Mehebub Sahana

List of Publications by Year
in descending order

74 papers	3,358 citations	147801 31 h-index	161849 54 g-index
77 all docs	77 docs citations	77 times ranked	2274 citing authors

#	Article	IF	Citations
1	Assessment of advanced random forest and decision tree algorithms for modeling rainfall-induced landslide susceptibility in the Izu-Oshima Volcanic Island, Japan. Science of the Total Environment, 2019, 662, 332-346.	8.0	378
2	Improved landslide assessment using support vector machine with bagging, boosting, and stacking ensemble machine learning framework in a mountainous watershed, Japan. Landslides, 2020, 17, 641-658.	5.4	294
3	Analyzing urban spatial patterns and trend of urban growth using urban sprawl matrix: A study on Kolkata urban agglomeration, India. Science of the Total Environment, 2018, 628-629, 1557-1566.	8.0	198
4	Landslide Susceptibility Assessment by Novel Hybrid Machine Learning Algorithms. Sustainability, 2019, 11, 4386.	3.2	130
5	Evaluating GIS-Based Multiple Statistical Models and Data Mining for Earthquake and Rainfall-Induced Landslide Susceptibility Using the LiDAR DEM. Remote Sensing, 2019, 11, 638.	4.0	124
6	Assessment and prediction of carbon sequestration using Markov chain and InVEST model in Sariska Tiger Reserve, India. Journal of Cleaner Production, 2021, 278, 123333.	9.3	117
7	Analyzing land surface temperature distribution in response to land use/land cover change using split window algorithm and spectral radiance model in Sundarban Biosphere Reserve, India. Modeling Earth Systems and Environment, 2016, 2, 1.	3.4	113
8	A comparison of frequency ratio and fuzzy logic models for flood susceptibility assessment of the lower Kosi River Basin in India. Environmental Earth Sciences, 2019, 78, 1.	2.7	93
9	Exploring effectiveness of frequency ratio and support vector machine models in storm surge flood susceptibility assessment: A study of Sundarban Biosphere Reserve, India. Catena, 2020, 189, 104450.	5.0	93
10	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.	7.8	80
11	Soil erosion potential hotspot zone identification using machine learning and statistical approaches in eastern India. Natural Hazards, 2020, 104, 1259-1294.	3.4	76
12	A systematic review on approaches and methods used for flood vulnerability assessment: framework for future research. Natural Hazards, 2019, 96, 975-998.	3.4	66
13	Assessing socio-economic vulnerability to climate change-induced disasters: evidence from Sundarban Biosphere Reserve, India. , 2021, 5, 40-52.		65
14	Assessing spatio-temporal health of forest cover using forest canopy density model and forest fragmentation approach in Sundarban reserve forest, India. Modeling Earth Systems and Environment, 2015, 1, 1.	3.4	59
15	Evaluating effectiveness of frequency ratio, fuzzy logic and logistic regression models in assessing landslide susceptibility: a case from Rudraprayag district, India. Journal of Mountain Science, 2017, 14, 2150-2167.	2.0	57
16	Understanding future urban growth, urban resilience and sustainable development of small cities using prediction-adaptation-resilience (PAR) approach. Sustainable Cities and Society, 2021, 74, 103196.	10.4	57
17	Torrential rainfall-triggered shallow landslide characteristics and susceptibility assessment using ensemble data-driven models in the Dongjiang Reservoir Watershed, China. Natural Hazards, 2019, 97, 579-609.	3.4	55
18	Assessing land transformation and its relation with land surface temperature in Mumbai city, India using geospatial techniques. International Journal of Urban Sciences, 2019, 23, 205-225.	2.8	53

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19	Vulnerability to storm surge flood using remote sensing and GIS techniques: A study on Sundarban Biosphere Reserve, India. Remote Sensing Applications: Society and Environment, 2019, 13, 106-120.	1.5	51
20	Assessing forest cover vulnerability in Uttarakhand, India using analytical hierarchy process. Modeling Earth Systems and Environment, 2020, 6, 821-831.	3.4	48
21	Flash-flood hazard using deep learning based on H2O R package and fuzzy-multicriteria decision-making analysis. Journal of Hydrology, 2022, 609, 127747.	5.4	46
22	Assessing coastal island vulnerability in the Sundarban Biosphere Reserve, India, using geospatial technology. Environmental Earth Sciences, 2019, 78, 1.	2.7	44
23	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.	3.5	43
24	Plastic waste footprint in the context of COVID-19: Reduction challenges and policy recommendations towards sustainable development goals. Science of the Total Environment, 2021, 796, 148951.	8.0	43
25	Assessing deforestation susceptibility to forest ecosystem in Rudraprayag district, India using fragmentation approach and frequency ratio model. Science of the Total Environment, 2018, 627, 1264-1275.	8.0	41
26	A Review of Glacial Lake Expansion and Associated Glacial Lake Outburst Floods in the Himalayan Region. Earth Systems and Environment, 2021, 5, 695-708.	6.2	41
27	Exploring climate variability and its impact on drought occurrence: Evidence from Godavari Middle sub-basin, India. Weather and Climate Extremes, 2020, 30, 100277.	4.1	38
28	GIS-based landscape vulnerability assessment to forest fire susceptibility of Rudraprayag district, Uttarakhand, India. Environmental Earth Sciences, 2017, 76, 1.	2.7	37
29	Assessing the impact of drought conditions on groundwater potential in Godavari Middle Sub-Basin, India using analytical hierarchy process and random forest machine learning algorithm. Groundwater for Sustainable Development, 2021, 13, 100554.	4.6	37
30	Morphometric Parameters-Based Prioritization of Sub-watersheds Using Fuzzy Analytical Hierarchy Process: A Case Study of Lower Barpani Watershed, India. Natural Resources Research, 2018, 27, 67-75.	4.7	36
31	Crop Suitability Analysis in the Bijnor District, UP, Using Geospatial Tools and Fuzzy Analytical Hierarchy Process. Agricultural Research, 2018, 7, 506-522.	1.7	35
32	Land suitability assessment for optimal cropping sequences in Katihar district of Bihar, India using GIS and AHP. Spatial Information Research, 2020, 28, 589-599.	2.2	35
33	Assessing farm-level agricultural sustainability using site-specific indicators and sustainable livelihood security index: Evidence from Vaishali district, India. Community Development, 2016, 47, 602-619.	1.0	34
34	Applying different resampling strategies in machine learning models to predict head-cut gully erosion susceptibility. AEJ - Alexandria Engineering Journal, 2021, 60, 5813-5829.	6.4	34
35	Prediction of spatial soil organic carbon distribution using Sentinel-2A and field inventory data in Sariska Tiger Reserve. Natural Hazards, 2018, 90, 693-704.	3.4	32
36	Analyzing climate variability and its effects in Sundarban Biosphere Reserve, India: reaffirmation from local communities. Environment, Development and Sustainability, 2021, 23, 2465-2492.	5.0	31

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37	Assessing anthropogenic disturbance on forest health based on fragment grading in Durgapur Forest Range, West Bengal, India. Spatial Information Research, 2017, 25, 501-512.	2.2	29
38	Assessing spatio-temporal growth of urban sub-centre using Shannonâ€™s entropy model and principle component analysis: A case from North 24 Parganas, lower Ganga River Basin, India. Egyptian Journal of Remote Sensing and Space Science, 2019, 22, 25-35.	2.0	28
39	Ensemble machine learning models based on Reduced Error Pruning Tree for prediction of rainfall-induced landslides. International Journal of Digital Earth, 2021, 14, 575-596.	3.9	28
40	Simulation of surface runoff using semi distributed hydrological model for a part of Satluj Basin: parameterization and global sensitivity analysis using SWAT CUP. Modeling Earth Systems and Environment, 2018, 4, 1111-1124.	3.4	27
41	Assessing hazards induced vulnerability in coastal districts of India using site-specific indicators: an integrated approach. Geo Journal, 2021, 86, 2245-2266.	3.1	26
42	A district-level susceptibility and vulnerability assessment of the COVID-19 pandemic's footprint in India. Spatial and Spatio-temporal Epidemiology, 2021, 36, 100390.	1.7	25
43	A systematic review on high conservation value assessment (HCVs): Challenges and framework for future research on conservation strategy. Science of the Total Environment, 2020, 709, 135425.	8.0	23
44	Analysing Urban Sprawl and Spatial Expansion of Kolkata Urban Agglomeration Using Geospatial Approach. , 2019, , 205-221.		22
45	Forest Vulnerability to Climate Change: A Review for Future Research Framework. Forests, 2022, 13, 917.	2.1	21
46	Assessing and monitoring forest health using a forest fragmentation approach in Sariska Tiger Reserve, India. Norsk Geografisk Tidsskrift, 2016, 70, 306-315.	0.7	20
47	Assessing coastal landscape vulnerability using geospatial techniques along Vizianagaramâ€“Srikakulam coast of Andhra Pradesh, India. Natural Hazards, 2018, 94, 711-725.	3.4	20
48	Response of sediment flux, bridge scouring on river bed morphology and geomorphic resilience in middle-lower part of river Chel, Eastern Himalayan foothills zone, India. Ecological Engineering, 2020, 142, 105632.	3.6	18
49	Driving force for forest fragmentation explored by land use change in Song watershed, India. Spatial Information Research, 2016, 24, 659-669.	2.2	17
50	Predicting impact of climate change on geographical distribution of major NTFP species in the Central India Region. Modeling Earth Systems and Environment, 2022, 8, 449-468.	3.4	17
51	Dominant urban form and its relation to nighttime land surface temperature in the rapidly urbanizing National Capital Region of India. Urban Climate, 2021, 40, 101002.	5.7	16
52	Integrated approach for spatial flood susceptibility assessment in Bhagirathi subâ€basin, India using entropy information theory and geospatial technology. Risk Analysis, 2022, 42, 2765-2780.	2.7	16
53	Assessing flood-induced ecological vulnerability and risk using GIS-based in situ measurements in Bhagirathi sub-basin, India. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	14
54	Assessing the degree of soil salinity in the Indian Sundarban Biosphere Reserve using measured soil electrical conductivity and remote sensing dataâ€“derived salinity indices. Arabian Journal of Geosciences, 2020, 13, 1.	1.3	12

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55	Assessing the Influence of Land Use/Land Cover Alteration on Climate Variability: An Analysis in the Aurangabad District of Maharashtra State, India. Sustainability, 2022, 14, 642.	3.2	12
56	Assessment of evidence-based climate variability in Bhagirathi sub-basin of India: a geostatistical analysis. Acta Geophysica, 2022, 70, 445-463.	2.0	12
57	Monitoring Metropolitan Growth Dynamics for Achieving Sustainable Urbanization (SDG 11.3) in Kolkata Metropolitan Area, India. Remote Sensing, 2021, 13, 4423.	4.0	11
58	Preparing turbidity and aquatic vegetation inventory for waterlogged wetlands in Lower Barpani sub-watersheds (Assam), India using geospatial technology. Egyptian Journal of Remote Sensing and Space Science, 2017, 20, 243-249.	2.0	10
59	Spatial variation in fluvial hydraulics with major bed erosion zone: a study of Kharsoti river of India in the post monsoon period. Arabian Journal of Geosciences, 2017, 10, 1.	1.3	10
60	Assessing and monitoring the human influence on water quality in response to land transformation within Wular environs of Kashmir Valley. Geo Journal, 2018, 83, 1091-1113.	3.1	10
61	Forced Migration and the Expatriation of the Rohingya: A Demographic Assessment of Their Historical Exclusions and Statelessness. Journal of Muslim Minority Affairs, 2019, 39, 44-60.	0.4	10
62	Documenting the land use pattern in the corridor complexes of Kaziranga National Park using high resolution satellite imagery. Trees, Forests and People, 2020, 2, 100039.	1.9	10
63	Assessing subsidence susceptibility to coal mining using frequency ratio, statistical index and Mamdani fuzzy models: evidence from Raniganj coalfield, India. Environmental Earth Sciences, 2020, 79, 1.	2.7	10
64	Detecting disturbed forest tracts in the Sariska Tiger Reserve, India, using forest canopy density and fragmentation models. Modeling Earth Systems and Environment, 2020, 6, 1373-1385.	3.4	9
65	Assessing Wetland ecosystem health in Sundarban Biosphere Reserve using pressure-state-response model and geospatial techniques. Remote Sensing Applications: Society and Environment, 2022, 26, 100754.	1.5	8
66	Susceptibility assessment of humanâ€“leopard conflict in Aravalli landscape of Haryana using geospatial techniques. Modeling Earth Systems and Environment, 2021, 7, 1459-1473.	3.4	7
67	Assessing losses from multi-hazard coastal events using Poisson regression: empirical evidence from Sundarban BiosphereÂReserve (SBR), India. Journal of Coastal Conservation, 2021, 25, 1.	1.6	6
68	Assessment of Drought Conditions Over Different Climate Zones of Kazakhstan Using Standardised Precipitation Evapotranspiration Index. Earth Systems and Environment, 2023, 7, 283-296.	6.2	6
69	Stacking state-of-the-art ensemble for flash-flood potential assessment. Geocarto International, 2022, 37, 13812-13838.	3.5	6
70	Assessing vegetation condition across topography in Nainital district, India using temperature vegetation dryness index model. Modeling Earth Systems and Environment, 2022, 8, 2167-2181.	3.4	5
71	Habitat Linkages for Asian Elephants in Central Indian LandscapeÂ. Advances in Asian Human-Environmental Research, 2021, , 75-89.	1.0	4
72	Environmental and Livelihood Impact Assessment of 2013 Flash Flood in Alakananda and Mandakini River Valley, Uttarakhand (India), Using Environmental Evaluation System and Geospatial Techniques. , 2021, , 11-34.		2

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73	Assessing Impact of Climate Variability on Potential Agricultural Land Suitability in Nalanda District, Bihar. Sustainable Development Goals Series, 2022, , 131-149.	0.4	2
74	Landslide Susceptibility Mapping Using Bivariate Frequency Ratio Model and Geospatial Techniques: A Case from Karbi Anglong West District in Assam, India. , 2021, , 59-73.		0