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Soggetti	Natural disasters Geotechnical engineering Remote sensing Electrical engineering Natural Hazards Geotechnical Engineering & Applied Earth Sciences Remote Sensing/Photogrammetry Communications Engineering, Networks
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Close-Range Photogrammetric Techniques for Deformation Measurement: Applications to Landslides -- A Fixed Terrestrial Photogrammetric System for Landslide Monitoring -- A New Approach Based on Terrestrial Remote Sensing Techniques for Rock Fall Hazard Assessment -- Multi-Temporal Terrestrial Laser Scanning Survey of a Landslide -- Micro-Scale Landslide Displacements Detection Using Bayesian Methods Applied to GNSS Data -- Analysis of Microseismic Activity within Unstable Rock Slopes -- The State of the Art of SPH Modelling for Flow-Slide Propagation -- Predictability of A Physically-based Model for Rainfall-induced Shallow Landslides: Model

Development and Case Studies -- Monitoring Landslide Activities in the Three Gorges Area with Multi-Frequency Satellite SAR Datasets -- Radar Technologies for Landslide Detection, Monitoring, Early Warning and Emergency Management -- A new Approach to Satellite Time Series Co-registration for Landslide Monitoring.

Sommario/riassunto

Modern Technologies for Landslide Investigation and Prediction presents eleven contributed chapters from Chinese and Italian authors, as a follow-up of a bilateral workshop held in Shanghai on September 2013. Chapters are organized in three main parts: ground-based monitoring techniques (photogrammetry, terrestrial laser scanning, ground-based InSAR, infrared thermography, and GNSS networks), geophysical (passive seismic sensor networks) and geotechnical methods (SPH and SLIDE), and satellite remote-sensing techniques (InSAR and optical images). Authors of these contributes are internationally-recognized experts in their respective research fields. Marco Scaioni works in the college of Surveying and Geo-Informatics at Tongji University, Shanghai (P.R. China). His research fields are mainly Close-range Photogrammetry, Terrestrial Laser Scanning, and other ground-based sensors for metrological and deformation monitoring applications to structural engineering and geosciences. In the period 2012-2016 he is chairman of the Working Group V/3 in the International Society for Photogrammetry and Remote Sensing, focusing on 'Terrestrial 3D Imaging and Sensors'.
