K J Devito

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6327192/publications.pdf

Version: 2024-02-01

58 papers	2,058 citations	218381 26 h-index	243296 44 g-index
64 all docs	64 docs citations	64 times ranked	1847 citing authors

#	Article	IF	Citations
1	A framework for broad-scale classification of hydrologic response units on the Boreal Plain: is topography the last thing to consider?. Hydrological Processes, 2005, 19, 1705-1714.	1.1	270
2	Controls on runoff from a partially harvested aspen-forested headwater catchment, Boreal Plain, Canada. Hydrological Processes, 2005, 19, 3-25.	1.1	112
3	Climateâ€change refugia in boreal North America: what, where, and for how long?. Frontiers in Ecology and the Environment, 2020, 18, 261-270.	1.9	91
4	Surface vegetation controls on evapotranspiration from a subâ€humid Western Boreal Plain wetland. Hydrological Processes, 2010, 24, 1072-1085.	1.1	80
5	Dynamics of evapotranspiration from a riparian pond complex in the Western Boreal Forest, Alberta, Canada. Hydrological Processes, 2007, 21, 1391-1401.	1.1	79
6	Advances in Canadian wetland hydrology, 1999-2003. Hydrological Processes, 2005, 19, 201-214.	1.1	73
7	Simulations of fully coupled lake-groundwater exchange in a subhumid climate with an integrated hydrologic model. Water Resources Research, 2007, 43, .	1.7	68
8	Hydrological controls on deep burning in a northern forested peatland. Hydrological Processes, 2015, 29, 4114-4124.	1.1	67
9	Constructing fen peatlands in post-mining oil sands landscapes: Challenges and opportunities from a hydrological perspective. Earth-Science Reviews, 2016, 161, 130-139.	4.0	63
10	Atmospheric and soil moisture controls on evapotranspiration from above and within a Western Boreal Plain aspen forest. Hydrological Processes, 2014, 28, 4449-4462.	1.1	59
11	Lateral flow thresholds for aspen forested hillslopes on the Western Boreal Plain, Alberta, Canada. Hydrological Processes, 2008, 22, 4287-4300.	1.1	58
12	Influence of subhumid climate and water table depth on groundwater recharge in shallow outwash aquifers. Water Resources Research, 2008, 44, .	1.7	53
13	Groundwater connectivity controls peat burn severity in the boreal plains. Ecohydrology, 2016, 9, 574-584.	1.1	53
14	Landscape controls on longâ€term runoff in subhumid heterogeneous Boreal Plains catchments. Hydrological Processes, 2017, 31, 2737-2751.	1.1	53
15	Precipitation variability and its relationship to hydrologic variability in Alberta. Hydrological Processes, 2009, 23, 3040-3056.	1.1	50
16	Particle densities of wetland soils in northern Alberta, Canada. Canadian Journal of Soil Science, 2006, 86, 57-60.	0.5	49
17	Sources and fate of terrestrial dissolved organic carbon in lakes of a Boreal Plains region recently affected by wildfire. Biogeosciences, 2013, 10, 6247-6265.	1.3	41
18	SAR and Lidar Temporal Data Fusion Approaches to Boreal Wetland Ecosystem Monitoring. Remote Sensing, 2019, 11, 161.	1.8	41

#	Article	IF	Citations
19	PEATâ€CLSM: A Specific Treatment of Peatland Hydrology in the NASA Catchment Land Surface Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2130-2162.	1.3	40
20	Climatic controls on groundwaterâ€"surface water interactions within the Boreal Plains of Alberta: Field observations and numerical simulations. Journal of Hydrology, 2015, 527, 734-746.	2.3	39
21	The influence of landscape characteristics on the spatial variability of river temperatures. Catena, 2019, 177, 70-83.	2.2	35
22	Potential influence of climate change on ecosystems within the Boreal Plains of Alberta. Hydrological Processes, 2017, 31, 2110-2124.	1.1	34
23	Aspect and soil textural controls on snowmelt runoff on forested Boreal Plain hillslopes. Hydrology Research, 2011, 42, 250-267.	1.1	32
24	Moving beyond bioclimatic envelope models: integrating upland forest and peatland processes to predict ecosystem transitions under climate change in the western Canadian boreal plain. Ecohydrology, 2016, 9, 899-908.	1.1	32
25	Effects of aspen harvesting on groundwater recharge and water table dynamics in a subhumid climate. Water Resources Research, 2011, 47, .	1.7	31
26	Burn severity alters peatland moss water availability: implications for postâ€fire recovery. Ecohydrology, 2016, 9, 341-353.	1.1	29
27	Mechanisms and pathways of lateral flow on aspenâ€forested, Luvisolic soils, Western Boreal Plains, Alberta, Canada. Hydrological Processes, 2010, 24, 2995-3010.	1.1	27
28	Effects of Topographic Resolution and Geologic Setting on Spatial Statistical River Temperature Models. Water Resources Research, 2020, 56, e2020WR028122.	1.7	25
29	Moss and peat hydraulic properties are optimized to maximize peatland water use efficiency. Ecohydrology, 2016, 9, 1039-1051.	1.1	24
30	Hydrogeology of brook trout (Salvelinusfontinalis) spawning and incubation habitats: implications for forestry and land use development. Canadian Journal of Forest Research, 1996, 26, 767-772.	0.8	23
31	Utikuma Region Study Area (URSA) â€" Part 1: Hydrogeological and ecohydrological studies (HEAD). Forestry Chronicle, 2016, 92, 57-61.	0.5	21
32	Low Evapotranspiration Enhances the Resilience of Peatland Carbon Stocks to Fire. Geophysical Research Letters, 2017, 44, 9341-9349.	1.5	21
33	Interactions Between Regional Climate, Surficial Geology, and Topography: Characterizing Shallow Groundwater Systems in Subhumid, Lowâ€Relief Landscapes. Water Resources Research, 2019, 55, 284-297.	1.7	21
34	Reclamation for aspen revegetation in the Athabasca oil sands: Understanding soil water dynamics through unsaturated flow modelling. Canadian Journal of Soil Science, 2012, 92, 103-116.	0.5	20
35	Relation of soil-, surface-, and ground-water distributions of inorganic nitrogen with topographic position in harvested and unharvested portions of an aspen-dominated catchment in the Boreal Plain. Canadian Journal of Forest Research, 2006, 36, 2090-2103.	0.8	19
36	Improved groundwater table and L-band brightness temperature estimates for Northern Hemisphere peatlands using new model physics and SMOS observations in a global data assimilation framework. Remote Sensing of Environment, 2020, 246, 111805.	4.6	19

#	Article	IF	Citations
37	Forestland-peatland hydrologic connectivity in water-limited environments: hydraulic gradients often oppose topography. Environmental Research Letters, 2020, 15, 034021.	2.2	18
38	Emerging forestâ€“peatland bistability and resilience of European peatland carbon stores. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
39	Severe wildfire exposes remnant peat carbon stocks to increased post-fire drying. Scientific Reports, 2019, 9, 3727.	1.6	17
40	Remote Sensing of Boreal Wetlands 1: Data Use for Policy and Management. Remote Sensing, 2020, 12, 1320.	1.8	17
41	The impact of gravel extraction on groundwater dependent wetlands and lakes in the Boreal Plains, Canada. Environmental Earth Sciences, 2012, 67, 1249-1259.	1.3	15
42	Peat depth as a control on moss water availability under evaporative stress. Hydrological Processes, 2017, 31, 4107-4121.	1.1	14
43	Regionalization of Runoff Variability of Alberta, Canada, by Wavelet, Independent Component, Empirical Orthogonal Function, and Geographical Information System Analyses. Journal of Hydrologic Engineering - ASCE, 2011, 16, 93-107.	0.8	12
44	Influence of glacial landform hydrology on phosphorus budgets of shallow lakes on the Boreal Plain, Canada. Journal of Hydrology, 2016, 535, 191-203.	2.3	11
45	Evaluating How Landform Design and Soil Covers Influence Groundwater Recharge in a Reclaimed Watershed. Water Resources Research, 2019, 55, 6464-6481.	1.7	11
46	Opportunistic wetland formation on reconstructed landforms in a sub-humid climate: influence of site and landscape-scale factors. Wetlands Ecology and Management, 2019, 27, 587-608.	0.7	10
47	Disturbance Impacts on Thermal Hot Spots and Hot Moments at the Peatlandâ€Atmosphere Interface. Geophysical Research Letters, 2018, 45, 185-193.	1.5	8
48	Characteristics of Dissolved Organic Carbon in Boreal Lakes: High Spatial and Interâ€Annual Variability Controlled by Landscape Attributes and Wetâ€Dry Periods. Water Resources Research, 2021, 57, .	1.7	8
49	Hydraulic redistribution and hydrological controls on aspen transpiration and establishment in peatlands following wildfire. Hydrological Processes, 2019, 33, 2714-2728.	1.1	7
50	Changes in geographical runoff generation in regions affected by climate and resource development: A case study of the Athabasca River. Journal of Hydrology: Regional Studies, 2022, 39, 100981.	1.0	6
51	Untangling harvestâ€streamflow responses in foothills conifer forests: Nexus of teleconnections, summerâ€dominated precipitation, and storage. Hydrological Processes, 2022, 36, .	1.1	6
52	The waterscape continuum concept: Rethinking boundaries in ecosystems. Wiley Interdisciplinary Reviews: Water, 2022, 9, .	2.8	6
53	Hydrologic impact of aspen harvesting within the subhumid Boreal Plains of Alberta. Hydrological Processes, 2018, 32, 3924-3937.	1.1	5
54	Regulation of peatland evaporation following wildfire; the complex control of soil tension under dynamic evaporation demand. Hydrological Processes, 2021, 35, e14132.	1.1	5

#	Article	IF	Citations
55	Ecological impacts of shortening fire return intervals on boreal peatlands and transition zones using integrated in situ field sampling and lidar approaches. Ecohydrology, 2022, 15, .	1.1	4
56	The influence of system heterogeneity on peat-surface temperature dynamics. Environmental Research Letters, 2021, 16, 024002.	2.2	3
57	Hummock-scale controls on groundwater recharge rates and the potential for developing local groundwater flow systems in water-limited environments. Journal of Hydrology, 2021, 603, 126894.	2.3	2
58	Landscape controls of surface-water/groundwater interactions on shallow outwash lakes: how the long-term groundwater signal overrides interannual variability due to evaporative effects. Hydrogeology Journal, 2022, 30, 251-264.	0.9	2