1.	Record Nr.	UNINA9910483490003321
	Titolo	Understanding and reducing landslide disaster risk . Volume 3 Monitoring and early warning / / Nicola Casagli [and four others]
	Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
	ISBN	3-030-60311-3
	Edizione	[1st ed. 2021.]
	Descrizione fisica	1 online resource (XXVIII, 361 p. 316 illus., 305 illus. in color.)
	Collana	ICL contribution to landslide disaster risk reduction, , 2662-1894
	Disciplina	551.307
	Soggetti	Landslide hazard analysis Hazard mitigation Environmental management Natural disasters
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	Monitoring and remote sensing for landslide risk mitigation: Defining kinematic and evolutive features of earth flows using integrated monitoring and low-cost sensors -- Monitoring of thermoelastic wave within a rock mass coupling information from IR camera and crack meters: a 24-hour experiment on "Branická skála" Rock in Prague, Czechia -- The role of maesure of deep-seated displacements in the monitoring network on large-sacle landslides -- Monitoring the movement of landslide-flows in Uzbekistan -- Long-term geophysical imaging of moisture driven landslide processes -- Geophysical monitoring of landslides: state-of-the art and recent advances -- Geophysical monitoring of landslides – A step closer towards predictive understanding? -- Recent advances in high spatial resolution geophysical monitoring of moisture-induced landslides Characteristic analysis of the Nayong rock avalanche based on the seismic signal -- Electrical resistivity tomography (ERT) based investigation of two landslides in Guizhou, China -- Vibration of Piled Rocks - Which rock can be removed? -- Urgent issues and new suggestions for geo-disaster prevention in Japan -- "Development of resident participation-type slope measurement/monitoring system in mountain region" --

Debris flow detection with video camera -- Landslide mapping and monitoring with satellite interferometry -- Comparison between PS and SBAS InSAR techniques in monitoring shallow mass movements -- Analyses of Koitash landslide, affecting Mailuu Suu valley, Kyrgyzstan, through integrated remote sensing techniques -- Landslide monitoring in the main municipalities of Sikkim Himalaya, India, through Sentinel-1 SAR data -- Landslide Early Warning Systems, forecasting models and time prediction of landslides: Definition and first application of a probabilistic warning model for rainfall-induced landslides -- Establishment of an integrated landslide early warning and monitoring system in populated areas -- An integrated Web Gis system for shallow landslide hazard early warning -- The values of soil wetness measuremnt for regional landslide early warning sytems Technical concepts for an early warning system for rainfall induced landslides in informal settlements -- Combination of rainfall thresholds and susceptibility maps for early warning purposes for shallow landslides at regional scale -- Development of Landslide Early Warning System based on the Satellite-Derived Rainfall Threshold in Indonesia -- Establishing Soil Moisture and Rainfall Intensity-duration thresholds for initiation of mass movements along the National Highway-58 in the Chamoli district of Uttarakhand -- The Efficient Early Warning with South East-Asia Oceania Flash Flood Guidance System (SAOFFGS) -- Regional approaches in forecasting rainfall-induced landslides -- Seven years of landslide forecasting in Norway – strengths and limitations -- Characterization of hillslope deposits for physically-based landslide forecasting models -- Development of a Rainfall-induced Landslide Forecast Tool for New Zealand -- Some Successful Early Warning Cases of Landslides in China -- Towards an early warning system for instable slopes in Gorgia The large Tskneti Akhaldaba landslide -- An EWS of landslide and slope failure by MEMS tilting sensor array -- Influence of intervals measuring surface displacement on time prediction of slope failure using Fukuzono Method Velocity and acceleration of surface displacement in sandy model slope with various slope conditions -- Comparison of Moving-average, Lazy, and Information Gain Methods for Predicting Weekly Slope-movements: A Case-study in Chamoli, India -- New insights into the spatiotemporal precursory failure dynamics of the 2017 Xinmo landslide and its surrounds -- Cutting-edge technologies aiming for better outcomes of landslide disaster mitigation.

Sommario/riassunto	This book is a part of ICL new book series "ICL Contribution to Landslide Disaster Risk Reduction" founded in 2019. Peer-reviewed papers submitted to the Fifth World Landslide Forum were published in six volumes of this book series. This book contains the followings: • One theme lecture and one keynote lecture • Monitoring and remote sensing for landslide risk mitigation, including one keynote lecture • Landslide early warning systems, forecasting models and time prediction of landslides Prof. Nicola Casagli is a Vice President and President-elect of the International Consortium on Landslides (ICL) for 2021–2023. He is Professor of engineering geology at the Department of Earth Sciences, University of Florence, and President of the National Institute of Oceanography and Applied Geophysics – OGS, Trieste, Italy. Dr. Veronica Tofani is an Associate Professor at the Department of Earth Sciences, University of Florence, and Program Coordinator of the UNESCO Chair on Prevention and Sustainable Management of Geo-hydrological hazards, University of Florence. Prof. Kyoji Sassa is the Founding President and the Secretary-General of the International Consortium on Landslides (ICL). He has been the Editor-in-Chief of International Journal Landslides since its foundation in 2004. Prof. Peter

Bobrowsky is the President of the International Consortium on Landslides. He is a Senior Scientist of Geological Survey of Canada, Ottawa, Canada. Prof. Kaoru Takara is the Executive Director of the International Consortium on Landslides. He is a Professor and Dean of Graduate School of Advanced Integrated Studies (GSAIS) in Human Survivability (Shishu-Kan), Kyoto University.