

1. Record Nr.	UNINA9910993946003321
Titolo	Civil Engineering for Disaster Risk Reduction // edited by Sreevalsan Kolathayar, Indrajit Pal, Siau Chen Chian, Arpita Mondal
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	9789811653124 9811653127 9789811653117 9811653119
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (X, 489 p. 247 illus., 214 illus. in color.)
Collana	Springer Tracts in Civil Engineering, , 2366-2603
Disciplina	624.15
Soggetti	Engineering geology Fire prevention Buildings - Protection Buildings - Design and construction Buildings - Repair and reconstruction Buildings - Maintenance Geoengineering Fire Science, Hazard Control, Building Safety Building Construction and Design Building Repair and Maintenance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Introduction - Civil Engineering and DRR Connect -- Chapter 2: Disaster Risk Reduction and Sustainable Development -- Chapter 3: Prof. Dilanthi Amaralatunga, Head, Global Disaster Resilience Centre -- Chapter 3: Geotechnical, Geological and Geophysical Investigations for Seismic Microzonation and Site-Specific Earthquake Hazard Analysis -- Chapter 4: Seismic Hazard Assessment – State of the Art and Future Directions -- Chapter 5: Earthquake Damage Scenario Analysis for Chennai City - A Geospatial Approach -- Chapter 6: Estimation of Local Site Effects: Lessons from Past Earthquakes, Current Practices and Future Trends -- Chapter 7: Post-Earthquake

**Sommario/riassunto**

The book is a comprehensive volume on multi-hazards and their management for a sustainable built environment. It focuses on the role of civil engineering in building disaster resilient society. This book brings together all diverse disciplines of civil engineering and related areas (for example, geotechnical engineering, water resources engineering, structural engineering, transportation engineering, environmental engineering, construction management, GIS, and remote sensing) towards a common goal of disaster resilience through an interdisciplinary approach. It contains methods and case studies focusing on civil engineering solutions to reduce the disaster risk. The book contents are aligned in line with the priorities set by UN-Sendai Framework for Disaster Risk Reduction and UN-SDGs to promote a global culture of risk-awareness and disaster reduction. The book will be a useful comprehensive reference for disaster risk reduction beneficial for engineering students, teaching faculty, researchers, industry professionals and policymakers.