

Dr. Majid Farooq

Geospatial Scientist · Climate Vulnerability & Risk · Remote Sensing / GIS

Department of Ecology, Environment & Remote Sensing, Government of Jammu & Kashmir, India

Email: majid.farooq@jk.gov.in · **ORCID:** 0000-0002-7813-3474

Google Scholar: scholar.google.com/citations?user=6X2n7iMAAAAJ · LinkedIn: linkedin.com/in/majid-farooq-phd-3b553a33/

Professional profile

Geospatial scientist with more than 20 years of experience applying satellite Earth observation, GIS, climate-risk analysis, spatial modelling and decision-support systems to natural-resource management and environmental policy. Research covers Himalayan climate vulnerabilities, flood and landslide risk, agricultural resilience, forestry, water resources and environmental governance.

Scientist at the Department of Ecology, Environment & Remote Sensing and Secretary to the J&K Expert Appraisal Committee (SEAC). Experienced in coordinating multi-agency research and capacity-building programmes with government, research institutions and technical stakeholders.

Areas of research & technical expertise

Climate vulnerability and adaptation · Flood, landslide and forest-fire risk assessment · Geospatial decision support · Earth observation and remote sensing · AI / machine learning · Satellite water-quality monitoring · Land-use and natural-resource analysis · Environmental impact assessment · Python / R · Google Earth Engine · ArcGIS / QGIS · HEC-RAS / SWAT / InVEST

Education

Ph.D. in Geoinformatics (2018–2022) — Suresh Gyan Vihar University, Jaipur. Thesis: Climate Change, Vulnerability & Risk Linkages — An Assessment of Agriculture Sector in Kashmir Valley, India.

M.Tech. in Remote Sensing and GIS (2007–2009) — SRM University, Chennai. Thesis: Geospatial Modeling of Biodiversity Patterns in Eco-sensitive Himalayan Landscape.

M.Sc. in Ecology and Environment (2004–2005) — Sikkim Manipal University, Gangtok. Thesis: Habitat Mapping of Kashmir Stag in Dachigam National Park using Remote Sensing and GIS.

B.Sc. in Environment & Water Management (1999–2003) — Sri Pratap College, Srinagar.

Professional experience

Scientist · Sept. 2019–present — Department of Ecology, Environment & Remote Sensing, Government of Jammu & Kashmir; climate change and geospatial projects; Secretary, J&K SEAC.

Scientific Assistant · Nov. 2013–Sept. 2019 — State spatial data infrastructure, environmental and health GIS, forest-fire risk and capacity-building projects.

Geospatial Scientist · Feb.–Oct. 2013 — Spatial Data Infrastructure project, DST-funded.

Research Assistant · Jan. 2011-Jan. 2013 — Health service accessibility, GIS modelling and database development.
Image Analyst · Feb. 2009-Dec. 2011 — ISRO/NRSC-supported biodiversity characterization and land-use mapping.
RS-GIS Expert · Aug. 2006-Aug. 2007 — Forest-cover change assessment and satellite classification.
GIS Digitizing Assistant · Sept. 2005-Aug. 2006 — Natural resource information system mapping.

Selected funded projects

Climate Change Centre under NMSHE — Phase II — Ministry of Science & Technology; ₹2.50 crore (CV-listed)
Climate Change Centre under NMSHE — Phase I — DST, Ministry of Science & Technology; ₹5.00 crore (completed)
SIS-DP geospatial mapping update — NRSC/ISRO; ₹2.25 crore (completed)
Digitization of forest demarcation maps, J&K — MoEF&CC; ₹1.20 crore (CV-listed)
Dal-Nigeeen Lake satellite / AI / IoT water-quality monitoring — J&K Government; ₹23 lakh (CV-listed)
Wular Lake monitoring — Wular Conservation and Management Authority; ₹40 lakh (CV-listed)
State Spatial Data Infrastructure — Government of J&K; ₹25 lakh per year (CV-listed)
Forest-fire vulnerability and risk assessment — J&K Forest Department / CAMPA; ₹25 lakh (completed)

Honors and awards

2024 · National Geospatial Fellow Award — IIT Bombay / FOSSEE / Ministry of Education
2018 · UNFCCC COP24 travel grant — Katowice, Poland
2012 · National e-Governance Award — Innovative Use of Technology, Government of India
2010 · Young Scientist Award — J&K Academy of Sciences
2008 · National competitions — Visual Image Interpretation and Geoinformatics Quiz, Anna University

Teaching, capacity building & service

Delivered 100+ guest lectures on Earth observation, GIS, climate change and environmental planning to universities and public institutions. Organized national and regional workshops on GIS, cadastral mapping, forest management, SAPCC, climate risk and geospatial governance. Peer reviewer for journals including Scientific Reports, Remote Sensing, Water, Sustainability, Climate, Environmental Earth Sciences and PeerJ.

Publications

Public academic CV version. Bibliographic details are based on the CV dated 30 May 2026. Three repeated journal references were consolidated; publications may be supplemented by the live ORCID record on the website.

Journal articles (55)

- 1. Vulnerability to Building Resilience: Strategies for Adaptation and Mitigation (AdMit) in Desert-Coastal Landscapes** (2025). Mushtaq, F., Haq, A. U., Alhems, L. M., Bharti, S., & Farooq, Majid. Sustainable Development.
- 2. Micro-level vulnerability assessment among agricultural communities of District Kupwara, Kashmir Himalaya** (2025). Fatima, K., Jan, M., Ahmad, I., Farooq, Majid, & Muslim, M. Scientific Reports, 15, article 34082. DOI: 10.1038/s41598-025-14950-9
- 3. Geospatial investigation of healthcare infrastructure disparities in Bathinda district of Punjab, India** (2025). Haq, A. U., Guite, L. S., Bharti, S., Kanga, S., Mushtaq, F., Farooq, Majid, ... & Singh, S. K. Discover Geoscience, 3(1), 135.
- 4. Assessment of ecotourism prospects in the North-Western Himalayas using multi-criteria decision making** (2025). Haq, A. U., Bharti, S., Mushtaq, F., & Farooq, Majid. Landscape and Ecological Engineering, 1-27.
- 5. A comprehensive review of geomatics-based coastal zone management in the realm of Arabian Gulf, Saudi Arabia** (2025). Mushtaq, F., Alhems, L. M., Farooq, Majid, & Tiwari, S. P. Discover Applied Science, 7(2), 1-25.
- 6. Projected trends in ecosystem service valuation in response to land use land cover dynamics in Kishtwar High Altitude National Park, India** (2025). Lahon, D., Meraj, G., Hashimoto, S., Debnath, J., Baba, A. M., Farooq, Majid, ... & Sahariah, D. Landscape and Ecological Engineering, 21(1), 81-106.
- 7. Assessing forest fire vulnerability with fuzzy-AHP: Insights from Poonch forest division, Jammu and Kashmir** (2025). Malik, F., Mushtaq, F., Farooq, Majid, Guite, L. T. S., Kanga, S., Meraj, G., Singh, S. K., & Kumar, P. Discover Forest, 1(4), 1-20.
- 8. Assessing future agricultural vulnerability in Kashmir Valley: Mid- and late-century projections using SSP scenarios** (2024). Farooq, Majid, Singh, S. K., Kanga, S., Meraj, G., Mushtaq, F., Durin, B., Pham, Q. B., & Hunt, J. Sustainability, 16, 7691.
- 9. Estimation of loss in arable land and irrigation requirements using high-resolution imagery and Google Earth Engine** (2024). Farooq, Majid, Mushtaq, F., & Yousuf, U. Irrigation and Drainage, 73(3), 1151-1167. DOI: 10.1002/ird.2931
- 10. Analysis of spatial variability of smog episodes over National Capital Delhi during (2013-2017)** (2024). Mushtaq, F., Farooq, Majid, Ghosh Nee Lala, M., Banerjee, S., Tirkey, A. S., Shaheen, F., & Meraj, G. Discover Applied Sciences, 6(8), 413.
- 11. Integrating geo-environmental and socio-environmental analyses for flood vulnerability assessment in the Kullu Valley, Himachal Pradesh, India** (2024). Chand, K., Kumar, A., Meraj, G., Thakur, T., Farooq, Majid, Kumar, P., Singh, S. K., Kanga, S., & Debnath, J. International Journal of Disaster Risk Reduction, 104494.
- 12. Development of inherent vulnerability index within Jammu Municipal Limits, India** (2024). Bharti, S., Haq, A. U., Guite, L. S., Kanga, S., Mushtaq, F., Farooq, Majid, Singh, S. K., & Meraj, G. Climate, 12(1), 12.
- 13. Geospatial modeling to assess the past and future land use-land cover changes in the Brahmaputra Valley, NE India, for sustainable land resource management** (2023). Debnath, J., Sahariah, D., Lahon, D., Nath, N., Chand, K., Meraj, G., Farooq, Majid, & Singh, S. K. Environmental Science and Pollution Research, 30(49), 106997-107020.
- 14. Assessment of ecosystem service value in response to LULC changes using geospatial techniques: A case study in the Merbil Wetland of the Brahmaputra Valley, Assam, India** (2023). Lahon, D., Sahariah, D., Debnath, J., Nath, N., Meraj, G., Kumar, P., Hashimoto, S., & Farooq, Majid. ISPRS International Journal of Geo-Information, 12(4), 165.
- 15. Assessing the impacts of current and future changes of the planforms of river Brahmaputra on its land use-land cover** (2023). Debnath, J., Sahariah, D., Lahon, D., Nath, N., Chand, K., Meraj, G., Kumar, P., Singh, S. K., Kanga, S., & Farooq, Majid. Geoscience Frontiers, 14(4), 101557.
- 16. Growth of water hyacinth biomass and its impact on the floristic composition of aquatic plants in a wetland ecosystem of the Brahmaputra floodplain of Assam, India** (2023). Lahon, D., Sahariah, D., Debnath, J., Nath, N., Meraj, G., Farooq, Majid, Kanga, S., Singh, S., & Chand, K. PeerJ, 11, e14811.

- 17. Analytic Hierarchy Process (AHP) based soil erosion susceptibility mapping in Northwestern Himalayas: A case study of Central Kashmir Province** (2023). Mushtaq, F., Farooq, Majid, Tirkey, A. S., & Sheikh, B. A. *Conservation*, 3(1), 32–52.
- 18. Land use and land cover change monitoring and prediction of a UNESCO World Heritage Site: Kaziranga Eco-Sensitive Zone using Cellular Automata-Markov model** (2023). Nath, N., Sahariah, D., Meraj, G., Debnath, J., Kumar, P., Lahon, D., Chand, K., Farooq, Majid, et al. *Land*, 12(1), 151.
- 19. Status of air pollution during COVID-19-induced lockdown in Delhi, India** (2022). Singh, H., Meraj, G., Singh, S., Shrivastava, V., Sharma, V., Farooq, Majid, Kanga, S., Singh, S. K., & Kumar, P. *Atmosphere*, 13(12), 2090.
- 20. Strategic slum upgrading and redevelopment action plan for Jammu City** (2022). Farooq, Majid, Mushtaq, F., Meraj, G., Singh, S. K., Kanga, S., Gupta, A., Kumar, P., Singh, D., & Avtar, R. *Resources*, 11(12), 120. DOI: 10.3390/resources11120120
- 21. ARIMA and SPSS statistics-based assessment of landslide occurrence in western Himalayas** (2022). Fayaz, M., Meraj, G., Khader, S. A., & Farooq, Majid. *Environmental Challenges*, 9, 100624.
- 22. Glacial lake outburst flood hazard and risk assessment of Gangabal Lake in the Upper Jhelum Basin of Kashmir Himalaya using geospatial technology and hydrodynamic modeling** (2022). Ahmed, R., Rawat, M., Wani, G. F., Ahmad, S. T., Ahmed, P., Jain, S. K., Meraj, G., Mir, R. A., Rather, A. F., & Farooq, Majid. *Remote Sensing*, 14(23), 5957. DOI: 10.3390/rs14235957
- 23. Understanding the linkage between urban growth and land surface temperature—A case study of Bangalore City, India** (2022). Kanga, S., Meraj, G., Johnson, B. A., Singh, S. K., Naseef, M. P. V., Farooq, Majid, Kumar, P., Marazi, A., & Sahu, N. *Remote Sensing*, 14(17), 4241.
- 24. Integrated remote sensing and field-based approach to assess the temporal evolution and future projection of meanders: A case study on River Manu in North-Eastern India** (2022). Debnath, J., Meraj, G., Das Pan, N., Chand, K., Debbarma, S., Sahariah, D., Gualtieri, C., Farooq, Majid, et al. *PLOS ONE*, 17(7), e0271190.
- 25. Assessing the yield of wheat using satellite remote sensing-based machine learning algorithms and simulation modeling** (2022). Meraj, G., Kanga, S., Ambadkar, A., Kumar, P., Singh, S. K., Farooq, Majid, Johnson, B. A., Rai, A., & Sahu, N. *Remote Sensing*, 14(13), 3005.
- 26. Management of landslides in a rural-urban transition zone using machine learning algorithms—A case study of a National Highway (NH-44), India, in the Rugged Himalayan Terrains** (2022). Fayaz, M., Meraj, G., Khader, S. A., Farooq, Majid, Kanga, S., Singh, S. K., Kumar, P., & Sahu, N. *Land*, 11(6), 884.
- 27. Neural network-based modeling of water quality in Jodhpur, India** (2022). Sinha, K. K., Gupta, M. K., Banerjee, M. K., Meraj, G., Singh, S. K., Kanga, S., Farooq, Majid, Kumar, P., & Sahu, N. *Hydrology*, 9(5), 92.
- 28. Designing Geographic Information System based property tax assessment in India** (2022). Singh, A., Singh, S. K., Meraj, G., Kanga, S., Farooq, Majid, Kranjčić, N., & Đurin, B. *Smart Cities*, 5(1), 364–381.
- 29. Vulnerability and risk assessment to climate change in Sagar Island, India** (2022). Bera, A., Meraj, G., Kanga, S., Farooq, Majid, Singh, S. K., Sahu, N., & Kumar, P. *Water*, 14(5), 823.
- 30. Assessing the groundwater reserves of the Udaipur District, Aravalli Range, India, using geospatial techniques** (2022). Shyam, M., Meraj, G., Kanga, S., Farooq, Majid, Singh, S. K., Sahu, N., & Kumar, P. *Water*, 14(4), 648.
- 31. Identifying the potential dam sites to avert the risk of catastrophic floods in the Jhelum Basin, Kashmir, NW Himalaya, India** (2022). Rather, M. A., Meraj, G., Farooq, Majid, Sheikh, B. A., Kumar, P., Kanga, S., Singh, S. K., Sahu, N., & Tiwari, S. P. *Remote Sensing*, 14(7), 1538.
- 32. Aerosol characteristics and their impact on the Himalayan energy budget** (2021). Chand, K., Kuniyal, J. C., Kanga, S., Guleria, R. P., Meraj, G., Kumar, P., Farooq, Majid, et al. *Sustainability*, 14(1), 179.
- 33. Inherent vulnerability profiles of agriculture sector in temperate Himalayan region: A preliminary assessment** (2021). Farooq, Majid, Singh, S. K., & Kanga, S. *Indian Journal of Ecology*, 48(2), 434–441.
- 34. Analyzing the risk to COVID-19 infection using remote sensing and GIS** (2021). Kanga, S., Meraj, G., Farooq, Majid, Nathawat, M. S., & Singh, S. K. *Risk Analysis*, 41(5), 801–813.
- 35. Mainstreaming adaptation strategies in relevant flagship schemes to overcome vulnerabilities of climate change to agriculture sector** (2021). Farooq, Majid, Singh, S. K., & Kanga, S. *Research Journal of Agricultural Sciences*, 12(2), 637–646.
- 36. GIS based forest fire vulnerability assessment and its validation using field and MODIS data: A case study of Bhaderwah Forest Division, Jammu and Kashmir (India)** (2021). Kanga, S., Rather, M. A., Farooq, Majid, & Singh, S. K. *Indian Forester*, 147(2), 120–136.

- 37. Modeling the sediment retention and ecosystem provisioning services in the Kashmir valley, India, Western Himalayas** (2021). Meraj, G., Farooq, Majid, Singh, S. K., Islam, M., & Kanga, S. *Modeling Earth Systems and Environment*, 1–26.
- 38. Impact of forest fires on air quality in Wolgan Valley, New South Wales, Australia—A mapping and monitoring study using Google Earth Engine** (2021). Singh, S., Singh, H., Sharma, V., Shrivastava, V., Kumar, P., Kanga, S., Sahu, N., Meraj, G., Farooq, Majid, & Singh, S. K. *Forests*, 13(1), 4.
- 39. Coronavirus pandemic versus temperature in the context of Indian subcontinent: A preliminary statistical analysis** (2021). Meraj, G., Farooq, Majid, Singh, S. K., Romshoo, S. A., Nathawat, M. S., & Kanga, S. *Environment, Development and Sustainability*, 23(4), 6524–6534.
- 40. Mapping of trees outside forest (ToF) from Sentinel-2 MSI satellite data using object-based image analysis** (2020). Hassanin, M., Kanga, S., Farooq, Majid, & Singh, S. K. *GAU Research Journal*, 45(4), 207–213.
- 41. Reporting the management of COVID-19 threat in India using remote sensing and GIS-based approach** (2020). Kanga, S., Sudhanshu, Meraj, G., Farooq, Majid, Nathawat, M. S., & Singh, S. K. *Geocarto International*, 1–8.
- 42. Modeling the spatial pattern of sediment flow in lower Hugli estuary, West Bengal, India by quantifying suspended sediment concentration (SSC) and depth conditions using geoinformatics** (2020). Kanga, S., Meraj, G., Das, B., Farooq, Majid, Chaudhuri, S., & Singh, S. K. *Applied Computing and Geosciences*, 8, 100043.
- 43. Health GIS—A long lasting solution for the effective pandemic management in India** (2020). Ranga, V., Pani, P., Kanga, S., Meraj, G., Singh, S. K., Farooq, Majid, & Nathawat, M. S. In *Climatological, Meteorological, and Environmental Factors in the COVID-19 Pandemic*.
- 44. Rapid assessment of land-use conversion patterns using geospatial technology in apple dominated areas of Kulgam and Shopain Districts, Jammu and Kashmir** (2019). Kumar, S., Kanga, S., Farooq, Majid, & Singh, S. K. *Plant Archives*, 19(2), 1886–1891.
- 45. Remote sensing & GIS for the assessment of flood affected population: A case study of September 2014 floods in Kashmir, J&K, India** (2018). Rather, M. A., & Farooq, Majid. *International Journal of Engineering Research*, 7(2), 35–37.
- 46. Remote sensing and GIS based forest fire vulnerability assessment in Dachigam National Park, North Western Himalaya** (2018). Rather, M. A., Farooq, Majid, Meraj, G., Dada, M. A., Sheikh, B. A., & Wani, I. A. *Asian Journal of Applied Sciences*, 11(2), 98–114.
- 47. Evaluating the variability and trends in extreme climate events in the Kashmir Valley using PRECIS RCM simulations** (2017). Gujree, I., Wani, I., Muslim, M., Farooq, Majid, & Meraj, G. *Modeling Earth Systems and Environment*, 3(4), 1647–1662.
- 48. Assessing the influence of watershed characteristics on soil erosion susceptibility of Jhelum basin in Kashmir Himalayas** (2017). Rather, M. A., Kumar, J. S., Farooq, Majid, & Rashid, H. *Arabian Journal of Geosciences*, 10(3), 1–25.
- 49. Satellite-based assessment of the catastrophic Jhelum floods of September 2014, Jammu & Kashmir, India** (2017). Bhatt, C. M., Rao, G. S., Farooq, Majid, Manjusree, P., Shukla, A., Sharma, S. V. S. P., Kulkarni, S. S., Begum, A., Bhanumurthy, V., Diwakar, P. G., & Dadhwal, V. K. *Geomatics, Natural Hazards and Risk*, 8(2), 309–327. DOI: 10.1080/19475705.2016.1218943
- 50. Geospatial monitoring of forests—A case study of Pir Panjal Forest Division, J&K** (2014). Aasim, M., & Farooq, Majid. *International Journal of Remote Sensing & Geoscience*, 3(3), 16–25.
- 51. Assessing the impact of anthropogenic activities on Manasbal Lake in Kashmir Himalayas** (2013). Irfan, R., Farooq, Majid, Muslim, M., & Romshoo, S. A. *International Journal of Environmental Sciences*, 3(6), 2052–2063.
- 52. Forest fire risk zonation using remote sensing and GIS technology in Kansrao Forest Range of Rajaji National Park, Uttarakhand, India** (2013). Malik, T., Rabbani, G., & Farooq, Majid. *International Journal of Advanced Remote Sensing and GIS*, 2(1), 86–95.
- 53. Seasonal habitat selection and spatial distribution of Kashmir Stag (*Cervus elaphus hanglu*) in Dachigam National Park, India** (2013). Farooq, Majid, Muslim, M., & Rashid, H. *International Journal of Remote Sensing and Geoscience*, 2(2), 16–26.
- 54. GIS based forest cover change analysis of SPSP forest range, Pir Panjal Forest Division, Jammu and Kashmir** (2010). Rashid, H., Naseem, G., Farooq, Majid, Mohideen, T., & Amin, A. *Indian Forester*, 136(8), 1024.
- 55. Spatio-temporal change analysis of forest density in Doodhganga Forest Range, Jammu & Kashmir** (2010). Farooq, Majid, & Rashid, H. *International Journal of Geomatics and Geosciences*, 1(2), 132–140.

Conference papers (6)

- 1. Exploring SST and Chlorophyll-a anomalies in the Arabian Gulf: A Google Earth Engine analysis** (2024). Mushtaq, F., Haq, A. U., Bharti, S., Farooq, Majid, Ponnambalam, M. K., & Alhems, L. M. In 2024 IEEE India Geoscience and Remote Sensing Symposium (InGARSS) (pp. 1–4). IEEE.
- 2. Regional climate dynamics in the Arabian Peninsula: A study of temperature trends and precipitation uncertainty** (No (2025). Mushtaq, F., Haq, A. U., Bharti, S., Alhems, L. M., & Farooq, Majid. EGU25-3014). Copernicus Meetings.
- 3. Quantitative analysis of oceanographic parameters in Arabian Gulf: Google Earth Engine approach** (2025). Mushtaq, F., Bharti, S., Haq, A., Alhems, L. M., Ponnambalam, M. K., & Farooq, Majid. AGU 2025 Fall Meeting, Washington DC, ESS Open Archive.
- 4. Estimation of ice thickness distribution over Raikot Glacier in Nanga Parbat region: A geospatial approach** (2021). Mantoo, A. G., Mushtaq, F., Ghosh Nee Lala, M., & Farooq, Majid. In 2021 IEEE International India Geoscience and Remote Sensing Symposium (InGARSS) (pp. 165–168). IEEE.
- 5. An integrated geoinformatics and hydrological modelling-based approach for effective flood management in the Jhelum Basin, NW Himalaya** (2018). Meraj, G., Khan, T., Romshoo, S., Farooq, Majid, Rohitashw, K., & Sheikh, B. A. Proceedings of 3rd International Electronic Conference on Water Sciences (ECWS-3), 1. <https://doi.org/10.3390/ECWS-3-05804> DOI: 10.3390/ECWS-3-05804
- 6. Dynamics and forecasting of population growth and urban expansion in Srinagar City—A geospatial approach** (2014). Farooq, Majid, & Muslim, M. The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, 40(8), 709.

Book chapters (12)

- 1. Understanding Climate Dynamics and Resilience in the Arabian Peninsula: An Introductory Perspective** (2026). Mushtaq, F., Alhems, L. M., & Farooq, M. In Climate Change in the Arabian Peninsula: Challenges and Pathways to Solutions (pp. 1–19). Cham: Springer Nature Switzerland.
- 2. Saudi Arabia's Climate Leadership: National Initiatives, Institutional Frameworks and Alignment with the SDGs** (2026). Mushtaq, F., Alhems, L. M., & Farooq, M. In Climate Change in the Arabian Peninsula: Challenges and Pathways to Solutions (pp. 277–293). Cham: Springer Nature Switzerland.
- 3. Geoinformation for integrated urban water resource management** (2024). Kotecha, M. J., Bakori, D., Agarwal, S., Meraj, G., Kanga, S., Singh, S. K., & Farooq, Majid. In Earth Observation in Urban Monitoring (pp. 93–111). Elsevier.
- 4. Significance of geo-visualization tools for pollution monitoring** (2023). Mushtaq, F., & Farooq, Majid. In Geospatial Analytics for Environmental Pollution Modeling: Analysis, Control and Management (pp. 353–384). Springer Nature Switzerland, Cham.
- 5. Noise pollution modelling using GIS techniques in Srinagar City** (2023). Khajuria, A., Farooq, Majid, Mushtaq, F., & Solan, P. In Geospatial Analytics for Environmental Pollution Modeling: Analysis, Control and Management (pp. 267–286). Springer Nature Switzerland, Cham.
- 6. Climate change and the need for REDD+** (2022). Shah, M. N., Meraj, G., & Farooq, Majid. In Climate Change Alleviation for Sustainable Progression (pp. 280–288). CRC Press.
- 7. Assessing the microclimatic environmental indicators of climate change of a temperate valley in the Western Himalayan Region** (2022). Farooq, Majid, Rashid, H., Meraj, G., Kanga, S., & Singh, S. K. In Climate Change, Disaster and Adaptations (pp. 47–61). Springer, Cham.
- 8. Hazard mitigation and climate change in the Himalayas—Policy and decision making** (2022). Rafiq, M., Meraj, G., Kesarkar, A. P., Farooq, Majid, Singh, S. K., & Kanga, S. In Disaster Management in the Complex Himalayan Terrains (pp. 169–182). Springer, Cham.
- 9. Forest fire alert system of India with a special reference to fire vulnerability assessment of the UT of Jammu and Kashmir** (2022). Farooq, Majid, Gazali, S., Dada, M., Gera, N., & Meraj, G. In Disaster Management in the Complex Himalayan Terrains (pp. 155–167). Springer, Cham.
- 10. Soil and Water Assessment Tool for simulating the sediment and water yield of alpine catchments: A brief review** (2022). Gujree, I., Zhang, F., Meraj, G., Farooq, Majid, Muslim, M., & Arshad, A. In Geospatial Modeling for Environmental

Management (pp. 37–57). Springer.

11. Slum categorization for efficient development plan—A case study of Udhampur City, Jammu and Kashmir using remote sensing and GIS (2022). Farooq, Majid, Meraj, G., Kanga, S., Nathawat, R., Singh, S. K., & Ranga, V. In Geospatial Technology for Landscape and Environmental Management (pp. 283–299). Springer, Singapore.

12. Vegetation classification and habitat mapping of Dachigam National Park, Kashmir, India (2018). Ahmad, K., & Farooq, Majid. In Vegetation of Central Asia and Environs (pp. 119–142). Springer, Cham.

Books and edited volumes (9)

1. Climate crisis over the Arabian Peninsula - Challenges and pathways to solutions (2024). Mushtaq, F., Farooq, Majid, & Mukherjee, A. B. Springer Nature.

2. Disaster management and environmental sustainability (2024). Kumar, S., Singh, S. K., Kanga, S., Meraj, G., Farooq, Majid, & Nathawat, M. S. (Eds.). John Wiley & Sons.

3. Geospatial analytics for environmental pollution modeling: Analysis, control and management (2023). Mushtaq, F., Farooq, Majid, Mukherjee, A. B., & Lala, M. G. N. (Eds.). Springer, Cham.

4. Geographic information science for land resource management (2021). Singh, S. K., Kanga, S., Meraj, G. (Lead Editor), Farooq, Majid, & Sudhanshu. Wiley-Scrivener Publishing LLC.

5. Disasters in the complex Himalayan terrains (2022). Kanga, S., Meraj, G., Farooq, Majid, Singh, S. K., & Nathawat, M. S. In Disaster management in the complex Himalayan (Book section). Springer, Cham.

6. Geospatial modeling for environmental management: Case studies from South Asia (1st ed.) (2022). Kanga, S., Singh, S. K., Meraj, G., & Farooq, Majid (Eds.). CRC Press.

7. GIScience for the sustainable management of water resources (2022). Meraj, G., Kanga, S., Farooq, Majid, Singh, S. K., & Sudhanshu. Apple Academic Press, Taylor and Francis Group.

8. Emission inventory of CO₂ in Jammu and Kashmir - A sectoral analysis (2016). Farooq, Majid, Shah, I. K., Mushtaq, S. M., Khaki, B. A., Marazi, A. A., Shah, M. N., Wani, I. A., & Mushtaq, M. Department of Ecology, Environment and Remote Sensing, J&K. ISBN: 978-93-5267-680-4.

9. Biodiversity Characterization at Landscape Level in Jammu and Kashmir Using Satellite Remote Sensing and Geographic Information Systems (2010). Department of Space & Department of Biotechnology, Govt. of India. Bishen Singh Mahendra Pal Singh Publishers, Dehradun, India. ISBN: 978-81-211-0818-8.

This public-facing CV omits residential address, date of birth, personal telephone numbers and third-party reference contact information. For professional enquiries, use the official email address above.