

Madan Kumar Jha

List of Publications by Year in descending order

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Version: 2024-02-01

121
papers

5,724
citations

87723

38
h-index

82410

72
g-index

122
all docs

122
docs citations

122
times ranked

4383
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Application of catastrophe theory to spatial analysis of groundwater potential in a sub-humid tropical region: a hybrid approach. <i>Geocarto International</i> , 2022, 37, 700-719. | 1.7 | 7 |
| 2 | Management of groundwater drought risk by reliability theory and copula model in Sina basin, India. <i>Sustainable Water Resources Management</i> , 2022, 8, 1. | 1.0 | 2 |
| 3 | Groundwater recharge over the past 100 years: Regional spatiotemporal assessment and climate change impact over the Saguenay–St. Jean region, Canada. <i>Hydrological Processes</i> , 2022, 36, . | 1.1 | 9 |
| 4 | Long-term trends and projections of hydrological fluxes under RCP climate change scenarios for a mountainous river catchment of northeast India. <i>Journal of Water and Climate Change</i> , 2022, 13, 1776-1789. | 1.2 | 4 |
| 5 | A Novel GIS-Based Modeling Approach for Evaluating Aquifer Susceptibility to Anthropogenic Contamination. <i>Sustainability</i> , 2022, 14, 4538. | 1.6 | 7 |
| 6 | Thank You to Our 2021 Reviewers. <i>Water Resources Research</i> , 2022, 58, . | 1.7 | 0 |
| 7 | Evaluation of water demand and supply under varying meteorological conditions in Eastern India and mitigation strategies for sustainable agricultural production. <i>Environment, Development and Sustainability</i> , 2021, 23, 1264-1291. | 2.7 | 4 |
| 8 | Planning rainwater conservation measures using geospatial and multi-criteria decision making tools. <i>Environmental Science and Pollution Research</i> , 2021, 28, 1734-1751. | 2.7 | 9 |
| 9 | Observed rainfall changes in the past century (1901–2019) over the wettest place on Earth. <i>Environmental Research Letters</i> , 2021, 16, 024018. | 2.2 | 66 |
| 10 | Assessing Multi-Criteria Decision Analysis Models for Predicting Groundwater Quality in a River Basin of South India. <i>Sustainability</i> , 2021, 13, 6719. | 1.6 | 7 |
| 11 | Investigating Groundwater Condition and Seawater Intrusion Status in Coastal Aquifer Systems of Eastern India. <i>Water (Switzerland)</i> , 2021, 13, 1952. | 1.2 | 11 |
| 12 | Efficacy of machine learning techniques in predicting groundwater fluctuations in agro-ecological zones of India. <i>Science of the Total Environment</i> , 2021, 785, 147319. | 3.9 | 34 |
| 13 | Modeling Soil Moisture and Flow Dynamics of Variably Saturated Heterogeneous Lateritic Porous Media under Wheat Crop. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2021, 147, 04021049. | 0.6 | 0 |
| 14 | Assessment of precipitation trends and its implications in the semi-arid region of Southern India. <i>Environmental Challenges</i> , 2021, 5, 100269. | 2.0 | 18 |
| 15 | Probability-based approach for evaluating groundwater risk assessment in Sina basin, India. , 2020, , 289-304. | | 1 |
| 16 | Identification of critical areas and evaluation of best management practices using SWAT for sustainable watershed management. <i>Science of the Total Environment</i> , 2020, 744, 140737. | 3.9 | 57 |
| 17 | Optimization modeling for conjunctive use planning in Upper Damodar River basin, India. <i>Journal of Cleaner Production</i> , 2020, 273, 123098. | 4.6 | 9 |
| 18 | Insight into the precipitation behavior of gridded precipitation data in the Sina basin. <i>Environmental Monitoring and Assessment</i> , 2020, 192, 729. | 1.3 | 13 |

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|----|---|-----|-----------|
| 19 | Predicting groundwater depth fluctuations using deep learning, extreme learning machine and Gaussian process: a comparative study. <i>Earth Science Informatics</i> , 2020, 13, 1237-1250. | 1.6 | 24 |
| 20 | Assessing groundwater quality for drinking water supply using hybrid fuzzy-GIS-based water quality index. <i>Water Research</i> , 2020, 179, 115867. | 5.3 | 146 |
| 21 | Mapping of laterite zones using 2D electrical resistivity tomography survey in parts of Paschim Medinipur, West Bengal, India: An approach for artificial groundwater recharge. <i>Journal of Earth System Science</i> , 2020, 129, 1. | 0.6 | 4 |
| 22 | Chlorophyll Meter-Based Nitrogen Management in a Rice-Wheat Cropping System in Eastern India. <i>International Journal of Plant Production</i> , 2020, 14, 355-371. | 1.0 | 6 |
| 23 | Neural network modeling for groundwater-level forecasting in coastal aquifers. <i>Neural Computing and Applications</i> , 2020, 32, 12737-12754. | 3.2 | 56 |
| 24 | Optimizing chlorophyll meter (SPAD) reading to allow efficient nitrogen use in rice and wheat under rice-wheat cropping system in eastern India. <i>Plant Production Science</i> , 2020, 23, 270-285. | 0.9 | 21 |
| 25 | Assessing Variability of Infiltration Characteristics and Reliability of Infiltration Models in a Tropical Sub-humid Region of India. <i>Scientific Reports</i> , 2020, 10, 1515. | 1.6 | 35 |
| 26 | Development of a rainfall Stability Index using probabilistic indicators. <i>Ecological Indicators</i> , 2020, 115, 106406. | 2.6 | 4 |
| 27 | Simulation-Optimization for Conjunctive Water Resources Management and Optimal Crop Planning in Kushabhadra-Bhargavi River Delta of Eastern India. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 3521. | 1.2 | 9 |
| 28 | Clustering of Groundwater Wells and Spatial Variation of Groundwater Recharge in Sina Basin, India. <i>Asian Journal of Water, Environment and Pollution</i> , 2020, 17, 11-21. | 0.4 | 2 |
| 29 | Overview, Current Status, and Future Prospect of Stochastic Time Series Modeling in Subsurface Hydrology. , 2019, , 133-151. | | 7 |
| 30 | Development and Evaluation of Hybrid Artificial Neural Network Architectures for Modeling Spatio-Temporal Groundwater Fluctuations in a Complex Aquifer System. <i>Water Resources Management</i> , 2019, 33, 2381-2397. | 1.9 | 31 |
| 31 | On the estimation of hydraulic conductivity of layered vadose zones with limited data availability. <i>Journal of Earth System Science</i> , 2019, 128, 1. | 0.6 | 5 |
| 32 | Comparison of Drought Indices in a Semi-Arid River Basin of India. <i>Water Resources Management</i> , 2019, 33, 75-102. | 1.9 | 70 |
| 33 | Simulation of regional irrigation requirement with SWAT in different agro-climatic zones driven by observed climate and two reanalysis datasets. <i>Science of the Total Environment</i> , 2019, 649, 846-865. | 3.9 | 39 |
| 34 | Infiltration characteristics of lateritic vadose zones: Field experiments and modeling. <i>Soil and Tillage Research</i> , 2019, 187, 219-234. | 2.6 | 25 |
| 35 | Analysis of trend in temperature and rainfall time series of an Indian arid region: comparative evaluation of salient techniques. <i>Theoretical and Applied Climatology</i> , 2019, 136, 301-320. | 1.3 | 61 |
| 36 | Scientific Framework For Subsurface Characterization and Evaluation of Grain-Size Analysis Methods. , 2019, , 261-272. | | 0 |

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|----|--|-----|-----------|
| 37 | Long-term geochemical assessment of groundwater in a hardrock aquifer system. International Journal of Agricultural Engineering, 2019, 12, 264-285. | 0.0 | 0 |
| 38 | Hydrogeologic and hydraulic characterization of aquifer and nonaquifer layers in a lateritic terrain (West Bengal, India). Hydrogeology Journal, 2018, 26, 1947-1973. | 0.9 | 9 |
| 39 | Assessing the accuracy of GIS-based Multi-Criteria Decision Analysis approaches for mapping groundwater potential. Ecological Indicators, 2018, 91, 24-37. | 2.6 | 120 |
| 40 | Application of Archimedean copulas to the impact assessment of hydro-climatic variables in semi-arid aquifers of western India. Hydrogeology Journal, 2018, 26, 89-108. | 0.9 | 12 |
| 41 | CHLOROPHYLLMETER-BASED NITROGEN MANAGEMENT OF WHEAT IN EASTERN INDIA. Experimental Agriculture, 2018, 54, 349-362. | 0.4 | 6 |
| 42 | Comparative evaluation of GIS-based models for mapping aquifer vulnerability in hard-rock terrains. Environmental Earth Sciences, 2018, 77, 1. | 1.3 | 14 |
| 43 | Mapping lithological variations in a river basin of West Bengal, India using electrical resistivity survey: implications for artificial recharge. Environmental Earth Sciences, 2018, 77, 1. | 1.3 | 9 |
| 44 | Framework for Standardizing Less Data-Intensive Methods of Reference Evapotranspiration Estimation. Water Resources Management, 2018, 32, 4159-4175. | 1.9 | 5 |
| 45 | Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. Earth-Science Reviews, 2018, 185, 901-927. | 4.0 | 167 |
| 46 | Comprehensive risk assessment of groundwater contamination in a weathered hard-rock aquifer system of India. Journal of Cleaner Production, 2018, 201, 853-868. | 4.6 | 20 |
| 47 | Development and analysis of the Soil Water Infiltration Global database. Earth System Science Data, 2018, 10, 1237-1263. | 3.7 | 85 |
| 48 | Evaluating persistence and identifying trends and abrupt changes in monthly and annual rainfalls of a semi-arid region in Western India. Theoretical and Applied Climatology, 2017, 128, 689-708. | 1.3 | 23 |
| 49 | Multi-criteria analysis and GIS modeling for identifying prospective water harvesting and artificial recharge sites for sustainable water supply. Journal of Cleaner Production, 2017, 142, 1436-1456. | 4.6 | 156 |
| 50 | Comparison of Analytic Hierarchy Process, Catastrophe and Entropy techniques for evaluating groundwater prospect of hard-rock aquifer systems. Journal of Hydrology, 2017, 548, 605-624. | 2.3 | 110 |
| 51 | Numerical groundwater-flow modeling to evaluate potential effects of pumping and recharge: implications for sustainable groundwater management in the Mahanadi delta region, India. Hydrogeology Journal, 2017, 25, 2489-2511. | 0.9 | 37 |
| 52 | Pattern recognition in lithology classification: modeling using neural networks, self-organizing maps and genetic algorithms. Hydrogeology Journal, 2017, 25, 311-330. | 0.9 | 54 |
| 53 | Evaluation of groundwater resources for sustainable groundwater development in a semiarid river basin of India. Environmental Earth Sciences, 2017, 76, 1. | 1.3 | 6 |
| 54 | Ground Water Contamination: Recent Advances in Identifying Sources. , 2017, , 97-134. | | 0 |

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|----|---|-----|-----------|
| 55 | Exploring hydrogeology and groundwater dynamics in a lateritic terrain of West Bengal, India, under limited data conditions. <i>Environmental Earth Sciences</i> , 2016, 75, 1. | 1.3 | 8 |
| 56 | Hydrologic and hydrogeologic analyses of an alluvial aquifer underlying Kushabhadra-Bhargavi River basin, Odisha, India. <i>Arabian Journal of Geosciences</i> , 2016, 9, 1. | 0.6 | 1 |
| 57 | GIS-Based Probabilistic Models as Spatial Prediction Tools for Mapping Regional Groundwater Potential. , 2016, , 85-98. | | 0 |
| 58 | GIS-based water balance modeling for estimating regional specific yield and distributed recharge in data-scarce hard-rock regions. <i>Journal of Hydro-Environment Research</i> , 2015, 9, 554-568. | 1.0 | 26 |
| 59 | Identifying sources of groundwater contamination in a hard-rock aquifer system using multivariate statistical analyses and GIS-based geostatistical modeling techniques. <i>Journal of Hydrology: Regional Studies</i> , 2015, 4, 80-110. | 1.0 | 137 |
| 60 | On the statistical forecasting of groundwater levels in unconfined aquifer systems. <i>Environmental Earth Sciences</i> , 2015, 73, 3119-3136. | 1.3 | 25 |
| 61 | Parameter identification and uncertainty analysis for simulating streamflow in a river basin of Eastern India. <i>Hydrological Processes</i> , 2015, 29, 3744-3766. | 1.1 | 55 |
| 62 | Evaluation of a GIS-Based Watershed Model for Streamflow and Sediment-Yield Simulation in the Upper Baitarani River Basin of Eastern India. <i>Journal of Hydrologic Engineering - ASCE</i> , 2015, 20, . | 0.8 | 13 |
| 63 | Evaluation of GIS-based multicriteria decision analysis and probabilistic modeling for exploring groundwater prospects. <i>Environmental Earth Sciences</i> , 2015, 74, 2223-2246. | 1.3 | 36 |
| 64 | Using Artificial Neural Network Approach for Simultaneous Forecasting of Weekly Groundwater Levels at Multiple Sites. <i>Water Resources Management</i> , 2015, 29, 5521-5532. | 1.9 | 97 |
| 65 | Assessing Climate Change Impact on Water Balance Components of a River Basin Using SWAT Model. <i>Water Resources Management</i> , 2015, 29, 4767-4785. | 1.9 | 89 |
| 66 | Efficacy of neural network and genetic algorithm techniques in simulating spatio-temporal fluctuations of groundwater. <i>Hydrological Processes</i> , 2015, 29, 671-691. | 1.1 | 61 |
| 67 | Characterizing rainfall-groundwater dynamics in a hard-rock aquifer system using time series, geographic information system and geostatistical modelling. <i>Hydrological Processes</i> , 2014, 28, 2824-2843. | 1.1 | 45 |
| 68 | Rainwater harvesting planning using geospatial techniques and multicriteria decision analysis. <i>Resources, Conservation and Recycling</i> , 2014, 83, 96-111. | 5.3 | 108 |
| 69 | Application of genetic algorithm technique to inverse modeling of tide-aquifer interaction. <i>Environmental Earth Sciences</i> , 2014, 71, 3655-3672. | 1.3 | 13 |
| 70 | Comparative evaluation of numerical model and artificial neural network for simulating groundwater flow in Kathajodi-Surua Inter-basin of Odisha, India. <i>Journal of Hydrology</i> , 2013, 495, 38-51. | 2.3 | 112 |
| 71 | Groundwater-level prediction using multiple linear regression and artificial neural network techniques: a comparative assessment. <i>Hydrogeology Journal</i> , 2013, 21, 1865-1887. | 0.9 | 140 |
| 72 | OPTIMAL DEVELOPMENT OF GROUNDWATER IN A WELL COMMAND OF EASTERN INDIA USING INTEGRATED SIMULATION AND OPTIMIZATION MODELLING. <i>Irrigation and Drainage</i> , 2013, 62, 363-376. | 0.8 | 4 |

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|----|--|-----|-----------|
| 73 | Precision nitrogen management using chlorophyll meter for Improving Growth, Productivity and N Use Efficiency of Rice in Subtropical Climate. <i>Journal of Agricultural Science</i> , 2013, 5, . | 0.1 | 14 |
| 74 | Sustainable Management of Groundwater Resources in Developing Countries: Constraints and Challenges. , 2013, , 325-348. | | 2 |
| 75 | Efficacy of Tide-Aquifer Interaction Models for Characterizing Coastal Aquifer Systems. , 2013, , 435-444. | | 1 |
| 76 | Hydrologic Time Series Analysis: Theory and Practice. , 2012, , . | | 118 |
| 77 | Hydrologic and Hydrogeologic Characterization of a Deltaic Aquifer System in Orissa, Eastern India. <i>Water Resources Management</i> , 2012, 26, 1899-1928. | 1.9 | 7 |
| 78 | A data-driven approach for analyzing dynamics of tide-aquifer interaction in coastal aquifer systems. <i>Environmental Earth Sciences</i> , 2012, 65, 1333-1355. | 1.3 | 6 |
| 79 | Modeling Short-Term Spatial and Temporal Variability of Groundwater Level Using Geostatistics and GIS. <i>Natural Resources Research</i> , 2012, 21, 117-136. | 2.2 | 45 |
| 80 | Methods for Time Series Analysis. , 2012, , 51-84. | | 6 |
| 81 | Current Status of Time Series Analysis in Hydrological Sciences. , 2012, , 96-136. | | 1 |
| 82 | Analysis of Trends in Low-Flow Time Series of Canadian Rivers. , 2012, , 201-221. | | 1 |
| 83 | Efficacy of Time Series Tests: A Critical Assessment. , 2012, , 139-164. | | 0 |
| 84 | GIS-based assessment and characterization of groundwater quality in a hard-rock hilly terrain of Western India. <i>Environmental Monitoring and Assessment</i> , 2011, 174, 645-663. | 1.3 | 52 |
| 85 | Assessment of Groundwater Potential in a Semi-Arid Region of India Using Remote Sensing, GIS and MCDM Techniques. <i>Water Resources Management</i> , 2011, 25, 1359-1386. | 1.9 | 390 |
| 86 | Groundwater assessment in Salboni Block, West Bengal (India) using remote sensing, geographical information system and multi-criteria decision analysis techniques. <i>Hydrogeology Journal</i> , 2010, 18, 1713-1728. | 0.9 | 311 |
| 87 | Evaluation of HEC-HMS and WEPP for simulating watershed runoff using remote sensing and geographical information system. <i>Paddy and Water Environment</i> , 2010, 8, 131-144. | 1.0 | 88 |
| 88 | Delineation of groundwater recharge zones and identification of artificial recharge sites in West Medinipur district, West Bengal, using RS, GIS and MCDM techniques. <i>Environmental Earth Sciences</i> , 2010, 59, 1209-1222. | 1.3 | 313 |
| 89 | Artificial Neural Network Modeling for Groundwater Level Forecasting in a River Island of Eastern India. <i>Water Resources Management</i> , 2010, 24, 1845-1865. | 1.9 | 157 |
| 90 | Modeling and evaluation of greenhouse for floriculture in subtropics. <i>Energy and Buildings</i> , 2010, 42, 1075-1083. | 3.1 | 28 |

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|-----|--|-----|-----------|
| 91 | Natural and Anthropogenic Disasters: An Overview. , 2010, , 1-16. | | 7 |
| 92 | Sustainable Management of Disasters: Challenges and Prospects. , 2010, , 598-609. | | 0 |
| 93 | Potential of Geospatial Technologies for Mitigating Land and Water Related Disasters. , 2010, , 469-502. | | 0 |
| 94 | Decision Support System: Concept and Potential for Integrated Water Resources Management. , 2010, , 503-535. | | 0 |
| 95 | Cost-effective Approaches for Sustainable Groundwater Management in Alluvial Aquifer Systems. Water Resources Management, 2009, 23, 219-233. | 1.9 | 32 |
| 96 | Simulation-Optimization Modelling for Sustainable Groundwater Management in a Coastal Basin of Orissa, India. Water Resources Management, 2009, 23, 235-263. | 1.9 | 46 |
| 97 | Design and technology for greenhouse cooling in tropical and subtropical regions: A review. Energy and Buildings, 2009, 41, 1269-1275. | 3.1 | 115 |
| 98 | Integrated remote sensing and GIS-based approach for assessing groundwater potential in West Medinipur district, West Bengal, India. International Journal of Remote Sensing, 2009, 30, 231-250. | 1.3 | 323 |
| 99 | Simulation Modeling for Efficient Groundwater Management in Balasore Coastal Basin, India. Water Resources Management, 2008, 22, 23-50. | 1.9 | 91 |
| 100 | Hydraulic Parameters of Coastal Aquifer Systems by Direct Methods and an Extended Tide-Aquifer Interaction Technique. Water Resources Management, 2008, 22, 1899-1923. | 1.9 | 45 |
| 101 | Ensuring sustainable water supplies: A study of groundwater conditions in Salboni Block, West Bengal. Environmental Quality Management, 2008, 18, 29-46. | 1.0 | 0 |
| 102 | Vertical electrical sounding survey and resistivity inversion using genetic algorithm optimization technique. Journal of Hydrology, 2008, 359, 71-87. | 2.3 | 40 |
| 103 | Comparative evaluation of statistical tests for time series analysis: application to hydrological time series / Evaluation comparative de tests statistiques pour l'analyse de s ries temporelles: application   des s ries temporelles hydrologiques. Hydrological Sciences Journal, 2008, 53, 353-366. | 1.2 | 73 |
| 104 | Groundwater management and development by integrated remote sensing and geographic information systems: prospects and constraints. Water Resources Management, 2007, 21, 427-467. | 1.9 | 384 |
| 105 | Challenges of using remote sensing and GIS in developing nations. Hydrogeology Journal, 2007, 15, 197-200. | 0.9 | 59 |
| 106 | Harnessing earth observation (EO) capabilities in hydrogeology: an Indian perspective. Hydrogeology Journal, 2007, 15, 155-158. | 0.9 | 24 |
| 107 | Modelling Infiltration and quantifying Spatial Soil Variability in a Wasteland of Kharagpur, India. Biosystems Engineering, 2006, 95, 569-582. | 1.9 | 69 |
| 108 | Evaluation of Traditional and Nontraditional Optimization Techniques for Determining Well Parameters from Step-Drawdown Test Data. Journal of Hydrologic Engineering - ASCE, 2006, 11, 617-630. | 0.8 | 30 |

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|-----|--|-----|-----------|
| 109 | Field Investigation of Water Movement and Nitrate Transport under Perched Water Table Conditions. Biosystems Engineering, 2005, 92, 69-84. | 1.9 | 22 |
| 110 | Water Quality of the Monobe River with Dams (I) : Seasonal Variations and Changes in Surface Water Quality from Upper to Lower Reaches. Journal of Rainwater Catchment Systems, 2004, 9, 1-10. | 0.2 | 0 |
| 111 | Planning and Design of Cost-effective Water Harvesting Structures for Efficient Utilization of Scarce Water Resources in Semi-arid Regions of Rajasthan, India. Water Resources Management, 2004, 18, 219-235. | 1.9 | 39 |
| 112 | Determining Hydraulic Characteristics of Production Wells using Genetic Algorithm. Water Resources Management, 2004, 18, 353-377. | 1.9 | 14 |
| 113 | Determination of hydraulic parameters of an unconfined alluvial aquifer by the floodwave-response technique. Hydrogeology Journal, 2004, 12, 628-642. | 0.9 | 17 |
| 114 | On the Basic Stochastic Characteristics (Moments) of Global Annual Precipitations. Journal of Rainwater Catchment Systems, 2004, 10, 7-14. | 0.2 | 0 |
| 115 | On the Estimation of Phreatic Aquifer Parameters by the Tidal Response Technique. Water Resources Management, 2003, 17, 69-88. | 1.9 | 25 |
| 116 | Estimation of Aquifer Parameters from Pumping Test Data by Genetic Algorithm Optimization Technique. Journal of Irrigation and Drainage Engineering - ASCE, 2003, 129, 348-359. | 0.6 | 61 |
| 117 | Dynamics of water flow and fertilizer solute leaching in lateritic soils of Kharagpur region, India. Agricultural Water Management, 2003, 63, 77-98. | 2.4 | 20 |
| 118 | Field Investigations for Sustainable Groundwater Utilization in the Konan Basin. Water Resources Management, 1999, 13, 443-470. | 1.9 | 24 |
| 119 | Effective Utilization of Chauris in North Bihar, India. Biosystems Engineering, 1995, 60, 237-247. | 0.4 | 1 |
| 120 | Mole drainage: Prospective drainage solution to Bangkok clay soils. Agricultural Water Management, 1995, 28, 253-270. | 2.4 | 12 |
| 121 | Trends and Variability of Rainfall in Tripura State of India in 1986-2019 and Key Drivers. Pure and Applied Geophysics, 0, , 1. | 0.8 | 0 |