Rabin Chakrabortty

List of Publications by Year
in descending order

68 papers	2,810 citations	136885 32 h-index	206029 48 g-index
72 all docs	72 docs citations	72 times ranked	1000 citing authors

#	Article	IF	Citations
1	Modeling groundwater potential zones of Puruliya district, West Bengal, India using remote sensing and GIS techniques. , 2019, 3, 223-237.		153
2	Flood susceptibility mapping by ensemble evidential belief function and binomial logistic regression model on river basin of eastern India. Advances in Space Research, 2020, 65, 1466-1489.	1.2	151
3	Flash Flood Susceptibility Modeling Using New Approaches of Hybrid and Ensemble Tree-Based Machine Learning Algorithms. Remote Sensing, 2020, 12, 3568.	1.8	118
4	Threats of climate and land use change on future flood susceptibility. Journal of Cleaner Production, 2020, 272, 122757.	4.6	115
5	Novel Ensemble Approach of Deep Learning Neural Network (DLNN) Model and Particle Swarm Optimization (PSO) Algorithm for Prediction of Gully Erosion Susceptibility. Sensors, 2020, 20, 5609.	2.1	106
6	Flood Susceptibility Assessment Using Novel Ensemble of Hyperpipes and Support Vector Regression Algorithms. Water (Switzerland), 2021, 13, 241.	1.2	100
7	Simulating the impact of climate change on soil erosion in sub-tropical monsoon dominated watershed based on RUSLE, SCS runoff and MIROC5 climatic model. Advances in Space Research, 2019, 64, 352-377.	1.2	98
8	Evaluation of different boosting ensemble machine learning models and novel deep learning and boosting framework for head-cut gully erosion susceptibility. Journal of Environmental Management, 2021, 284, 112015.	3.8	80
9	Soil erosion potential hotspot zone identification using machine learning and statistical approaches in eastern India. Natural Hazards, 2020, 104, 1259-1294.	1.6	76
10	Modeling and mapping of groundwater potentiality zones using AHP and GIS technique: a case study of Raniganj Block, Paschim Bardhaman, West Bengal. Modeling Earth Systems and Environment, 2018, 4, 1085-1110.	1.9	73
11	Changing climate and land use of 21st century influences soil erosion in India. Gondwana Research, 2021, 94, 164-185.	3.0	66
12	A novel hybrid of meta-optimization approach for flash flood-susceptibility assessment in a monsoon-dominated watershed, Eastern India. Environmental Earth Sciences, 2022, 81, 1.	1.3	64
13	Modelling multi-hazard threats to cultural heritage sites and environmental sustainability: The present and future scenarios. Journal of Cleaner Production, 2021, 320, 128713.	4.6	62
14	Decision tree based ensemble machine learning approaches for landslide susceptibility mapping. Geocarto International, 2022, 37, 4594-4627.	1.7	60
15	Ensemble approach to develop landslide susceptibility map in landslide dominated Sikkim Himalayan region, India. Environmental Earth Sciences, 2020, 79, 1.	1.3	59
16	Ensemble of Machine-Learning Methods for Predicting Gully Erosion Susceptibility. Remote Sensing, 2020, 12, 3675.	1.8	59
17	Trend of extreme rainfall events using suitable Global Circulation Model to combat the water logging condition in Kolkata Metropolitan Area. Urban Climate, 2020, 32, 100599.	2.4	57
18	Optimization modelling to establish false measures implemented with ex-situ plant species to control gully erosion in a monsoon-dominated region with novel in-situ measurements. Journal of Environmental Management, 2021, 287, 112284.	3.8	57

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19	Implementation of Artificial Intelligence Based Ensemble Models for Gully Erosion Susceptibility Assessment. Remote Sensing, 2020, 12, 3620.	1.8	56
20	Assessing the Importance of Static and Dynamic Causative Factors on Erosion Potentiality Using SWAT, EBF with Uncertainty and Plausibility, Logistic Regression and Novel Ensemble Model in a Sub-tropical Environment. Journal of the Indian Society of Remote Sensing, 2020, 48, 765-789.	1.2	56
21	Novel Machine Learning Approaches for Modelling the Gully Erosion Susceptibility. Remote Sensing, 2020, 12, 2833.	1.8	52
22	Modeling of water induced surface soil erosion and the potential risk zone prediction in a sub-tropical watershed of Eastern India. Modeling Earth Systems and Environment, 2019, 5, 369-393.	1.9	50
23	Torrential rainfall-induced landslide susceptibility assessment using machine learning and statistical methods of eastern Himalaya. Natural Hazards, 2021, 107, 697-722.	1.6	49
24	Significant decrease of lightning activities during COVID-19 lockdown period over Kolkata megacity in India. Science of the Total Environment, 2020, 747, 141321.	3.9	47
25	Threats of climate change and land use patterns enhance the susceptibility of future floods in India. Journal of Environmental Management, 2022, 305, 114317.	3.8	44
26	Rainfall induced landslide susceptibility mapping using novel hybrid soft computing methods based on multi-layer perceptron neural network classifier. Geocarto International, 2022, 37, 2747-2771.	1.7	43
27	Application of forest canopy density model for forest cover mapping using LISS-IV satellite data: a case study of Sali watershed, West Bengal. Modeling Earth Systems and Environment, 2018, 4, 853-865.	1.9	42
28	The use of RUSLE and GCMs to predict potential soil erosion associated with climate change in a monsoon-dominated region of eastern India. Arabian Journal of Geosciences, 2020, 13, 1.	0.6	42
29	Comparison of multi-criteria and artificial intelligence models for land-subsidence susceptibility zonation. Journal of Environmental Management, 2021, 284, 112067.	3.8	39
30	Flash-flood hazard susceptibility mapping in Kangsabati River Basin, India. Geocarto International, 2022, 37, 6713-6735.	1.7	38
31	Prediction of highly flood prone areas by GIS based heuristic and statistical model in a monsoon dominated region of Bengal Basin. Remote Sensing Applications: Society and Environment, 2020, 19, 100343.	0.8	36
32	Evaluation of different DEMs for gully erosion susceptibility mapping using in-situ field measurement and validation. Ecological Informatics, 2021, 65, 101425.	2.3	36
33	Improvement in ambient-air-quality reduced temperature during the COVID-19 lockdown period in India. Environment, Development and Sustainability, 2021, 23, 9581-9608.	2.7	35
34	Novel Ensemble of Multivariate Adaptive Regression Spline with Spatial Logistic Regression and Boosted Regression Tree for Gully Erosion Susceptibility. Remote Sensing, 2020, 12, 3284.	1.8	33
35	Spatial prediction of landslide susceptibility using projected storm rainfall and land use in Himalayan region. Bulletin of Engineering Geology and the Environment, 2021, 80, 5237-5258.	1.6	32
36	Development of Different Machine Learning Ensemble Classifier for Gully Erosion Susceptibility in Gandheswari Watershed of West Bengal, India. Algorithms for Intelligent Systems, 2020, , 1-26.	0.5	27

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37	Climate and land use change induced future flood susceptibility assessment in a sub-tropical region of India. Soft Computing, 2021, 25, 5925-5949.	2.1	27
38	A coupled novel framework for assessing vulnerability of water resources using hydrochemical analysis and data-driven models. Journal of Cleaner Production, 2022, 336, 130407.	4.6	26
39	Threats of unplanned movement of migrant workers for sudden spurt of COVID-19 pandemic in India. Cities, 2021, 109, 103035.	2.7	24
40	GIS-based statistical model for the prediction of flood hazard susceptibility. Environment, Development and Sustainability, 2021, 23, 16713-16743.	2.7	24
41	Living with floods through geospatial approach: a case study of Arambag C.D. Block of Hugli District, West Bengal, India. SN Applied Sciences, 2019, 1, 1.	1.5	22
42	Chemical weathering and gully erosion causing land degradation in a complex river basin of Eastern India: an integrated field, analytical and artificial intelligence approach. Natural Hazards, 2022, 110, 847-879.	1.6	22
43	Impact of Climate Change on Future Flood Susceptibility: an Evaluation Based on Deep Learning Algorithms and GCM Model. Water Resources Management, 2021, 35, 4251-4274.	1.9	22
44	COVID-19 strict lockdown impact on urban air quality and atmospheric temperature in four megacities of India. Geoscience Frontiers, 2022, 13, 101368.	4.3	22
45	Drought risk assessment: integrating meteorological, hydrological, agricultural and socio-economic factors using ensemble models and geospatial techniques. Geocarto International, 2022, 37, 6087-6115.	1.7	21
46	Predicting landslide susceptibility based on decision tree machine learning models under climate and land use changes. Geocarto International, 2022, 37, 7881-7907.	1.7	21
47	Gully erosion and climate induced chemical weathering for vulnerability assessment in sub-tropical environment. Geomorphology, 2022, 398, 108027.	1.1	19
48	Land degradation risk dynamics assessment in red and lateritic zones of eastern plateau, India: A combine approach of K-fold CV, data mining and field validation. Ecological Informatics, 2022, 69, 101653.	2.3	19
49	Have any effect of COVID-19 lockdown on environmental sustainability? A study from most polluted metropolitan area of India. Stochastic Environmental Research and Risk Assessment, 2022, 36, 283-295.	1.9	18
50	Intra-annual variations of vegetation status in a sub-tropical deciduous forest-dominated area using geospatial approach: a case study of Sali watershed, Bankura, West Bengal, India. , 2020, 4, 257-268.		17
51	Flood susceptibility mapping in Brahmaputra floodplain of Bangladesh using deep boost, deep learning neural network, and artificial neural network. Geocarto International, 2022, 37, 8770-8791.	1.7	16
52	Evaluation of debris flow and landslide hazards using ensemble framework of Bayesian- and tree-based models. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	1.6	16
53	Assessment of vegetation status of Sali River basin, a tributary of Damodar River in Bankura District, West Bengal, using satellite data. Environment, Development and Sustainability, 2020, 22, 5651-5685.	2.7	15
54	Water-induced erosion potentiality and vulnerability assessment in Kangsabati river basin, eastern India. Environment, Development and Sustainability, 2022, 24, 3518-3557.	2.7	15

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55	Evaluation of various boosting ensemble algorithms for predicting flood hazard susceptibility areas. Geomatics, Natural Hazards and Risk, 2021, 12, 2607-2628.	2.0	14
56	Impact of firecrackers burning and policy-practice gap on air quality in Delhi during Indian's great mythological event of Diwali festival. Cities, 2021, 119, 103384.	2.7	13
57	Mapping of earthquake hotspot and coldspot zones for identifying potential landslide hotspot areas in the Himalayan region. Bulletin of Engineering Geology and the Environment, 2022, 81, .	1.6	12
58	Application of novel deep boosting framework-based earthquake induced landslide hazards prediction approach in Sikkim Himalaya. Geocarto International, 2022, 37, 12509-12535.	1.7	11
59	Impact of ineffective measures on the increasing land degradation in a monsoonâ€dominated region of India: Issues and policy implications. Land Degradation and Development, 2022, 33, 3174-3185.	1.8	10
60	Application of neural network model-based framework approach to identify gully erosion potential hotspot zones in sub-tropical environment. Geocarto International, 2022, 37, 14758-14784.	1.7	10
61	Evaluation of climate change impacts on future gully erosion using deep learning and soft computational approaches. Geocarto International, 2022, 37, 12709-12745.	1.7	9
62	Development of Hybrid Computational Approaches for Landslide Susceptibility Mapping Using Remotely Sensed Data in East Sikkim, India. , 2020, , 71-92.		8
63	Novel ensemble approach for landslide susceptibility index assessment in a mountainous environment of India. Geocarto International, 2022, 37, 13311-13336.	1.7	8
64	Application of data-mining technique and hydro-chemical data for evaluating vulnerability of groundwater in Indo-Gangetic Plain. Journal of Environmental Management, 2022, 318, 115582.	3.8	8
65	Morphometric Analysis for Hydrological Assessment using Remote Sensing and GIS Technique: A Case Study of Dwarkeswar River Basin of Bankura District, West Bengal. Asian Journal of Research in Social Sciences and Humanities, 2018, 8, 113.	0.0	7
66	Assessment of Forest Cover Dynamics using Forest Canopy Density Model in Sali River Basin: A Spill Channel of Damodar River. Environmental Science and Engineering, 2021, , 365-384.	0.1	3
67	Application of the novel state-of-the-art soft computing techniques for groundwater potential assessment. Arabian Journal of Geosciences, 2022, 15, .	0.6	1
68	Reply to the comment on â€œChanging climate and land use of 21st century influences soil erosion in Indiaâ€•by Pal et al., Gondwana Research, volume 94, pages 164â€"185. Gondwana Research, 2022, 107, 64-65.	3.0	0