

Doerthe Tetzlaff

List of Publications by Year in descending order

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Version: 2024-02-01

233
papers

12,564
citations

19636

61
h-index

36008

97
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278
all docs

278
docs citations

278
times ranked

7634
citing authors

#	ARTICLE	IF	CITATIONS
1	The Rhine River basin. , 2022, , 333-391.		16
2	Disentangling the Influence of Landscape Characteristics, Hydroclimatic Variability and Land Management on Surface Water NO ₃ Dynamics: Spatially Distributed Modeling Over 30Âyr in a Lowland Mixed Land Use Catchment. Water Resources Research, 2022, 58, .	1.7	9
3	Functional Multi-Scale Integration of Agricultural Nitrogen-Budgets Into Catchment Water Quality Modeling. Geophysical Research Letters, 2022, 49, .	1.5	2
4	Visualizing catchment-scale spatio-temporal dynamics of storage-flux-age interactions using a tracer-aided ecohydrological model. Hydrological Processes, 2022, 36, .	1.1	0
5	Critical Zone Response Times and Water Age Relationships Under Variable Catchment Wetness States: Insights Using a Tracer-Aided Ecohydrological Model. Water Resources Research, 2022, 58, .	1.7	5
6	Estimates of water partitioning in complex urban landscapes with isotope-aided ecohydrological modelling. Hydrological Processes, 2022, 36, .	1.1	7
7	Xylem water in riparian willow trees (<i>Salix alba</i>) reveals shallow sources of root water uptake by in situ monitoring of stable water isotopes. Hydrology and Earth System Sciences, 2022, 26, 2073-2092.	1.9	13
8	Modelling temporal variability of in situ soil water and vegetation isotopes reveals ecohydrological couplings in a riparian willow plot. Biogeosciences, 2022, 19, 2465-2485.	1.3	11
9	Assessing land use influences on isotopic variability and stream water ages in urbanising rural catchments. Isotopes in Environmental and Health Studies, 2022, 58, 277-300.	0.5	4
10	Seasonal variations in soil-plant interactions in contrasting urban green spaces: Insights from water stable isotopes. Journal of Hydrology, 2022, 612, 127998.	2.3	12
11	Tracer-aided identification of hydrological and biogeochemical controls on in-stream water quality in a riparian wetland. Water Research, 2022, 222, 118860.	5.3	5
12	Using soil water isotopes to infer the influence of contrasting urban green space on ecohydrological partitioning. Hydrology and Earth System Sciences, 2021, 25, 927-943.	1.9	19
13	Catchment Functioning Under Prolonged Drought Stress: Tracer-Aided Ecohydrological Modeling in an Intensively Managed Agricultural Catchment. Water Resources Research, 2021, 57, e2020WR029094.	1.7	11
14	Quantifying the effects of land use and model scale on water partitioning and water ages using tracer-aided ecohydrological models. Hydrology and Earth System Sciences, 2021, 25, 2239-2259.	1.9	43
15	Co-evolution of xylem water and soil water stable isotopic composition in a northern mixed forest biome. Hydrology and Earth System Sciences, 2021, 25, 2169-2186.	1.9	11
16	Using isotopes to understand landscape-scale connectivity in a groundwater-dominated, lowland catchment under drought conditions. Hydrological Processes, 2021, 35, e14197.	1.1	20
17	Quantifying the effects of urban green space on water partitioning and ages using an isotope-based ecohydrological model. Hydrology and Earth System Sciences, 2021, 25, 3635-3652.	1.9	28
18	Effects of streamflow isotope sampling strategies on the calibration of a tracer-aided rainfall-runoff model. Hydrological Processes, 2021, 35, e14223.	1.1	13

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19	A longer-term perspective on soil moisture, groundwater and stream flow response to the 2018 drought in an experimental catchment in the Scottish Highlands. <i>Hydrological Processes</i> , 2021, 35, e14206.	1.1	10
20	Women advancing research on hydrological processes: Preface. <i>Hydrological Processes</i> , 2021, 35, e14267.	1.1	2
21	Modelling ecohydrological feedbacks in forest and grassland plots under a prolonged drought anomaly in Central Europe 2018–2020. <i>Hydrological Processes</i> , 2021, 35, e14325.	1.1	11
22	Structural changes to forests during regeneration affect water flux partitioning, water ages and hydrological connectivity: Insights from tracer-aided ecohydrological modelling. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 4861-4886.	1.9	12
23	Spatio-temporal variations in stable isotopes in peri-urban catchments: A preliminary assessment of potential and challenges in assessing streamflow sources. <i>Journal of Hydrology</i> , 2021, 600, 126685.	2.3	10
24	Isotope hydrology and water sources in a heavily urbanized stream. <i>Hydrological Processes</i> , 2021, 35, e14377.	1.1	12
25	Hydroclimatic variability and riparian wetland restoration control the hydrology and nutrient fluxes in a lowland agricultural catchment. <i>Journal of Hydrology</i> , 2021, 603, 126904.	2.3	11
26	Stable isotopes of water reveal differences in plant – soil water relationships across northern environments. <i>Hydrological Processes</i> , 2021, 35, e14023.	1.1	51
27	Importance of rainfall partitioning in a northern mixed forest canopy for soil water isotopic signatures in ecohydrological studies. <i>Hydrological Processes</i> , 2020, 34, 284-302.	1.1	7
28	Riparian wetland rehabilitation and beaver re-colonization impacts on hydrological processes and water quality in a lowland agricultural catchment. <i>Science of the Total Environment</i> , 2020, 699, 134302.	3.9	54
29	An agent-based model that simulates the spatio-temporal dynamics of sources and transfer mechanisms contributing faecal indicator organisms to streams. Part 1: Background and model description. <i>Journal of Environmental Management</i> , 2020, 270, 110903.	3.8	5
30	Contrasting storage-flux-age interactions revealed by catchment inter-comparison using a tracer-aided runoff model. <i>Journal of Hydrology</i> , 2020, 590, 125226.	2.3	7
31	Peak grain forecasts for the US High Plains amid withering waters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 26145-26150.	3.3	12
32	Critical Zone Storage Controls on the Water Ages of Ecohydrological Outputs. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088897.	1.5	31
33	An agent-based model that simulates the spatio-temporal dynamics of sources and transfer mechanisms contributing faecal indicator organisms to streams. Part 2: Application to a small agricultural catchment. <i>Journal of Environmental Management</i> , 2020, 270, 110905.	3.8	5
34	Homogenization of the terrestrial water cycle. <i>Nature Geoscience</i> , 2020, 13, 656-658.	5.4	242
35	Isotope-aided modelling of ecohydrologic fluxes and water ages under mixed land use in Central Europe: The 2018 drought and its recovery. <i>Hydrological Processes</i> , 2020, 34, 3406-3425.	1.1	33
36	Urban water systems under climate stress: An isotopic perspective from Berlin, Germany. <i>Hydrological Processes</i> , 2020, 34, 3758-3776.	1.1	30

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37	Headwaters drive streamflow and lowland tracer export in a large-scale humid tropical catchment. <i>Hydrological Processes</i> , 2020, 34, 3824-3841.	1.1	13
38	Using isotopes to incorporate tree water storage and mixing dynamics into a distributed ecohydrologic modelling framework. <i>Ecohydrology</i> , 2020, 13, e2201.	1.1	51
39	Advancing ecohydrology in the 21st century: A convergence of opportunities. <i>Ecohydrology</i> , 2020, 13, e2208.	1.1	34
40	Improving the Jarvis-type model with modified temperature and radiation functions for sap flow simulations. <i>Journal of Hydrology</i> , 2020, 587, 124981.	2.3	21
41	Using storage selection functions to assess mixing patterns and water ages of soil water, evaporation and transpiration. <i>Advances in Water Resources</i> , 2020, 141, 103586.	1.7	8
42	Using water stable isotopes to understand evaporation, moisture stress, and re-wetting in catchment forest and grassland soils of the summer drought of 2018. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 3737-3752.	1.9	40
43	Assessing the influence of soil freeze-thaw cycles on catchment water storage-flux-age interactions using a tracer-aided ecohydrological model. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 3319-3334.	1.9	22
44	Assessment of evapotranspiration from urban vegetation across space and time: a case study in Berlin. , 2019, , .		4
45	Deciphering key processes controlling rainfall isotopic variability during extreme tropical cyclones. <i>Nature Communications</i> , 2019, 10, 4321.	5.8	52
46	Assessing runoff generation in riparian wetlands: monitoring groundwater-surface water dynamics at the micro-catchment scale. <i>Environmental Monitoring and Assessment</i> , 2019, 191, 116.	1.3	12
47	Spatially distributed tracer-aided runoff modelling and dynamics of storage and water ages in a permafrost-influenced catchment. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 2507-2523.	1.9	22
48	Hysteretic response of sap flow in Scots pine (<i>Pinus sylvestris</i>) to meteorological forcing in a humid low-energy headwater catchment. <i>Ecohydrology</i> , 2019, 12, e2125.	1.1	24
49	Ecohydrological modelling with ECh_2O_{iso} to quantify forest and grassland effects on water partitioning and flux ages. <i>Hydrological Processes</i> , 2019, 33, 2174-2191.	1.1	40
50	To what extent does hydrological connectivity control dynamics of faecal indicator organisms in streams? Initial hypothesis testing using a tracer-aided model. <i>Journal of Hydrology</i> , 2019, 570, 423-435.	2.3	12
51	A simple topography-driven and calibration-free runoff generation module. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 787-809.	1.9	37
52	Hydrology at Aberdeen - thinking about water locally and globally. <i>Scottish Geographical Journal</i> , 2019, 135, 267-286.	0.4	1
53	Climate-phenology-hydrology interactions in northern high latitudes: Assessing the value of remote sensing data in catchment ecohydrological studies. <i>Science of the Total Environment</i> , 2019, 656, 19-28.	3.9	32
54	What can we learn from multi-data calibration of a process-based ecohydrological model?. <i>Environmental Modelling and Software</i> , 2018, 101, 301-316.	1.9	48

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55	Using repeat electrical resistivity surveys to assess heterogeneity in soil moisture dynamics under contrasting vegetation types. <i>Journal of Hydrology</i> , 2018, 559, 684-697.	2.3	33
56	Permafrost and lakes control river isotope composition across a boreal Arctic transect in the Western Siberian lowlands. <i>Environmental Research Letters</i> , 2018, 13, 034028.	2.2	32
57	Modelling the effects of land cover and climate change on soil water partitioning in a boreal headwater catchment. <i>Journal of Hydrology</i> , 2018, 558, 520-531.	2.3	32
58	Role of riparian wetlands and hydrological connectivity in the dynamics of stream thermal regimes. <i>Hydrology Research</i> , 2018, 49, 634-647.	1.1	4
59	Using spatial-stream-network models and long-term data to understand and predict dynamics of faecal contamination in a mixed land-use catchment. <i>Science of the Total Environment</i> , 2018, 612, 840-852.	3.9	29
60	Using stable isotopes to assess surface water source dynamics and hydrological connectivity in a high-latitude wetland and permafrost influenced landscape. <i>Journal of Hydrology</i> , 2018, 556, 279-293.	2.3	116
61	$\delta^{18}O$ -iso ^{1.0} : water isotopes and age tracking in a process-based, distributed ecohydrological model. <i>Geoscientific Model Development</i> , 2018, 11, 3045-3069.	1.3	88
62	Testing a spatially distributed tracer-aided runoff model in a snow-influenced catchment: Effects of multicriteria calibration on streamwater ages. <i>Hydrological Processes</i> , 2018, 32, 3089-3107.	1.1	12
63	Conceptualizing catchment storage dynamics and nonlinearities. <i>Hydrological Processes</i> , 2018, 32, 3299-3303.	1.1	12
64	Water ages in the critical zone of long-term experimental sites in northern latitudes. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 3965-3981.	1.9	37
65	High riverine CO ₂ emissions at the permafrost boundary of Western Siberia. <i>Nature Geoscience</i> , 2018, 11, 825-829.	5.4	64
66	Using stable isotopes to estimate travel times in a data-sparse Arctic catchment: Challenges and possible solutions. <i>Hydrological Processes</i> , 2018, 32, 1936-1952.	1.1	34
67	Spatio-temporal diel DOC cycles in a wet, low energy, northern catchment: Highlighting and questioning the sub-daily rhythms of catchment functioning. <i>Journal of Hydrology</i> , 2018, 563, 962-974.	2.3	7
68	Measuring and Modeling Stable Isotopes of Mobile and Bulk Soil Water. <i>Vadose Zone Journal</i> , 2018, 17, 1-18.	1.3	84
69	Characterization of surface water isotope spatial patterns of Scotland. <i>Journal of Geochemical Exploration</i> , 2018, 194, 71-80.	1.5	20
70	Groundwater dynamics at the hillslope-riparian interface in a year with extreme winter rainfall. <i>Journal of Hydrology</i> , 2018, 564, 509-528.	2.3	24
71	On the Use of Storage Selection Functions to Assess Time-Variant Travel Times in Lakes. <i>Water Resources Research</i> , 2018, 54, 5163-5185.	1.7	12
72	Abundant pre-industrial carbon detected in Canadian Arctic headwaters: implications for the permafrost carbon feedback. <i>Environmental Research Letters</i> , 2018, 13, 034024.	2.2	25

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73	Storage, mixing, and fluxes of water in the critical zone across northern environments inferred by stable isotopes of soil water. <i>Hydrological Processes</i> , 2018, 32, 1720-1737.	1.1	52
74	Spatially distributed tracer-aided modelling to explore water and isotope transport, storage and mixing in a pristine, humid tropical catchment. <i>Hydrological Processes</i> , 2018, 32, 3206-3224.	1.1	27
75	Integrated surface-subsurface model to investigate the role of groundwater in headwater catchment runoff generation: A minimalist approach to parameterisation. <i>Journal of Hydrology</i> , 2017, 547, 664-677.	2.3	60
76	A probabilistic approach to quantifying hydrologic thresholds regulating migration of adult Atlantic salmon into spawning streams. <i>Water Resources Research</i> , 2017, 53, 2264-2277.	1.7	15
77	Using SAS functions and high-resolution isotope data to unravel travel time distributions in headwater catchments. <i>Water Resources Research</i> , 2017, 53, 1864-1878.	1.7	102
78	Spatial and temporal patterns of soil water storage and vegetation water use in humid northern catchments. <i>Science of the Total Environment</i> , 2017, 595, 486-493.	3.9	72
79	Save northern high-latitude catchments. <i>Nature Geoscience</i> , 2017, 10, 324-325.	5.4	71
80	Hydraulic modelling of the spatial and temporal variability in Atlantic salmon parr habitat availability in an upland stream. <i>Science of the Total Environment</i> , 2017, 601-602, 1046-1059.	3.9	24
81	Taming the flood-How far can we go with trees?. <i>Hydrological Processes</i> , 2017, 31, 3122-3126.	1.1	47
82	The essential value of long-term experimental data for hydrology and water management. <i>Water Resources Research</i> , 2017, 53, 2598-2604.	1.7	102
83	Assessing the environmental controls on Scots pine transpiration and the implications for water partitioning in a boreal headwater catchment. <i>Agricultural and Forest Meteorology</i> , 2017, 240-241, 58-66.	1.9	66
84	Scaling effects of riparian peatlands on stable isotopes in runoff and DOC mobilisation. <i>Journal of Hydrology</i> , 2017, 549, 220-235.	2.3	28
85	Testing the maximum entropy production approach for estimating evapotranspiration from closed canopy shrubland in a low-energy humid environment. <i>Hydrological Processes</i> , 2017, 31, 4613-4621.	1.1	19
86	Influence of forest and shrub canopies on precipitation partitioning and isotopic signatures. <i>Hydrological Processes</i> , 2017, 31, 4282-4296.	1.1	32
87	Temporal dynamics in dominant runoff sources and flow paths in the Añramo. <i>Water Resources Research</i> , 2017, 53, 5998-6017.	1.7	49
88	Groundwater isoscapes in a montane headwater catchment show dominance of well-mixed storage. <i>Hydrological Processes</i> , 2017, 31, 3504-3519.	1.1	27
89	Modeling the isotopic evolution of snowpack and snowmelt: Testing a spatially distributed parsimonious approach. <i>Water Resources Research</i> , 2017, 53, 5813-5830.	1.7	49
90	No influence of CO ₂ on stable isotope analyses of soil waters with off-axis integrated cavity output spectroscopy (OA-COS). <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 430-436.	0.7	15

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91	Using high-resolution isotope data and alternative calibration strategies for a tracer-aided runoff model in a nested catchment. <i>Hydrological Processes</i> , 2017, 31, 3962-3978.	1.1	17
92	Evaporation fractionation in a peatland drainage network affects stream water isotope composition. <i>Water Resources Research</i> , 2017, 53, 851-866.	1.7	92
93	Using isotopes to constrain water flux and age estimates in snow-influenced catchments using the STARR (Spatially distributed Tracer-Aided Rainfall-Runoff) model. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 5089-5110.	1.9	69
94	Soil water stable isotopes reveal evaporation dynamics at the soil-plant-atmosphere interface of the critical zone. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 3839-3858.	1.9	119
95	Characterizing the age distribution of catchment evaporative losses. <i>Hydrological Processes</i> , 2016, 30, 1308-1312.	1.1	25
96	Spatial organization of groundwater dynamics and streamflow response from different hydrogeological units in a montane catchment. <i>Hydrological Processes</i> , 2016, 30, 3735-3753.	1.1	42
97	Water sources and mixing in riparian wetlands revealed by tracers and geospatial analysis. <i>Water Resources Research</i> , 2016, 52, 456-470.	1.7	37
98	Biogeochemistry of "pristine" freshwater stream and lake systems in the western Canadian Arctic. <i>Biogeochemistry</i> , 2016, 130, 191-213.	1.7	17
99	Hydroclimatic controls on non-stationary stream water ages in humid tropical catchments. <i>Journal of Hydrology</i> , 2016, 542, 231-240.	2.3	19
100	Visualization of spatial patterns of connectivity and runoff ages derived from a tracer-aided model. <i>Hydrological Processes</i> , 2016, 30, 4893-4895.	1.1	9
101	Modelling storage-driven connectivity between landscapes and riverscapes: towards a simple framework for long-term ecohydrological assessment. <i>Hydrological Processes</i> , 2016, 30, 2482-2497.	1.1	21
102	Using high resolution tracer data to constrain water storage, flux and age estimates in a spatially distributed rainfall-runoff model. <i>Hydrological Processes</i> , 2016, 30, 4761-4778.	1.1	69
103	Redox dynamics in the active layer of an Arctic headwater catchment; examining the potential for transfer of dissolved methane from soils to stream water. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 2776-2792.	1.3	28
104	Linking high-frequency DOC dynamics to the age of connected water sources. <i>Water Resources Research</i> , 2016, 52, 5232-5247.	1.7	62
105	Using geophysical surveys to test tracer-based storage estimates in headwater catchments. <i>Hydrological Processes</i> , 2016, 30, 4434-4445.	1.1	33
106	Hydroclimatic influences on non-stationary transit time distributions in a boreal headwater catchment. <i>Journal of Hydrology</i> , 2016, 543, 7-16.	2.3	25
107	Heat-based hyporheic flux calculations in heterogeneous salmon spawning gravels. <i>Aquatic Sciences</i> , 2016, 78, 203-213.	0.6	18
108	Continuous Dissolved Oxygen Measurements and Modelling Metabolism in Peatland Streams. <i>PLoS ONE</i> , 2016, 11, e0161363.	1.1	10

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109	Stream water age distributions controlled by storage dynamics and nonlinear hydrologic connectivity: Modeling with high-resolution isotope data. <i>Water Resources Research</i> , 2015, 51, 7759-7776.	1.7	134
110	A coupled hydrology–biogeochemistry model to simulate dissolved organic carbon exports from a permafrost–influenced catchment. <i>Hydrological Processes</i> , 2015, 29, 5383-5396.	1.1	29
111	A preliminary assessment of water partitioning and ecohydrological coupling in northern headwaters using stable isotopes and conceptual runoff models. <i>Hydrological Processes</i> , 2015, 29, 5153-5173.	1.1	57
112	Connecting precipitation inputs and soil flow pathways to stream water in contrasting boreal catchments. <i>Hydrological Processes</i> , 2015, 29, 3546-3555.	1.1	74
113	Landscape influence on small-scale water temperature variations in a moorland catchment. <i>Hydrological Processes</i> , 2015, 29, 3098-3111.	1.1	15
114	Comparison of threshold hydrologic response across northern catchments. <i>Hydrological Processes</i> , 2015, 29, 3575-3591.	1.1	55
115	Ecohydrological separation in wet, low energy northern environments? A preliminary assessment using different soil water extraction techniques. <i>Hydrological Processes</i> , 2015, 29, 5139-5152.	1.1	100
116	Scale-dependent groundwater contributions influence patterns of winter baseflow stream chemistry in boreal catchments. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 847-858.	1.3	66
117	Resistance and resilience to droughts: hydrogeological controls on catchment storage and runoff response. <i>Hydrological Processes</i> , 2015, 29, 4579-4593.	1.1	33
118	Spatial aggregation of time–variant stream water ages in urbanizing catchments. <i>Hydrological Processes</i> , 2015, 29, 3038-3050.	1.1	27
119	Detecting groundwater discharge dynamics from point-to-catchment scale in a lowland stream: combining hydraulic and tracer methods. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 1871-1886.	1.9	29
120	Conceptual modelling to assess how the interplay of hydrological connectivity, catchment storage and tracer dynamics controls nonstationary water age estimates. <i>Hydrological Processes</i> , 2015, 29, 2956-2969.	1.1	95
121	Tracer–based assessment of flow paths, storage and runoff generation in northern catchments: a review. <i>Hydrological Processes</i> , 2015, 29, 3475-3490.	1.1	145
122	The Isotope Hydrology of a Large River System Regulated for Hydropower. <i>River Research and Applications</i> , 2015, 31, 335-349.	0.7	21
123	Baseflow dynamics: Multi-tracer surveys to assess variable groundwater contributions to montane streams under low flows. <i>Journal of Hydrology</i> , 2015, 527, 1021-1033.	2.3	60
124	Modelling landscape controls on dissolved organic carbon sources and fluxes to streams. <i>Biogeochemistry</i> , 2015, 122, 361-374.	1.7	77
125	The relative role of soil type and tree cover on water storage and transmission in northern headwater catchments. <i>Hydrological Processes</i> , 2015, 29, 1844-1860.	1.1	87
126	Conceptual Modelling to Assess Hydrological Impacts and Evaluate Environmental Flow Scenarios in Montane River Systems Regulated for Hydropower. <i>River Research and Applications</i> , 2015, 31, 1066-1081.	0.7	18

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127	Do catchment characteristics explain differences in coherence and trends in hydroclimatic behaviour in an upland region?. <i>Hydrology Research</i> , 2014, 45, 817-837.	1.1	0
128	ASSESSING THE CUMULATIVE IMPACTS OF HYDROPOWER REGULATION ON THE FLOW CHARACTERISTICS OF A LARGE ATLANTIC SALMON RIVER SYSTEM. <i>River Research and Applications</i> , 2014, 30, 456-475.	0.7	20
129	A comparison of wetness indices for the prediction of observed connected saturated areas under contrasting conditions. <i>Earth Surface Processes and Landforms</i> , 2014, 39, 399-413.	1.2	62
130	Analysis of hydrological seasonality across northern catchments using monthly precipitation-runoff polygon metrics. <i>Hydrological Sciences Journal</i> , 2014, 59, 56-72.	1.2	4
131	Application of a linear regression model to assess the influence of urbanised areas and grazing pastures on the microbiological quality of rural streams. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 7141-7155.	1.3	18
132	The influence of forestry on acidification and recovery: Insights from long-term hydrochemical and invertebrate data. <i>Ecological Indicators</i> , 2014, 37, 317-329.	2.6	27
133	Integrating parsimonious models of hydrological connectivity and soil biogeochemistry to simulate stream DOC dynamics. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 1030-1047.	1.3	35
134	Developing a consistent process-based conceptualization of catchment functioning using measurements of internal state variables. <i>Water Resources Research</i> , 2014, 50, 3481-3501.	1.7	73
135	Projecting climate change impacts on stream flow regimes with tracer-aided runoff models - preliminary assessment of heterogeneity at the mesoscale. <i>Hydrological Processes</i> , 2014, 28, 545-558.	1.1	24
136	Influence of lowland aquifers and anthropogenic impacts on the isotope hydrology of contrasting mesoscale catchments. <i>Hydrological Processes</i> , 2014, 28, 793-808.	1.1	12
137	Storage dynamics in hydrogeological units control hillslope connectivity, runoff generation, and the evolution of catchment transit time distributions. <i>Water Resources Research</i> , 2014, 50, 969-985.	1.7	216
138	Assessing urbanization impacts on catchment transit times. <i>Geophysical Research Letters</i> , 2014, 41, 442-448.	1.5	33
139	INFLUENCE OF SCALE ON THERMAL CHARACTERISTICS IN A LARGE MONTANE RIVER BASIN. <i>River Research and Applications</i> , 2013, 29, 403-419.	0.7	47
140	Concepts of hydrological connectivity: Research approaches, pathways and future agendas. <i>Earth-Science Reviews</i> , 2013, 119, 17-34.	4.0	445
141	Use of color maps and wavelet coherence to discern seasonal and interannual climate influences on streamflow variability in northern catchments. <i>Water Resources Research</i> , 2013, 49, 6194-6207.	1.7	59
142	A decade of Predictions in Ungauged Basins (PUB) - a review. <i>Hydrological Sciences Journal</i> , 2013, 58, 1198-1255.	1.2	821
143	Modeling the dynamics of metabolism in montane streams using continuous dissolved oxygen measurements. <i>Water Resources Research</i> , 2013, 49, 5260-5275.	1.7	13
144	Catchments on the cusp? Structural and functional change in northern ecohydrology. <i>Hydrological Processes</i> , 2013, 27, 766-774.	1.1	55

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145	Catchments in the future North: interdisciplinary science for sustainable management in the 21 st Century. <i>Hydrological Processes</i> , 2013, 27, 635-639.	1.1	8
146	Process realism: flow paths and storage. , 2013, , 53-69.		6
147	Will catchment characteristics moderate the projected effects of climate change on flow regimes in the Scottish Highlands?. <i>Hydrological Processes</i> , 2013, 27, 687-699.	1.1	43
148	Change in winter climate will affect dissolved organic carbon and water fluxes in mid- to high latitude catchments. <i>Hydrological Processes</i> , 2013, 27, 700-709.	1.1	35
149	Potential effects of climate change on streambed scour and risks to salmonid survival in snow-dominated mountain basins. <i>Hydrological Processes</i> , 2013, 27, 750-765.	1.1	70
150	What can flux tracking teach us about water age distribution patterns and their temporal dynamics?. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 533-564.	1.9	217
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