Gunter Bloschl

List of Publications by Year
in descending order

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315	31,504	3933 88	5539 163
papers	citations	h-index	g-index

390	390	390	17644
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scale issues in hydrological modelling: A review. Hydrological Processes, 1995, 9, 251-290.	2.6	1,348
2	Socioâ€hydrology: A new science of people and water. Hydrological Processes, 2012, 26, 1270-1276.	2.6	822
3	A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	2.6	821
4	Observed spatial organization of soil moisture and its relation to terrain indices. Water Resources Research, 1999, 35, 797-810.	4.2	646
5	Changing climate both increases and decreases European river floods. Nature, 2019, 573, 108-111.	27.8	639
6	A compilation of data on European flash floods. Journal of Hydrology, 2009, 367, 70-78.	5.4	623
7	Preferred states in spatial soil moisture patterns: Local and nonlocal controls. Water Resources Research, 1997, 33, 2897-2908.	4.2	608
8	Changing climate shifts timing of European floods. Science, 2017, 357, 588-590.	12.6	584
9	â€œPanta Rheiâ€"Everything Flowsâ€: Change in hydrology and societyâ€"The IAHS Scientific Decade 2013â€"2022. Hydrological Sciences Journal, 2013, 58, 1256-1275.	2.6	569
10	Regionalisation of catchment model parameters. Journal of Hydrology, 2004, 287, 95-123.	5.4	549
11	Spatial correlation of soil moisture in small catchments and its relationship to dominant spatial hydrological processes. Journal of Hydrology, 2004, 286, 113-134.	5.4	532
12	Twenty-three unsolved problems in hydrology (UPH) â€" a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
13	The ASCAT Soil Moisture Product: A Review of its Specifications, Validation Results, and Emerging Applications. Meteorologische Zeitschrift, 2013, 22, 5-33.	1.0	471
14	Scaling of Soil Moisture: A Hydrologic Perspective. Annual Review of Earth and Planetary Sciences, 2002, 30, 149-180.	11.0	428
15	Understanding flood regime changes in Europe: a state-of-the-art assessment. Hydrology and Earth System Sciences, 2014, 18, 2735-2772.	4.9	423
16	Socio-hydrology: conceptualising human-flood interactions. Hydrology and Earth System Sciences, 2013, 17, 3295-3303.	4.9	403
17	Flood risk assessment and associated uncertainty. Natural Hazards and Earth System Sciences, 2004, 4, 295-308.	3.6	402
18	On the spatial scaling of soil moisture. Journal of Hydrology, 1999, 217, 203-224.	5.4	395

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19	Operational readiness of microwave remote sensing of soil moisture for hydrologic applications. Hydrology Research, 2007, 38, 1-20.	2.7	395
20	A process typology of regional floods. Water Resources Research, 2003, 39, .	4.2	347
21	Toward capturing hydrologically significant connectivity in spatial patterns. Water Resources Research, 2001, 37, 83-97.	4.2	338
22	Debatesâ€"Perspectives on socioâ€hydrology: Capturing feedbacks between physical and social processes. Water Resources Research, 2015, 51, 4770-4781.	4.2	337
23	Time stability of catchment model parameters: Implications for climate impact analyses. Water Resources Research, 2011, 47, .	4.2	334
24	At what scales do climate variability and land cover change impact on flooding and low flows?. Hydrological Processes, 2007, 21, 1241-1247.	2.6	313
25	A comparison of regionalisation methods for catchment model parameters. Hydrology and Earth System Sciences, 2005, 9, 157-171.	4.9	309
26	Downward approach to hydrological prediction. Hydrological Processes, 2003, 17, 2101-2111.	2.6	294
27	Flood fatalities in Africa: From diagnosis to mitigation. Geophysical Research Letters, 2010, 37, .	4.0	290
28	Scaling issues in snow hydrology. Hydrological Processes, 1999, 13, 2149-2175.	2.6	285
29	Land use change impacts on floods at the catchment scale: Challenges and opportunities for future research. Water Resources Research, 2017, 53, 5209-5219.	4.2	269
30	Bacterial diversity along a 2600â€‰km river continuum. Environmental Microbiology, 2015, 17, 4994-5007.	3.8	265
31	Flash flood forecasting, warning and risk management: the HYDRATE project. Environmental Science and Policy, 2011, 14, 834-844.	4.9	256
32	Spatioâ€temporal combination of MODIS images â€“ potential for snow cover mapping. Water Resources Research, 2008, 44, .	4.2	254
33	Geostatistical characterisation of soil moisture patterns in the Tarrawarra catchment. Journal of Hydrology, 1998, 205, 20-37.	5.4	240
34	Floods and climate: emerging perspectives for flood risk assessment and management. Natural Hazards and Earth System Sciences, 2014, 14, 1921-1942.	3.6	239
35	Sociohydrology: Scientific Challenges in Addressing the Sustainable Development Goals. Water Resources Research, 2019, 55, 6327-6355.	4.2	226
36	A Probabilistic Modelling System for Assessing Flood Risks. Natural Hazards, 2006, 38, 79-100.	3.4	225

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37	Insights from socio-hydrology modelling on dealing with flood risk â€“ Roles of collective memory, risk-taking attitude and trust. Journal of Hydrology, 2014, 518, 71-82.	5.4	223
38	Flood frequency regionalisationâ€”spatial proximity vs. catchment attributes. Journal of Hydrology, 2005, 302, 283-306.	5.4	218
39	A regional analysis of event runoff coefficients with respect to climate and catchment characteristics in Austria. Water Resources Research, 2009, 45, .	4.2	218
40	The value of MODIS snow cover data in validating and calibrating conceptual hydrologic models. Journal of Hydrology, 2008, 358, 240-258.	5.4	213
41	Spatio-temporal variability of event runoff coefficients. Journal of Hydrology, 2006, 331, 591-604.	5.4	212
42	Large-sample hydrology: a need to balance depth with breadth. Hydrology and Earth System Sciences, 2014, 18, 463-477.	4.9	208
43	Time scale interactions and the coevolution of humans and water. Water Resources Research, 2015, 51, 6988-7022.	4.2	205
44	Transformation of point rainfall to areal rainfall: Intensity-duration-frequency curves. Journal of Hydrology, 1998, 204, 150-167.	5.4	204
45	Validation of MODIS snow cover images over Austria. Hydrology and Earth System Sciences, 2006, 10, 679-689.	4.9	199
46	Advances in the use of observed spatial patterns of catchment hydrological response. Advances in Water Resources, 2002, 25, 1313-1334.	3.8	198
47	Flood frequency hydrology: 1. Temporal, spatial, and causal expansion of information. Water Resources Research, 2008, 44, .	4.2	197
48	Predictability of hydrologic response at the plot and catchment scales: Role of initial conditions. Water Resources Research, 2004, 40, .	4.2	187
49	Comparative assessment of predictions in ungauged basins â€“ Part 1: Runoff-hydrograph studies. Hydrology and Earth System Sciences, 2013, 17, 1783-1795.	4.9	186
50	The June 2013 flood in the Upper Danube Basin, and comparisons with the 2002, 1954 and 1899 floods. Hydrology and Earth System Sciences, 2013, 17, 5197-5212.	4.9	182
51	Seasonal characteristics of flood regimes across the Alpineâ€“Carpathian range. Journal of Hydrology, 2010, 394, 78-89.	5.4	181
52	Soil moisture updating by Ensemble Kalman Filtering in real-time flood forecasting. Journal of Hydrology, 2008, 357, 228-242.	5.4	176
53	Causes, impacts and patterns of disastrous river floods. Nature Reviews Earth & Environment, 2021, 2, 592-609.	29.7	175
54	Characteristic space scales and timescales in hydrology. Water Resources Research, 2003, 39, .	4.2	172

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55	Top-kriging - geostatistics on stream networks. Hydrology and Earth System Sciences, 2006, 10, 277-287.	4.9	171
56	Climate change impactsâ€"throwing the dice?. Hydrological Processes, 2010, 24, 374-381.	2.6	171
57	Distributed Snowmelt Simulations in an Alpine Catchment: 1. Model Evaluation on the Basis of Snow Cover Patterns. Water Resources Research, 1991, 27, 3171-3179.	4.2	163
58	Linking flood frequency to long-term water balance: Incorporating effects of seasonality. Water Resources Research, 2005, 41, .	4.2	161
59	Uncertainty and multiple objective calibration in regional water balance modelling: case study in 320 Austrian catchments. Hydrological Processes, 2007, 21, 435-446.	2.6	157
60	Flood timescales: Understanding the interplay of climate and catchment processes through comparative hydrology. Water Resources Research, 2012, 48, .	4.2	156
61	Current European flood-rich period exceptional compared with past 500Âyears. Nature, 2020, 583, 560-566.	27.8	154
62	Scaling in hydrology. Hydrological Processes, 2001, 15, 709-711.	2.6	152
63	Controls on event runoff coefficients in the eastern Italian Alps. Journal of Hydrology, 2009, 375, 312-325.	5.4	149
64	A comparison of low flow regionalisation methodsâ€"catchment grouping. Journal of Hydrology, 2006, 323, 193-214.	5.4	148
65	A spatially distributed flash flood forecasting model. Environmental Modelling and Software, 2008, 23, 464-478.	4.5	146
66	Assimilating scatterometer soil moisture data into conceptual hydrologic models at the regional scale. Hydrology and Earth System Sciences, 2006, 10, 353-368.	4.9	142
67	A regional snow-line method for estimating snow cover from MODIS during cloud cover. Journal of Hydrology, 2010, 381, 203-212.	5.4	137
68	Flood frequency hydrology: 3. A Bayesian analysis. Water Resources Research, 2013, 49, 675-692.	4.2	137
69	Does soil compaction increase floods? A review. Journal of Hydrology, 2018, 557, 631-642.	5.4	136
70	Bayesian MCMC approach to regional flood frequency analyses involving extraordinary flood events at ungauged sites. Journal of Hydrology, 2010, 394, 101-117.	5.4	129
71	Scale effects in conceptual hydrological modeling. Water Resources Research, 2009, 45, .	4.2	124
72	Process controls on regional flood frequency: Coefficient of variation and basin scale. Water Resources Research, 1997, 33, 2967-2980.	4.2	123

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73	Increasing river floods: fiction or reality?. Wiley Interdisciplinary Reviews: Water, 2015, 2, 329-344.	6.5	123
74	Fragmented patterns of flood change across the United States. Geophysical Research Letters, 2016, 43, 10232-10239.	4.0	123
75	Developing predictive insight into changing water systems: use-inspired hydrologic science for the Anthropocene. Hydrology and Earth System Sciences, 2013, 17, 5013-5039.	4.9	119
76	Regional calibration of catchment models: Potential for ungauged catchments. Water Resources Research, 2007, 43, .	4.2	118
77	The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804.	4.9	116
78	Evaluating participation in water resource management: A review. Water Resources Research, 2012, 48, .	4.2	115
79	Temporal Stability of Soil Moisture and Radar Backscatter Observed by the Advanced Synthetic Aperture Radar (ASAR). Sensors, 2008, 8, 1174-1197.	3.8	112
80	Hydrologic synthesis: Across processes, places, and scales. Water Resources Research, 2006, 42, .	4.2	111
81	Performance Characteristics of qPCR Assays Targeting Human- and Ruminant-AssociatedBacteroidetesfor Microbial Source Tracking across Sixteen Countries on Six Continents. Environmental Science & Technology, 2013, 47, 8548-8556.	10.0	111
82	Seasonality indices for regionalizing low flows. Hydrological Processes, 2006, 20, 3851-3878.	2.6	109
83	Patterns of predictability in hydrological threshold systems. Water Resources Research, 2007, 43, .	4.2	103
84	How well do indicator variograms capture the spatial connectivity of soil moisture?. Hydrological Processes, 1998, 12, 1851-1868.	2.6	100
85	On the representative elementary area (REA) concept and its utility for distributed rainfall-runoff modelling. Hydrological Processes, 1995, 9, 313-330.	2.6	98
86	World Lines. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1458-1467.	4.4	98
87	Comparative predictions of discharge from an artificial catchment (Chicken Creek) using sparse data. Hydrology and Earth System Sciences, 2009, 13, 2069-2094.	4.9	97
88	Flood frequency hydrology: 2. Combining data evidence. Water Resources Research, 2008, 44, .	4.2	95
89	Comparative assessment of predictions in ungauged basins â€“ Part 2: Flood and low flow studies. Hydrology and Earth System Sciences, 2013, 17, 2637-2652.	4.9	95
90	Initial soil moisture effects on flash flood generation â€“ A comparison between basins of contrasting hydro-climatic conditions. Journal of Hydrology, 2016, 541, 206-217.	5.4	94

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91	Spatiotemporal topological kriging of runoff time series. Water Resources Research, 2007, 43, .	4.2	93
92	Comparative assessment of predictions in ungauged basins â€“ Part 3: Runoff signatures in Austria. Hydrology and Earth System Sciences, 2013, 17, 2263-2279.	4.9	93
93	Temporal Stability of Soil Moisture and Radar Backscatter Observed by the Advanced Synthetic Aperture Radar (ASAR). Sensors, 2008, 8, 1174-1197.	3.8	88
94	The influence of non-stationarity in extreme hydrological events on flood frequency estimation. Journal of Hydrology and Hydromechanics, 2016, 64, 426-437.	2.0	88
95	Catchments as space-time filters â€“ a joint spatio-temporal geostatistical analysis of runoff and precipitation. Hydrology and Earth System Sciences, 2006, 10, 645-662.	4.9	87
96	On the role of storm duration in the mapping of rainfall to flood return periods. Hydrology and Earth System Sciences, 2009, 13, 205-216.	4.9	86
97	Causative classification of river flood events. Wiley Interdisciplinary Reviews: Water, 2019, 6, e1353.	6.5	86
98	Ensemble prediction of floods â€“ catchment non-linearity and forecast probabilities. Natural Hazards and Earth System Sciences, 2007, 7, 431-444.	3.6	84
99	Runoff models and flood frequency statistics for design flood estimation in Austria â€“ Do they tell a consistent story?. Journal of Hydrology, 2012, 456-457, 30-43.	5.4	84
100	Potential of timeâ€lapse photography of snow for hydrological purposes at the small catchment scale. Hydrological Processes, 2012, 26, 3327-3337.	2.6	84
101	Spatial moments of catchment rainfall: rainfall spatial organisation, basin morphology, and flood response. Hydrology and Earth System Sciences, 2011, 15, 3767-3783.	4.9	83
102	Advancing catchment hydrology to deal with predictions under change. Hydrology and Earth System Sciences, 2014, 18, 649-671.	4.9	83
103	Charting unknown watersâ€"On the role of surprise in flood risk assessment and management. Water Resources Research, 2015, 51, 6399-6416.	4.2	83
104	On hydrological predictability. Hydrological Processes, 2005, 19, 3923-3929.	2.6	82
105	Quantifying space-time dynamics of flood event types. Journal of Hydrology, 2010, 394, 213-229.	5.4	82
106	The principle of â€˜maximum energy dissipationâ€™: a novel thermodynamic perspective on rapid water flow in connected soil structures. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1377-1386.	4.0	82
107	Entering the Era of Distributed Snow Models. Hydrology Research, 1994, 25, 1-24.	2.7	80
108	Identification of coherent flood regions across Europe by using the longest streamflow records. Journal of Hydrology, 2015, 528, 341-360.	5.4	79

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109	The Hydrological Open Air Laboratory (HOAL) in Petzenkirchen: a hypothesis-driven observatory. Hydrology and Earth System Sciences, 2016, 20, 227-255.	4.9	77
110	On the role of the runoff coefficient in the mapping of rainfall to flood return periods. Hydrology and Earth System Sciences, 2009, 13, 577-593.	4.9	76
111	MODIS snow cover mapping accuracy in a small mountain catchment â€“ comparison between open and forest sites. Hydrology and Earth System Sciences, 2012, 16, 2365-2377.	4.9	75
112	Attribution of regional flood changes based on scaling fingerprints. Water Resources Research, 2016, 52, 5322-5340.	4.2	75
113	Joint Trends in Flood Magnitudes and Spatial Extents Across Europe. Geophysical Research Letters, 2020, 47, e2020GL087464.	4.0	75
114	Identifying Land Use/Cover Dynamics in the Koga Catchment, Ethiopia, from Multi-Scale Data, and Implications for Environmental Change. ISPRS International Journal of Geo-Information, 2013, 2, 302-323.	2.9	73
115	Conceptualizing socioâ€hydrological drought processes: The case of the Maya collapse. Water Resources Research, 2016, 52, 6222-6242.	4.2	73
116	Matching ERS scatterometer based soil moisture patterns with simulations of a conceptual dual layer hydrologic model over Austria. Hydrology and Earth System Sciences, 2009, 13, 259-271.	4.9	69
117	Comparative analysis of the seasonality of hydrological characteristics in Slovakia and Austria / Analyse comparative de la saisonnalitÃ© de caractÃ©ristiques hydrologiques en Slovaquie et en Autriche. Hydrological Sciences Journal, 2009, 54, 456-473.	2.6	68
118	Point snowmelt models with different degrees of complexity â€” Internal processes. Journal of Hydrology, 1991, 129, 127-147.	5.4	67
119	National flood discharge mapping in Austria. Natural Hazards, 2008, 46, 53-72.	3.4	67
120	Generalised synthesis of spaceâ€“time variability in flood response: An analytical framework. Journal of Hydrology, 2010, 394, 198-212.	5.4	67
121	Dependence between flood peaks and volumes: a case study on climate and hydrological controls. Hydrological Sciences Journal, 2015, 60, 968-984.	2.6	67
122	Distributed Snowmelt Simulations in an Alpine Catchment: 2. Parameter Study and Model Predictions. Water Resources Research, 1991, 27, 3181-3188.	4.2	66
123	A comparative analysis of the effectiveness of flood management measures based on the concept of "retaining water in the landscape" in different European hydro-climatic regions. Natural Hazards and Earth System Sciences, 2012, 12, 3287-3306.	3.6	66
124	A national low flow estimation procedure for Austria. Hydrological Sciences Journal, 2007, 52, 625-644.	2.6	65
125	Flash floods: Observations and analysis of hydro-meteorological controls. Journal of Hydrology, 2010, 394, 1-3.	5.4	65
126	Gaining insight into interdisciplinary research and education programmes: A framework for evaluation. Research Policy, 2018, 47, 35-48.	6.4	64

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127	Low flow estimates from short stream flow recordsâ€"a comparison of methods. Journal of Hydrology, 2005, 306, 264-286.	5.4	63
128	Step changes in the flood frequency curve: Process controls. Water Resources Research, 2012, 48, .	4.2	63
129	Estimating degree-day factors from MODIS for snowmelt runoff modeling. Hydrology and Earth System Sciences, 2014, 18, 4773-4789.	4.9	63
130	Virtual laboratories: new opportunities for collaborative water science. Hydrology and Earth System Sciences, 2015, 19, 2101-2117.	4.9	63
131	Barriers to the exchange of hydrometeorological data in Europe: Results from a survey and implications for data policy. Journal of Hydrology, 2010, 394, 63-77.	5.4	62
132	Factors influencing long range dependence in streamflow of European rivers. Hydrological Processes, 2014, 28, 1573-1586.	2.6	61
133	Impact of mountain permafrost on flow path and runoff response in a high alpine catchment. Water Resources Research, 2017, 53, 1288-1308.	4.2	61
134	Identification of phosphorus emission hotspots in agricultural catchments. Science of the Total Environment, 2012, 433, 74-88.	8.0	59
135	Spatial patterns and characteristics of flood seasonality in Europe. Hydrology and Earth System Sciences, 2018, 22, 3883-3901.	4.9	59
136	Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences. Hydrological Sciences Journal, 2016, 61, 2803-2817.	2.6	57
137	Process controls on the statistical flood moments â€•a data based analysis. Hydrological Processes, 2009, 23, 675-696.	2.6	56
138	Largeâ€scale heavy precipitation over central Europe and the role of atmospheric cyclone track types. International Journal of Climatology, 2018, 38, e497-e517.	3.5	55
139	Flood trends in Europe: are changes in small and big floods different?. Hydrology and Earth System Sciences, 2020, 24, 1805-1822.	4.9	54
140	Smooth regional estimation of low-flow indices: physiographical space based interpolation and top-kriging. Hydrology and Earth System Sciences, 2011, 15, 715-727.	4.9	54
141	Spatial prediction on river networks: comparison of top-kriging with regional regression. Hydrological Processes, 2014, 28, 315-324.	2.6	53
142	Evaluation of the predicted error of the soil moisture retrieval from C-band SAR by comparison against modelled soil moisture estimates over Australia. Remote Sensing of Environment, 2012, 120, 188-196.	11.0	51
143	Evolutionary leap in largeâ€scale flood risk assessment needed. Wiley Interdisciplinary Reviews: Water, 2018, 5, e1266.	6.5	50
144	Spaceâ€Time Patterns of Meteorological Drought Events in the European Greater Alpine Region Over the Past 210 Years. Water Resources Research, 2017, 53, 9807-9823.	4.2	49

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145	Prediction in a socio-hydrological world. Hydrological Sciences Journal, 0, , 1-8.	2.6	47
146	Modeling the interaction between flooding events and economic growth. Ecological Economics, 2016, 129, 193-209.	5.7	47
147	Why does a conceptual hydrological model fail to correctly predict discharge changes in response to climate change?. Hydrology and Earth System Sciences, 2020, 24, 3493-3511.	4.9	46
148	Annual water, sediment, nutrient, and organic carbon fluxes in river basins: A global metaâ€analysis as a function of scale. Water Resources Research, 2015, 51, 8949-8972.	4.2	45
149	Why has catchment evaporation increased in the past 40Âyears? A data-based study in Austria. Hydrology and Earth System Sciences, 2018, 22, 5143-5158.	4.9	45
150	Three-dimensional flow patterns at the riverâ€“aquifer interface â€” a case study at the Danube. Advances in Water Resources, 2010, 33, 1375-1387.	3.8	44
151	The Growth of Hydrological Understanding: Technologies, Ideas, and Societal Needs Shape the Field. Water Resources Research, 2017, 53, 8137-8146.	4.2	44
152	Spatiotemporal flood sensitivity to annual precipitation: Evidence for landscapeâ€climate coevolution. Water Resources Research, 2014, 50, 5492-5509.	4.2	43
153	rtop: An R package for interpolation of data with a variable spatial support, with an example from river networks. Computers and Geosciences, 2014, 67, 180-190.	4.2	43
154	The Value of Empirical Data for Estimating the Parameters of a Sociohydrological Flood Risk Model. Water Resources Research, 2019, 55, 1312-1336.	4.2	43
155	Sampling Scale Effects in Random Fields and Implications for Environmental Monitoring. Environmental Monitoring and Assessment, 2006, 114, 521-552.	2.7	42
156	Vegetation regulation on streamflow intraâ€annual variability through adaption to climate variations. Geophysical Research Letters, 2015, 42, 10,307.	4.0	42
157	Quantifying effects of catchments storage thresholds on step changes in the flood frequency curve. Water Resources Research, 2013, 49, 6946-6958.	4.2	41
158	Long term variability of the Danube River flow and its relation to precipitation and air temperature. Journal of Hydrology, 2014, 519, 871-880.	5.4	41
159	A reflection on the first 50 years of Water Resources Research. Water Resources Research, 2015, 51, 7829-7837.	4.2	40
160	The seasonal dynamics of the stream sources and input flow paths of water and nitrogen of an Austrian headwater agricultural catchment. Science of the Total Environment, 2016, 542, 935-945.	8.0	40
161	Flood forecast errors and ensemble spreadâ€”A case study. Water Resources Research, 2012, 48, .	4.2	39
162	Do small and large floods have the same drivers of change? A regional attribution analysis in Europe. Hydrology and Earth System Sciences, 2021, 25, 1347-1364.	4.9	39

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163	Flood warning â€•on the value of local information. International Journal of River Basin Management, 2008, 6, 41-50.	2.7	38
164	A new classification scheme of European cyclone tracks with relevance to precipitation. Water Resources Research, 2016, 52, 7086-7104.	4.2	38
165	Comparison of three types of laser optical disdrometers under natural rainfall conditions. Hydrological Sciences Journal, 2020, 65, 524-535.	2.6	38
166	Understanding the relationship between rainfall and flood probabilities through combined intensity-duration-frequency analysis. Journal of Hydrology, 2021, 602, 126759.	5.4	38
167	Evaluating the snow component of a flood forecasting model. Hydrology Research, 2012, 43, 762-779.	2.7	37
168	A dynamic framework for flood risk. Water Security, 2017, 1, 3-11.	2.5	37
169	On the estimation of spatially representative plot scale saturated hydraulic conductivity in an agricultural setting. Journal of Hydrology, 2019, 570, 106-117.	5.4	37
170	Probabilistic envelope curves for extreme rainfall events. Journal of Hydrology, 2009, 378, 263-271.	5.4	36
171	Nodes on Ropes: A Comprehensive Data and Control Flow for Steering Ensemble Simulations. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 1872-1881.	4.4	36
172	Temporal variation of suspended sediment transport in the Koga catchment, North Western Ethiopia and environmental implications. Hydrological Processes, 2014, 28, 5972-5984.	2.6	36
173	A fast second-order shallow water scheme on two-dimensional structured grids over abrupt topography. Advances in Water Resources, 2019, 127, 89-108.	3.8	36
174	On the definition of the flow width for calculating specific catchment area patterns from gridded elevation data. Hydrological Processes, 2005, 19, 2539-2556.	2.6	35
175	Mapping snow cover from daily Collection 6 MODIS products over Austria. Journal of Hydrology, 2020, 590, 125548.	5.4	35
176	Uncertainty contributions to low-flow projections in Austria. Hydrology and Earth System Sciences, 2016, 20, 2085-2101.	4.9	34
177	Nonlinear Filtering Effects of Reservoirs on Flood Frequency Curves at the Regional Scale. Water Resources Research, 2017, 53, 8277-8292.	4.2	34
178	Climate and catchment controls on the performance of regional flood simulations. Journal of Hydrology, 2011, 402, 340-356.	5.4	33
179	Flashiness of mountain streams in Slovakia and Austria. Journal of Hydrology, 2011, 405, 392-401.	5.4	33
180	Re-suspension of bed sediment in a small stream â€“ results from two flushing experiments. Hydrology and Earth System Sciences, 2014, 18, 1043-1052.	4.9	33

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181	Effects of fluctuations in river water level on virus removal by bank filtration and aquifer passage â€" A scenario analysis. Journal of Contaminant Hydrology, 2013, 147, 34-44.	3.3	32
182	A European Flood Database: facilitating comprehensive flood research beyond administrative boundaries. Proceedings of the International Association of Hydrological Sciences, 0, 370, 89-95.	1.0	32
183	The Influence of Uncertainty in Air Temperature and Albedo on Snowmelt. Hydrology Research, 1991, 22, 95-108.	2.7	30
184	Emerging Approaches to Hydrological Risk Management in a Changing World. , 2013, , 3-10.		30
185	Visual Analysis and Steering of Flooding Simulations. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 1062-1075.	4.4	30
186	The Added Value of Different Data Types for Calibrating and Testing a Hydrologic Model in a Small Catchment. Water Resources Research, 2020, 56, e2019WR026153.	4.2	30
187	Exploring the Influence of Smallholders' Perceptions Regarding Water Availability on Crop Choice and Water Allocation Through Socioâ€Hydrological Modeling. Water Resources Research, 2018, 54, 2580-2604.	4.2	29
188	High abundance of genetic Bacteroidetes markers for total fecal pollution in pristine alpine soils suggests lack in specificity for feces. Journal of Microbiological Methods, 2012, 88, 433-435.	1.6	28
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