1. Record Nr. UNINA9910624315903321

Titolo	Coseismic Landslides : Phenomena, Long-Term Effects and Mitigation / / edited by Ikuo Towhata, Gonghui Wang, Qiang Xu, Chris Massey
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-19-6597-8
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (680 pages)
Collana	Springer Natural Hazards, , 2365-0664
Disciplina	551.307
Soggetti	Natural disasters Geophysics Geotechnical engineering Natural Hazards Geotechnical Engineering and Applied Earth Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Report on landslides triggered by the 2008 Wenchuan earthquake -- Earthquake-induced landslides and ground failure in Chile: The Aysen 2007 and Maule 2010 earthquakes -- Earthquake-Induced landslides in the Nepal Himalaya -- Landslides triggered by the 2002 M 7.9 Denali Fault earthquake, Alaska, USA -- Recent earthquake-triggered landslide events in Central Asia, evidence of seismic landslides in the Lesser Caucasus and the Carpathians -- Some earthquake-induced rockslides in the Central Asia region -- Some recent coseismic landslides in Japan -- Co-Seismic Landslides in Greece, a Review -- Characteristics of Landslides and Cases of Severe Landslides on Gentle Slopes Triggered by the Chi-Chi Earthquake, Taiwan, 1999 -- Landslides triggered by recent earthquakes in Italy -- Earthquake-induced landslides and related problems -- Characteristics of sites response of a series of monitored slopes in Sichuan mountain area -- Post-earthquake landscape response -- Earthquake-induced landslide susceptibility and hazard assessment approaches -- Numerical Evaluation of the Effect of Drainage Wells on the Stability of the Ichiba No.1 Landslide during an Mj6.7 Earthquake -- Displacement predictive relationships for earthquake triggered landslides and structural

vulnerability models for buildings exposed to co-seismic ground movements -- A prototype earthquake-induced landslide forecast tool for New Zealand -- Coseismic landslide susceptibility and triggering analyses.

Sommario/riassunto

This book is the result of an elaborate project initiated by the Joint Technical Committee (JTC-1) of 1) the International Society for Soil Mechanics and Geotechnical Engineering, 2) the International Association for Engineering Geology and the Environment, 3) the International Society for Rock Mechanics, and 4) the International Geotextile Society, with the focus on natural slopes and landslides. The framework of the book sets out the steps, based on recent disaster experiences in the twenty-first century, leading to the assessment of earthquake-induced landslide hazards. It contains: 1) important cases of landslides triggered by earthquakes around the world; 2) investigation into the characteristics of ground motion site response; 3) methods to determine landslide susceptibility and triggering thresholds and their comparative study; and 4) commentary on the production of earthquake-induced landslide hazard maps. All the contents are the result of the latest research on related areas. The book is a valuable resource for researchers, designers, consultants, academicians, government officials, and all others who are involved in the mitigation of coseismic landslides. The book contributes toward the development of a new chapter in disaster prevention and mitigation of landslides induced by earthquakes.