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Descrizione fisica	1 online resource (XX, 165 p. 112 illus., 87 illus. in color.)
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Disciplina	624.151
Soggetti	Geotechnical engineering Engineering design Civil engineering Soil science Geotechnical Engineering and Applied Earth Sciences Engineering Design Civil Engineering Soil Science
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Macroscopic Characteristics of Seismic Liquefaction -- Liquefaction Potential Evaluation Based on In situ Testing -- Laboratory Experimental Study on Dynamic Characteristics of Liquefiable Soil -- Physical Model Testing for Dynamic Characteristics of Seismic Soil Liquefaction -- Numerical Simulation for Deformation of Liquefiable Soils -- Comprehensive Evaluation for Liquefaction Damage During Earthquakes.
Sommario/riassunto	This book presents comprehensive hazard analysis methods for seismic soil liquefaction, providing an update on soil liquefaction by systematically reviewing the phenomenon’s occurrence since the beginning of this century. It also puts forward a range of advanced research methods including in-situ tests, laboratory studies, physical model tests, numerical simulation, and performance-based assessment. Recent seismic liquefaction-related damage to soils and foundations demonstrate the increasing need for the comprehensive hazard analysis of seismic soil liquefaction in order to mitigate this

damage and protect human lives. As such the book addresses the comprehensive hazard analysis of seismic soil liquefaction, including factors such as macroscopic characteristics, evaluating the liquefaction potential, dynamic characteristics and deformation processes, providing reliable evaluation results for liquefaction potential and deformation in the context of risk assessment.