1. Record Nr. UNINA9910627244903321

Titolo	Advances in Earthquake Geotechnics / / edited by T. G. Sitharam, Ravi S. Jakka, Sreevalsa Kolathayar
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-19-3330-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (257 pages)
Collana	Springer Tracts in Civil Engineering, , 2366-2603
Disciplina	624.1762
Soggetti	Engineering geology Geotechnical engineering Natural disasters Soil science Mechanics, Applied Solids Geoengineering Geotechnical Engineering and Applied Earth Sciences Natural Hazards Soil Science Solid Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Risks and Vulnerabilities in the design, construction and operation of offshore wind turbine farms in seismic areas -- Chapter 2. Numerical modelling of basin effects on earthquake ground motions in Kutch basin -- Chapter 3. Controlled ground-borne vibrations for design of sub-structural systems - theory and practice -- Chapter 4. Geotechnical, Geological and Geophysical Investigations for Seismic Microzonation and Site-Specific Earthquake Hazard Analysis in Gujarat -- Chapter 5. Seismic Analysis of Pile Foundations using an Integrated Approach -- Chapter 6. Numerical Modeling of Liquefaction -- Chapter 7. Region Specific Consideration for GMPE Development,Representative Seismic Hazard Estimation and Rock Design Spectrum for Himalayan Region -- Chapter 8. Seismic Response of Shallow Foundations on

Reinforced Sand Bed -- Chapter 9. Seismic Performance Evaluation of Concrete Gravity Dam on Rock Foundation System with Shear Zone -- Chapter 10. Visualization of Liquefaction in Soils withPWP Measurements by Tapping -- Chapter 11. An Experimental Study on Soil Spring Stiffness of Vibrating Bases on Polypropylene Fibre Reinforced Fine Sand -- Chapter 12. Guidelines for minimization of uncertainties and estimation of a reliable shear wave velocity profile using MASW testing: A state of the art review.

Sommario/riassunto

This book brings together contributions from world renowned researchers and practitioners in the field of geotechnical engineering. The chapters of this book are based on the keynote and invited lectures delivered at the 7th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics. The book presents advances in the field of soil dynamics and geotechnical earthquake engineering. A strong emphasis is placed on proving connections between academic research and field practice, with many examples, case studies, best practices, and discussions on performance-based design. This book will be of interest to research scholars, academicians and industry professionals alike.