Lutz Breuer

List of Publications by Year
in descending order

184 papers	6,993 citations	53794 45 h-index	82547 72 g-index
228 all docs	228 docs citations	228 times ranked	8577 citing authors

#	Article	IF	Citations
1	Plant parameter values for models in temperate climates. Ecological Modelling, 2003, 169, 237-293.	2.5	307
2	Title is missing!. Nutrient Cycling in Agroecosystems, 1997, 48, 79-90.	2.2	209
3	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
4	State-of-the-art global models underestimate impacts from climate extremes. Nature Communications, 2019, 10, 1005.	12.8	168
5	N2O emission from tropical forest soils of Australia. Journal of Geophysical Research, 2000, 105, 26353-26367.	3.3	163
6	Large scale prediction of groundwater nitrate concentrations from spatial data using machine learning. Science of the Total Environment, 2019, 668, 1317-1327.	8.0	146
7	Validation and application of a cryogenic vacuum extraction system for soil and plant water extraction for isotope analysis. Journal of Sensors and Sensor Systems, 2013, 2, 179-193.	0.9	140
8	Parameter uncertainty and the significance of simulated land use change effects. Journal of Hydrology, 2003, 273, 164-176.	5.4	134
9	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
10	Critical issues with cryogenic extraction of soil water for stable isotope analysis. Ecohydrology, 2016, 9, 1-5.	2.4	127
11	LandscapeDNDC: a process model for simulation of biosphereâ€"atmosphereâ€"hydrosphere exchange processes at site and regional scale. Landscape Ecology, 2013, 28, 615-636.	4.2	126
12	Temperature and Moisture Effects on Nitrification Rates in Tropical Rainâ€Forest Soils. Soil Science Society of America Journal, 2002, 66, 834-844.	2.2	123
13	SPOTting Model Parameters Using a Ready-Made Python Package. PLoS ONE, 2015, 10, e0145180.	2.5	118
14	How many tracers do we need for end member mixing analysis (EMMA)? A sensitivity analysis. Water Resources Research, 2011, 47, .	4.2	115
15	Sources of uncertainty in hydrological climate impact assessment: a cross-scale study. Environmental Research Letters, 2018, 13, 015006.	5.2	109
16	Exchange of trace gases between soils and the atmosphere in Scots pine forest ecosystems of the northeastern German lowlands. Forest Ecology and Management, 2002, 167, 123-134.	3.2	107
17	Groundwater recharge rates and surface runoff response to land use and land cover changes in semi-arid environments. Ecological Processes, 2016, 5, .	3.9	107
18	A comparison of changes in river runoff from multiple global and catchment-scale hydrological models under global warming scenarios of 1ÂÂ°C, 2ÂÂ°C and 3ÂÂ°C. Climatic Change, 2017, 141, 577-595.	3.6	104

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19	Temporal stability of soil moisture in various semi-arid steppe ecosystems and its application in remote sensing. Journal of Hydrology, 2008, 359, 16-29.	5.4	101
20	Citizen science in hydrological monitoring and ecosystem services management: State of the art and future prospects. Science of the Total Environment, 2019, 693, 133531.	8.0	94
21	Biodegradability of a polyacrylate superabsorbent in agricultural soil. Environmental Science and Pollution Research, 2014, 21, 9453-9460.	5.3	93
22	Inter-laboratory comparison of cryogenic water extraction systems for stable isotope analysis of soil water. Hydrology and Earth System Sciences, 2018, 22, 3619-3637.	4.9	92
23	Identifying controls of the rainfallâ€"runoff response of small catchments in the tropical Andes (Ecuador). Journal of Hydrology, 2011, 407, 164-174.	5.4	90
24	Afforestation or intense pasturing improve the ecological and economic value of abandoned tropical farmlands. Nature Communications, 2014, 5, 5612.	12.8	89
25	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
26	Impact of elevation and weather patterns on the isotopic composition of precipitation in a tropical montane rainforest. Hydrology and Earth System Sciences, 2013, 17, 409-419.	4.9	86
27	Analysing the effects of soil properties changes associated with land use changes on the simulated water balance: A comparison of three hydrological catchment models for scenario analysis. Ecological Modelling, 2007, 209, 29-40.	2.5	85
28	Impact of a conversion from cropland to grassland on C and N storage and related soil properties: Analysis of a 60-year chronosequence. Geoderma, 2006, 133, 6-18.	5.1	80
29	Comparing molecular composition of dissolved organic matter in soil and stream water: Influence of land use and chemical characteristics. Science of the Total Environment, 2016, 571, 142-152.	8.0	79
30	Compositional diversity of rehabilitated tropical lands supports multiple ecosystem services and buffers uncertainties. Nature Communications, 2016, 7, 11877.	12.8	77
31	CMF: A Hydrological Programming Language Extension For Integrated Catchment Models. Environmental Modelling and Software, 2011, 26, 828-830.	4.5	73
32	Land use and climate control the spatial distribution of soil types in the grasslands of Inner Mongolia. Journal of Arid Environments, 2013, 88, 194-205.	2.4	66
33	Citizen science pioneers in Kenya â€" A crowdsourced approach for hydrological monitoring. Science of the Total Environment, 2018, 631-632, 1590-1599.	8.0	65
34	Degradation kinetics of biochar from pyrolysis and hydrothermal carbonization in temperate soils. Plant and Soil, 2013, 372, 375-387.	3.7	60
35	Accuracy and congruency of three different digital land-use maps. Landscape and Urban Planning, 2006, 78, 289-299.	7.5	57
36	Propagation of forcing and model uncertainties on to hydrological drought characteristics in a multi-model century-long experiment in large river basins. Climatic Change, 2017, 141, 435-449.	3.6	57

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37	Land use affects total dissolved nitrogen and nitrate concentrations in tropical montane streams in Kenya. Science of the Total Environment, 2017, 603-604, 519-532.	8.0	56
38	Integration of a detailed biogeochemical model into SWAT for improved nitrogen predictionsâ€"Model development, sensitivity, and GLUE analysis. Ecological Modelling, 2007, 203, 215-228.	2.5	55
39	Recent insights on uncertainties present in integrated catchment water quality modelling. Water Research, 2019, 150, 368-379.	11.3	54
40	Nation-wide estimation of groundwater redox conditions and nitrate concentrations through machine learning. Environmental Research Letters, 2020, 15, 064004.	5.2	52
41	Understanding uncertainties when inferring mean transit times of water trough tracer-based lumped-parameter models in Andean tropical montane cloud forest catchments. Hydrology and Earth System Sciences, 2014, 18, 1503-1523.	4.9	51
42	Deforestation and Benthic Indicators: How Much Vegetation Cover Is Needed to Sustain Healthy Andean Streams?. PLoS ONE, 2014, 9, e105869.	2.5	50
43	Assessing the impact of land use change on hydrology by ensemble modelling (LUCHEM) IV: Model sensitivity to data aggregation and spatial (re-)distribution. Advances in Water Resources, 2009, 32, 171-192.	3.8	49
44	Temporal dynamics in dominant runoff sources and flow paths in the <scp>A</scp>ndean <scp>P</scp>Ã¡ramo. Water Resources Research, 2017, 53, 5998-6017.	4.2	49
45	Insights into the water mean transit time in a high-elevation tropical ecosystem. Hydrology and Earth System Sciences, 2016, 20, 2987-3004.	4.9	48
46	Moisture transport and seasonal variations in the stable isotopic composition of rainfall in <scp>Central American</scp> and <scp>Andean PÃ¡ramo</scp> during <scp>El NiÃ±o</scp> conditions (2015â€"2016). Hydrological Processes, 2019, 33, 1802-1817.	2.6	48
47	Nitrogen processes in aquatic ecosystems. , 2011, , 126-146.		46
48	Using hydrological and climatic catchment clusters to explore drivers of catchment behavior. Hydrology and Earth System Sciences, 2020, 24, 1081-1100.	4.9	46
49	Model intercomparison to explore catchment functioning: Results from a remote montane tropical rainforest. Ecological Modelling, 2012, 239, 3-13.	2.5	42
50	Monte Carlo-based calibration and uncertainty analysis of a coupled plant growth and hydrological model. Biogeosciences, 2014, 11, 2069-2082.	3.3	42
51	Conversion of natural forest results in a significant degradation of soil hydraulic properties in the highlands of Kenya. Soil and Tillage Research, 2018, 176, 36-44.	5.6	41
52	Current concepts in nitrogen dynamics for mesoscale catchments. Hydrological Sciences Journal, 2008, 53, 1059-1074.	2.6	39
53	Current economic obstacles to biochar use in agriculture and climate change mitigation. Carbon Management, 2016, 7, 183-190.	2.4	39
54	Identification of geographic runoff sources in a data sparse region: hydrological processes and the limitations of tracerâ€based approaches. Hydrological Processes, 2010, 24, 2313-2327.	2.6	37

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55	Accounting for multiple ecosystem services in a simulation of landâ€use decisions: Does it reduce tropical deforestation?. Global Change Biology, 2020, 26, 2403-2420.	9.5	37
56	An institutional analysis of EPD programs and a global PCR registry. International Journal of Life Cycle Assessment, 2014, 19, 786-795.	4.7	36
57	The use of agri-environmental measures to address environmental pressures in Germany: Spatial mismatches and options for improvement. Land Use Policy, 2019, 84, 347-362.	5.6	36
58	Changing climate - Changing livelihood: Smallholder's perceptions and adaption strategies. Journal of Environmental Management, 2020, 259, 109702.	7.8	35
59	Stable water isotope tracing through hydrological models for disentangling runoff generation processes at the hillslope scale. Hydrology and Earth System Sciences, 2014, 18, 4113-4127.	4.9	33
60	HydroCrowd: a citizen science snapshot to assess the spatial control of nitrogen solutes in surface waters. Scientific Reports, 2015, 5, 16503.	3.3	33
61	Exploring water cycle dynamics by sampling multiple stable water isotope pools in a developed landscape in Germany. Hydrology and Earth System Sciences, 2016, 20, 3873-3894.	4.9	33
62	Spatially distributed hydro-chemical data with temporally high-resolution is needed to adequately assess the hydrological functioning of headwater catchments. Science of the Total Environment, 2019, 651, 1613-1626.	8.0	33
63	Sensitivity of simulated hydrological fluxes towards changes in soil properties in response to land use change. Physics and Chemistry of the Earth, 2004, 29, 749-758.	2.9	32
64	Preliminary evaluation of the runoff processes in a remote montane cloud forest basin using Mixing Model Analysis and Mean Transit Time. Hydrological Processes, 2012, 26, 3896-3910.	2.6	32
65	Shifts in leaf litter breakdown along a forestâ€"pastureâ€"urban gradient in Andean streams. Ecology and Evolution, 2016, 6, 4849-4865.	1.9	32
66	Climate Vulnerability in Rainfed Farming: Analysis from Indian Watersheds. Sustainability, 2018, 10, 3357.	3.2	32
67	Evaluation of evapotranspiration methods for model validation in a semi-arid watershed in northern China. Advances in Geosciences, 0, 11, 37-42.	12.0	32
68	Spatial variability of topsoils and vegetation in a grazed steppe ecosystem in Inner Mongolia (PR) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	1.9	30
69	Assessment of hydrological pathways in East African montane catchments under different land use. Hydrology and Earth System Sciences, 2018, 22, 4981-5000.	4.9	30
70	Monte Carlo assessment of uncertainty in the simulated hydrological response to land use change. Environmental Modeling and Assessment, 2006, 11, 209-218.	2.2	29
71	Water Resources Management Strategies for Irrigated Agriculture in the Indus Basin of Pakistan. Water (Switzerland), 2020, 12, 1429.	2.7	29
72	Quantification of plant water uptake by water stable isotopes in rice paddy systems. Plant and Soil, 2018, 429, 281-302.	3.7	28

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73	Effect of land cover and hydroâ€meteorological controls on soil water DOC concentrations in a highâ€elevation tropical environment. Hydrological Processes, 2018, 32, 2624-2635.	2.6	28
74	New Seasonal Shift in In-Stream Diurnal Nitrate Cycles Identified by Mining High-Frequency Data. PLoS ONE, 2016, 11, e0153138.	2.5	28
75	Evaluating Today's Landscape Multifunctionality and Providing an Alternative Future: A Normative Scenario Approach. Ecology and Society, 2010, 15, .	2.3	27
76	Using Highâ€Resolution Data to Assess Land Use Impact on Nitrate Dynamics in East African Tropical Montane Catchments. Water Resources Research, 2018, 54, 1812-1830.	4.2	27
77	Water source characterization through spatiotemporal patterns of major, minor and trace element stream concentrations in a complex, mesoscale German catchment. Hydrological Processes, 2008, 22, 2028-2043.	2.6	26
78	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
79	Modelling of point and non-point source pollution of nitrate with SWAT in the river Dill, Germany. Advances in Geosciences, 0, 5, 7-12.	12.0	26
80	Spatial distribution of soils determines export of nitrogen and dissolved organic carbon from an intensively managed agricultural landscape. Biogeosciences, 2012, 9, 4513-4525.	3.3	25
81	Continuous <i>versus</i> eventâ€based sampling: how many samples are required for deriving general hydrological understanding on Ecuador's pÃ¡ramo region?. Hydrological Processes, 2016, 30, 4059-4073.	2.6	25
82	Improving irrigation efficiency will be insufficient to meet future water demand in the Nile Basin. Journal of Hydrology: Regional Studies, 2017, 12, 315-330.	2.4	25
83	Environmental and ecological hydroinformatics to support the implementation of the European Water Framework Directive for river basin management. Journal of Hydroinformatics, 2006, 8, 239-252.	2.4	23
84	Identifying Controls on Water Chemistry of Tropical Cloud Forest Catchments: Combining Descriptive Approaches and Multivariate Analysis. Aquatic Geochemistry, 2010, 16, 127-149.	1.3	23
85	Solute behaviour and export rates in neotropical montane catchments under different land-uses. Journal of Tropical Ecology, 2011, 27, 305-317.	1.1	23
86	Climate change impacts on runoff in the Ferghana Valley (Central Asia). Water Resources, 2017, 44, 707-730.	0.9	23
87	A simple greenhouse experiment to explore the effect of cryogenic water extraction for tracing plant source water. Ecohydrology, 2018, 11, e1967.	2.4	23
88	Land-use effects on structural and functional composition of benthic and leaf-associated macroinvertebrates in four Andean streams. Aquatic Ecology, 2018, 52, 77-92.	1.5	23
89	The influence of land-use on macroinvertebrate communities in montane tropical streams a case study from Ecuador. Fundamental and Applied Limnology, 2010, 177, 267-282.	0.7	22
90	Spatial correlation of agri-environmental measures with high levels of ecosystem services. Ecological Indicators, 2018, 84, 364-370.	6.3	22

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91	Sensitivity analysis of a climate vulnerability index - a case study from Indian watershed development programmes. Climate Change Responses, 2018, 5, .	2.6	22
92	Response of maize biomass and soil water fluxes on elevated CO₂ and droughtâ€”From field experiments to processâ€based simulations. Global Change Biology, 2019, 25, 2947-2957.	9.5	22
93	Assessment of potential implications of agricultural irrigation policy on surface water scarcity in Brazil. Hydrology and Earth System Sciences, 2020, 24, 307-324.	4.9	22
94	Linking Spatial Patterns of Groundwater Table Dynamics and Streamflow Generation Processes in a Small Developed Catchment. Water (Switzerland), 2014, 6, 3085-3117.	2.7	21
95	Agricultural land is the main source of stream sediments after conversion of an African montane forest. Scientific Reports, 2020, 10, 14827.	3.3	21
96	Water transport and tracer mixing in volcanic ash soils at a tropical hillslope: A wet layered sloping sponge. Hydrological Processes, 2020, 34, 2032-2047.	2.6	21
97	Nitrogen soil surface budgets for districts in Germany 1995 to 2017. Environmental Sciences Europe, 2020, 32, .	5.5	21
98	Interdisciplinary modeling and the significance of soil functions. Journal of Plant Nutrition and Soil Science, 2002, 165, 460.	1.9	20
99	Set Up of an Automatic Water Quality Sampling System in Irrigation Agriculture. Sensors, 2014, 14, 212-228.	3.8	20
100	Regional Patterns of Ecosystem Services in Cultural Landscapes. Land, 2016, 5, 17.	2.9	20
101	Rejecting hydro-biogeochemical model structures by multi-criteria evaluation. Environmental Modelling and Software, 2017, 93, 1-12.	4.5	19
102	Ambiguous effects of grazing intensity on surface soil moisture: A geostatistical case study from a steppe environment in Inner Mongolia, PR China. Journal of Arid Environments, 2008, 72, 1305-1319.	2.4	18
103	Using multi-model averaging to improve the reliability of catchment scale nitrogen predictions. Geoscientific Model Development, 2013, 6, 117-125.	3.6	18
104	A Site-sPecific Agricultural water Requirement and footprint Estimator (SPARE:WATER 1.0). Geoscientific Model Development, 2013, 6, 1043-1059.	3.6	18
105	Addressing sources of uncertainty in runoff projections for a data scarce catchment in the Ecuadorian Andes. Climatic Change, 2014, 125, 221-235.	3.6	18
106	Relevance of nonfunctional linear polyacrylic acid for the biodegradation of superabsorbent polymer in soils. Environmental Science and Pollution Research, 2015, 22, 5444-5452.	5.3	18
107	Assessing the model performance of an integrated hydrological and biogeochemical model for discharge and nitrate load predictions. Hydrology and Earth System Sciences, 2007, 11, 997-1011.	4.9	17
108	Uncertainty assessment of quantifying spatially concentrated groundwater discharge to small streams by distributed temperature sensing. Water Resources Research, 2013, 49, 400-407.	4.2	17

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109	Sampling frequency trade-offs in the assessment of mean transit times of tropical montane catchment waters under semi-steady-state conditions. Hydrology and Earth System Sciences, 2015, 19, 1153-1168.	4.9	17
110	Reduction of predictive uncertainty in estimating irrigation water requirement through multi-model ensembles and ensemble averaging. Geoscientific Model Development, 2015, 8, 1233-1244.	3.6	17
111	Exploring impacts of vegetated buffer strips on nitrogen cycling using a spatially explicit hydro-biogeochemical modeling approach. Environmental Modelling and Software, 2017, 90, 55-67.	4.5	17
112	A coupled hydrological-plant growth model for simulating the effect of elevated CO 2 on a temperate grassland. Agricultural and Forest Meteorology, 2017, 246, 42-50.	4.8	17
113	Biodegradability screening of soil amendments through coupling of wavelengthâ€scanned cavity ringâ€down spectroscopy to multiple dynamic chambers. Rapid Communications in Mass Spectrometry, 2011, 25, 3683-3689.	1.5	16
114	Knowledge discovery from high-frequency stream nitrate concentrations: hydrology and biology contributions. Scientific Reports, 2016, 6, 31536.	3.3	16
115	A hotspot analysis of water footprints and groundwater decline in the High Plains aquifer region, USA. Regional Environmental Change, 2016, 16, 2419-2428.	2.9	16
116	A practical planning software program for desalination in agriculture - SPARE:WATERopt. Desalination, 2017, 404, 121-131.	8.2	16
117	Constraining a complex biogeochemical model for CO₂ and N₂O emission simulations from various land uses by modelâ€“data fusion. Biogeosciences, 2017, 14, 3487-3508.	3.3	16
118	Detection of artificial sweeteners and iodinated X-ray contrast media in wastewater via LC-MS/MS and their potential use as anthropogenic tracers in flowing waters. Chemosphere, 2019, 218, 189-196.	8.2	16
119	Sampling soil water along the <scp>pF</scp> curve for <scp>Î´²H</scp> and <scp>Î´¹⁸O</scp> analysis. Hydrological Processes, 2020, 34, 4959-4972.	2.6	16
120	Explainable AI Framework for Multivariate Hydrochemical Time Series. Machine Learning and Knowledge Extraction, 2021, 3, 170-204.	5.0	16
121	Effects of Short Term Bioturbation by Common Voles on Biogeochemical Soil Variables. PLoS ONE, 2015, 10, e0126011.	2.5	16
122	Modelling Agroforestryâ€™s Contributions to Peopleâ€"A Review of Available Models. Agronomy, 2021, 11, 2106.	3.0	16
123	Inferring the effect of catchment complexity on mesoscale hydrologic response. Water Resources Research, 2008, 44, .	4.2	15
124	Investigating unproductive water losses from irrigated agricultural crops in the humid tropics through analyses of stable isotopes of water. Hydrology and Earth System Sciences, 2020, 24, 3627-3642.	4.9	15
125	Spatial and temporal variation of soil moisture in dependence of multiple environmental parameters in semi-arid grasslands. Plant and Soil, 2011, 340, 73-88.	3.7	14
126	Effects of Input Data Content on the Uncertainty of Simulating Water Resources. Water (Switzerland), 2018, 10, 621.	2.7	14

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127	Trade-offs between parameter constraints and model realism: a case study. Scientific Reports, 2019, 9, 10729.	3.3	14
128	Local temperature optimum of N2O production rates in tropical rain forest soils of Australia. Soil Research, 2005, 43, 689.	1.1	13
129	Biodegradation measurements confirm the predictive value of the O:Câ€ratio for biochar recalcitrance. Journal of Plant Nutrition and Soil Science, 2014, 177, 633-637.	1.9	13
130	Modification of the microclimate and water balance through the integration of trees into temperate cropping systems. Agricultural and Forest Meteorology, 2022, 323, 109065.	4.8	13
131	Rainfallâ€Runoff Modeling Using Crowdsourced Water Level Data. Water Resources Research, 2019, 55, 10856-10871.	4.2	12
132	Spatial Distribution of Integrated Nitrate Reduction across the Unsaturated Zone and the Groundwater Body in Germany. Water (Switzerland), 2020, 12, 2456.	2.7	12
133	Application of Machine Learning Models to Predict Maximum Event Water Fractions in Streamflow. Frontiers in Water, 2021, 3, .	2.3	12
134	The Role of Small Woody Landscape Features and Agroforestry Systems for National Carbon Budgeting in Germany. Land, 2021, 10, 1028.	2.9	12
135	A research framework for projecting ecosystem change in highly diverse tropical mountain ecosystems. Oecologia, 2021, 195, 589-600.	2.0	12
136	Water-saving strategies for irrigation agriculture in Saudi Arabia. International Journal of Water Resources Development, 2017, 33, 292-309.	2.0	11
137	Simulating Long-Term Development of Greenhouse Gas Emissions, Plant Biomass, and Soil Moisture of a Temperate Grassland Ecosystem under Elevated Atmospheric CO2. Agronomy, 2020, 10, 50.	3.0	11
138	Tropical Montane Forest Conversion Is a Critical Driver for Sediment Supply in East African Catchments. Water Resources Research, 2020, 56, e2020WR027495.	4.2	11
139	High-Resolution, In Situ Monitoring of Stable Isotopes of Water Revealed Insight into Hydrological Response Behavior. Water (Switzerland), 2020, 12, 565.	2.7	11
140	Leaching of dissolved and particulate phosphorus <i>via</i> preferential flow pathways in a forest soil: An approach using zeroâ€tension lysimeters. Journal of Plant Nutrition and Soil Science, 2020, 183, 238-247.	1.9	11
141	Assessment of multiple stable isotopes for tracking regional and organic authenticity of plant products in Hesse, Germany. Isotopes in Environmental and Health Studies, 2021, 57, 1-20.	1.0	11
142	Using Python as a coupling platform for integrated catchment models. Advances in Geosciences, 0, 27, 51-56.	12.0	11
143	Focus of the IPCC Assessment Reports Has Shifted to Lower Temperatures. Earth's Future, 2022, 10, .	6.3	11
144	Urbanisation process generates more independently-acting stressors and ecosystem functioning impairment in tropical Andean streams. Journal of Environmental Management, 2022, 304, 114211.	7.8	10

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145	High-Frequency Water Isotopic Analysis Using an Automatic Water Sampling System in Rice-Based Cropping Systems. Water (Switzerland), 2018, 10, 1327.	2.7	9
146	Calculation of a food consumption nitrogen footprint for Germany. Environmental Research Letters, 2021, 16, 075005.	5.2	9
147	Simulating Water Resource Availability under Data Scarcityâ€"A Case Study for the Ferghana Valley (Central Asia). Water (Switzerland), 2014, 6, 3270-3299.	2.7	8
148	Prediction and uncertainty analysis of a parsimonious floodplain surface waterâ€groundwater interaction model. Water Resources Research, 2017, 53, 7678-7695.	4.2	8
149	Is observation uncertainty masking the signal of land use change impacts on hydrology?. Journal of Hydrology, 2019, 570, 393-400.	5.4	8
150	Review of soil phosphorus routines in ecosystem models. Environmental Modelling and Software, 2020, 126, 104639.	4.5	8
151	Gauging the ungauged basin: a top-down approach in a large semiarid watershed in China. Advances in Geosciences, 0, 18, 3-8.	12.0	8
152	Economic and environmental impact assessment of sustainable future irrigation practices in the Indus Basin of Pakistan. Scientific Reports, 2021, 11, 23466.	3.3	8
153	A field, laboratory, and literature review evaluation of the water retention curve of volcanic ash soils: How well do standard laboratory methods reflect field conditions?. Hydrological Processes, 2021, 35, e14011.	2.6	7
154	Betting on the best case: higher end warming is underrepresented in research. Environmental Research Letters, 2021, 16, 084036.	5.2	7
155	Probabilistic multi-model ensemble predictions of nitrogen concentrations in river systems. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	6
156	Modelling of rare flood meadow species distribution by a combined habitat surface waterâ€"groundwater model. Ecohydrology, 2019, 12, e2122.	2.4	6
157	Supporting, Regulating, and Provisioning Hydrological Services. Ecological Studies, 2013, , 107-116.	1.2	6
158	Carbon accounting in European agroforestry systems â€" Key research gaps and data needs. Current Research in Environmental Sustainability, 2022, 4, 100134.	3.5	6
159	Closing the N-Budget: How Simulated Groundwater-Borne Nitrate Supply Affects Plant Growth and Greenhouse Gas Emissions on Temperate Grassland. Atmosphere, 2018, 9, 407.	2.3	5
160	Diurnal Patterns in Solute Concentrations Measured with In Situ UV-Vis Sensors: Natural Fluctuations or Artefacts?. Sensors, 2020, 20, 859.	3.8	5
161	Variability in tree water uptake determined with stable water isotopes in an African tropical montane forest. Ecohydrology, 2021, 14, e2278.	2.4	5
162	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

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163	Multi-model evaluation of catchment- and global-scale hydrological model simulations of drought characteristics across eight large river catchments. Advances in Water Resources, 2022, 165, 104212.	3.8	5
164	Effect of (quasi-)optimum model parameter sets and model characteristics on future discharge projection of two basins from Europe and Asia. Climatic Change, 2017, 142, 559-573.	3.6	4
165	Incremental model breakdown to assess the multi-hypotheses problem. Hydrology and Earth System Sciences, 2018, 22, 4565-4581.	4.9	4
166	A National Nitrogen Target for Germany. Sustainability, 2021, 13, 1121.	3.2	4
167	Simple Catchments and Where to Find Them: The Storage-Discharge Relationship as a Proxy for Catchment Complexity. Frontiers in Water, 2021, 3, .	2.3	4
168	Detection of hidden model errors by combining single and multi-criteria calibration. Science of the Total Environment, 2021, 777, 146218.	8.0	4
169	National nitrogen budget for Germany. Environmental Research Communications, 2021, 3, 095004.	2.3	4
170	Spatially explicit versus lumped models in catchment hydrology â€" experiences from two case studies. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 3-26.	0.2	4
171	Integrating heterogeneous landscape characteristics into watershed scale modelling. Advances in Geosciences, 0, 31, 31-38.	12.0	4
172	Multicriteria assessment of water dynamics reveals subcatchment variability in a seemingly homogeneous tropical cloud forest catchment. Hydrological Processes, 2017, 31, 1456-1468.	2.6	3
173	Multi-Source Uncertainty Analysis in Simulating Floodplain Inundation under Climate Change. Water (Switzerland), 2018, 10, 809.	2.7	3
174	Analysis of future changes in meteorological drought patterns in Fulda, Germany. International Journal of Climatology, 2020, 40, 5515-5526.	3.5	3
175	Particulate macronutrient exports from tropical African montane catchments point to the impoverishment of agricultural soils. Soil, 2021, 7, 53-70.	4.9	3
176	Monitoring of Suspended Sediments in a Tropical Forested Landscape With Citizen Science. Frontiers in Water, 2021, 3, .	2.3	3
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