

Chris Spence

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

2,183
citations

218592

26
h-index

223716

46
g-index

52
all docs

52
docs citations

52
times ranked

2067
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrology of subarctic Canadian shield: soil-filled valleys. <i>Journal of Hydrology</i> , 2003, 279, 151-166.	2.3	195
2	Eddy covariance measurements of evaporation from Great Slave Lake, Northwest Territories, Canada. <i>Water Resources Research</i> , 2000, 36, 1069-1077.	1.7	165
3	The Role of Northern Lakes in a Regional Energy Balance. <i>Journal of Hydrometeorology</i> , 2005, 6, 291-305.	0.7	141
4	On the relation between dynamic storage and runoff: A discussion on thresholds, efficiency, and function. <i>Water Resources Research</i> , 2007, 43, .	1.7	115
5	A Paradigm Shift in Hydrology: Storage Thresholds Across Scales Influence Catchment Runoff Generation. <i>Geography Compass</i> , 2010, 4, 819-833.	1.5	109
6	Storage dynamics and streamflow in a catchment with a variable contributing area. <i>Hydrological Processes</i> , 2010, 24, 2209-2221.	1.1	100
7	Storage dynamics simulations in prairie wetland hydrology models: evaluation and parameterization. <i>Hydrological Processes</i> , 2013, 27, 1875-1889.	1.1	95
8	Connectivity and runoff dynamics in heterogeneous basins. <i>Hydrological Processes</i> , 2011, 25, 3061-3075.	1.1	92
9	An Overview of Temporary Stream Hydrology in Canada. <i>Canadian Water Resources Journal</i> , 2012, 37, 279-310.	0.5	75
10	Hydrology of subarctic Canadian Shield: heterogeneous headwater basins. <i>Journal of Hydrology</i> , 2006, 317, 138-154.	2.3	72
11	Towards a unified threshold-based hydrological theory: necessary components and recurring challenges. <i>Hydrological Processes</i> , 2013, 27, 313-318.	1.1	63
12	Towards an improved land surface scheme for prairie landscapes. <i>Journal of Hydrology</i> , 2014, 511, 105-116.	2.3	59
13	Hydrological processes and streamflow in a lake dominated watercourse. <i>Hydrological Processes</i> , 2006, 20, 3665-3681.	1.1	55
14	Deployment of an unmanned aerial system to assist in mapping an intermittent stream. <i>Hydrological Processes</i> , 2016, 30, 493-500.	1.1	53
15	The Processes, Patterns and Impacts of Low Flows Across Canada. <i>Canadian Water Resources Journal</i> , 2008, 33, 107-124.	0.5	50
16	Fill-and-Spill: A Process Description of Runoff Generation at the Scale of the Beholder. <i>Water Resources Research</i> , 2021, 57, e2020WR027514.	1.7	43
17	Evidence of a change in water chemistry in Canada's subarctic associated with enhanced winter streamflow. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 113-127.	1.3	41
18	Influence of shallow groundwater-surface water interactions on the hydrological connectivity and water budget of a wetland complex. <i>Hydrological Processes</i> , 2015, 29, 3862-3877.	1.1	41

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19	Energy Budget Processes of a Small Northern Lake. <i>Journal of Hydrometeorology</i> , 2003, 4, 694-701.	0.7	40
20	On the behaviour of dynamic contributing areas and flood frequency curves in North American Prairie watersheds. <i>Journal of Hydrology</i> , 2012, 414-415, 364-373.	2.3	38
21	A six-year isotopic record of lake evaporation at a mine site in the Canadian subarctic: results and validation. <i>Hydrological Processes</i> , 1998, 12, 1779-1792.	1.1	34
22	A watershed classification approach that looks beyond hydrology: application to a semi-arid, agricultural region in Canada. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 3945-3967.	1.9	33
23	The Effect of Storage on Runoff from a Headwater Subarctic Shield Basin. <i>Arctic</i> , 2000, 53, .	0.2	32
24	Refining understanding of hydrological connectivity in a boreal catchment. <i>Hydrological Processes</i> , 2015, 29, 3491-3503.	1.1	31
25	Testing the ability of a semidistributed hydrological model to simulate contributing area. <i>Water Resources Research</i> , 2016, 52, 4399-4415.	1.7	31
26	The Tâ€œTEL Method for Assessing Water, Sediment, and Chemical Connectivity. <i>Water Resources Research</i> , 2018, 54, 634-662.	1.7	28
27	Quantifying the Impact of Hydrometric Network Reductions on Regional Streamflow Prediction in Northern Canada. <i>Canadian Water Resources Journal</i> , 2007, 32, 1-20.	0.5	24
28	Seasonal and Geographic Variation in Dissolved Carbon Biogeochemistry of Rivers Draining to the Canadian Arctic Ocean and Hudson Bay. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 3371-3386.	1.3	22
29	Fluvial CO ₂ and CH ₄ patterns across wildfireâ€œdisturbed ecozones of subarctic Canada: Current status and implications for future change. <i>Global Change Biology</i> , 2020, 26, 2304-2319.	4.2	22
30	On the changes in long-term streamflow regimes in the North American Prairies. <i>Hydrological Sciences Journal</i> , 2016, 61, 64-78.	1.2	21
31	The Energy Budget of Canadian Shield Subarctic Terrain and Its Impact on Hillslope Hydrological Processes. <i>Journal of Hydrometeorology</i> , 2002, 3, 208-218.	0.7	20
32	Shallow soil moisture â€œ ground thaw interactions and controls â€œ Part 1: Spatiotemporal patterns and correlations over a subarctic landscape. <i>Hydrology and Earth System Sciences</i> , 2010, 14, 1375-1386.	1.9	20
33	The Hydrological Functions of a Boreal Wetland. <i>Wetlands</i> , 2011, 31, 75-85.	0.7	20
34	The process of winter streamflow generation in a subarctic Precambrian Shield catchment. <i>Hydrological Processes</i> , 2014, 28, 4179-4190.	1.1	19
35	Predicting Variable Contributing Areas, Hydrological Connectivity, and Solute Transport Pathways for a Canadian Prairie Basin. <i>Water Resources Research</i> , 2020, 56, e2020WR027984.	1.7	18
36	Application of dynamic contributing area for modelling the hydrologic response of the Assiniboine River Basin to a changing climate. <i>Journal of Great Lakes Research</i> , 2021, 47, 663-676.	0.8	17

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37	Comparison of event-specific rainfall-runoff responses and their controls in contrasting geographic areas. <i>Hydrological Processes</i> , 2019, 33, 1961-1979.	1.1	16
38	Western Canadian freshwater availability: current and future vulnerabilities. <i>Environmental Reviews</i> , 2020, 28, 528-545.	2.1	15
39	Synthesis of science: findings on Canadian Prairie wetland drainage. <i>Canadian Water Resources Journal</i> , 2021, 46, 229-241.	0.5	15
40	Estimates of Canadian Arctic Archipelago runoff from observed hydrometric data. <i>Journal of Hydrology</i> , 2008, 362, 247-259.	2.3	14
41	Evaluating the Ubiquity of Thresholds in Rainfall-Runoff Response Across Contrasting Environments. <i>Water Resources Research</i> , 2021, 57, .	1.7	14
42	The Canadian Water Resource Vulnerability Index to Permafrost Thaw (CWRVI _{PT}). <i>Arctic Science</i> , 2020, 6, 437-462.	0.9	13
43	Prairie water: a global water futures project to enhance the resilience of prairie communities through sustainable water management. <i>Canadian Water Resources Journal</i> , 2019, 44, 115-126.	0.5	12
44	On the relationship between flood and contributing area. <i>Hydrological Processes</i> , 2019, 33, 1980-1992.	1.1	12
45	Hydrological resilience to forest fire in the subarctic Canadian shield. <i>Hydrological Processes</i> , 2020, 34, 4940-4958.	1.1	8
46	Hydrometeorological data from Baker Creek Research Watershed, Northwest Territories, Canada. <i>Earth System Science Data</i> , 2018, 10, 1753-1767.	3.7	8
47	An Application of the T&E Assessment Method to Evaluate Connectivity in a Lake-Dominated Watershed after Drought. <i>Journal of the American Water Resources Association</i> , 2019, 55, 318-333.	1.0	6
48	The impact of a loss of hydrologic connectivity on boreal lake thermal and evaporative regimes. <i>Limnology and Oceanography</i> , 2018, 63, 2028-2044.	1.6	5
49	Assessing hydrological sensitivity of grassland basins in the Canadian Prairies to climate using a basin classification-based virtual modelling approach. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 1801-1819.	1.9	5
50	The Baker Creek Research Watershed: Streamflow data highlighting the behaviour of an intermittent Canadian Shield stream through a wet-dry-wet cycle. <i>Hydrological Processes</i> , 2021, 35, e14038.	1.1	2