Omid Rahmati

List of Publications by Citations

76 papers	4,341 citations	37 h-index	65 g-index
79 ext. papers	5,668 ext. citations	5.3 avg, IF	6.4 L-index

#	Paper	IF	Citations
76	Application of GIS-based data driven random forest and maximum entropy models for groundwater potential mapping: A case study at Mehran Region, Iran. *Catena*, **2016**, 137, 360-372	5.8	293
75	Application of analytical hierarchy process, frequency ratio, and certainty factor models for groundwater potential mapping using GIS. *Earth Science Informatics*, **2015**, 8, 867-883	2.5	258
74	Groundwater potential mapping at Kurdistan region of Iran using analytic hierarchy process and GIS. *Arabian Journal of Geosciences*, **2015**, 8, 7059-7071	1.8	256
73	Flood susceptibility mapping using frequency ratio and weights-of-evidence models in the Golastan Province, Iran. *Geocarto International*, **2016**, 31, 42-70	2.7	228
72	Prediction of the landslide susceptibility: Which algorithm, which precision?. *Catena*, **2018**, 162, 177-192	5.8	223
71	Urban flood risk mapping using the GARP and QUEST models: A comparative study of machine learning techniques. *Journal of Hydrology*, **2019**, 569, 142-154	6	174
70	Flood hazard zoning in Yasooj region, Iran, using GIS and multi-criteria decision analysis. *Geomatics, Natural Hazards and Risk*, **2016**, 7, 1000-1017	3.6	173
69	A novel machine learning-based approach for the risk assessment of nitrate groundwater contamination. *Science of the Total Environment*, **2018**, 644, 954-962	10.2	152
68	River suspended sediment modelling using the CART model: A comparative study of machine learning techniques. *Science of the Total Environment*, **2018**, 615, 272-281	10.2	142
67	Gully erosion susceptibility mapping: the role of GIS-based bivariate statistical models and their comparison. *Natural Hazards*, **2016**, 82, 1231-1258	3	135
66	Evaluation of different machine learning models for predicting and mapping the susceptibility of gully erosion. *Geomorphology*, **2017**, 298, 118-137	4.3	125
65	Evaluating the influence of geo-environmental factors on gully erosion in a semi-arid region of Iran: An integrated framework. *Science of the Total Environment*, **2017**, 579, 913-927	10.2	115
64	Spatial analysis of groundwater potential using weights-of-evidence and evidential belief function models and remote sensing. *Arabian Journal of Geosciences*, **2016**, 9, 1	1.8	104
63	Modelling gully-erosion susceptibility in a semi-arid region, Iran: Investigation of applicability of certainty factor and maximum entropy models. *Science of the Total Environment*, **2019**, 655, 684-696	10.2	103
62	Identification of Critical Flood Prone Areas in Data-Scarce and Ungauged Regions: A Comparison of Three Data Mining Models. *Water Resources Management*, **2017**, 31, 1473-1487	3.7	101
61	Flood Detection and Susceptibility Mapping Using Sentinel-1 Remote Sensing Data and a Machine Learning Approach: Hybrid Intelligence of Bagging Ensemble Based on K-Nearest Neighbor Classifier. *Remote Sensing*, **2020**, 12, 266	5	96
60	Groundwater spring potential modelling: Comprising the capability and robustness of three different modeling approaches. *Journal of Hydrology*, **2018**, 565, 248-261	6	96

59	Spatial prediction of flood-susceptible areas using frequency ratio and maximum entropy models. *Geocarto International*, **2018**, 33, 927-941	2.7	91
58	Predicting uncertainty of machine learning models for modelling nitrate pollution of groundwater using quantile regression and UNEEC methods. *Science of the Total Environment*, **2019**, 688, 855-866	10.2	89
57	Forecasting flood-prone areas using Shannon's entropy model. *Journal of Earth System Science*, **2017**, 126, 1	1.8	76
56	Application of Dempster-Shafer theory, spatial analysis and remote sensing for groundwater potentiality and nitrate pollution analysis in the semi-arid region of Khuzestan, Iran. *Science of the Total Environment*, **2016**, 568, 1110-1123	10.2	67
55	Assessment of the Contribution of N-Fertilizers to Nitrate Pollution of Groundwater in Western Iran (Case Study: Ghorveh-Dehgelan Aquifer). *Water Quality, Exposure, and Health*, **2015**, 7, 143-151		66
54	PMT: New analytical framework for automated evaluation of geo-environmental modelling approaches. *Science of the Total Environment*, **2019**, 664, 296-311	10.2	60
53	Land subsidence modelling using tree-based machine learning algorithms. *Science of the Total Environment*, **2019**, 672, 239-252	10.2	58
52	Machine learning approaches for spatial modeling of agricultural droughts in the south-east region of Queensland Australia. *Science of the Total Environment*, **2020**, 699, 134230	10.2	55
51	Flood susceptibility mapping with machine learning, multi-criteria decision analysis and ensemble using Dempster Shafer Theory. *Journal of Hydrology*, **2020**, 590, 125275	6	54
50	Applicability of generalized additive model in groundwater potential modelling and comparison its performance by bivariate statistical methods. *Geocarto International*, **2017**, 32, 1069-1089	2.7	48
49	The effect of sample size on different machine learning models for groundwater potential mapping in mountain bedrock aquifers. *Catena*, **2020**, 187, 104421	5.8	44
48	Land subsidence hazard modeling: Machine learning to identify predictors and the role of human activities. *Journal of Environmental Management*, **2019**, 236, 466-480	7.9	43
47	Assessing the Accuracy of GIS-Based Analytical Hierarchy Process for Watershed Prioritization; Gorganrood River Basin, Iran. *Water Resources Management*, **2016**, 30, 1131-1150	3.7	43
46	Evaluation of watershed health using Fuzzy-ANP approach considering geo-environmental and topo-hydrological criteria. *Journal of Environmental Management*, **2019**, 232, 22-36	7.9	41
45	Development of an automated GIS tool for reproducing the HAND terrain model. *Environmental Modelling and Software*, **2018**, 102, 1-12	5.2	40
44	Delineation of groundwater potential zones using remote sensing and GIS-based data-driven models. *Geocarto International*, **2016**, 1-21	2.7	40
43	Multi-Temporal Analysis of Forest Fire Probability Using Socio-Economic and Environmental Variables. *Remote Sensing*, **2019**, 11, 86	5	39
42	Landslide susceptibility assessment using three bivariate models considering the new topo-hydrological factor: HAND. *Geocarto International*, **2018**, 33, 1155-1185	2.7	39

41	SWPT: An automated GIS-based tool for prioritization of sub-watersheds based on morphometric and topo-hydrological factors. *Geoscience Frontiers*, **2019**, 10, 2167-2175	6	38
40	Multi-Hazard Exposure Mapping Using Machine Learning Techniques: A Case Study from Iran. *Remote Sensing*, **2019**, 11, 1943	5	37
39	How can statistical and artificial intelligence approaches predict piping erosion susceptibility?. *Science of the Total Environment*, **2019**, 646, 1554-1566	10.2	35
38	Artificial Neural Networks for Flood Susceptibility Mapping in Data-Scarce Urban Areas **2019**, 323-336		34
37	Development of novel hybridized models for urban flood susceptibility mapping. *Scientific Reports*, **2020**, 10, 12937	4.9	32
36	Mapping of Groundwater Spring Potential in Karst Aquifer System Using Novel Ensemble Bivariate and Multivariate Models. *Water (Switzerland)*, **2020**, 12, 985	3	30
35	Hybridized neural fuzzy ensembles for dust source modeling and prediction. *Atmospheric Environment*, **2020**, 224, 117320	5.3	28
34	Spatial Modeling of Snow Avalanche Using Machine Learning Models and Geo-Environmental Factors: Comparison of Effectiveness in Two Mountain Regions. *Remote Sensing*, **2019**, 11, 2995	5	27
33	Use of a maximum entropy model to identify the key factors that influence groundwater availability on the Gonabad Plain, Iran. *Environmental Earth Sciences*, **2018**, 77, 1	2.9	25
32	Land degradation risk mapping using topographic, human-induced, and geo-environmental variables and machine learning algorithms, for the Pole-Doab watershed, Iran. *Environmental Earth Sciences*, **2021**, 80, 1	2.9	23
31	Urban Flood Hazard Modeling Using Self-Organizing Map Neural Network. *Water (Switzerland)*, **2019**, 11, 2370	3	23
30	GIS-Based Site Selection for Check Dams in Watersheds: Considering Geomorphometric and Topo-Hydrological Factors. *Sustainability*, **2019**, 11, 5639	3.6	22
29	Deep learning neural networks for spatially explicit prediction of flash flood probability. *Geoscience Frontiers*, **2021**, 12, 101076	6	22
28	A Modeling Comparison of Groundwater Potential Mapping in a Mountain Bedrock Aquifer: QUEST, GARP, and RF Models. *Water (Switzerland)*, **2020**, 12, 679	3	20
27	Capability and robustness of novel hybridized models used for drought hazard modeling in southeast Queensland, Australia. *Science of the Total Environment*, **2020**, 718, 134656	10.2	18
26	Application of Fuzzy Analytical Network Process Model for Analyzing the Gully Erosion Susceptibility. *Advances in Natural and Technological Hazards Research*, **2019**, 105-125	1.8	17
25	Toward the development of deep-learning analyses for snow avalanche releases in Mountain regions. *Geocarto International*,1-25	2.7	16
24	Urban flood modeling using deep-learning approaches in Seoul, South Korea. *Journal of Hydrology*, **2021**, 601, 126684	6	16

23	An Automated Python Language-Based Tool for Creating Absence Samples in Groundwater Potential Mapping. *Remote Sensing*, **2019**, 11, 1375	5	15
22	Identifying sources of dust aerosol using a new framework based on remote sensing and modelling. *Science of the Total Environment*, **2020**, 737, 139508	10.2	15
21	Regional Groundwater Potential Analysis Using Classification and Regression Trees **2019**, 485-498		13
20	Debris flows modeling using geo-environmental factors: developing hybridized deep-learning algorithms. *Geocarto International*,1-25	2.7	9
19	RiMARS: An automated river morphodynamics analysis method based on remote sensing multispectral datasets. *Science of the Total Environment*, **2020**, 719, 137336	10.2	8
18	Development of a novel hybrid multi-boosting neural network model for spatial prediction of urban flood. *Geocarto International*,1-27	2.7	6
17	Application of the group method of data handling (GMDH) approach for landslide susceptibility zonation using readily available spatial covariates. *Catena*, **2022**, 208, 105779	5.8	5
16	Swarm intelligence optimization of the group method of data handling using the cuckoo search and whale optimization algorithms to model and predict landslides. *Applied Soft Computing Journal*, **2022**, 116, 108254	7.5	4
15	Fog-water harvesting Capability Index (FCI) mapping for a semi-humid catchment based on socio-environmental variables and using artificial intelligence algorithms. *Science of the Total Environment*, **2020**, 708, 135115	10.2	4
14	Assessing the susceptibility of schools to flood events in Iran. *Scientific Reports*, **2020**, 10, 18114	4.9	4
13	A hybridized model based on neural network and swarm intelligence-grey wolf algorithm for spatial prediction of urban flood-inundation. *Journal of Hydrology*, **2021**, 603, 126854	6	4
12	TET: An automated tool for evaluating suitable check-dam sites based on sediment trapping efficiency. *Journal of Cleaner Production*, **2020**, 266, 122051	10.3	3
11	Contribution of physical and anthropogenic factors to gully erosion initiation. *Catena*, **2022**, 210, 105925	5.8	3
10	Assessment of the Contribution of Geo-environmental Factors to Flood Inundation in a Semi-arid Region of SW Iran: Comparison of Different Advanced Modeling Approaches. *Advances in Natural and Technological Hazards Research*, **2019**, 59-78	1.8	3
9	Assessment of Gini-, entropy- and ratio-based classification trees for groundwater potential modelling and prediction. *Geocarto International*, **2021**, 1-20	2.7	3
8	Groundwater potential mapping using hybridization of simulated annealing and random forest **2021**, 391-403		3
7	Effects of drought on vegetative cover changes: Investigating spatiotemporal patterns **2019**, 213-222		2
6	Scrutinizing Relationships between Submarine Groundwater Discharge and Upstream Areas Using Thermal Remote Sensing: A Case Study in the Northern Persian Gulf. *Remote Sensing*, **2021**, 13, 358	5	2

5	Spatial Prediction of Landslide Susceptibility Using Random Forest Algorithm. *Springer Transactions in Civil and Environmental Engineering*, **2021**, 281-292	0.4	1
4	Geomorphological change detection of an urban meander loop caused by an extreme flood using remote sensing and bathymetry measurements (a case study of Karoon River, Iran). *Journal of Hydrology*, **2021**, 597, 125712	6	1
3	Assessing morphological changes in a human-impacted alluvial system using hydro-sediment modeling and remote sensing. *International Journal of Sediment Research*, **2021**, 36, 439-448	3	1
2	Spatial Modeling of Soil Erosion Susceptibility with Support Vector Machine. *Springer Transactions in Civil and Environmental Engineering*, **2021**, 267-280	0.4	
1	Flood susceptibility mapping in ungauged watersheds using a statistical model **2021**, 381-389		