# Manish Kumar Goyal

## List of Publications by Citations

| 116 papers | 2,186 citations | 29 h-index | 41 g-index |
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| 117 ext. papers | 2,731 ext. citations | 3.7 avg, IF | 6.22 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 116 | Modeling of daily pan evaporation in sub tropical climates using ANN, LS-SVR, Fuzzy Logic, and ANFIS. *Expert Systems With Applications*, **2014**, 41, 5267-5276 | 7.8 | 182 |
| 115 | Modeling of Sediment Yield Prediction Using M5 Model Tree Algorithm and Wavelet Regression. *Water Resources Management*, **2014**, 28, 1991-2003 | 3.7 | 67 |
| 114 | Statistical Analysis of Long Term Trends of Rainfall During 1901-2002 at Assam, India. *Water Resources Management*, **2014**, 28, 1501-1515 | 3.7 | 66 |
| 113 | Modeling of Suspended Sediment Concentration at Kasol in India Using ANN, Fuzzy Logic, and Decision Tree Algorithms. *Journal of Hydrologic Engineering - ASCE*, **2012**, 17, 394-404 | 1.8 | 66 |
| 112 | Analysis and trends of precipitation lapse rate and extreme indices over north Sikkim eastern Himalayas under CMIP5ESM-2M RCPs experiments. *Atmospheric Research*, **2016**, 167, 34-60 | 5.4 | 60 |
| 111 | Estimation of Scour Downstream of a Ski-Jump Bucket Using Support Vector and M5 Model Tree. *Water Resources Management*, **2011**, 25, 2177-2195 | 3.7 | 59 |
| 110 | Application of ANN, Fuzzy Logic and Decision Tree Algorithms for the Development of Reservoir Operating Rules. *Water Resources Management*, **2013**, 27, 911-925 | 3.7 | 53 |
| 109 | Non-stationary and copula-based approach to assess the drought characteristics encompassing climate indices over the Himalayan states in India. *Journal of Hydrology*, **2020**, 580, 124356 | 6 | 53 |
| 108 | Impact of climate change on floods in the Brahmaputra basin using CMIP5 decadal predictions. *Journal of Hydrology*, **2015**, 527, 281-291 | 6 | 52 |
| 107 | Air quality modelling using long short-term memory (LSTM) over NCT-Delhi, India. *Air Quality, Atmosphere and Health*, **2019**, 12, 899-908 | 5.6 | 50 |
| 106 | Treatment of baseflow from an urban catchment by a floating wetland system. *Ecological Engineering*, **2012**, 49, 170-180 | 3.9 | 49 |
| 105 | Identification of Homogeneous Rainfall Regimes in Northeast Region of India using Fuzzy Cluster Analysis. *Water Resources Management*, **2014**, 28, 4491-4511 | 3.7 | 48 |
| 104 | Probabilistic evaluation of vegetation drought likelihood and its implications to resilience across India. *Global and Planetary Change*, **2019**, 176, 23-35 | 4.2 | 47 |
| 103 | Fate of pharmaceutical compounds in hydroponic mesocosms planted with Scirpus validus. *Environmental Pollution*, **2013**, 181, 98-106 | 9.3 | 47 |
| 102 | Impact of Climate Change on Water Resources in India. *Journal of Environmental Engineering, ASCE*, **2018**, 144, 04018054 | 2 | 45 |
| 101 | Development of stage-discharge rating curve using model tree and neural networks: An application to Peachtree Creek in Atlanta. *Expert Systems With Applications*, **2012**, 39, 5702-5710 | 7.8 | 45 |
| 100 | A novel framework for risk assessment and resilience of critical infrastructure towards climate change. *Technological Forecasting and Social Change*, **2021**, 165, 120532 | 9.5 | 44 |

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| 99 | Downscaling of surface temperature for lake catchment in an arid region in India using linear multiple regression and neural networks. *International Journal of Climatology*, **2012**, 32, 552-566 | 3.5 | 41 |
| 98 | Analysis of the change in temperature trends in Subansiri River basin for RCP scenarios using CMIP5 datasets. *Theoretical and Applied Climatology*, **2017**, 129, 1175-1187 | 3 | 38 |
| 97 | Glacial Lake Outburst Flood Hazard, Downstream Impact, and Risk Over the Indian Himalayas. *Water Resources Research*, **2020**, 56, e2019WR026533 | 5.4 | 38 |
| 96 | District-level assessment of the ecohydrological resilience to hydroclimatic disturbances and its controlling factors in India. *Journal of Hydrology*, **2018**, 564, 1048-1057 | 6 | 38 |
| 95 | Copula-based probabilistic characterization of precipitation extremes over North Sikkim Himalaya. *Atmospheric Research*, **2018**, 212, 273-284 | 5.4 | 36 |
| 94 | Assessment of ecosystem resilience to hydroclimatic disturbances in India. *Global Change Biology*, **2018**, 24, e432-e441 | 11.4 | 35 |
| 93 | Monthly rainfall prediction using wavelet regression and neural network: an analysis of 1901-2002 data, Assam, India. *Theoretical and Applied Climatology*, **2014**, 118, 25-34 | 3 | 35 |
| 92 | Nonparametric Statistical Downscaling of Temperature, Precipitation, and Evaporation in a Semiarid Region in India. *Journal of Hydrologic Engineering - ASCE*, **2012**, 17, 615-627 | 1.8 | 34 |
| 91 | Predicting time-dependent pier scour depth with support vector regression. *Journal of Hydrology*, **2012**, 468-469, 241-248 | 6 | 34 |
| 90 | Support vector regression model of wastewater bioreactor performance using microbial community diversity indices: effect of stress and bioaugmentation. *Water Research*, **2014**, 53, 282-96 | 12.5 | 31 |
| 89 | Evaluation of linear regression methods as downscaling tools in temperature projections over the Pichola Lake Basin in India. *Hydrological Processes*, **2011**, 25, 1453-1465 | 3.3 | 30 |
| 88 | Downscaling of precipitation on a lake basin: evaluation of rule and decision tree induction algorithms **2012**, 43, 215-230 | | 29 |
| 87 | Copula based analysis of meteorological, hydrological and agricultural drought characteristics across Indian river basins. *International Journal of Climatology*, **2021**, 41, 4637 | 3.5 | 28 |
| 86 | Assessment of the impacts of climatic variability and anthropogenic stress on hydrologic resilience to warming shifts in Peninsular India. *Scientific Reports*, **2018**, 8, 13833 | 4.9 | 27 |
| 85 | Assessment of drought trend and variability in India using wavelet transform. *Hydrological Sciences Journal*, **2020**, 65, 1539-1554 | 3.5 | 25 |
| 84 | Assessment of the changes in precipitation and temperature in Teesta River basin in Indian Himalayan Region under climate change. *Atmospheric Research*, **2020**, 231, 104670 | 5.4 | 25 |
| 83 | Prediction of soil organic carbon stock using digital mapping approach in humid India. *Environmental Earth Sciences*, **2018**, 77, 1 | 2.9 | 24 |
| 82 | Drought occurrence in Different River Basins of India and blockchain technology based framework for disaster management. *Journal of Cleaner Production*, **2021**, 312, 127737 | 10.3 | 24 |

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| 81 | Applying Fuzzy logic and the point count system to select landfill sites. *Environmental Monitoring and Assessment*, **2007**, 135, 99-106 | 3.1 | 23 |
| 80 | On the relationship of climatic and monsoon teleconnections with monthly precipitation over meteorologically homogenous regions in India: Wavelet & global coherence approaches. *Atmospheric Research*, **2020**, 238, 104889 | 5.4 | 22 |
| 79 | Understanding the climate change impact on crop yield over Eastern Himalayan Region: ascertaining GCM and scenario uncertainty. *Theoretical and Applied Climatology*, **2020**, 142, 467-482 | 3 | 22 |
| 78 | Projection of hydro-climatological changes over eastern Himalayan catchment by the evaluation of RegCM4 RCM and CMIP5 GCM models **2019**, 50, 117-137 | | 22 |
| 77 | Comparative Assessment of SWAT Model Performance in two Distinct Catchments under Various DEM Scenarios of Varying Resolution, Sources and Resampling Methods. *Water Resources Management*, **2018**, 32, 805-825 | 3.7 | 22 |
| 76 | Evaluation of machine learning tools as a statistical downscaling tool: temperatures projections for multi-stations for Thames River Basin, Canada. *Theoretical and Applied Climatology*, **2012**, 108, 519-534 | 3 | 21 |
| 75 | A fuzzy c-means approach regionalization for analysis of meteorological drought homogeneous regions in western India. *Natural Hazards*, **2016**, 84, 1831-1847 | 3 | 20 |
| 74 | Diagnosing climate change impacts and identifying adaptation strategies by involving key stakeholder organisations and farmers in Sikkim, India: Challenges and opportunities. *Science of the Total Environment*, **2018**, 626, 468-477 | 10.2 | 19 |
| 73 | Influences of watershed characteristics on long-term annual and intra-annual water balances over India. *Journal of Hydrology*, **2019**, 577, 123970 | 6 | 17 |
| 72 | Spatio-temporal heterogeneity and changes in extreme precipitation over eastern Himalayan catchments India. *Stochastic Environmental Research and Risk Assessment*, **2017**, 31, 2527-2546 | 3.5 | 17 |
| 71 | Application of artificial neural network, fuzzy logic and decision tree algorithms for modelling of streamflow at Kasol in India. *Water Science and Technology*, **2013**, 68, 2521-6 | 2.2 | 17 |
| 70 | Assessment of Risk and Resilience of Terrestrial Ecosystem Productivity under the Influence of Extreme Climatic Conditions over India. *Scientific Reports*, **2019**, 9, 18923 | 4.9 | 16 |
| 69 | Geospatial and hydrological modeling to assess hydropower potential zones and site location over rainfall dependent Inland catchment. *Water Resources Management*, **2015**, 29, 2875-2894 | 3.7 | 15 |
| 68 | Spatiotemporal and joint probability behavior of temperature extremes over the Himalayan region under changing climate. *Theoretical and Applied Climatology*, **2018**, 134, 477-498 | 3 | 15 |
| 67 | Analysing model disparity in diagnosing the climatic and human stresses on runoff variability over India. *Journal of Hydrology*, **2020**, 581, 124407 | 6 | 14 |
| 66 | Impact of climate change on crop water and irrigation requirements over eastern Himalayan region. *Stochastic Environmental Research and Risk Assessment*, **2021**, 35, 1175-1188 | 3.5 | 13 |
| 65 | Assessment of spatially explicit annual water-balance model for Sutlej River Basin in eastern Himalayas and Tungabhadra River Basin in peninsular India **2017**, 48, 542-558 | | 12 |
| 64 | Robust weighted regression as a downscaling tool in temperature projections. *International Journal of Global Warming*, **2010**, 2, 234 | 0.6 | 12 |

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| 63 | Evaluation of Various Linear Regression Methods for Downscaling of Mean Monthly Precipitation in Arid Pichola Watershed. *Natural Resources*, **2010**, 01, 11-18 | 0.2 | 12 |
| 62 | Changes in climate extremes by the use of CMIP5 coupled climate models over eastern Himalayas. *Environmental Earth Sciences*, **2016**, 75, 1 | 2.9 | 12 |
| 61 | Multicriteria Evaluation Approach for Assessing Parametric Uncertainty during Extreme Peak and Low Flow Conditions over Snow Glaciated and Inland Catchments. *Journal of Hydrologic Engineering - ASCE*, **2016**, 21, 04015044 | 1.8 | 11 |
| 60 | A novel analysis of COVID 19 risk in India incorporating climatic and socioeconomic Factors. *Technological Forecasting and Social Change*, **2021**, 167, 120679 | 9.5 | 11 |
| 59 | Precipitation Simulation Based on k-Nearest Neighbor Approach Using Gamma Kernel. *Journal of Hydrologic Engineering - ASCE*, **2013**, 18, 481-487 | 1.8 | 10 |
| 58 | Joint behaviour of climate extremes across India: Past and future. *Journal of Hydrology*, **2021**, 597, 126185 | 3.5 | 10 |
| 57 | Assessment of future water provisioning and sediment load under climate and LULC change scenarios in a peninsular river basin, India. *Hydrological Sciences Journal*, **2019**, 64, 405-419 | 3.5 | 10 |
| 56 | Low frequency global-scale modes and its influence on rainfall extremes over India: Nonstationary and uncertainty analysis. *International Journal of Climatology*, **2021**, 41, 1873-1888 | 3.5 | 10 |
| 55 | Evaluation of Rule and Decision Tree Induction Algorithms for Generating Climate Change Scenarios for Temperature and Pan Evaporation on a Lake Basin. *Journal of Hydrologic Engineering - ASCE*, **2014**, 19, 828-835 | 1.8 | 9 |
| 54 | PLS regression-based pan evaporation and minimumaximum temperature projections for an arid lake basin in India. *Theoretical and Applied Climatology*, **2011**, 105, 403-415 | 3 | 9 |
| 53 | Statistical downscaling of temperatures under climate change scenarios for Thames river basin, Canada. *International Journal of Global Warming*, **2012**, 4, 13 | 0.6 | 9 |
| 52 | An improved coupled framework for Glacier classification: an integration of optical and thermal infrared remote-sensing bands. *International Journal of Remote Sensing*, **2018**, 39, 6864-6892 | 3.1 | 9 |
| 51 | Teesta River and Its Ecosystem. *Springer Hydrogeology*, **2018**, 537-551 | 0.4 | 8 |
| 50 | Potential Assessment of Neural Network and Decision Tree Algorithms for Forecasting Ambient PM2.5 and CO Concentrations: Case Study. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2016**, 20, | 2.3 | 7 |
| 49 | Curve number modifications and parameterization sensitivity analysis for reducing model uncertainty in simulated and projected streamflows in a Himalayan catchment. *Ecological Engineering*, **2017**, 108, 17-29 | 3.9 | 7 |
| 48 | Application of the Standardized Precipitation Index and Normalized Difference Vegetation Index for Evaluation of Irrigation Demands at Three Sites in Jamaica. *Journal of Irrigation and Drainage Engineering - ASCE*, **2013**, 139, 922-932 | 1.1 | 7 |
| 47 | Hydrological Drought: Water Surface and Duration Curve Indices **2017**, 45-71 | | 7 |
| 46 | Prediction of flow rate of karstic springs using support vector machines. *Hydrological Sciences Journal*, **2017**, 62, 2175-2186 | 3.5 | 7 |

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| 45 | Analysis of Mean Monthly Rainfall Runoff Data of Indian Catchments Using Dimensionless Variables by Neural Network. *Journal of Environmental Protection*, **2010**, 01, 155-171 | 0.6 | 6 |
| 44 | Application of PLS-Regression as Downscaling Tool for Pichola Lake Basin in India. *International Journal of Geosciences*, **2010**, 01, 51-57 | 0.4 | 6 |
| 43 | Regional Carbon Fluxes from Land-Use Conversion and Land-Use Management in Northeast India. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2018**, 22, 04018016 | 2.3 | 6 |
| 42 | Soil carbon and its associate resilience using big data analytics: For food Security and environmental management. *Technological Forecasting and Social Change*, **2021**, 169, 120823 | 9.5 | 6 |
| 41 | Modeling and Prediction of Hourly Ambient Ozone (O3) and Oxides of Nitrogen (NOx) Concentrations Using Artificial Neural Network and Decision Tree Algorithms for an Urban Intersection in India. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2016**, 20, | 2.3 | 5 |
| 40 | Spatial homogeneity of extreme precipitation indices using fuzzy clustering over northeast India. *Natural Hazards*, **2019**, 98, 559-574 | 3 | 5 |
| 39 | Regional sustainable development of renewable natural resources using Net Primary Productivity on a global scale. *Ecological Indicators*, **2021**, 127, 107768 | 5.8 | 5 |
| 38 | Unsteady High Velocity Flood Flows and the Development of Rating Curves in a Himalayan Basin under Climate Change Scenarios. *Journal of Hydrologic Engineering - ASCE*, **2017**, 22, 04017023 | 1.8 | 4 |
| 37 | Simulation of the Streamflow for the Rio Nuevo Watershed of Jamaica for Use in Agriculture Water Scarcity Planning. *Journal of Irrigation and Drainage Engineering - ASCE*, **2015**, 141, 04014056 | 1.1 | 4 |
| 36 | Bayesian network model for monthly rainfall forecast **2015**, | | 4 |
| 35 | DETERMINING IRRIGATION REQUIREMENTS FOR VEGETABLES AND SUGARCANE IN JAMAICA. *Irrigation and Drainage*, **2014**, 63, 340-348 | 1.1 | 4 |
| 34 | Terrestrial ecosystem response to flash droughts over India. *Journal of Hydrology*, **2022**, 605, 127402 | 6 | 4 |
| 33 | An assessment of snow-glacier melt runoff under climate change scenarios in the Himalayan basin. *Stochastic Environmental Research and Risk Assessment*, **2021**, 35, 2067-2092 | 3.5 | 4 |
| 32 | Sustainability of Carbon Storage and Sequestration **2020**, 465-482 | | 3 |
| 31 | Challenges of Sustainability in Agricultural Management **2020**, 339-356 | | 3 |
| 30 | Regionalization of Drought Prediction **2017**, 253-278 | | 3 |
| 29 | Evaluation of precipitation datasets available on Google earth engine over India. *International Journal of Climatology*, **2021**, 41, 4844-4863 | 3.5 | 3 |
| 28 | Phosphorus fate, transport and management on subsurface drained agricultural organic soils: a review. *Environmental Research Letters*, **2021**, 16, 013004 | 6.2 | 3 |

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| 27 | Effects of Land Use and Soil Management on Soil Quality in India's Northeastern Himalayas. *Journal of Environmental Engineering, ASCE*, **2019**, 145, 04019007 | 2 | 2 |
| 26 | Remote Sensing and GIS Applications in Sustainability **2020**, 605-626 | | 2 |
| 25 | A Comparison of Three Soft Computing Techniques, Bayesian Regression, Support Vector Regression, and Wavelet Regression, for Monthly Rainfall Forecast. *Journal of Intelligent Systems*, **2017**, 26, 641-655 | 1.5 | 2 |
| 24 | Discussion of "Comparison of Multivariate Regression and Artificial Neural Networks for Peak Urban Water-Demand Forecasting: Evaluation of Different ANN Learning Algorithms" by Jan Adamowski and Christina Karapataki. *Journal of Hydrologic Engineering - ASCE*, **2012**, 17, 833-834 | 1.8 | 2 |
| 23 | Bayesian network for monthly rainfall forecast: a comparison of K2 and MCMC algorithm. *International Journal of Computers and Applications*, **2016**, 38, 199-206 | 0.8 | 2 |
| 22 | Climate Change and Sustainable Water Resources Management. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2020**, 24, 02020001 | 2.3 | 1 |
| 21 | Subansiri: Largest Tributary of Brahmaputra River, Northeast India. *Springer Hydrogeology*, **2018**, 523-535 | 5.4 | 1 |
| 20 | Evaluation of soft computing algorithms for estimation of spatial transmissivity. *International Journal of Water*, **2015**, 9, 168 | 0.9 | 1 |
| 19 | Sustainability of River Water Resources Under the Influence of Climate Change **2020**, 507-526 | | 1 |
| 18 | Soil Carbon Sequestration. *Advances in Environmental Engineering and Green Technologies Book Series*, 30-54 | 0.4 | 1 |
| 17 | Soil Carbon Sequestration **2017**, 188-212 | | 1 |
| 16 | Quantifying groundwater sensitivity and resilience over peninsular India. *Hydrological Processes*, **2020**, 34, 5327-5339 | 3.3 | 1 |
| 15 | Current Trends and Projections of Water Resources Under Climate Change in Ganga River Basin. *Society of Earth Scientists Series*, **2021**, 233-256 | 0.6 | 1 |
| 14 | Assessment of Hydroclimatological Changes in Eastern Himalayan River Catchment of Northeast India. *Journal of Hydrologic Engineering - ASCE*, **2021**, 26, 05021027 | 1.8 | 1 |
| 13 | Relative Contribution of Climate Variables on Long-Term Runoff Using Budyko Framework. *Advances in Geographical and Environmental Sciences*, **2022**, 147-159 | 0.4 | 0 |
| 12 | Impact of COVID-19 on Agro-Food Industry and Transitions Towards Food Security. *Disaster Resilience and Green Growth*, **2020**, 255-273 | 0.3 | 0 |
| 11 | Climate change impact on precipitation extremes over Indian cities: Non-stationary analysis. *Technological Forecasting and Social Change*, **2022**, 180, 121685 | 9.5 | 0 |
| 10 | Sustainable Systems for Groundwater Resource Management **2020**, 527-552 | | |

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| 9 | Closure to "Potential Assessment of Neural Network and Decision Tree Algorithms for Forecasting Ambient PM2.5 and CO Concentrations: Case Study" by Chandrra Sekar, B. R. Gurjar, C. S. P. Ojha, and Manish Kumar Goyal. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2017**, 21, 07017002 | 2.3 |
| 8 | Discussion of "SWAT-Based Evapotranspirative Water Conservation Analysis Performed on Irrigated Croplands to Determine Potential Regional Water Savings" by Andrew Gayley. *Journal of Irrigation and Drainage Engineering - ASCE*, **2014**, 140, 07014005 | 1.1 |
| 7 | Impact of Climate Change on Regionalization Using Fuzzy Clustering. *Advances in Intelligent Systems and Computing*, **2015**, 455-462 | 0.4 |
| 6 | COVID 19 Threat and the Role of Human and Natural Factors. *Disaster Resilience and Green Growth*, **2020**, 87-103 | 0.3 |
| 5 | Climate Change Adaptation for Sustainable Management of Water in India: Issues and Challenges **2020**, 439-463 | |
| 4 | Statistical Downscaling of Precipitation and Temperature for a Lake Basin **2013**, 219-250 | |
| 3 | Assessment of glacial lake development and downstream flood impacts of critical glacial lake. *Natural Hazards*, **2021**, 109, 1027-1046 | 3 |
| 2 | Adapting to Climate Change: Water Management Strategy **2016**, 737-752 | |
| 1 | Water Harvesting, Climate Change, and Variability **2021**, 427-446 | |