John Pomeroy

List of Publications by Year in descending order

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254 15,211 66 109 g-index

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#	Article	IF	CITATIONS
1	IAHS Decade on Predictions in Ungauged Basins (PUB), 2003–2012: Shaping an exciting future for the hydrological sciences. Hydrological Sciences Journal, 2003, 48, 857-880.	1.2	982
2	A decade of Predictions in Ungauged Basins (PUB)—a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	1.2	821
3	Measurements and modelling of snow interception in the boreal forest. Hydrological Processes, 1998, 12, 1611-1625.	1.1	397
4	The cold regions hydrological model: a platform for basing process representation and model structure on physical evidence. Hydrological Processes, 2007, 21, 2650-2667.	1.1	362
5	Evaluation of forest snow processes models (SnowMIP2). Journal of Geophysical Research, 2009, 114, .	3.3	290
6	The Prairie Blowing Snow Model: characteristics, validation, operation. Journal of Hydrology, 1993, 144, 165-192.	2.3	266
7	An evaluation of snow accumulation and ablation processes for land surface modelling. Hydrological Processes, 1998, 12, 2339-2367.	1.1	266
8	Coupled modelling of forest snow interception and sublimation. Hydrological Processes, 1998, 12, 2317-2337.	1.1	226
9	Saltation of snow. Water Resources Research, 1990, 26, 1583-1594.	1.7	220
10	Estimates of Threshold Wind Speeds for Snow Transport Using Meteorological Data. Journal of Applied Meteorology and Climatology, 1997, 36, 205-213.	1.7	205
11	Prediction of seasonal snow accumulation in cold climate forests. Hydrological Processes, 2002, 16, 3543-3558.	1.1	192
12	SNOWMIP2: An Evaluation of Forest Snow Process Simulations. Bulletin of the American Meteorological Society, 2009, 90, 1120-1136.	1.7	186
13	Estimating areal snowmelt infiltration into frozen soils. Hydrological Processes, 2001, 15, 3095-3111.	1.1	181
14	Application of a distributed blowing snow model to the Arctic. Hydrological Processes, 1997, 11, 1451-1464.	1.1	178
15	A distributed model of blowing snow over complex terrain. Hydrological Processes, 1999, 13, 2423-2438.	1.1	177
16	Multiple Effects of Changes in Arctic Snow Cover. Ambio, 2011, 40, 32-45.	2.8	169
17	Shrub tundra snowmelt. Hydrological Processes, 2006, 20, 923-941.	1.1	160
18	Modeling Forest Cover Influences on Snow Accumulation, Sublimation, and Melt. Journal of Hydrometeorology, 2004, 5, 785-803.	0.7	155

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19	Measurement of the physical properties of the snowpack. Reviews of Geophysics, 2015, 53, 481-544.	9.0	151
20	Prairie and arctic areal snow cover mass balance using a blowing snow model. Journal of Geophysical Research, 2000, 105, 26619-26634.	3.3	150
21	Solar radiation transmission through conifer canopies. Agricultural and Forest Meteorology, 2004, 126, 257-270.	1.9	149
22	WINTER RADIATION EXTINCTION AND REFLECTION IN A BOREAL PINE CANOPY: MEASUREMENTS AND MODELLING. , 1996 , 10 , $1591-1608$.		147
23	The impact of coniferous forest temperature on incoming longwave radiation to melting snow. Hydrological Processes, 2009, 23, 2513-2525.	1.1	146
24	Incoming longwave radiation to melting snow: observations, sensitivity and estimation in Northern environments. Hydrological Processes, 2006, 20, 3697-3708.	1.1	145
25	Turbulent fluxes during blowing snow: field tests of model sublimation predictions. Hydrological Processes, 1999, 13, 2963-2975.	1.1	142
26	The Energy Balance of the Winter Boreal Landscape. Journal of Climate, 1996, 9, 2778-2787.	1.2	141
27	An evaluation of methods for determining during-storm precipitation phase and the rain/snow transition elevation at the surface in a mountain basin. Advances in Water Resources, 2013, 55, 98-110.	1.7	136
28	A Sensitivity Study of Daytime Net Radiation during Snowmelt to Forest Canopy and Atmospheric Conditions. Journal of Hydrometeorology, 2004, 5, 774-784.	0.7	132
29	Variation in Surface Energetics during Snowmelt in a Subarctic Mountain Catchment. Journal of Hydrometeorology, 2003, 4, 702-719.	0.7	131
30	Hydrological regime changes in a Canadian Prairie basin. Hydrological Processes, 2015, 29, 3893-3904.	1.1	129
31	Vegetation and Topographic Control of Wind-Blown Snow Distributions in Distributed and Aggregated Simulations for an Arctic Tundra Basin. Journal of Hydrometeorology, 2004, 5, 735-744.	0.7	128
32	ESM-SnowMIP: assessing snow models and quantifying snow-related climate feedbacks. Geoscientific Model Development, 2018, 11, 5027-5049.	1.3	119
33	Estimating precipitation phase using a psychrometric energy balance method. Hydrological Processes, 2013, 27, 1901-1914.	1.1	118
34	On the importance of sublimation to an alpine snow mass balance in the Canadian Rocky Mountains. Hydrology and Earth System Sciences, 2010, 14, 1401-1415.	1.9	114
35	Sensitivity of snowmelt hydrology in Marmot Creek, Alberta, to forest cover disturbance. Hydrological Processes, 2012, 26, 1891-1904.	1.1	113
36	Prediction of snowmelt derived streamflow in a wetland dominated prairie basin. Hydrology and Earth System Sciences, 2010, 14, 991-1006.	1.9	111

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37	MELTWATER FLUXES AT AN ARCTIC FOREST-TUNDRA SITE. Hydrological Processes, 1996, 10, 1383-1400.	1.1	109
38	Simulation of snow accumulation and melt in needleleaf forest environments. Hydrology and Earth System Sciences, 2010, 14, 925-940.	1.9	109
39	Parameterization of Blowing-Snow Sublimation in a Macroscale Hydrology Model. Journal of Hydrometeorology, 2004, 5, 745-762.	0.7	105
40	Interâ€comparison of hydroâ€climatic regimes across northern catchments: synchronicity, resistance and resilience. Hydrological Processes, 2010, 24, 3591-3602.	1.1	103
41	Statistical modelling of the snow depth distribution in open alpine terrain. Hydrology and Earth System Sciences, 2013, 17, 3005-3021.	1.9	100
42	Flood processes in Canada: Regional and special aspects. Canadian Water Resources Journal, 2016, 41, 7-30.	0.5	97
43	The 2013 flood event in the South Saskatchewan and Elk River basins: Causes, assessment and damages. Canadian Water Resources Journal, 2016, 41, 105-117.	0.5	97
44	Memory effects of depressional storage in Northern Prairie hydrology. Hydrological Processes, 2011, 25, 3890-3898.	1.1	96
45	Modelling longwave radiation to snow beneath forest canopies using hemispherical photography or linear regression. Hydrological Processes, 2008, 22, 2788-2800.	1.1	95
46	Storage dynamics simulations in prairie wetland hydrology models: evaluation and parameterization. Hydrological Processes, 2013, 27, 1875-1889.	1.1	95
47	Sublimation of Snow from Coniferous Forests in a Climate Model. Journal of Climate, 2003, 16, 1855-1864.	1.2	94
48	Connectivity and runoff dynamics in heterogeneous basins. Hydrological Processes, 2011, 25, 3061-3075.	1.1	92
49	Multi-variable evaluation of hydrological model predictions for a headwater basin in the Canadian Rocky Mountains. Hydrology and Earth System Sciences, 2013, 17, 1635-1659.	1.9	92
50	Effect of covariance between ablation and snow water equivalent on depletion of snow-covered area in a forest. Hydrological Processes, 2000, 14, 2683-2695.	1.1	90
51	Steady-state suspension of snow. Journal of Hydrology, 1992, 136, 275-301.	2.3	89
52	Response of snow processes to climate change: spatial variability in a small basin in the Spanish Pyrenees. Hydrological Processes, 2013, 27, 2637-2650.	1.1	87
53	Accuracy of snow depth estimation in mountain and prairie environments by an unmanned aerial vehicle. Cryosphere, 2016, 10, 2559-2571.	1.5	86
54	Radiative Transfer Modeling of a Coniferous Canopy Characterized by Airborne Remote Sensing. Journal of Hydrometeorology, 2008, 9, 228-241.	0.7	85

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55	Changes in the hydrological character of rainfall on the Canadian prairies. Hydrological Processes, 2012, 26, 1752-1766.	1.1	84
56	Probability of occurrence of blowing snow. Journal of Geophysical Research, 1997, 102, 21955-21964.	3.3	80
57	Implications of spatial distributions of snow mass and melt rate for snow-cover depletion: theoretical considerations. Annals of Glaciology, 2004, 38, 261-265.	2.8	80
58	Comparing Simulated and Measured Sensible and Latent Heat Fluxes over Snow under a Pine Canopy to Improve an Energy Balance Snowmelt Model. Journal of Hydrometeorology, 2008, 9, 1506-1522.	0.7	80
59	Simulation of the snowmelt runoff contributing area in a small alpine basin. Hydrology and Earth System Sciences, 2010, 14, 1205-1219.	1.9	77
60	Modelling blowing snow redistribution to prairie wetlands. Hydrological Processes, 2009, 23, 2557-2569.	1.1	76
61	Soil water storage and active-layer development in a sub-alpine tundra hillslope, southern Yukon Territory, Canada. Permafrost and Periglacial Processes, 2005, 16, 369-382.	1.5	74
62	Drought impacts on Canadian prairie wetland snow hydrology. Hydrological Processes, 2008, 22, 2858-2873.	1.1	73
63	Effects of needleleaf forest cover on radiation and snowmelt dynamics in the Canadian Rocky Mountains. Canadian Journal of Forest Research, 2011, 41, 608-620.	0.8	73
64	Different sensitivities of snowpacks to warming in Mediterranean climate mountain areas. Environmental Research Letters, 2017, 12, 074006.	2.2	73
65	Simulating cold regions hydrological processes using a modular model in the west of China. Journal of Hydrology, 2014, 509, 13-24.	2.3	72
66	Hydrological resilience of a Canadian Rockies headwaters basin subject to changing climate, extreme weather, and forest management. Hydrological Processes, 2015, 29, 3905-3924.	1.1	72
67	Influence of landscape aggregation in modelling snow-cover ablation and snowmelt runoff in a sub-arctic mountainous environment. Hydrological Sciences Journal, 2008, 53, 725-740.	1.2	70
68	The cold rainâ€onâ€snow event of June 2013 in the Canadian Rockies â€" characteristics and diagnosis. Hydrological Processes, 2016, 30, 2899-2914.	1.1	70
69	Hydrological sensitivity of a northern mountain basin to climate change. Hydrological Processes, 2014, 28, 4191-4208.	1.1	69
70	Wetlands, Flood Control and Ecosystem Services in the Smith Creek Drainage Basin: A Case Study in Saskatchewan, Canada. Ecological Economics, 2018, 147, 36-47.	2.9	69
71	Modelling snow melt and snowcover depletion in a small alpine cirque, Canadian Rocky Mountains. Hydrological Processes, 2009, 23, 2584-2599.	1.1	67
72	Snowmelt runoff sensitivity analysis to drought on the Canadian prairies. Hydrological Processes, 2007, 21, 2594-2609.	1.1	64

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73	Estimating surface sublimation losses from snowpacks in a mountain catchment using eddy covariance and turbulent transfer calculations. Hydrological Processes, 2012, 26, 3699-3711.	1.1	64
74	Modeling increases in snowmelt yield and desynchronization resulting from forest gapâ€thinning treatments in a northern mountain headwater basin. Water Resources Research, 2013, 49, 936-949.	1.7	62
75	Variability in shortwave irradiance caused by forest gaps: Measurements, modelling, and implications for snow energetics. Agricultural and Forest Meteorology, 2015, 207, 69-82.	1.9	62
76	Advances in Canadian forest hydrology, 1995-1998. Hydrological Processes, 2000, 14, 1551-1578.	1.1	60
77	Parameterizing redistribution and sublimation of blowing snow for hydrological models: tests in a mountainous subarctic catchment. Hydrological Processes, 2009, 23, 2570-2583.	1.1	59
78	Implications of spatial distributions of snow mass and melt rate for snow-cover depletion: observations in a subarctic mountain catchment. Annals of Glaciology, 2004, 38, 195-201.	2.8	58
79	Soil moisture storage in mature and replanted sub-humid boreal forest stands. Canadian Journal of Soil Science, 1998, 78, 17-27.	0.5	56
80	Comparison of algorithms and parameterisations for infiltration into organic-covered permafrost soils. Hydrology and Earth System Sciences, 2010, 14, 729-750.	1.9	56
81	An extension of the force-restore method to estimating soil temperature at depth and evaluation for frozen soils under snow. Journal of Geophysical Research, 2002, 107, ACL 11-1.	3.3	55
82	Physically Based Mountain Hydrological Modeling Using Reanalysis Data in Patagonia. Journal of Hydrometeorology, 2015, 16, 172-193.	0.7	55
83	Bias corrections of precipitation measurements across experimental sites in different ecoclimatic regions of western Canada. Cryosphere, 2016, 10, 2347-2360.	1.5	55
84	Problems Closing the Energy Balance over a Homogeneous Snow Cover during Midwinter. Journal of Hydrometeorology, 2012, 13, 557-572.	0.7	54
85	The effect of slope aspect on the response of snowpack to climate warming in the Pyrenees. Theoretical and Applied Climatology, 2014, 117, 207-219.	1.3	53
86	The transformation of frequency distributions of winter precipitation to spring streamflow probabilities in cold regions; case studies from the Canadian Prairies. Journal of Hydrology, 2015, 521, 395-409.	2.3	53
87	Implications of mountain shading on calculating energy for snowmelt using unstructured triangular meshes. Hydrological Processes, 2012, 26, 1767-1778.	1.1	52
88	Diagnosis of the hydrology of a small Arctic basin at the tundra-taiga transition using a physically based hydrological model. Journal of Hydrology, 2017, 550, 685-703.	2.3	52
89	Influence of snowpack and melt energy heterogeneity on snow cover depletion and snowmelt runoff simulation in a cold mountain environment. Journal of Hydrology, 2017, 553, 199-213.	2.3	52
90	Improving sub-canopy snow depth mapping with unmanned aerial vehicles: lidar versus structure-from-motion techniques. Cryosphere, 2020, 14, 1919-1935.	1.5	51

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91	Estimating sub anopy shortwave irradiance to melting snow on forested slopes. Hydrological Processes, 2007, 21, 2581-2593.	1.1	50
92	An assessment of corrections for eddy covariance measured turbulent fluxes over snow in mountain environments. Water Resources Research, 2009, 45, .	1.7	50
93	Thick ice layers in snow and frozen soil affecting gas emissions from agricultural soils during winter. Journal of Geophysical Research, 2001, 106, 23061-23071.	3.3	49
94	Hydrological model uncertainty due to precipitationâ€phase partitioning methods. Hydrological Processes, 2014, 28, 4311-4327.	1.1	49
95	Bending of a conifer branch at subfreezing temperatures: implications for snow interception. Canadian Journal of Forest Research, 1990, 20, 1251-1253.	0.8	47
96	Intra-basin variability of snowmelt water balance calculations in a subarctic catchment. Hydrological Processes, 2006, 20, 1001-1016.	1.1	47
97	Snow, frozen soils and permafrost hydrology in Canada, 1995-1998. Hydrological Processes, 2000, 14, 1591-1611.	1.1	45
98	Freeze–Thaw Changes of Seasonally Frozen Ground on the Tibetan Plateau from 1960 to 2014. Journal of Climate, 2020, 33, 9427-9446.	1.2	45
99	Characteristics of the Near-Surface Boundary Layer within a Mountain Valley during Winter. Journal of Applied Meteorology and Climatology, 2012, 51, 583-597.	0.6	44
100	An assessment of two automated snow water equivalent instruments during the WMO Solid Precipitation Intercomparison Experiment. Cryosphere, 2017, 11, 101-116.	1.5	44
101	Boundary-layer integration approach to advection of sensible heat to a patchy snow cover. Hydrological Processes, 2002, 16, 3559-3569.	1.1	41
102	Impact of windflow calculations on simulations of alpine snow accumulation, redistribution and ablation. Hydrological Processes, 2015, 29, 3983-3999.	1.1	41
103	A Process-Based Model of Snow Drifting. Annals of Glaciology, 1989, 13, 237-240.	2.8	40
104	Impact of climate warming on snow processes in Ny-Ãlesund, a polar maritime site at Svalbard. Global and Planetary Change, 2016, 146, 10-21.	1.6	40
105	Temporal Variation in Snowcover Area During Melt in Prairie and Alpine Environments. Hydrology Research, 1993, 24, 183-198.	1.1	40
106	Multiple-scale modelling of forest snow sublimation: initial findings. Hydrological Processes, 2000, 14, 2669-2681.	1.1	39
107	Wind-Blown Snow: Sublimation, Transport and Changes to Polar Snow. , 1996, , 453-489.		39
108	Spatial and temporal variations in snowmelt runoff chemistry, Northwest Territories, Canada. Water Resources Research, 1999, 35, 1559-1567.	1.7	38

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109	Spatial Variability of Shortwave Irradiance for Snowmelt in Forests. Journal of Hydrometeorology, 2008, 9, 1482-1490.	0.7	38
110	Snowpack sensitivity to perturbed climate in a cool mid″atitude mountain catchment. Hydrological Processes, 2015, 29, 3925-3940.	1.1	38
111	Scientific and Human Errors in a Snow Model Intercomparison. Bulletin of the American Meteorological Society, 2021, 102, E61-E79.	1.7	38
112	A blowing snow particle detector. Cold Regions Science and Technology, 1989, 16, 167-174.	1.6	37
113	Boundary-layer growth and advection of heat over snow and soil patches: modelling and parameterization. Hydrological Processes, 2006, 20, 953-967.	1.1	37
114	Measurements and modelling of snowmelt and turbulent heat fluxes over shrub tundra. Hydrology and Earth System Sciences, 2010, 14, 1331-1340.	1.9	37
115	Regionalisation of land surface hydrological model parameters in subarctic and arctic environments. Physics and Chemistry of the Earth, 2008, 33, 1081-1089.	1.2	36
116	Modelled sensitivity of the snow regime to topography, shrub fraction and shrub height. Hydrology and Earth System Sciences, 2014, 18, 2375-2392.	1.9	35
117	Impact of antecedent conditions on simulations of a flood in a mountain headwater basin. Hydrological Processes, 2016, 30, 2754-2772.	1.1	35
118	Boundary-layer growth over snow and soil patches: field observations. Hydrological Processes, 2006, 20, 943-951.	1.1	34
119	CO2 in Arctic snow cover: landscape form, in-pack gas concentration gradients, and the implications for the estimation of gaseous fluxes. Hydrological Processes, 1999, 13, 2977-2989.	1.1	33
120	Evaluation of three evaporation estimation methods in a Canadian prairie landscape. Hydrological Processes, 2008, 22, 2801-2815.	1.1	33
121	Localâ€Scale Advection of Sensible and Latent Heat During Snowmelt. Geophysical Research Letters, 2017, 44, 9769-9777.	1.5	33
122	Globally scalable alpine snow metrics. Remote Sensing of Environment, 2018, 213, 61-72.	4.6	33
123	Are the effects of vegetation and soil changes as important as climate change impacts on hydrological processes?. Hydrology and Earth System Sciences, 2019, 23, 4933-4954.	1.9	33
124	Transformations of runoff chemistry in the Arctic tundra, Northwest Territories, Canada. Hydrological Processes, 2006, 20, 2901-2919.	1.1	32
125	Estimation of Needleleaf Canopy and Trunk Temperatures and Longwave Contribution to Melting Snow. Journal of Hydrometeorology, 2017, 18, 555-572.	0.7	32
126	Water and energy fluxes over northern prairies as affected by chinook winds and winter precipitation. Agricultural and Forest Meteorology, 2018, 248, 372-385.	1.9	32

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127	Snow breezes in the boreal forest. Journal of Geophysical Research, 1998, 103, 23087-23101.	3.3	31
128	A shrub bending model to calculate the albedo of shrub-tundra. Hydrological Processes, 2014, 28, 341-351.	1.1	31
129	Modelling capillary hysteresis effects on preferential flow through melting and cold layered snowpacks. Advances in Water Resources, 2017, 107, 250-264.	1.7	31
130	Decoupling of warming mountain snowpacks from hydrological regimes. Environmental Research Letters, 2020, 15, 114006.	2.2	31
131	Effects of Spatial Aggregation of Initial Conditions and Forcing Data on Modeling Snowmelt Using a Land Surface Scheme. Journal of Hydrometeorology, 2008, 9, 789-803.	0.7	30
132	Hydrological responses to climatic variability in a cold agricultural region. Hydrological Processes, 2017, 31, 854-870.	1.1	30
133	Spatial Snow Depth Assessment Using LiDAR Transect Samples and Public GIS Data Layers in the Elbow River Watershed, Alberta. Canadian Water Resources Journal, 2012, 37, 69-87.	0.5	29
134	A Finite Volume Blowing Snow Model for Use With Variable Resolution Meshes. Water Resources Research, 2020, 56, e2019WR025307.	1.7	29
135	Multi-scale snowdrift-permitting modelling of mountain snowpack. Cryosphere, 2021, 15, 743-769.	1.5	29
136	Snowcover Accumulation, Relocation and Management. Arctic and Alpine Research, 1998, 30, 314.	1.3	28
137	A modelling framework to simulate fieldâ€scale nitrate response and transport during snowmelt: The WINTRA model. Hydrological Processes, 2017, 31, 4250-4268.	1.1	28
138	The Canadian Hydrological Model (CHM) v1.0: a multi-scale, multi-extent, variable-complexity hydrological model â€" design and overview. Geoscientific Model Development, 2020, 13, 225-247.	1.3	28
139	Assessment of Extremes in Global Precipitation Products: How Reliable Are They?. Journal of Hydrometeorology, 2020, 21, 2855-2873.	0.7	28
140	Determining snow water equivalent by acoustic sounding. Hydrological Processes, 2007, 21, 2623-2640.	1.1	27
141	lon enrichment of snowmelt runoff water caused by basal ice formation. Hydrological Processes, 2008, 22, 2758-2766.	1.1	27
142	Solar Radiation Transfer Through a Subarctic Shrub Canopy. Arctic, Antarctic, and Alpine Research, 2007, 39, 365-374.	0.4	26
143	Variability in evaporation across the Canadian Prairie region during drought and non-drought periods. Journal of Hydrology, 2015, 521, 182-195.	2.3	26
144	Changes to flood peaks of a mountain river: implications for analysis of the 2013 flood in the Upper Bow River, Canada. Hydrological Processes, 2016, 30, 4657-4673.	1.1	26

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145	Assessing the factors governing the ability to predict late-spring flooding in cold-region mountain basins. Hydrology and Earth System Sciences, 2020, 24, 2141-2165.	1.9	26
146	Synthesis of incoming shortwave radiation for hydrological simulation. Hydrology Research, 2011, 42, 433-446.	1.1	25
147	Research network to track alpine water. Nature, 2015, 521, 32-32.	13.7	25
148	Diagnosis of future changes in hydrology for a Canadian Rockies headwater basin. Hydrology and Earth System Sciences, 2020, 24, 2731-2754.	1.9	25
149	Quantifying the effects of Prairie depressional storage complexes on drainage basin connectivity. Journal of Hydrology, 2021, 593, 125846.	2.3	25
150	Transformations of snow chemistry in the boreal forest: accumulation and volatilization. , 1999, 13, 2257-2273.		24
151	Sensitivity of model parameterizations for simulated latent heat flux at the snow surface for complex mountain sites. Hydrological Processes, 2014, 28, 868-881.	1.1	24
152	Simulating cold-region hydrology in an intensively drained agricultural watershed in Manitoba, Canada, using the Cold Regions Hydrological Model. Hydrology and Earth System Sciences, 2017, 21, 3483-3506.	1.9	24
153	Estimating Evaporation in a Prairie Landscape under Drought Conditions. Canadian Water Resources Journal, 2010, 35, 173-186.	0.5	23
154	A radiative–conductive–convective approach to calculate thaw season ground surface temperatures for modelling frost table dynamics. Hydrological Processes, 2015, 29, 3954-3965.	1,1	23
155	The June 2013 Alberta Catastrophic Flooding Event: Part 1â€"Climatological aspects and hydrometeorological features. Hydrological Processes, 2016, 30, 4899-4916.	1.1	23
156	Impact of Future Climate and Vegetation on the Hydrology of an Arctic Headwater Basin at the Tundra–Taiga Transition. Journal of Hydrometeorology, 2019, 20, 197-215.	0.7	23
157	Sensible heat flux and local advection over a heterogeneous landscape at an Arctic tundra site during snowmelt. Annals of Glaciology, 1997, 25, 132-136.	2.8	22
158	Relocation of Major Ions in Snow along the Tundra-Taiga Ecotone. Hydrology Research, 1993, 24, 151-168.	1,1	22
159	High-resolution meteorological forcing data for hydrological modelling and climate change impact analysis in the Mackenzie River Basin. Earth System Science Data, 2020, 12, 629-645.	3.7	22
160	Automated Determination of Snow Water Equivalent by Acoustic Reflectometry. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3161-3167.	2.7	21
161	Reconstructing sixty year (1950-2009) daily soil moisture over the Canadian Prairies using the Variable Infiltration Capacity model. Canadian Water Resources Journal, 2011, 36, 83-102.	0.5	21
162	Recent changes to the hydrological cycle of an Arctic basin at the tundra–taiga transition. Hydrology and Earth System Sciences, 2018, 22, 3993-4014.	1.9	21

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163	Hydrological Responses of Headwater Basins to Monthly Perturbed Climate in the North American Cordillera. Journal of Hydrometeorology, 2019, 20, 863-882.	0.7	21
164	Optical Properties of Blowing Snow. Journal of Glaciology, 1988, 34, 3-10.	1.1	20
165	Near-surface snow particle dynamics from particle tracking velocimetry and turbulence measurements during alpine blowingÂsnowÂstorms. Cryosphere, 2016, 10, 3043-3062.	1.5	20
166	Challenges in Modeling Turbulent Heat Fluxes to Snowpacks in Forest Clearings. Journal of Hydrometeorology, 2018, 19, 1599-1616.	0.7	20
167	Summary and synthesis of Changing Cold Regions Network (CCRN) research in the interior of western Canada $\hat{a} \in \text{``Part}\hat{A}2$: Future change in cryosphere, vegetation, and hydrology. Hydrology and Earth System Sciences, 2021, 25, 1849-1882.	1.9	20
168	Effects of shelterbelts on snow distribution and sublimation. Agroforestry Systems, 2012, 86, 335-344.	0.9	19
169	Changes in the frequency of global high mountain rain-on-snow events due to climate warming. Environmental Research Letters, 2021, 16, 094021.	2.2	19
170	Diagnosing changes in glacier hydrology from physical principles using a hydrological model with snow redistribution, sublimation, firnification and energy balance ablation algorithms. Journal of Hydrology, 2022, 608, 127545.	2.3	19
171	Multi-objective unstructured triangular mesh generation for use in hydrological and land surface models. Computers and Geosciences, 2018, 119, 49-67.	2.0	18
172	Predicting Variable Contributing Areas, Hydrological Connectivity, and Solute Transport Pathways for a Canadian Prairie Basin. Water Resources Research, 2020, 56, e2020WR027984.	1.7	18
173	A long-term hydrometeorological dataset (1993–2014) of a northern mountain basin: Wolf Creek Research Basin, Yukon Territory, Canada. Earth System Science Data, 2019, 11, 89-100.	3.7	18
174	A triple-moment blowing snow-atmospheric model and its application in computing the seasonal wintertime snow mass budget. Hydrology and Earth System Sciences, 2010, 14, 1063-1079.	1.9	17
175	Description of current and future snow processes in a small basin in the Bavarian Alps. Environmental Earth Sciences, $2016, 75, 1$.	1.3	17
176	Evaluation of SNODAS Snow Water Equivalent in Western Canada and Assimilation Into a Cold Region Hydrological Model. Water Resources Research, 2019, 55, 11166-11187.	1.7	17
177	Modelling nutrient dynamics in cold agricultural catchments: A review. Environmental Modelling and Software, 2020, 124, 104586.	1.9	17
178	Snowmelt Processes and Runoff at the Arctic Treeline: Ten Years of MAGS Research., 2008, , 97-123.		17
179	Progress in Canadian Snow and Frozen Ground Hydrology, 2003-2007. Canadian Water Resources Journal, 2009, 34, 127-138.	0.5	16
180	SAS2: the system for acoustic sensing of snow. Hydrological Processes, 2015, 29, 4032-4050.	1.1	16

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