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Landslides Inventory of Active Ramgarh Thrust Zone through Image Processing and GIS Techniques in Sikkim, India -- Landslide Susceptibility Zonation Mapping using Frequency Ratio, Information Value Model, and Logistic Regression Model: A Case Study of Kohima District in Nagaland, India -- Unmanned Aerial Vehicles Technology for Slope Hazard Assessment, Monitoring, and Post Failure Management -- Landslide Hazard Assessment Using Machine Learning and GIS -- Social and Economic Impacts of Kotropi Landslide on National Highways of Himalayas – A Case Study. .

Sommario/riassunto

This book intends to decipher the knowledge in the advancement of understanding, detecting, predicting, and monitoring landslides. The number of massive landslides and the damages they cause has increased across the globe in recent times. It is one of the most devastating natural hazards that cause widespread damage to habitat on a local, regional, and global scale. International experts provide their experience in landslide research and practice to help stakeholders mitigate and predict potential landslides. The book comprises chapters on: Dynamics, mechanisms, and processes of landslides; Geological, geotechnical, hydrological, and geophysical modelling for landslides; Mapping and assessment of hazard, vulnerability, and risk associated with landslides; Monitoring and early warning of landslides; Application of remote sensing and GIS techniques in monitoring and assessment of landslides. The book will be of interest to researchers, practitioners, and decision-makers in adapting suitable modern techniques for landslide study.