the Total Environment, 2008, 407, 708-722. | 8.0 | 48 |
| 98 | Impact of social preparedness on flood early warning systems. Water Resources Research, 2017, 53, 522-534. | 4.2 | 47 |
| 99 | Smiling in the rain: Seven reasons to be positive about uncertainty in hydrological modelling. Hydrological Processes, 2013, 27, 1117-1122. | 2.6 | 46 |
| 100 | Bias correction for hydrological impact studies – beyond the daily perspective. Hydrological Processes, 2014, 28, 4823-4828. | 2.6 | 46 |
| 101 | Model Calibration Criteria for Estimating Ecological Flow Characteristics. Water (Switzerland), 2015, 7, 2358-2381. | 2.7 | 44 |
| 102 | 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. | 3.3 | 44 |
| 103 | Global Fully Distributed Parameter Regionalization Based on Observed Streamflow From 4,229 Headwater Catchments. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031485. | 3.3 | 44 |
| 104 | Geostatistical investigation into the temporal evolution of spatial structure in a shallow water table. Hydrology and Earth System Sciences, 2006, 10, 113-125. | 4.9 | 43 |
| 105 | Contributing sources to baseflow in preâ€elpine headwaters using spatial snapshot sampling. Hydrological Processes, 2015, 29, 5321-5336. | 2.6 | 43 |
| 106 | Pre-event water contributions to runoff events of different magnitude in pre-alpine headwaters. Hydrology Research, 2017, 48, 28-47. | 2.7 | 43 |
| 107 | Variability of groundwater levels and total organic carbon in the riparian zone of a boreal catchment. Journal of Geophysical Research, 2011, 116, . | 3.3 | 42 |
| 108 | Regional water balance modelling using flow-duration curves with observational uncertainties. Hydrology and Earth System Sciences, 2014, 18, 2993-3013. | 4.9 | 42 |

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|-----|--|-----|-----------|
| 109 | Multiscale calibration and validation of a conceptual rainfall-runoff model. Physics and Chemistry of the Earth, 2000, 25, 59-64. | 0.3 | 40 |
| 110 | Evolution of soil solution aluminum during transport along a forested boreal hillslope. Journal of Geophysical Research, 2007, 112, . | 3.3 | 38 |
| 111 | Groundwater dynamics in a till hillslope: flow directions, gradients and delay. Hydrological Processes, 2011, 25, 1899-1909. | 2.6 | 37 |
| 112 | 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. | 5.4 | 37 |
| 113 | Appropriate temporal resolution of precipitation data for discharge modelling in pre-alpine catchments. Hydrological Sciences Journal, 2018, 63, 1-16. | 2.6 | 37 |
| 114 | Distribution of soil moisture and groundwater levels at patch and catchment scales. Agricultural and Forest Meteorology, 1999, 98-99, 305-324. | 4.8 | 36 |
| 115 | Value of different precipitation data for flood prediction in an alpine catchment: A Bayesian approach. Journal of Hydrology, 2018, 556, 961-971. | 5.4 | 36 |
| 116 | Change in winter climate will affect dissolved organic carbon and water fluxes in midâ€ŧoâ€high latitude catchments. Hydrological Processes, 2013, 27, 700-709. | 2.6 | 35 |
| 117 | Streamflow characteristics from modeled runoff time series – importance of calibration criteria selection. Hydrology and Earth System Sciences, 2017, 21, 5443-5457. | 4.9 | 35 |
| 118 | Hydrological Modeling to Evaluate Climate Model Simulations and Their Bias Correction. Journal of Hydrometeorology, 2018, 19, 1321-1337. | 1.9 | 35 |
| 119 | The role of landscape properties, storage and evapotranspiration on variability in streamflow recessions in a boreal catchment. Journal of Hydrology, 2019, 570, 315-328. | 5.4 | 35 |
| 120 | Information content of stream level class data for hydrological model calibration. Hydrology and Earth System Sciences, 2017, 21, 4895-4905. | 4.9 | 34 |
| 121 | Crowd-Based Observations of Riverine Macroplastic Pollution. Frontiers in Earth Science, 2020, 8, . | 1.8 | 34 |
| 122 | Testing the Waters: Mobile Apps for Crowdsourced Streamflow Data. Eos, 2018, 99, . | 0.1 | 34 |
| 123 | New Approach to the Measurement of Interception Evaporation. Journal of Atmospheric and Oceanic Technology, 1997, 14, 1023-1035. | 1.3 | 33 |
| 124 | Sensing with boots and trousers — qualitative field observations of shallow soil moisture patterns. Hydrological Processes, 2012, 26, 4112-4120. | 2.6 | 33 |
| 125 | Predictability of low flow – An assessment with simulation experiments. Journal of Hydrology, 2014, 519, 1383-1393. | 5.4 | 33 |
| 126 | Is groundwater response timing in a preâ€alpine catchment controlled more by topography or by rainfall?. Hydrological Processes, 2016, 30, 1036-1051. | 2.6 | 33 |

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|-----|--|-----|-----------|
| 127 | Citizens AND HYdrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. Hydrological Sciences Journal, 2022, 67, 2534-2551. | 2.6 | 33 |
| 128 | Your work is my boundary condition!. Journal of Hydrology, 2019, 571, 235-243. | 5.4 | 33 |
| 129 | Irrigania – a web-based game about sharing water resources. Hydrology and Earth System Sciences, 2012, 16, 2523-2530. | 4.9 | 31 |
| 130 | The assumption of uniform specific discharge: unsafe at any time?. Hydrological Processes, 2016, 30, 3978-3988. | 2.6 | 31 |
| 131 | Magic components—why quantifying rain, snowmelt, and icemelt in river discharge is not easy. Hydrological Processes, 2018, 32, 160-166. | 2.6 | 31 |
| 132 | Technical note: Representing glacier geometry changes in a semi-distributed hydrological model. Hydrology and Earth System Sciences, 2018, 22, 2211-2224. | 4.9 | 31 |
| 133 | Synthetic design hydrographs for ungauged catchments: a comparison of regionalization methods. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1993-2023. | 4.0 | 30 |
| 134 | Effective precipitation duration for runoff peaks based on catchment modelling. Journal of Hydrology, 2018, 556, 510-522. | 5.4 | 30 |
| 135 | Seasonal and runoff-related changes in total organic carbon concentrations in the River Öre, Northern Sweden. Aquatic Sciences, 2008, 70, 21-29. | 1.5 | 29 |
| 136 | Water storage in a till catchment. I: Distributed modelling and relationship to runoff. Hydrological Processes, 2011, 25, 3937-3949. | 2.6 | 29 |
| 137 | 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. | 4.2 | 29 |
| 138 | The CrowdWater game: AÂplayful way to improve the accuracy of crowdsourced water level class data. PLoS ONE, 2019, 14, e0222579. | 2.5 | 29 |
| 139 | A retrospective on hydrological catchment modelling based on half a century with the HBV model. Hydrology and Earth System Sciences, 2022, 26, 1371-1388. | 4.9 | 29 |
| 140 | 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. | 4.8 | 28 |
| 141 | Continuous long-term measurements of soil–plant–atmosphere variables at an agricultural site. Agricultural and Forest Meteorology, 1999, 98-99, 75-102. | 4.8 | 28 |
| 142 | Tracer Hydrology. , 2011, , 215-236. | | 28 |
| 143 | How informative are stream level observations in different geographic regions?. Hydrological Processes, 2016, 30, 2498-2508. | 2.6 | 28 |
| 144 | Glacioâ€hydrological model calibration and evaluation. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1483. | 6.5 | 28 |

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|-----|--|-----|-----------|
| 145 | Quantifying sensitivity to droughts – an experimental modeling approach. Hydrology and Earth System Sciences, 2015, 19, 1371-1384. | 4.9 | 27 |
| 146 | Aqua temporaria incognita. Hydrological Processes, 2020, 34, 5704-5711. | 2.6 | 27 |
| 147 | Ensemble modelling of nitrogen fluxes: data fusion for a Swedish meso-scale catchment. Hydrology and Earth System Sciences, 2010, 14, 2383-2397. | 4.9 | 26 |
| 148 | Modelling rating curves using remotely sensed LiDAR data. Hydrological Processes, 2012, 26, 1427-1434. | 2.6 | 26 |
| 149 | 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. | 2.9 | 26 |
| 150 | Sub-daily runoff predictions using parameters calibrated on the basis of data with a daily temporal resolution. Journal of Hydrology, 2017, 550, 399-411. | 5.4 | 26 |
| 151 | Hydrological model calibration with uncertain discharge data. Hydrological Sciences Journal, 2022, 67, 2441-2456. | 2.6 | 26 |
| 152 | Nitrogen source apportionment modeling and the effect of land-use class related runoff contributions. Hydrology Research, 2007, 38, 317-331. | 2.7 | 25 |
| 153 | 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. | 2.6 | 24 |
| 154 | Preface "Hydrology education in a changing world". Hydrology and Earth System Sciences, 2013, 17, 1393-1399. | 4.9 | 24 |
| 155 | Bivariate analysis of floods in climate impact assessments. Science of the Total Environment, 2018, 616-617, 1392-1403. | 8.0 | 24 |
| 156 | Reducing systematic errors in rainfall measurements using a new type of gauge. Agricultural and Forest Meteorology, 1999, 98-99, 341-348. | 4.8 | 23 |
| 157 | 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. | 4.9 | 23 |
| 158 | Calculating terrain indices along streams: A new method for separating stream sides. Water Resources Research, 2010, 46, . | 4.2 | 22 |
| 159 | Flood-type trend analysis for alpine catchments. Hydrological Sciences Journal, 2020, 65, 1281-1299. | 2.6 | 22 |
| 160 | Can a regionalized model parameterisation be improved with a limited number of runoff measurements?. Journal of Hydrology, 2015, 529, 49-61. | 5.4 | 21 |
| 161 | Hydrological change modeling: Challenges and opportunities. Hydrological Processes, 2016, 30, 4966-4971. | 2.6 | 21 |
| 162 | Value of uncertain streamflow observations for hydrological modelling. Hydrology and Earth System Sciences, 2018, 22, 5243-5257. | 4.9 | 21 |

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|-----|---|-----|-----------|
| 163 | Value of Crowdâ€Based Water Level Class Observations for Hydrological Model Calibration. Water Resources Research, 2020, 56, e2019WR026108. | 4.2 | 21 |
| 164 | Quality and timing of crowdâ€based water level class observations. Hydrological Processes, 2020, 34, 4365-4378. | 2.6 | 21 |
| 165 | Understanding conditions behind speleothem formation in Korallgrottan, northwestern Sweden. Journal of Hydrology, 2007, 347, 13-22. | 5.4 | 20 |
| 166 | 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. | 2.6 | 20 |
| 167 | Using landscape characteristics to define an adjusted distance metric for improving kriging interpolations. International Journal of Geographical Information Science, 2010, 24, 723-740. | 4.8 | 20 |
| 168 | True colors – experimental identification of hydrological processes at a hillslope prone to slide. Hydrology and Earth System Sciences, 2014, 18, 875-892. | 4.9 | 20 |
| 169 | The role of soil pH in linking groundwater flow and plant species density in boreal forest landscapes. Ecography, 2006, 29, 515-524. | 4.5 | 19 |
| 170 | Identification of Flood Reactivity Regions via the Functional Clustering of Hydrographs. Water Resources Research, 2018, 54, 1852-1867. | 4.2 | 19 |
| 171 | Accuracy of crowdsourced streamflow and stream level class estimates. Hydrological Sciences Journal, 2020, 65, 823-841. | 2.6 | 19 |
| 172 | Hydrological response to warm and dry weather: do glaciers compensate?. Hydrology and Earth System Sciences, 2021, 25, 3245-3265. | 4.9 | 19 |
| 173 | Rapid transformation of inorganic to organic and plant-available phosphorous in soils of a glacier forefield. Geoderma, 2012, 189-190, 215-226. | 5.1 | 18 |
| 174 | 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. | 1.7 | 18 |
| 175 | Value of a Limited Number of Discharge Observations for Improving Regionalization: A Largeâ€Sample Study Across the United States. Water Resources Research, 2019, 55, 363-377. | 4.2 | 18 |
| 176 | Regionalization for Ungauged Catchments — Lessons Learned From a Comparative Large‣ample Study. Water Resources Research, 2021, 57, e2021WR030437. | 4.2 | 18 |
| 177 | Distributed conceptual modelling in a Swedish lowland catchment: a multi-criteria model assessment. Hydrology Research, 2013, 44, 318-333. | 2.7 | 17 |
| 178 | Measuring the significance of a divide to local drainage patterns. International Journal of Geographical Information Science, 2013, 27, 1453-1468. | 4.8 | 16 |
| 179 | When should stream water be sampled to be most informative for event-based, multi-criteria model calibration?. Hydrology Research, 2017, 48, 1566-1584. | 2.7 | 16 |
| 180 | Water storage dynamics in a till hillslope: the foundation for modeling flows and turnover times. Hydrological Processes, 2017, 31, 4-14. | 2.6 | 16 |

| # | Article | lF | CITATIONS |
|-----|--|-----|-----------|
| 181 | An Approach for Including Consideration of Stream Water Dissolved Organic Carbon in Long Term Forest Planning. Ambio, 2009, 38, 387-394. | 5.5 | 14 |
| 182 | Runoff generation in a pre-alpine catchment: A discussion between a tracer and a shallow groundwater hydrologist. Cuadernos De Investigacion Geografica, 2018, 44, 429-452. | 1.1 | 14 |
| 183 | Historical glacier outlines from digitized topographic maps of the Swiss Alps. Earth System Science Data, 2018, 10, 805-814. | 9.9 | 14 |
| 184 | Soil Information in Hydrologic Models. , 2012, , 515-536. | | 13 |
| 185 | Snow and Ice in the Hydrosphere. , 2015, , 99-137. | | 13 |
| 186 | Robustness of flood-model calibration using single and multiple events. Hydrological Sciences Journal, 2020, 65, 842-853. | 2.6 | 13 |
| 187 | Do stream water solute concentrations reflect when connectivity occurs in a small, pre-Alpine headwater catchment?. Hydrology and Earth System Sciences, 2020, 24, 3381-3398. | 4.9 | 13 |
| 188 | Validation and Over-Parameterization—Experiences from Hydrological Modeling. Simulation Foundations, Methods and Applications, 2019, , 811-834. | 0.1 | 12 |
| 189 | Sensitivity of discharge projections to potential evapotranspiration estimation in Northern Tunisia. Regional Environmental Change, 2020, 20, 1. | 2.9 | 12 |
| 190 | Gauging ungauged catchments – Active learning for the timing of point discharge observations in combination with continuous water level measurements. Journal of Hydrology, 2021, 598, 126448. | 5.4 | 12 |
| 191 | Effect of DEM-smoothing and -aggregation on topographically-based flow directions and catchment boundaries. Journal of Hydrology, 2021, 602, 126717. | 5.4 | 12 |
| 192 | Representative sets of design hydrographs for ungauged catchments: A regional approach using probabilistic region memberships. Advances in Water Resources, 2018, 112, 235-244. | 3.8 | 11 |
| 193 | Influence of hydro-meteorological data spatial aggregation on streamflow modelling. Journal of Hydrology, 2016, 541, 1212-1220. | 5.4 | 10 |
| 194 | Utilization of Global Precipitation Datasets in Data Limited Regions: A Case Study of Kilombero Valley, Tanzania. Atmosphere, 2017, 8, 246. | 2.3 | 10 |
| 195 | The quest for an improved dialog between modeler and experimentalist. Water Science and Application, 2003, , 301-315. | 0.3 | 9 |
| 196 | Downsizing parameter ensembles for simulations of rare floods. Natural Hazards and Earth System Sciences, 2020, 20, 3521-3549. | 3.6 | 9 |
| 197 | Hydroclimatic and hydrochemical controls on Plecoptera diversity and distribution in northern freshwater ecosystems. Hydrobiologia, 2012, 693, 39-53. | 2.0 | 8 |
| 198 | Learning about water resource sharing through game play. Hydrology and Earth System Sciences, 2016, 20, 4079-4091. | 4.9 | 8 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | What is the best time to take stream isotope samples for event-based model calibration?. Journal of Hydrology, 2019, 577, 123950. | 5.4 | 8 |
| 200 | Flood prediction using parameters calibrated on limited discharge data and uncertain rainfall scenarios. Hydrological Sciences Journal, 2020, 65, 1512-1524. | 2.6 | 8 |
| 201 | Incorporating landscape characteristics in a distance metric for interpolating between observations of stream water chemistry. Hydrology and Earth System Sciences, 2008, 12, 1229-1239. | 4.9 | 8 |
| 202 | Risks and opportunities for aÂSwiss hydroelectricity company in aÂchanging climate. Hydrology and Earth System Sciences, 2020, 24, 3815-3833. | 4.9 | 8 |
| 203 | Definitions of climatological and discharge days: do they matter in hydrological modelling?. Hydrological Sciences Journal, 2018, 63, 836-844. | 2.6 | 7 |
| 204 | Assessing the Sampling Quality of a Low-Tech Low-Budget Volume-Based Rainfall Sampler for Stable Isotope Analysis. Frontiers in Earth Science, 2019, 7, . | 1.8 | 7 |
| 205 | Training citizen scientists through an online game developed for data quality control. Geoscience Communication, 2020, 3, 109-126. | 0.9 | 7 |
| 206 | Qualitative soil moisture assessment in semi-arid Africa – the role of experience and training on inter-rater reliability. Hydrology and Earth System Sciences, 2015, 19, 3505-3516. | 4.9 | 5 |
| 207 | The Role of Prosocialness and Trust in the Consumption of Water as a Limited Resource. Frontiers in Psychology, 2017, 8, 694. | 2.1 | 5 |
| 208 | Multi-model data fusion as a tool for PUB: example in a Swedish mesoscale catchment. Advances in Geosciences, 0, 29, 43-50. | 12.0 | 5 |
| 209 | Evaluating the long short-term memory (LSTM) network for discharge prediction under changing climate conditions. Hydrology Research, 2022, 53, 657-667. | 2.7 | 5 |
| 210 | Comment on "On the calibration and verification of two-dimensional, distributed, Hortonian, continuous watershed models" by Sharika U. S. Senarath et al Water Resources Research, 2001, 37, 3393-3395. | 4.2 | 4 |
| 211 | Preface "Towards holistic studies of the Earth's Critical Zone: hydropedology perspectives". Hydrology and Earth System Sciences, 2010, 14, 479-480. | 4.9 | 4 |
| 212 | On the risk of obtaining misleading results by pooling streamflow data for trend analyses. Water Resources Research, 2012, 48, . | 4.2 | 4 |
| 213 | Analysis of hydrological seasonality across northern catchments using monthly precipitation–runoff polygon metrics. Hydrological Sciences Journal, 2014, 59, 56-72. | 2.6 | 4 |
| 214 | Change in streamflow response in unregulated catchments in Sweden over the last century. Water Resources Research, 2016, 52, 5847-5867. | 4.2 | 4 |
| 215 | Soil moisture storage estimation based on steady vertical fluxes under equilibrium. Journal of Hydrology, 2017, 553, 798-804. | 5.4 | 4 |
| 216 | Effects of Spatial Variability in the Groundwater Isotopic Composition on Hydrograph Separation Results for a Preâ€Alpine Headwater Catchment. Water Resources Research, 2020, 56, e2019WR026855. | 4.2 | 4 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Hydrological trends and the evolution of catchment research in the Alptal valley, central Switzerland. Hydrological Processes, 2021, 35, e14113. | 2.6 | 4 |
| 218 | The Maimai <scp>M8</scp> experimental catchment database: Forty years of processâ€based research on steep, wet hillslopes. Hydrological Processes, 2021, 35, e14112. | 2.6 | 4 |
| 219 | Evaluating the effects of alternative model structures on dynamic storage simulation in heterogeneous boreal catchments. Hydrology Research, 2022, 53, 562-583. | 2.7 | 4 |
| 220 | A primer for hydrology: the beguiling simplicity of <i>Water's journey from rain to stream</i> at 30. Hydrological Processes, 2015, 29, 3443-3446. | 2.6 | 3 |
| 221 | Effect of Observation Errors on the Timing of the Most Informative Isotope Samples for Event-Based Model Calibration. Hydrology, 2018, 5, 4. | 3.0 | 3 |
| 222 | Snow and ice in the hydrosphere. , 2021, , 93-135. | | 3 |
| 223 | Formation and decay of peat bogs in the vegetable belt of Switzerland. Swiss Journal of Geosciences, 2021, 114, . | 1.2 | 2 |
| 224 | Hydrological Impacts of Projected Climate Change on Northern Tunisian Headwater Catchments—An Ensemble Approach Addressing Uncertainties. Climate Change Management, 2022, , 499-519. | 0.8 | 2 |
| 225 | Representation of Biâ€Directional Fluxes Between Groundwater and Surface Water in a Bucketâ€Type Hydrological Model. Water Resources Research, 2021, 57, e2020WR028835. | 4.2 | 1 |
| 226 | The CH-IRP data set: a decade of fortnightly data on <i>Î'</i> ² H and <i>Î'</i> ¹⁸ O in streamflow and precipitation in Switzerland. Earth System Science Data, 2020, 12, 3057-3066. | 9.9 | 0 |