Donald Burn

List of Publications by Year
in descending order

115 papers	7,447 citations	57758 44 h-index	56724 83 g-index
115 all docs	115 docs citations	115 times ranked	5339 citing authors

#	Article	IF	Citations
1	Technical guidelines for future intensity–duration–frequency curve estimation in Canada. Canadian Water Resources Journal, 2021, 46, 87-104.	1.2	4
2	Trend Detection in the Presence of Positive and Negative Serial Correlation: A Comparison of Block Maxima and Peaks‐Over‐threshold Data. Water Resources Research, 2021, 57, e2020WR028886.	4.2	5
3	A temporal downscaling approach for sub-daily gridded extreme rainfall intensity estimation under climate change. Journal of Hydrology: Regional Studies, 2021, 35, 100811.	2.4	10
4	Identification of a preferred statistical distribution for at-site flood frequency analysis in Canada. Canadian Water Resources Journal, 2020, 45, 43-58.	1.2	16
5	Estimates of gridded relative changes in 24-h extreme rainfall intensities based on pooled frequency analysis. Journal of Hydrology, 2019, 577, 123940.	5.4	9
6	Comparison of Estimation Methods for a Nonstationary Index‐Flood Model in Flood Frequency Analysis Using Peaks Over Threshold. Water Resources Research, 2019, 55, 9398-9416.	4.2	10
7	Automatic feature selection and weighting for the formation of homogeneous groups for regional IDF estimation. Journal of Hydrology, 2019, 575, 292-307.	5.4	4
8	Pooled frequency analysis for intensity–duration–frequency curve estimation. Hydrological Processes, 2019, 33, 2080-2094.	2.6	14
9	Pooled flood frequency analysis: a comparison based on peaks-over-threshold and annual maximum series. Hydrological Sciences Journal, 2019, 64, 121-136.	2.6	22
10	Analysis of trends in annual streamflow to the Arctic Ocean. Hydrological Processes, 2019, 33, 1143-1151.	2.6	32
11	A nationwide regional flood frequency analysis at ungauged sites using ROI/GLS with copulas and super regions. Journal of Hydrology, 2018, 567, 191-202.	5.4	18
12	Changes in flood events inferred from centennial length streamflow data records. Advances in Water Resources, 2018, 121, 333-349.	3.8	31
13	Comparison of automatic procedures for selecting flood peaks over threshold based on goodness‐of‐fit tests. Hydrological Processes, 2018, 32, 2874-2887.	2.6	26
14	Delineation of precipitation regions using location and atmospheric variables in two Canadian climate regions: the role of attribute selection. Hydrological Sciences Journal, 2017, 62, 191-204.	2.6	9
15	Advances in projection of climate change impacts using supervised nonlinear dimensionality reduction techniques. Climate Dynamics, 2017, 48, 1329-1351.	3.8	14
16	Changes in cold region flood regimes inferred from long‐record reference gauging stations. Water Resources Research, 2017, 53, 2643-2658.	4.2	34
17	Delineation of precipitation regions in two Canadian study areas: the role of the temporal resolution of the precipitation data. Hydrological Sciences Journal, 2017, 62, 2061-2071.	2.6	1
18	Climate-driven variability in the occurrence of major floods across North America and Europe. Journal of Hydrology, 2017, 552, 704-717.	5.4	122

#	Article	IF	Citations
19	Identification of changes in floods and flood regimes in Canada using a peaks over threshold approach. Hydrological Processes, 2016, 30, 3303-3314.	2.6	44
20	Time‐varying nonstationary multivariate risk analysis using a dynamic Bayesian copula. Water Resources Research, 2016, 52, 2327-2349.	4.2	94
21	Water resources climate change projections using supervised nonlinear and multivariate soft computing techniques. Journal of Hydrology, 2016, 536, 119-132.	5.4	36
22	Changes of extreme drought and flood events in Iran. Global and Planetary Change, 2016, 144, 67-81.	3.5	111
23	Changes in floods and flood regimes in Canada. Canadian Water Resources Journal, 2016, 41, 139-150.	1.2	85
24	A framework for regional estimation of intensity–duration–frequency (IDF) curves. Hydrological Processes, 2014, 28, 4209-4218.	2.6	25
25	A new selection metric for multiobjective hydrologic model calibration. Water Resources Research, 2014, 50, 7082-7099.	4.2	36
26	A spatiotemporal analysis of hydrological trends and variability in the Athabasca River region, Canada. Journal of Hydrology, 2014, 509, 333-342.	5.4	60
27	A nonstationary index-flood technique for estimating extreme quantiles for annual maximum streamflow. Journal of Hydrology, 2014, 519, 2040-2048.	5.4	55
28	Estimates of changes in design rainfall values for Canada. Hydrological Processes, 2013, 27, 1590-1599.	2.6	34
29	Generation of Daily and Hourly Weather Variables for use in Climate Change Vulnerability Assessment. Water Resources Management, 2013, 27, 1533-1550.	3.9	11
30	Analysis of changes in the Great Lakes hydro-climatic variables. Journal of Great Lakes Research, 2013, 39, 383-394.	1.9	8
31	A Canadian viewpoint on data, information and uncertainty in the context of prediction in ungauged basins. Hydrology Research, 2013, 44, 419-429.	2.7	4
32	A review of the Prediction in Ungauged Basins (PUB) decade in Canada. Canadian Water Resources Journal, 2013, 38, 253-262.	1.2	11
33	Discussion of "Comparison of Multivariate Regression and Artificial Neural Networks for Peak Urban Water-Demand Forecasting: Evaluation of Different ANN Learning Algorithms" by Jan Adamowski and Christina Karapataki. Journal of Hydrologic Engineering - ASCE, 2012, 17, 833-834.	1.9	4
34	Statistical downscaling of temperatures under climate change scenarios for Thames river basin, Canada. International Journal of Global Warming, 2012, 4, 13.	0.5	10
35	The use of a genetic algorithm-based search strategy in geostatistics: application to a set of anisotropic piezometric head data. Computers and Geosciences, 2012, 41, 136-146.	4.2	22
36	Reference hydrologic networks I. The status and potential future directions of national reference hydrologic networks for detecting trends. Hydrological Sciences Journal, 2012, 57, 1562-1579.	2.6	67

#	Article	IF	Citations
37	Reference hydrologic networks II. Using reference hydrologic networks to assess climate-driven changes in streamflow. Hydrological Sciences Journal, 2012, 57, 1580-1593.	2.6	43
38	Evaluation of machine learning tools as a statistical downscaling tool: temperatures projections for multi-stations for Thames River Basin, Canada. Theoretical and Applied Climatology, 2012, 108, 519-534.	2.8	26
39	Numerical assessment of metamodelling strategies in computationally intensive optimization. Environmental Modelling and Software, 2012, 34, 67-86.	4.5	113
40	Risk assessment of a water supply system under climate variability: a stochastic approach. Canadian Journal of Civil Engineering, 2011, 38, 252-262.	1.3	9
41	A Fuzzy C-Means approach for regionalization using a bivariate homogeneity and discordancy approach. Journal of Hydrology, 2011, 401, 231-239.	5.4	65
42	Trends and Variability in Extreme Rainfall Events in British Columbia. Canadian Water Resources Journal, 2011, 36, 67-82.	1.2	39
43	Detection of trends in hydrological extremes for Canadian watersheds. Hydrological Processes, 2010, 24, 1781-1790.	2.6	140
44	Probabilistic design of a riverine early warning source water monitoring systemA paper submitted to the Journal of Environmental Engineering and Science.. Canadian Journal of Civil Engineering, 2009, 36, 1095-1106.	1.3	1
45	Homogeneity testing: How homogeneous do heterogeneous cross-correlated regions seem?. Journal of Hydrology, 2008, 360, 67-76.	5.4	68
46	Climatic influences on streamflow timing in the headwaters of the Mackenzie River Basin. Journal of Hydrology, 2008, 352, 225-238.	5.4	164
47	Identification and quantification of streamflow trends on the Canadian Prairies. Hydrological Sciences Journal, 2008, 53, 538-549.	2.6	39
48	The Processes, Patterns and Impacts of Low Flows Across Canada. Canadian Water Resources Journal, 2008, 33, 107-124.	1.2	50
49	Improved K-Nearest Neighbor Weather Generating Model. Journal of Hydrologic Engineering - ASCE, 2007, 12, 42-51.	1.9	80
50	Trends in evaporation for the Canadian Prairies. Journal of Hydrology, 2007, 336, 61-73.	5.4	203
51	Long-lead probabilistic forecasting of streamflow using ocean-atmospheric and hydrological predictors. Water Resources Research, 2006, 42, .	4.2	41
52	Switching the pooling similarity distances: Mahalanobis for Euclidean. Water Resources Research, 2006, 42, .	4.2	44
53	Site-focused nonparametric test of regional homogeneity based on flood regime. Journal of Hydrology, 2006, 318, 301-315.	5.4	14
54	Trends and variability in the hydrological regime of the Mackenzie River Basin. Journal of Hydrology, 2006, 319, 282-294.	5.4	270

#	Article	IF	Citations
55	Simulating climate change scenarios using an improved K-nearest neighbor model. Journal of Hydrology, 2006, 325, 179-196.	5.4	97
56	Reply to the discussion by Markiewicz et al.. Journal of Hydrology, 2006, 331, 367-368.	5.4	0
57	A Comparison of Trends in Potential and Pan Evaporation for the Canadian Prairies. Canadian Water Resources Journal, 2006, 31, 173-184.	1.2	9
58	Spatial and Temporal Variability of Canadian Seasonal Streamflows. Journal of Climate, 2005, 18, 191-210.	3.2	55
59	Use of tree ring reconstructed streamflows to assess drought. Canadian Journal of Civil Engineering, 2005, 32, 1114-1123.	1.3	9
60	Hydrological trends and variability in the Liard River basin / Tendances hydrologiques et variabilité dans le basin de la rivière Liard. Hydrological Sciences Journal, 2004, 49, 53-67.	2.6	193
61	Wind quantile estimation using a pooled frequency analysis approach. Journal of Wind Engineering and Industrial Aerodynamics, 2004, 92, 509-528.	3.9	20
62	Linkages between Regional Trends in Monthly Maximum Flows and Selected Climatic Variables. Journal of Hydrologic Engineering - ASCE, 2004, 9, 246-256.	1.9	73
63	Wavelet analysis of variability in annual Canadian streamflows. Water Resources Research, 2004, 40, .	4.2	189
64	Artificial neural network ensembles and their application in pooled flood frequency analysis. Water Resources Research, 2004, 40, .	4.2	153
65	Homogeneous pooling group delineation for flood frequency analysis using a fuzzy expert system with genetic enhancement. Journal of Hydrology, 2004, 291, 132-149.	5.4	39
66	Non-stationary pooled flood frequency analysis. Journal of Hydrology, 2003, 276, 210-223.	5.4	143
67	The use of resampling for estimating confidence intervals for single site and pooled frequency analysis / Utilisation d'un rééchantillonnage pour l'estimation des intervalles de confiance lors d'analyses fréquentielles mono et multi-site. Hydrological Sciences Journal, 2003, 48, 25-38.	2.6	42
68	Spatial patterns of homogeneous pooling groups for flood frequency analysis. Hydrological Sciences Journal, 2003, 48, 601-618.	2.6	15
69	The use of flood regime information in regional flood frequency analysis. Hydrological Sciences Journal, 2002, 47, 77-92.	2.6	49
70	Local and Regional Trends in Monthly Maximum Flows in Southern British Columbia. Canadian Water Resources Journal, 2002, 27, 191-212.	1.2	43
71	A comparison of index flood estimation procedures for ungauged catchments. Canadian Journal of Civil Engineering, 2002, 29, 734-741.	1.3	48
72	Detection of hydrologic trends and variability. Journal of Hydrology, 2002, 255, 107-122.	5.4	922

#	Article	IF	Citations
73	Analysis of the linkage between rain and flood regime and its application to regional flood frequency estimation. Journal of Hydrology, 2002, 261, 115-131.	5.4	64
74	Waste-Load Allocation Using Genetic Algorithms. Journal of Water Resources Planning and Management - ASCE, 2001, 127, 121-129.	2.6	100
75	Assessing the effectiveness of hydrological similarity measures for flood frequency analysis. Journal of Hydrology, 2001, 241, 270-285.	5.4	181
76	The formation of groups for regional flood frequency analysis. Hydrological Sciences Journal, 2000, 45, 97-112.	2.6	120
77	Short term streamflow forecasting using artificial neural networks. Journal of Hydrology, 1999, 214, 32-48.	5.4	415
78	Perceptions of flood risk: A case study of the Red River Flood of 1997. Water Resources Research, 1999, 35, 3451-3458.	4.2	82
79	Hydrological information for sustainable development. Hydrological Sciences Journal, 1997, 42, 481-492.	2.6	14
80	Regionalization of Catchments for Regional Flood Frequency Analysis. Journal of Hydrologic Engineering - ASCE, 1997, 2, 76-82.	1.9	56
81	Catchment similarity for regional flood frequency analysis using seasonality measures. Journal of Hydrology, 1997, 202, 212-230.	5.4	244
82	Climate change effects on the hydrologic regime within the Churchill-Nelson River Basin. Journal of Hydrology, 1997, 202, 263-279.	5.4	151
83	Spatial characterization of drought events using synthetic hydrology. Canadian Journal of Civil Engineering, 1996, 23, 1231-1240.	1.3	7
84	Sensitivity of reservoir operation performance to climatic change. Water Resources Management, 1996, 10, 463-478.	3.9	30
85	Regional Flood Frequency with Hierarchical Region of Influence. Journal of Water Resources Planning and Management - ASCE, 1996, 122, 245-252.	2.6	42
86	GENERATING ROBUST SOLUTIONS: A WATER QUALITY MANAGEMENT EXAMPLE. Civil Engineering and Environmental Systems, 1995, 12, 273-286.	0.2	0
87	Hydrologic effects of climatic change in west-central Canada. Journal of Hydrology, 1994, 160, 53-70.	5.4	231
88	An entropy approach to data collection network design. Journal of Hydrology, 1994, 157, 307-324.	5.4	130
89	Flood frequency analysis for ungauged sites using a region of influence approach. Journal of Hydrology, 1994, 153, 1-21.	5.4	134
90	Synchronicity in global flood responses. Journal of Hydrology, 1993, 144, 381-404.	5.4	20

#	ARTICLE	IF	CITATIONS
91	Estimation of hydrological parameters at ungauged catchments. Journal of Hydrology, 1993, 143, 429-454.	5.4	133
92	RESERVOIR OPERATING POLICIES CONSIDERING RELEASE CHANGE. Civil Engineering and Environmental Systems, 1993, 10, 77-86.	0.2	7
93	Interactive Computer Graphics for Expertâ€System Verification. Journal of Water Resources Planning and Management - ASCE, 1993, 119, 518-530.	2.6	6
94	Reservoir Management and Thermal Power Generation. Journal of Water Resources Planning and Management - ASCE, 1992, 118, 388-405.	2.6	11
95	Development of a framework for the selection of a reservoir operating policy. Canadian Journal of Civil Engineering, 1992, 19, 865-874.	1.3	7
96	Application of Kriging to surface water level estimation. Canadian Journal of Civil Engineering, 1992, 19, 181-185.	1.3	1
97	Risk-based parameter selection for short-term reservoir operation. Journal of Hydrology, 1992, 131, 269-291.	5.4	33
98	An approach to the rationalization of streamflow data collection networks. Journal of Hydrology, 1991, 122, 71-91.	5.4	34
99	Systems Theory for the civil engineer Experience with knowledge acquisition for an engineering expert system. Civil Engineering and Environmental Systems, 1991, 8, 13-18.	0.2	2
100	Risk-based performance criteria for real-time reservoir operation. Canadian Journal of Civil Engineering, 1991, 18, 36-42.	1.3	29
101	Realâ€Time Sampling Strategies for Estimating Nutrient Loadings. Journal of Water Resources Planning and Management - ASCE, 1990, 116, 727-741.	2.6	6
102	An appraisal of the â€œregion of influenceâ€•approach to flood frequency analysis. Hydrological Sciences Journal, 1990, 35, 149-165.	2.6	144
103	Evaluation of regional flood frequency analysis with a region of influence approach. Water Resources Research, 1990, 26, 2257-2266.	4.2	79
104	A STAGE DISTRIBUTION APPROACH TO ESTIMATING ICE RELATED FLOODING PROBABILITIES. Journal of the American Water Resources Association, 1989, 25, 953-960.	2.4	1
105	A COMPARISON OF STREAMFLOW GENERATION MODELS FOR RESERVOIR CAPACITY-YIELD ANALYSIS. Journal of the American Water Resources Association, 1989, 25, 977-983.	2.4	11
106	Cluster Analysis as Applied to Regional Flood Frequency. Journal of Water Resources Planning and Management - ASCE, 1989, 115, 567-582.	2.6	107
107	An improved methodology for shortâ€term operation of a single multipurpose reservoir. Water Resources Research, 1989, 25, 1-8.	4.2	51
108	A simulationâ€"optimization algorithm for reservoir capacity calculation: the effect of inflow data set length. Canadian Journal of Civil Engineering, 1989, 16, 477-482.	1.3	2

#	Article	IF	Citations
109	Delineation of groups for regional flood frequency analysis. Journal of Hydrology, 1988, 104, 345-361.	5.4	42
110	River flow forecasting for multiple time periods. Canadian Journal of Civil Engineering, 1988, 15, 58-65.	1.3	1
111	Modeling Coliform Bacteria Subject to Chlorination. Journal of Environmental Engineering, ASCE, 1987, 113, 585-594.	1.4	2
112	Nonlinear optimization modeling of coliform bacteria. Water, Air, and Soil Pollution, 1987, 32, 183.	2.4	2
113	Application of nonlinear optimization to water quality. Applied Mathematical Modelling, 1987, 11, 438-446.	4.2	9
114	Linear stochastic optimization applied to biochemical oxygen demand â€" dissolved oxygen modelling. Canadian Journal of Civil Engineering, 1986, 13, 249-254.	1.3	11
115	Optimization Modeling of Water Quality in an Uncertain Environment. Water Resources Research, 1985, 21, 934-940.	4.2	89