

Jeffrey J Mcdonnell

List of Publications by Year in descending order

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Version: 2024-02-01

282
papers

27,432
citations

4146

87
h-index

7160

153
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308
all docs

308
docs citations

308
times ranked

13414
citing authors

#	ARTICLE	IF	CITATIONS
1	Sources and mean transit times of intermittent streamflow in semi-arid headwater catchments. <i>Journal of Hydrology</i> , 2022, 604, 127208.	5.4	7
2	Modeling streamflow variability at the regional scale: (1) perceptual model development through signature analysis. <i>Journal of Hydrology</i> , 2022, 605, 127287.	5.4	7
3	Modeling streamflow variability at the regional scale: (2) Development of a bespoke distributed conceptual model. <i>Journal of Hydrology</i> , 2022, 605, 127286.	5.4	3
4	Using stable isotopes to track hydrological processes at an oil sands mine, Alberta, Canada. <i>Journal of Hydrology: Regional Studies</i> , 2022, 40, 101032.	2.4	2
5	Toward a Closure of Catchment Mass Balance: Insight on the Missing Link From a Vegetated Lysimeter. <i>Water Resources Research</i> , 2022, 58, .	4.2	6
6	Phloem water isotopically different to xylem water: Potential causes and implications for ecohydrological tracing. <i>Ecohydrology</i> , 2022, 15, .	2.4	16
7	Tree water deficit and dynamic source water partitioning. <i>Hydrological Processes</i> , 2021, 35, .	2.6	34
8	On the use of leaf water to determine plant water source: A proof of concept. <i>Hydrological Processes</i> , 2021, 35, e14073.	2.6	20
9	Summary and synthesis of Changing Cold Regions Network (CCRN) research in the interior of western Canada – Part 2: Future change in cryosphere, vegetation, and hydrology. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 1849-1882.	4.9	20
10	The evolving perceptual model of streamflow generation at the Panola Mountain Research Watershed. <i>Hydrological Processes</i> , 2021, 35, e14127.	2.6	12
11	Tracing and Closing the Water Balance in a Vegetated Lysimeter. <i>Water Resources Research</i> , 2021, 57, e2020WR029049.	4.2	20
12	Fill-and-Spill: A Process Description of Runoff Generation at the Scale of the Beholder. <i>Water Resources Research</i> , 2021, 57, e2020WR027514.	4.2	43
13	The Maimai experimental catchment database: Forty years of process-based research on steep, wet hillslopes. <i>Hydrological Processes</i> , 2021, 35, e14112.	2.6	4
14	Organic contamination detection for isotopic analysis of water by laser spectroscopy. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9118.	1.5	14
15	Crustal Groundwater Volumes Greater Than Previously Thought. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093549.	4.0	24
16	Tropical forest water source patterns revealed by stable isotopes: A preliminary analysis of 46 neighboring species. <i>Forest Ecology and Management</i> , 2021, 494, 119355.	3.2	11
17	Tracers reveal limited influence of plantation forests on surface runoff in a UK natural flood management catchment. <i>Journal of Hydrology: Regional Studies</i> , 2021, 36, 100834.	2.4	4
18	No evidence of isotopic fractionation in olive trees (<i>Olea europaea</i>): a stable isotope tracing experiment. <i>Hydrological Sciences Journal</i> , 2021, 66, 2415-2430.	2.6	11

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19	Isotopic fractionation from deep roots to tall shoots: A forensic analysis of xylem water isotope composition in mature tropical savanna trees. <i>Science of the Total Environment</i> , 2021, 795, 148675.	8.0	16
20	Depth distribution of soil water sourced by plants at the global scale: A new direct inference approach. <i>Ecohydrology</i> , 2020, 13, e2177.	2.4	43
21	The impact of across-slope forest strips on hillslope subsurface hydrological dynamics. <i>Journal of Hydrology</i> , 2020, 581, 124427.	5.4	11
22	Freshwater pearl mussels from northern Sweden serve as long-term, high-resolution stream water isotope recorders. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 673-696.	4.9	8
23	The Maimai Catchment New Zealand. , 2020, , 271-274.		1
24	Where Is the Bottom of a Watershed?. <i>Water Resources Research</i> , 2020, 56, e2019WR026010.	4.2	65
25	Further experiments comparing direct vapor equilibration and cryogenic vacuum distillation for plant water stable isotope analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 1850-1854.	1.5	6
26	Intercomparison of soil pore water extraction methods for stable isotope analysis and interpretation of hillslope runoff sources. <i>Hydrological Processes</i> , 2019, 33, 2939-2954.	2.6	14
27	Fill and Spill Hillslope Runoff Representation With a Richards Equation-Based Model. <i>Water Resources Research</i> , 2019, 55, 8445-8462.	4.2	28
28	Editorial Expression of Concern: Global analysis of streamflow response to forest management. <i>Nature</i> , 2019, 574, E7-E7.	27.8	3
29	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. <i>Hydrological Sciences Journal</i> , 2019, 64, 1141-1158.	2.6	474
30	The Demographics of Water: A Review of Water Ages in the Critical Zone. <i>Reviews of Geophysics</i> , 2019, 57, 800-834.	23.0	197
31	¹⁷ O-excess as a detector for co-extracted organics in vapor analyses of plant isotope signatures. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 1301-1310.	1.5	18
32	The role of vegetation, soils, and precipitation on water storage and hydrological services in Andean Páramo catchments. <i>Journal of Hydrology</i> , 2019, 572, 805-819.	5.4	41
33	Possible soil tension controls on the isotopic equilibrium fractionation factor for evaporation from soil. <i>Hydrological Processes</i> , 2019, 33, 1629-1634.	2.6	26
34	Characterizing the Fluxes and Age Distribution of Soil Water, Plant Water, and Deep Percolation in a Model Tropical Ecosystem. <i>Water Resources Research</i> , 2019, 55, 3307-3327.	4.2	73
35	A global assessment of freshwater mollusk shell oxygen isotope signatures and their relation to precipitation and stream water. <i>Scientific Reports</i> , 2019, 9, 4312.	3.3	21
36	The Role of Matric Potential, Solid Interfacial Chemistry, and Wettability on Isotopic Equilibrium Fractionation. <i>Vadose Zone Journal</i> , 2019, 18, 1-11.	2.2	19

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37	Hillslope Hydrology in Global Change Research and Earth System Modeling. <i>Water Resources Research</i> , 2019, 55, 1737-1772.	4.2	281
38	Velocities, Residence Times, Tracer Breakthroughs in a Vegetated Lysimeter: A Multitracer Experiment. <i>Water Resources Research</i> , 2019, 55, 21-33.	4.2	28
39	Water mining from the deep critical zone by apple trees growing on loess. <i>Hydrological Processes</i> , 2019, 33, 320-327.	2.6	96
40	Fifty years of recorded hillslope runoff on seasonally frozen ground: the Swift Current, Saskatchewan, Canada, dataset. <i>Earth System Science Data</i> , 2019, 11, 1375-1383.	9.9	0
41	A simple greenhouse experiment to explore the effect of cryogenic water extraction for tracing plant source water. <i>Ecohydrology</i> , 2018, 11, e1967.	2.4	23
42	A comparison of extraction systems for plant water stable isotope analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 1031-1044.	1.5	75
43	Fill and spill drives runoff connectivity over frozen ground. <i>Journal of Hydrology</i> , 2018, 558, 115-128.	5.4	35
44	The two water worlds hypothesis: Addressing multiple working hypotheses and proposing a way forward. <i>Ecohydrology</i> , 2018, 11, e1843.	2.4	90
45	Infiltration into frozen soil: From core-scale dynamics to hillslope-scale connectivity. <i>Hydrological Processes</i> , 2018, 32, 66-79.	2.6	20
46	No Direct Linkage Between Event-Based Runoff Generation and Groundwater Recharge on the Maimai Hillslope. <i>Water Resources Research</i> , 2018, 54, 8718-8733.	4.2	10
47	Inter-laboratory comparison of cryogenic water extraction systems for stable isotope analysis of soil water. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 3619-3637.	4.9	92
48	Freshwater pearl mussels as a stream water stable isotope recorder. <i>Ecohydrology</i> , 2018, 11, e2007.	2.4	11
49	Groundwater Subsidy From Headwaters to Their Parent Water Watershed: A Combined Field-Modeling Approach. <i>Water Resources Research</i> , 2018, 54, 5110-5125.	4.2	36
50	Woody bioenergy crop selection can have large effects on water yield: A southeastern United States case study. <i>Biomass and Bioenergy</i> , 2018, 117, 180-189.	5.7	20
51	Discussing scientific ethics: what would you do?. <i>Astronomy and Geophysics</i> , 2018, 59, 4.12-4.12.	0.2	0
52	Water sustainability and watershed storage. <i>Nature Sustainability</i> , 2018, 1, 378-379.	23.7	56
53	Contrasting Groundwater and Streamflow Ages at the Maimai Watershed. <i>Water Resources Research</i> , 2018, 54, 3937-3957.	4.2	37
54	A Numerical Water Tracer Model for Understanding Event-Scale Hydrometeorological Phenomena. <i>Journal of Hydrometeorology</i> , 2018, 19, 947-967.	1.9	8

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55	Potential risks to freshwater aquatic organisms following a silvicultural application of herbicides in Oregon's Coast Range. <i>Integrated Environmental Assessment and Management</i> , 2017, 13, 396-409.	2.9	9
56	Paper writing gone Hollywood. <i>Science</i> , 2017, 355, 102-102.	12.6	4
57	Bedrock geology controls on catchment storage, mixing, and release: A comparative analysis of 16 nested catchments. <i>Hydrological Processes</i> , 2017, 31, 1828-1845.	2.6	104
58	Prevalence and magnitude of groundwater use by vegetation: a global stable isotope meta-analysis. <i>Scientific Reports</i> , 2017, 7, 44110.	3.3	109
59	Global aquifers dominated by fossil groundwaters but wells vulnerable to modern contamination. <i>Nature Geoscience</i> , 2017, 10, 425-429.	12.9	210
60	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.	8.0	72
61	Save northern high-latitude catchments. <i>Nature Geoscience</i> , 2017, 10, 324-325.	12.9	71
62	Climate change impacts on hillslope runoff on the northern Great Plains, 1962–2013. <i>Journal of Hydrology</i> , 2017, 550, 538-548.	5.4	37
63	Reply to comment by Fred L. Ogden et al. on “Beyond the SCS-CN method: A theoretical framework for spatially lumped rainfall-runoff response”. <i>Water Resources Research</i> , 2017, 53, 6351-6354.	4.2	4
64	A role for meta-analysis in hydrology. <i>Hydrological Processes</i> , 2017, 31, 3588-3591.	2.6	12
65	Plant source water apportionment using stable isotopes: A comparison of simple linear, two-compartment mixing model approaches. <i>Hydrological Processes</i> , 2017, 31, 3750-3758.	2.6	75
66	Beyond the water balance. <i>Nature Geoscience</i> , 2017, 10, 396-396.	12.9	52
67	Potential limitation of cryogenic vacuum extractions and spiked experiments. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 821-823.	1.5	28
68	Primary weathering rates, water transit times, and concentration-discharge relations: A theoretical analysis for the critical zone. <i>Water Resources Research</i> , 2017, 53, 942-960.	4.2	73
69	The sustainable scientist. <i>Science</i> , 2017, 357, 1202-1202.	12.6	0
70	HP Volume to honor Keith Beven. <i>Hydrological Processes</i> , 2017, 31, 3762-3764.	2.6	0
71	A portable experimental hillslope for frozen ground studies. <i>Hydrological Processes</i> , 2017, 31, 4450-4457.	2.6	2
72	Carbon, nitrogen, and water stable isotopes in plant tissue and soils across a moisture gradient in Puerto Rico. <i>Hydrological Processes</i> , 2017, 31, 1558-1559.	2.6	2

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73	The role of stable isotopes in understanding rainfall interception processes: a review. <i>Wiley Interdisciplinary Reviews: Water</i> , 2017, 4, 1-17.	6.5	91
74	Reviews and syntheses: on the roles trees play in building and plumbing the critical zone. <i>Biogeosciences</i> , 2017, 14, 5115-5142.	3.3	130
75	Tritium analysis shows apple trees may be transpiring water several decades old. <i>Hydrological Processes</i> , 2017, 31, 1196-1201.	2.6	72
76	A sprinkling experiment to quantify celerityâ€“velocity differences at the hillslope scale. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 5891-5910.	4.9	10
77	Interactions between payments for hydrologic services, landowner decisions, and ecohydrological consequences: synergies and disconnection in the cloud forest zone of central Veracruz, Mexico. <i>Ecology and Society</i> , 2017, 22, .	2.3	43
78	Terrestrial diatoms as tracers in catchment hydrology: a review. <i>Wiley Interdisciplinary Reviews: Water</i> , 2017, 4, e1241.	6.5	25
79	Stimulating a Canadian narrative for climate. <i>Facets</i> , 2017, 2, 131-149.	2.4	3
80	Multiple runoff processes and multiple thresholds control agricultural runoff generation. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 4525-4545.	4.9	55
81	Factors influencing stream baseflow transit times in tropical montane watersheds. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 1621-1635.	4.9	41
82	Insights into plant water uptake from xylemâ€“water isotope measurements in two tropical catchments with contrasting moisture conditions. <i>Hydrological Processes</i> , 2016, 30, 3210-3227.	2.6	110
83	Effect of bedrock permeability on stream base flow mean transit time scaling relations: 1. A multiscale catchment intercomparison. <i>Water Resources Research</i> , 2016, 52, 1358-1374.	4.2	86
84	The exponential decline in saturated hydraulic conductivity with depth: a novel method for exploring its effect on water flow paths and transit time distribution. <i>Hydrological Processes</i> , 2016, 30, 2438-2450.	2.6	54
85	Intercomparison of soil pore water extraction methods for stable isotope analysis. <i>Hydrological Processes</i> , 2016, 30, 3434-3449.	2.6	129
86	Critical issues with cryogenic extraction of soil water for stable isotope analysis. <i>Ecohydrology</i> , 2016, 9, 1-5.	2.4	127
87	Orchestrating a powerful group. <i>Science</i> , 2016, 352, 378-378.	12.6	0
88	Evaristo et al. reply. <i>Nature</i> , 2016, 536, E3-E3.	27.8	2
89	Framework for eventâ€“based semidistributed modeling that unifies the SCSâ€“CN method, VIC, PDM, and TOPMODEL. <i>Water Resources Research</i> , 2016, 52, 7036-7052.	4.2	15
90	The 1-hour workday. <i>Science</i> , 2016, 353, 718-718.	12.6	3

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91	Interactions among hydraulic conductivity distributions, subsurface topography, and transport thresholds revealed by a multitracer hillslope irrigation experiment. <i>Water Resources Research</i> , 2016, 52, 6186-6206.	4.2	30
92	Beyond the SCS-CN method: A theoretical framework for spatially lumped rainfall-runoff response. <i>Water Resources Research</i> , 2016, 52, 4608-4627.	4.2	67
93	Dual nitrate isotopes clarify the role of biological processing and hydrologic flow paths on nitrogen cycling in subtropical low-gradient watersheds. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 422-437.	3.0	25
94	Hillslope permeability architecture controls on subsurface transit time distribution and flow paths. <i>Journal of Hydrology</i> , 2016, 543, 17-30.	5.4	47
95	Diatoms as a tracer of hydrological connectivity: are they supply limited?. <i>Ecohydrology</i> , 2016, 9, 631-645.	2.4	15
96	Effect of bedrock permeability on stream base flow mean transit time scaling relationships: 2. Process study of storage and release. <i>Water Resources Research</i> , 2016, 52, 1375-1397.	4.2	45
97	Substantial proportion of global streamflow less than three months old. <i>Nature Geoscience</i> , 2016, 9, 126-129.	12.9	252
98	Interflow dynamics on a low relief forested hillslope: Lots of fill, little spill. <i>Journal of Hydrology</i> , 2016, 534, 648-658.	5.4	43
99	Are all runoff processes the same? Numerical experiments comparing a D-arcyR-richards solver to an overland flow-based approach for subsurface storm runoff simulation. <i>Water Resources Research</i> , 2015, 51, 10008-10028.	4.2	38
100	Interception effects on stable isotope driven streamwater transit time estimates. <i>Geophysical Research Letters</i> , 2015, 42, 5299-5308.	4.0	29
101	Examination of aerial diatom flushing across watersheds in Luxembourg, Oregon and Slovakia for tracing episodic hydrological connectivity. <i>Journal of Hydrology and Hydromechanics</i> , 2015, 63, 235-245.	2.0	6
102	Comparison of threshold hydrologic response across northern catchments. <i>Hydrological Processes</i> , 2015, 29, 3575-3591.	2.6	55
103	Tracer advances in catchment hydrology. <i>Hydrological Processes</i> , 2015, 29, 5135-5138.	2.6	28
104	Factors affecting the spatial pattern of bedrock groundwater recharge at the hillslope scale. <i>Hydrological Processes</i> , 2015, 29, 4594-4610.	2.6	40
105	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.	2.6	100
106	Temporal dynamics of catchment transit times from stable isotope data. <i>Water Resources Research</i> , 2015, 51, 4208-4223.	4.2	56
107	Hydropedology: Synergistic integration of soil science and hydrology in the Critical Zone. <i>Hydrological Processes</i> , 2015, 29, 4559-4561.	2.6	11
108	Water's Way at Sleepers River watershed – revisiting flow generation in a post-glacial landscape, Vermont USA. <i>Hydrological Processes</i> , 2015, 29, 3447-3459.	2.6	53

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109	Efectos hidrológicos de la conversión del bosque de niebla en el centro de Veracruz, México. Bosque, 2015, 36, 395-407.	0.3	13
110	Hydrological connectivity inferred from diatom transport through the riparian-stream system. Hydrology and Earth System Sciences, 2015, 19, 3133-3151.	4.9	35
111	Where does streamwater come from in low-relief forested watersheds? A dual-isotope approach. Hydrology and Earth System Sciences, 2015, 19, 125-135.	4.9	55
112	Groundwater surface mapping informs sources of catchment baseflow. Hydrology and Earth System Sciences, 2015, 19, 1599-1613.	4.9	21
113	Stochastic rainfall-runoff model with explicit soil moisture dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150389.	2.1	15
114	Creating a research brand. Science, 2015, 349, 758-758.	12.6	2
115	Whither field hydrology? The need for discovery science and outrageous hydrological hypotheses. Water Resources Research, 2015, 51, 5919-5928.	4.2	127
116	Global separation of plant transpiration from groundwater and streamflow. Nature, 2015, 525, 91-94.	27.8	377
117	Seeing the climate through the trees: observing climate and forestry impacts on streamflow using a 60-year record. Hydrological Processes, 2015, 29, 473-480.	2.6	24
118	Gauging the Ungauged Basin: Relative Value of Soft and Hard Data. Journal of Hydrologic Engineering - ASCE, 2015, 20, .	1.9	60
119	Spatial patterns of throughfall isotopic composition at the event and seasonal timescales. Journal of Hydrology, 2015, 522, 58-66.	5.4	31
120	A stochastic approach to modelling and understanding hillslope runoff connectivity dynamics. Ecological Modelling, 2015, 298, 64-74.	2.5	23
121	The relative role of soil type and tree cover on water storage and transmission in northern headwater catchments. Hydrological Processes, 2015, 29, 1844-1860.	2.6	87
122	The pronounced seasonality of global groundwater recharge. Water Resources Research, 2014, 50, 8845-8867.	4.2	246
123	Ecohydrological flow networks in the subsurface. Ecohydrology, 2014, 7, 1073-1078.	2.4	19
124	A comparison of wetness indices for the prediction of observed connected saturated areas under contrasting conditions. Earth Surface Processes and Landforms, 2014, 39, 399-413.	2.5	62
125	The two water worlds hypothesis: ecohydrological separation of water between streams and trees?. Wiley Interdisciplinary Reviews: Water, 2014, 1, 323-329.	6.5	196
126	The role of pre-event canopy storage in throughfall and stemflow by using isotopic tracers. Ecohydrology, 2014, 7, 858-868.	2.4	67

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127	Analysis of hydrological seasonality across northern catchments using monthly precipitation-runoff polygon metrics. <i>Hydrological Sciences Journal</i> , 2014, 59, 56-72.	2.6	4
128	Lateral subsurface stormflow and solute transport in a forested hillslope: A combined measurement and modeling approach. <i>Water Resources Research</i> , 2014, 50, 8159-8178.	4.2	53
129	Debates-The future of hydrological sciences: A (common) path forward? A call to action aimed at understanding velocities, celerities and residence time distributions of the headwater hydrograph. <i>Water Resources Research</i> , 2014, 50, 5342-5350.	4.2	325
130	Rainfall seasonality and an ecohydrological feedback offset the potential impact of climate warming on evapotranspiration and groundwater recharge. <i>Water Resources Research</i> , 2014, 50, 1308-1321.	4.2	25
131	Simulated effect of soil depth and bedrock topography on near-surface hydrologic response and slope stability. <i>Earth Surface Processes and Landforms</i> , 2013, 38, 146-159.	2.5	66
132	Toward a formal definition of water scarcity in natural-human systems. <i>Water Resources Research</i> , 2013, 49, 4506-4517.	4.2	65
133	Hydrograph separation using stable isotopes: Review and evaluation. <i>Journal of Hydrology</i> , 2013, 505, 47-64.	5.4	473
134	A new multisource and high-frequency approach to measuring $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in hydrological field studies. <i>Water Resources Research</i> , 2013, 49, 7797-7803.	4.2	32
135	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.	4.2	59
136	A decade of Predictions in Ungauged Basins (PUB)-a review. <i>Hydrological Sciences Journal</i> , 2013, 58, 1198-1255.	2.6	821
137	Catchments on the cusp? Structural and functional change in northern ecohydrology. <i>Hydrological Processes</i> , 2013, 27, 766-774.	2.6	55
138	Are all runoff processes the same?. <i>Hydrological Processes</i> , 2013, 27, 4103-4111.	2.6	84
139	Outcomes of synthesis. , 2013, , 361-383.		4
140	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.	2.6	35
141	Macropore flow of old water revisited: experimental insights from a tile-drained hillslope. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 103-118.	4.9	112
142	Land use change effects on runoff generation in a humid tropical montane cloud forest region. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 3543-3560.	4.9	106
143	The hydrology of the humid tropics. <i>Nature Climate Change</i> , 2012, 2, 655-662.	18.8	284
144	A comparison of similarity indices for catchment classification using a cross-regional dataset. <i>Advances in Water Resources</i> , 2012, 40, 11-22.	3.8	85

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145	Runoff generation in a steep, tropical montane cloud forest catchment on permeable volcanic substrate. <i>Water Resources Research</i> , 2012, 48, .	4.2	127
146	Cross-regional prediction of long-term trajectory of stream water DOC response to climate change. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	127
147	Ecohydrologic connections and complexities in drylands: new perspectives for understanding transformative landscape change. <i>Ecohydrology</i> , 2012, 5, 143-144.	2.4	11
148	Organization of complexity in water limited ecohydrology. <i>Ecohydrology</i> , 2012, 5, 184-199.	2.4	73
149	Ecohydrological controls on soil erosion and landscape evolution. <i>Ecohydrology</i> , 2012, 5, 478-490.	2.4	13
150	Stable isotopes reveal linkages among ecohydrological processes in a seasonally dry tropical montane cloud forest. <i>Ecohydrology</i> , 2012, 5, 779-790.	2.4	193
151	The "hidden streamflow" challenge in catchment hydrology: a call to action for stream water transit time analysis. <i>Hydrological Processes</i> , 2012, 26, 2061-2066.	2.6	59
152	Hydroclimatic and hydrochemical controls on Plecoptera diversity and distribution in northern freshwater ecosystems. <i>Hydrobiologia</i> , 2012, 693, 39-53.	2.0	8
153	The role of bedrock groundwater in rainfall-runoff response at hillslope and catchment scales. <i>Journal of Hydrology</i> , 2012, 450-451, 117-133.	5.4	105
154	An inexpensive and portable drill rig for bedrock groundwater studies in headwater catchments. <i>Hydrological Processes</i> , 2012, 26, 622-632.	2.6	22
155	Topographic, pedologic and climatic interactions influencing streamflow generation at multiple catchment scales. <i>Hydrological Processes</i> , 2012, 26, 3858-3874.	2.6	21
156	Lateral Subsurface Flow in a Soil Cover over Waste Rock in a Humid Temperate Environment. <i>Vadose Zone Journal</i> , 2011, 10, 332-344.	2.2	16
157	Examining the role of throughfall patterns on subsurface stormflow generation. <i>Journal of Hydrology</i> , 2011, 409, 460-471.	5.4	30
158	On the value of long-term, low-frequency water quality sampling: avoiding throwing the baby out with the bathwater. <i>Hydrological Processes</i> , 2011, 25, 828-830.	2.6	44
159	On the relative role of upslope and downslope topography for describing water flow path and storage dynamics: a theoretical analysis. <i>Hydrological Processes</i> , 2011, 25, 3909-3923.	2.6	22
160	How much water can a watershed store?. <i>Hydrological Processes</i> , 2011, 25, 3899-3908.	2.6	134
161	Hillslope threshold response to rainfall: (1) A field based forensic approach. <i>Journal of Hydrology</i> , 2010, 393, 65-76.	5.4	161
162	Hillslope threshold response to rainfall: (2) Development and use of a macroscale model. <i>Journal of Hydrology</i> , 2010, 393, 77-93.	5.4	58

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163	Truncation of stream residence time: how the use of stable isotopes has skewed our concept of streamwater age and origin. <i>Hydrological Processes</i> , 2010, 24, 1646-1659.	2.6	181
164	Assessing the impact of mixing assumptions on the estimation of streamwater mean residence time. <i>Hydrological Processes</i> , 2010, 24, 1730-1741.	2.6	83
165	Estimating the deep seepage component of the hillslope and catchment water balance within a measurement uncertainty framework. <i>Hydrological Processes</i> , 2010, 24, 3631-3647.	2.6	64
166	How old is streamwater? Open questions in catchment transit time conceptualization, modelling and analysis. <i>Hydrological Processes</i> , 2010, 24, 1745-1754.	2.6	276
167	Gypsies in the palace: experimentalist's view on the use of 3D physics-based simulation of hillslope hydrological response. <i>Hydrological Processes</i> , 2010, 24, 3878-3893.	2.6	29
168	Ground-based thermal imagery as a simple, practical tool for mapping saturated area connectivity and dynamics. <i>Hydrological Processes</i> , 2010, 24, 3123-3132.	2.6	65
169	Inter-comparison of hydro-climatic regimes across northern catchments: synchronicity, resistance and resilience. <i>Hydrological Processes</i> , 2010, 24, 3591-3602.	2.6	103
170	Mechanistic assessment of hillslope transpiration controls of diel subsurface flow: a steady-state irrigation approach. <i>Ecohydrology</i> , 2010, 3, 133-142.	2.4	32
171	Ecohydrologic separation of water between trees and streams in a Mediterranean climate. <i>Nature Geoscience</i> , 2010, 3, 100-104.	12.9	587
172	Effects of wildfire on catchment runoff response: a modelling approach to detect changes in snow-dominated forested catchments. <i>Hydrology Research</i> , 2010, 41, 378-390.	2.7	73
173	Uncertainty assessment of forest road modeling with the Distributed Hydrology Soil Vegetation Model (DHSVM). <i>Canadian Journal of Forest Research</i> , 2010, 40, 1397-1409.	1.7	19
174	In lieu of the paired catchment approach: Hydrologic model change detection at the catchment scale. <i>Water Resources Research</i> , 2010, 46, .	4.2	67
175	Hydrological connectivity of hillslopes and streams: Characteristic time scales and nonlinearities. <i>Water Resources Research</i> , 2010, 46, .	4.2	270
176	Land-cover impacts on streamflow: a change-detection modelling approach that incorporates parameter uncertainty. <i>Hydrological Sciences Journal</i> , 2010, 55, 316-332.	2.6	94
177	Hillslope hydrology under glass: confronting fundamental questions of soil-water-biota co-evolution at Biosphere 2. <i>Hydrology and Earth System Sciences</i> , 2009, 13, 2105-2118.	4.9	68
178	The role of hillslope hydrology in controlling nutrient loss. <i>Journal of Hydrology</i> , 2009, 367, 177-187.	5.4	63
179	Assessment of multi-frequency electromagnetic induction for determining soil moisture patterns at the hillslope scale. <i>Journal of Hydrology</i> , 2009, 368, 56-67.	5.4	59
180	Connectivity at the hillslope scale: Identifying interactions between storm size, bedrock permeability, slope angle and soil depth. <i>Journal of Hydrology</i> , 2009, 376, 378-391.	5.4	229

#	ARTICLE	IF	CITATIONS
181	The rivers are alive: on the potential for diatoms as a tracer of water source and hydrological connectivity. <i>Hydrological Processes</i> , 2009, 23, 2841-2845.	2.6	61
182	High-frequency field-deployable isotope analyzer for hydrological applications. <i>Water Resources Research</i> , 2009, 45, .	4.2	135
183	A new time-space accounting scheme to predict stream water residence time and hydrograph source components at the watershed scale. <i>Water Resources Research</i> , 2009, 45, .	4.2	102
184	Testing the Hydrological Landscape Unit Classification System and Other Terrain Analysis Measures for Predicting Low-Flow Nitrate and Chloride in Watersheds. <i>Environmental Management</i> , 2008, 42, 877-893.	2.7	18
185	Conceptualizing catchment processes: simply too complex?. <i>Hydrological Processes</i> , 2008, 22, 1727-1730.	2.6	86
186	A mechanistic assessment of nutrient flushing at the catchment scale. <i>Journal of Hydrology</i> , 2008, 358, 268-287.	5.4	64
187	Assessing the controls of the snow energy balance and water available for runoff in a rain-on-snow environment. <i>Journal of Hydrology</i> , 2008, 354, 1-14.	5.4	99
188	A reference data set of hillslope rainfall-runoff response, Panola Mountain Research Watershed, United States. <i>Water Resources Research</i> , 2008, 44, .	4.2	23
189	Learning from model improvement: On the contribution of complementary data to process understanding. <i>Water Resources Research</i> , 2008, 44, .	4.2	184
190	Conceptualizing lateral preferential flow and flow networks and simulating the effects on gauged and ungauged hillslopes. <i>Water Resources Research</i> , 2007, 43, .	4.2	194
191	The effects of land use on stream nitrate dynamics. <i>Journal of Hydrology</i> , 2007, 332, 54-68.	5.4	152
192	Comment on "An assessment of the tracer-based approach to quantifying groundwater contributions to streamflow" by J. P. Jones et al.. <i>Water Resources Research</i> , 2007, 43, .	4.2	9
193	Factors influencing the residence time of catchment waters: A virtual experiment approach. <i>Water Resources Research</i> , 2007, 43, .	4.2	65
194	Moving beyond heterogeneity and process complexity: A new vision for watershed hydrology. <i>Water Resources Research</i> , 2007, 43, .	4.2	613
195	Rainfall threshold for hillslope outflow: an emergent property of flow pathway connectivity. <i>Hydrology and Earth System Sciences</i> , 2007, 11, 1047-1063.	4.9	148
196	Effect of bedrock permeability on subsurface stormflow and the water balance of a trenched hillslope at the Panola Mountain Research Watershed, Georgia, USA. <i>Hydrological Processes</i> , 2007, 21, 750-769.	2.6	153
197	Integrating tracer experiments with modeling to assess runoff processes and water transit times. <i>Advances in Water Resources</i> , 2007, 30, 824-837.	3.8	158
198	Threshold relations in subsurface stormflow: 1. A 147-storm analysis of the Panola hillslope. <i>Water Resources Research</i> , 2006, 42, .	4.2	305

#	ARTICLE	IF	CITATIONS
199	Threshold relations in subsurface stormflow: 2. The fill and spill hypothesis. <i>Water Resources Research</i> , 2006, 42, .	4.2	477
200	A process-based rejectionist framework for evaluating catchment runoff model structure. <i>Water Resources Research</i> , 2006, 42, .	4.2	133
201	Using numerical modelling to evaluate the capillary fringe groundwater ridging hypothesis of streamflow generation. <i>Journal of Hydrology</i> , 2006, 316, 141-162.	5.4	65
202	Testing nutrient flushing hypotheses at the hillslope scale: A virtual experiment approach. <i>Journal of Hydrology</i> , 2006, 319, 339-356.	5.4	116
203	A virtual experiment on the effects of evaporation and intensity smoothing by canopy interception on subsurface stormflow generation. <i>Journal of Hydrology</i> , 2006, 327, 352-364.	5.4	57
204	Functional intercomparison of hillslopes and small catchments by examining water source, flowpath and mean residence time. <i>Journal of Hydrology</i> , 2006, 327, 627-642.	5.4	86
205	Response to comment by Jozsef Szilagyi on "Using numerical modelling to evaluate the capillary fringe groundwater ridging hypothesis of streamflow generation" (<i>Journal of Hydrology</i> 316 (2006) 141-162). <i>Journal of Hydrology</i> , 2006, 329, 730-732.	5.4	1
206	A review and evaluation of catchment transit time modeling. <i>Journal of Hydrology</i> , 2006, 330, 543-563.	5.4	712
207	On the interrelations between topography, soil depth, soil moisture, transpiration rates and species distribution at the hillslope scale. <i>Advances in Water Resources</i> , 2006, 29, 293-310.	3.8	312
208	HELPing FRIENDs in PUBs: charting a course for synergies within international water research programmes in gauged and ungauged basins. <i>Hydrological Processes</i> , 2006, 20, 1867-1874.	2.6	24
209	The future of applied tracers in hydrogeology. <i>Hydrogeology Journal</i> , 2005, 13, 255-258.	2.1	49
210	Isotope tracers in catchment hydrology in the humid tropics. , 2005, , 770-789.		11
211	A Review of Isotope Applications in Catchment Hydrology. , 2005, , 151-169.		45
212	Comment to "Spatial correlation of soil moisture in small catchments and its relationship to dominant spatial hydrological processes, <i>Journal of Hydrology</i> 286: 113-134". <i>Journal of Hydrology</i> , 2005, 303, 307-312.	5.4	44
213	The role of lateral pipe flow in hillslope runoff response: an intercomparison of non-linear hillslope response. <i>Journal of Hydrology</i> , 2005, 311, 117-133.	5.4	173
214	Effects of suburban development on runoff generation in the Croton River basin, New York, USA. <i>Journal of Hydrology</i> , 2005, 311, 266-281.	5.4	224
215	The role of topography on catchment-scale water residence time. <i>Water Resources Research</i> , 2005, 41, .	4.2	571
216	Wetland nitrogen dynamics in an Adirondack forested watershed. <i>Hydrological Processes</i> , 2004, 18, 1853-1870.	2.6	27

#	ARTICLE	IF	CITATIONS
217	HPToday and HPTomorrow. Hydrological Processes, 2004, 18, 2739-2741.	2.6	0
218	Role of upslope soil pore pressure on lateral subsurface storm flow dynamics. Water Resources Research, 2004, 40, .	4.2	64
219	Scale effects on headwater catchment runoff timing, flow sources, and groundwater-streamflow relations. Water Resources Research, 2004, 40, .	4.2	176
220	On the use of multiple criteria for posterior model rejection: Soft data to characterize model performance. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	17
221	A new topographic index to quantify downslope controls on local drainage. Water Resources Research, 2004, 40, .	4.2	177
222	Entiat Experimental Forest: Catchment-scale runoff data before and after a 1970 wildfire. Water Resources Research, 2004, 40, .	4.2	17
223	Constraining dynamic TOPMODEL responses for imprecise water table information using fuzzy rule based performance measures. Journal of Hydrology, 2004, 291, 254-277.	5.4	158
224	Virtual experiments: a new approach for improving process conceptualization in hillslope hydrology. Journal of Hydrology, 2004, 285, 3-18.	5.4	282
225	Runoff generation processes and modelling. , 2004, , 61-66.		0
226	Runoff generation and implications for river basin modelling special issue. Hydrological Processes, 2003, 17, 197-198.	2.6	19
227	A new tool for hillslope hydrologists: spatially distributed groundwater level and soilwater content measured using electromagnetic induction. Hydrological Processes, 2003, 17, 1965-1977.	2.6	75
228	On the relationships between catchment scale and streamwater mean residence time. Hydrological Processes, 2003, 17, 175-181.	2.6	144
229	Where does water go when it rains? Moving beyond the variable source area concept of rainfall-runoff response. Hydrological Processes, 2003, 17, 1869-1875.	2.6	304
230	The Geochemical Evolution of Riparian Ground Water in a Forested Piedmont Catchment. Ground Water, 2003, 41, 913-925.	1.3	88
231	Shallow Water Table Fluctuations in Relation to Soil Penetration Resistance. Ground Water, 2003, 41, 964-972.	1.3	17
232	IAHS Decade on Predictions in Ungauged Basins (PUB), 2003â€“2012: Shaping an exciting future for the hydrological sciences. Hydrological Sciences Journal, 2003, 48, 857-880.	2.6	982
233	Groundwater dynamics along a hillslope: A test of the steady state hypothesis. Water Resources Research, 2003, 39, .	4.2	133
234	Role of discrete landscape units in controlling catchment dissolved organic carbon dynamics. Water Resources Research, 2003, 39, .	4.2	229

#	ARTICLE	IF	CITATIONS
235	Quantifying the relative contributions of riparian and hillslope zones to catchment runoff. <i>Water Resources Research</i> , 2003, 39, .	4.2	269
236	How does rainfall become runoff? A combined tracer and runoff transfer function approach. <i>Water Resources Research</i> , 2003, 39, .	4.2	191
237	The effect of model configuration on modelled hillslopeâ€“riparian interactions. <i>Journal of Hydrology</i> , 2003, 279, 167-181.	5.4	27
238	Simple Estimation of Prevalence of Hortonian Flow in New York City Watersheds. <i>Journal of Hydrologic Engineering - ASCE</i> , 2003, 8, 214-218.	1.9	63
239	The quest for an improved dialog between modeler and experimentalist. <i>Water Science and Application</i> , 2003, , 301-315.	0.3	9
240	The role of bedrock topography on subsurface storm flow. <i>Water Resources Research</i> , 2002, 38, 5-1-5-16.	4.2	322
241	On the dialog between experimentalist and modeler in catchment hydrology: Use of soft data for multicriteria model calibration. <i>Water Resources Research</i> , 2002, 38, 23-1-23-14.	4.2	476
242	A review of the evolving perceptual model of hillslope flowpaths at the Maimai catchments, New Zealand. <i>Journal of Hydrology</i> , 2002, 257, 1-26.	5.4	216
243	Isotope variations in a Sierra Nevada snowpack and their relation to meltwater. <i>Journal of Hydrology</i> , 2002, 260, 38-57.	5.4	87
244	A field-based study of soil water and groundwater nitrate release in an Adirondack forested watershed. <i>Water Resources Research</i> , 2002, 38, 2-1-2-16.	4.2	110
245	Physical controls on septic leachate movement in the vadose zone at the hillslope scale, Putnam County, New York, USA. <i>Hydrological Processes</i> , 2002, 16, 2559-2575.	2.6	24
246	Controls on old and new water contributions to stream flow at some nested catchments in Vermont, USA. <i>Hydrological Processes</i> , 2002, 16, 589-609.	2.6	133
247	The zone of vegetation influence on baseflow revealed by diel patterns of streamflow and vegetation water use in a headwater basin. <i>Hydrological Processes</i> , 2002, 16, 1671-1677.	2.6	132
248	Estimation of baseflow residence times in watersheds from the runoff hydrograph recession: method and application in the Neversink watershed, Catskill Mountains, New York. <i>Hydrological Processes</i> , 2002, 16, 1871-1877.	2.6	55
249	A look inside ?black box? hydrograph separation models: a study at the Hydrohill catchment. <i>Hydrological Processes</i> , 2001, 15, 1877-1902.	2.6	99
250	Quantifying contributions to storm runoff through end-member mixing analysis and hydrologic measurements at the Panola Mountain Research Watershed (Georgia, USA). <i>Hydrological Processes</i> , 2001, 15, 1903-1924.	2.6	299
251	Topographic controls on the chemistry of subsurface stormflow. <i>Hydrological Processes</i> , 2001, 15, 1925-1938.	2.6	62
252	Hydrology and biogeochemistry of forested catchments. <i>Hydrological Processes</i> , 2001, 15, 1673-1674.	2.6	19

#	ARTICLE	IF	CITATIONS
253	On the future of forest hydrology and biogeochemistry. <i>Hydrological Processes</i> , 2001, 15, 2053-2055.	2.6	15
254	Effects of experimental uncertainty on the calculation of hillslope flow paths. <i>Hydrological Processes</i> , 2000, 14, 2457-2471.	2.6	42
255	Nitrogen solutes in an Adirondack forested watershed: Importance of dissolved organic nitrogen. <i>Biogeochemistry</i> , 2000, 48, 165-184.	3.5	87
256	Tracer and hydrometric study of preferential flow in large undisturbed soil cores from the Georgia Piedmont, USA. <i>Hydrological Processes</i> , 1999, 13, 139-155.	2.6	48
257	The role of event water, a rapid shallow flow component, and catchment size in summer stormflow. <i>Journal of Hydrology</i> , 1999, 217, 171-190.	5.4	254
258	A hydrometric and geochemical approach to test the transmissivity feedback hypothesis during snowmelt. <i>Journal of Hydrology</i> , 1999, 219, 188-205.	5.4	131
259	Riparian zone flowpath dynamics during snowmelt in a small headwater catchment. <i>Journal of Hydrology</i> , 1999, 222, 75-92.	5.4	129
260	Effects of a beaver pond on runoff processes: comparison of two headwater catchments. <i>Journal of Hydrology</i> , 1998, 205, 248-264.	5.4	74
261	Comment on "A deterministic empirical model of the effect of the capillary-fringe on near-stream area runoff. 1. Description of the model" by Jayatilaka, C. J. and Gillham, R. W. (<i>Journal of Hydrology</i>) Tj ETQq1 1 05784314 rg5T /Ove		
262	Base cation concentrations in subsurface flow from a forested hillslope: The role of flushing frequency. <i>Water Resources Research</i> , 1998, 34, 3535-3544.	4.2	100
263	Flow Pathways on Steep Forested Hillslopes: the Tracer, Tensiometer and Trough Approach. <i>Forestry Sciences</i> , 1998, , 463-474.	0.4	21
264	Linking the hydrologic and biogeochemical controls of nitrogen transport in near-stream zones of temperate-forested catchments: a review. <i>Journal of Hydrology</i> , 1997, 199, 88-120.	5.4	319
265	Monitoring land-surface snow conditions from SSM/I data using an artificial neural network classifier. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1997, 35, 801-809.	6.3	11
266	Hydrological processes Letters. Topographic controls on subsurface storm flow at the hillslope scale for two hydrologically distinct small catchmetns. <i>Hydrological Processes</i> , 1997, 11, 1347-1352.	2.6	125
267	New method developed for studying flow on hillslopes. <i>Eos</i> , 1996, 77, 465-472.	0.1	90
268	SNOW WETNESS ESTIMATES OF VEGETATED TERRAIN FROM SATELLITE PASSIVE MICROWAVE DATA. <i>Hydrological Processes</i> , 1996, 10, 1619-1628.	2.6	14
269	Effects of soil moisture dynamics on slope failure at Hyrum Reservoir, Utah. <i>Earth Surface Processes and Landforms</i> , 1995, 20, 243-253.	2.5	2
270	Hydrograph Separation Using Continuous Open System Isotope Mixing. <i>Water Resources Research</i> , 1995, 31, 157-171.	4.2	63

#	ARTICLE	IF	CITATIONS
271	Automated system for measuring snow surface energy balance components in mountainous terrain. <i>Hydrological Processes</i> , 1994, 8, 437-446.	2.6	5
272	Technical Notes: Electronic Versus Fluid Multiplexing in Recording Tensiometer Systems. <i>Transactions of the American Society of Agricultural Engineers</i> , 1993, 36, 459-462.	0.9	4
273	USA/USSR Issues in Environmental Hydrology. <i>Professional Geographer</i> , 1991, 43, 106-106.	1.8	0
274	Modeling Base Flow Soil Water Residence Times From Deuterium Concentrations. <i>Water Resources Research</i> , 1991, 27, 2681-2693.	4.2	197
275	Effect of Catchment-Scale Subsurface Mixing on Stream Isotopic Response. <i>Water Resources Research</i> , 1991, 27, 3065-3073.	4.2	169
276	A CASE STUDY OF SHALLOW FLOW PATHS IN A STEEP ZERO-ORDER BASIN. <i>Journal of the American Water Resources Association</i> , 1991, 27, 679-685.	2.4	53
277	The influence of macropores on debris flow initiation. <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> , 1990, 23, 325-331.	1.4	61
278	Deuterium variations in storm rainfall: Implications for stream hydrograph separation. <i>Water Resources Research</i> , 1990, 26, 455-458.	4.2	256
279	A Rationale for Old Water Discharge Through Macropores in a Steep, Humid Catchment. <i>Water Resources Research</i> , 1990, 26, 2821-2832.	4.2	539
280	Modelling the areal depletion of snowcover in a forested catchment. <i>Journal of Hydrology</i> , 1987, 90, 43-60.	5.4	38
281	Surface and subsurface water contributions during snowmelt in a small Precambrian Shield watershed, Muskoka, Ontario. <i>Atmosphere - Ocean</i> , 1987, 25, 251-266.	1.6	27
282	Gauging the ungauged basin: a top-down approach in a large semiarid watershed in China. <i>Advances in Geosciences</i> , 0, 18, 3-8.	12.0	8