

Amin A Elshorbagy

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5143699/amin-a-elshorbagy-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

84
papers

2,289
citations

31
h-index

45
g-index

95
ext. papers

2,627
ext. citations

3.7
avg, IF

5.25
L-index

#	Paper	IF	Citations
84	Experimental investigation of the predictive capabilities of data driven modeling techniques in hydrology - Part 1: Concepts and methodology. <i>Hydrology and Earth System Sciences</i> , 2010 , 14, 1931-1947	5.5	138
83	Estimation of missing streamflow data using principles of chaos theory. <i>Journal of Hydrology</i> , 2002 , 255, 123-133	6	122
82	Experimental investigation of the predictive capabilities of data driven modeling techniques in hydrology - Part 2: Application. <i>Hydrology and Earth System Sciences</i> , 2010 , 14, 1943-1961	5.5	105
81	Modelling the dynamics of the evapotranspiration process using genetic programming. <i>Hydrological Sciences Journal</i> , 2007 , 52, 563-578	3.5	102
80	HESS Opinions: Incubating deep-learning-powered hydrologic science advances as a community. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 5639-5656	5.5	95
79	On the relevance of using artificial neural networks for estimating soil moisture content. <i>Journal of Hydrology</i> , 2008 , 362, 1-18	6	83
78	Performance Evaluation of Artificial Neural Networks for Runoff Prediction. <i>Journal of Hydrologic Engineering - ASCE</i> , 2000 , 5, 424-427	1.8	66
77	A stochastic reconstruction framework for analysis of water resource system vulnerability to climate-induced changes in river flow regime. <i>Water Resources Research</i> , 2013 , 49, 291-305	5.4	63
76	System dynamics approach to assess the sustainability of reclamation of disturbed watersheds. <i>Canadian Journal of Civil Engineering</i> , 2005 , 32, 144-158	1.3	63
75	Managing water in complex systems: An integrated water resources model for Saskatchewan, Canada. <i>Environmental Modelling and Software</i> , 2014 , 58, 12-26	5.2	62
74	Noise reduction in chaotic hydrologic time series: facts and doubts. <i>Journal of Hydrology</i> , 2002 , 256, 147-165	6.5	59
73	Infiltration and drainage processes in multi-layered coarse soils. <i>Canadian Journal of Soil Science</i> , 2011 , 91, 169-183	1.4	55
72	The Use of Object-Oriented Modeling for Water Resources Planning in Egypt. <i>Water Resources Management</i> , 1997 , 11, 243-261	3.7	53
71	Toward understanding nonstationarity in climate and hydrology through tree ring proxy records. <i>Water Resources Research</i> , 2015 , 51, 1813-1830	5.4	51
70	Prediction of hourly actual evapotranspiration using neural networks, genetic programming, and statistical models. <i>Hydrological Processes</i> , 2010 , 24, 3413-3425	3.3	49
69	Quantification of the climate change-induced variations in IntensityDurationFrequency curves in the Canadian Prairies. <i>Journal of Hydrology</i> , 2015 , 527, 990-1005	6	45
68	Object-oriented modeling approach to surface water quality management. <i>Environmental Modelling and Software</i> , 2006 , 21, 689-698	5.2	45

67	Quantile-Based Downscaling of Precipitation Using Genetic Programming: Application to IDF Curves in Saskatoon. <i>Journal of Hydrologic Engineering - ASCE</i> , 2014 , 19, 943-955	1.8	44
66	Estimating Saturated Hydraulic Conductivity Using Genetic Programming. <i>Soil Science Society of America Journal</i> , 2007 , 71, 1676-1684	2.5	43
65	Towards a time and cost effective approach to water quality index class prediction. <i>Journal of Hydrology</i> , 2019 , 575, 148-165	6	42
64	Group-based estimation of missing hydrological data: I. Approach and general methodology. <i>Hydrological Sciences Journal</i> , 2000 , 45, 849-866	3.5	40
63	Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences. <i>Hydrological Sciences Journal</i> , 2016 , 61, 2803-2817	3.5	40
62	Cluster-Based Hydrologic Prediction Using Genetic Algorithm-Trained Neural Networks. <i>Journal of Hydrologic Engineering - ASCE</i> , 2007 , 12, 52-62	1.8	38
61	Estimating Saturated Hydraulic Conductivity In Spatially Variable Fields Using Neural Network Ensembles. <i>Soil Science Society of America Journal</i> , 2006 , 70, 1851-1859	2.5	38
60	Application of copula modelling to the performance assessment of reconstructed watersheds. <i>Stochastic Environmental Research and Risk Assessment</i> , 2012 , 26, 189-205	3.5	37
59	Data-driven modelling approaches for socio-hydrology: opportunities and challenges within the Panta Rhei Science Plan. <i>Hydrological Sciences Journal</i> , 2016 , 1-17	3.5	37
58	National water, food, and trade modeling framework: The case of Egypt. <i>Science of the Total Environment</i> , 2018 , 639, 485-496	10.2	35
57	Simulation of the hydrological processes on reconstructed watersheds using system dynamics. <i>Hydrological Sciences Journal</i> , 2007 , 52, 538-562	3.5	33
56	Water availability and forest growth in coarse-textured soils. <i>Canadian Journal of Soil Science</i> , 2011 , 91, 199-210	1.4	32
55	Toward improving the reliability of hydrologic prediction: Model structure uncertainty and its quantification using ensemble-based genetic programming framework. <i>Water Resources Research</i> , 2008 , 44,	5.4	32
54	A generic system dynamics model for simulating and evaluating the hydrological performance of reconstructed watersheds. <i>Hydrology and Earth System Sciences</i> , 2009 , 13, 865-881	5.5	31
53	Comparison of three data-driven techniques in modelling the evapotranspiration process. <i>Journal of Hydroinformatics</i> , 2010 , 12, 365-379	2.6	29
52	Hybrid modelling approach to prairie hydrology: fusing data-driven and process-based hydrological models. <i>Hydrological Sciences Journal</i> , 2015 , 60, 1473-1489	3.5	28
51	Investigating the capabilities of evolutionary data-driven techniques using the challenging estimation of soil moisture content. <i>Journal of Hydroinformatics</i> , 2009 , 11, 237-251	2.6	26
50	Probabilistic Approach for Design and Hydrologic Performance Assessment of Reconstructed Watersheds. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2007 , 133, 1110-1118	3.4	25

49	Integrating Supply Uncertainties from Stochastic Modeling into Integrated Water Resource Management: Case Study of the Saskatchewan River Basin. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016 , 142, 05015006	2.8	24
48	Spiking modular neural networks: A neural network modeling approach for hydrological processes. <i>Water Resources Research</i> , 2006 , 42,	5.4	24
47	Analysis of cross-correlated chaotic streamflows. <i>Hydrological Sciences Journal</i> , 2001 , 46, 781-793	3.5	23
46	Total maximum daily load (TMDL) approach to surface water quality management: concepts, issues, and applications. <i>Canadian Journal of Civil Engineering</i> , 2005 , 32, 442-448	1.3	21
45	Trade-offs and synergies in the water-energy-food nexus: The case of Saskatchewan, Canada. <i>Resources, Conservation and Recycling</i> , 2021 , 164, 105192	11.9	21
44	A risk-based framework for water resource management under changing water availability, policy options, and irrigation expansion. <i>Advances in Water Resources</i> , 2016 , 94, 291-306	4.7	20
43	The impact of soil moisture availability on forest growth indices for variably layered coarse-textured soils. <i>Ecohydrology</i> , 2013 , 6, 214-227	2.5	20
42	Topography- and nightlight-based national flood risk assessment in Canada. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 2219-2232	5.5	16
41	System dynamics modeling of infiltration and drainage in layered coarse soil. <i>Canadian Journal of Soil Science</i> , 2011 , 91, 185-197	1.4	16
40	The ecohydrological vulnerability of a large inland delta to changing regional streamflows and upstream irrigation expansion. <i>Ecohydrology</i> , 2017 , 10, e1824	2.5	14
39	Multicriterion decision analysis approach to assess the utility of watershed modeling for management decisions. <i>Water Resources Research</i> , 2006 , 42,	5.4	13
38	Fuzzy set based error measure for hydrologic model evaluation. <i>Journal of Hydroinformatics</i> , 2005 , 7, 199-208	2.6	13
37	Group-based estimation of missing hydrological data: II. Application to streamflows. <i>Hydrological Sciences Journal</i> , 2000 , 45, 867-880	3.5	12
36	Impacts of climate change on soil moisture and evapotranspiration in reconstructed watersheds in northern Alberta, Canada. <i>Hydrological Processes</i> , 2012 , 26, 1321-1331	3.3	11
35	Time scale effect and uncertainty in reconstruction of paleo-hydrology. <i>Hydrological Processes</i> , 2016 , 30, 1985-1999	3.3	11
34	Risk-based quantification of the impact of climate change on storm water infrastructure. <i>Water Science</i> , 2018 , 32, 102-114	1.9	10
33	Effects of Variably Layered Coarse Textured Soils on Plant Available Water and Forest Productivity. <i>Procedia Environmental Sciences</i> , 2013 , 19, 148-157		10
32	Correlation and causation in tree-ring-based reconstruction of paleohydrology in cold semiarid regions. <i>Water Resources Research</i> , 2016 , 52, 7053-7069	5.4	9

31	The Impact of Climate Change on the Water Balance of Oil Sands Reclamation Covers and Natural Soil Profiles. <i>Journal of Hydrometeorology</i> , 2018 , 19, 1731-1752	3-7	9
30	Revisiting flood peak distributions: A pan-Canadian investigation. <i>Advances in Water Resources</i> , 2020 , 145, 103720	4-7	8
29	Flood mapping under uncertainty: a case study in the Canadian prairies. <i>Natural Hazards</i> , 2018 , 94, 537-560	5-6	7
28	Utilizing North American Regional Reanalysis for modeling soil moisture and evapotranspiration in reconstructed watersheds. <i>Physics and Chemistry of the Earth</i> , 2011 , 36, 31-41	3	7
27	Experimental investigation of the predictive capabilities of data driven modeling techniques in hydrology [Part 2: Application]		7
26	Streamflow Data Infilling Techniques Based on Concepts of Groups and Neural Networks. <i>Water Science and Technology Library</i> , 2000 , 235-258	0-3	7
25	Wavelet networks: an alternative to classical neural networks		6
24	Meta-analysis based predictions of flood insurance and flood vulnerability patterns in Calgary, Alberta. <i>Applied Geography</i> , 2018 , 96, 41-50	4-4	6
23	Toward Simple Modeling Practices in the Complex Canadian Prairie Watersheds. <i>Journal of Hydrologic Engineering - ASCE</i> , 2020 , 25, 04020024	1-8	5
22	A novel model for storage dynamics simulation and inundation mapping in the prairies. <i>Environmental Modelling and Software</i> , 2020 , 133, 104850	5-2	5
21	Understanding human adaptation to drought: agent-based agricultural water demand modeling in the Bow River Basin, Canada. <i>Hydrological Sciences Journal</i> , 2021 , 66, 389-407	3-5	5
20	Assessment of pathogen pollution in watersheds using object-oriented modeling and probabilistic analysis. <i>Journal of Hydroinformatics</i> , 2006 , 8, 51-63	2-6	4
19	Long-Term Performance of a Reclamation Cover: The Evolution of Hydraulic Properties and Hydrologic Response 2006 , 813		4
18	Noise Reduction Approach in Chaotic Hydrologic Time Series Revisited. <i>Canadian Water Resources Journal</i> , 2001 , 26, 537-550	1-7	4
17	ACPAR: A framework for linking national water and food security management with global conditions. <i>Advances in Water Resources</i> , 2021 , 147, 103809	4-7	4
16	Methodology for pH Total Maximum Daily Loads: Application to Beech Creek Watershed. <i>Journal of Environmental Engineering, ASCE</i> , 2004 , 130, 167-174	2	3
15	Framework for Assessment of Relative Pollutant Loads in Streams with Limited Data. <i>Water International</i> , 2005 , 30, 477-486	2-4	3
14	Experimental investigation of the predictive capabilities of data driven modeling techniques in hydrology [Part 1: Concepts and methodology]		3

13	Toward Bridging the Gap Between Data-Driven and Mechanistic Models: Cluster-Based Neural Networks for Hydrologic Processes. <i>Water Science and Technology Library</i> , 2009 , 389-403	0.3	3
12	Peering into agricultural rebound phenomenon using a global sensitivity analysis approach. <i>Journal of Hydrology</i> , 2021 , 602, 126739	6	3
11	Improving the representation of the non-contributing area dynamics in land surface models for better simulation of prairie hydrology. <i>Journal of Hydrology</i> , 2021 , 600, 126562	6	2
10	Advances in modelling large river basins in cold regions with Modélisation Environnementale Communautaire Surface and Hydrology (MESH), the Canadian hydrological land surface scheme. <i>Hydrological Processes</i> , 2022 , 36,	3.3	2
9	Data Driven Techniques and Wavelet Analysis for the Modeling and Analysis of Actual Evapotranspiration 2013 ,		1
8	The Sask formula to estimate glomerular filtration rate in renal transplant patients. <i>Nephron Clinical Practice</i> , 2011 , 117, c135-50		1
7	Comparative probabilistic assessment of the hydrological performance of reconstructed and natural watersheds. <i>Hydrological Processes</i> , 2010 , 24, n/a-n/a	3.3	1
6	A generic system dynamics model for simulating and evaluating the hydrological performance of reconstructed watersheds		1
5	Dynamics of water-energy-food nexus interactions with climate change and policy options. <i>Environmental Research Communications</i> , 2022 , 4, 015009	3.1	0
4	A new error statistic for performance evaluation of models in hydrology. <i>Developments in Water Science</i> , 2002 , 47, 787-794		
3	Changes in social vulnerability to flooding: a quasi-experimental analysis. <i>Natural Hazards</i> , 2022 , 111, 2487	3	
2	Multi-criterion decision making approach to assess the performance of reconstructed watersheds 2007 , 257-269		
1	Deterministic and probabilistic approaches to the development of pH total maximum daily loads: a comparative analysis. <i>Journal of Hydroinformatics</i> , 2007 , 9, 203-213	2.6	