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Nota di contenuto	Chapter 1: Field and laboratory testing of soils for the estimation of dynamic soil properties -- Chapter 2: Latest findings on liquefaction of soils -- Chapter 3: Seismic slope stability and landslides -- Chapter 4: Seismic design of retaining walls, marine structures, and dams -- Chapter 5: Seismic design of shallow and deep foundations -- Chapter 6: Soil-structure interaction under dynamic loading -- Chapter 7: Engineering seismology, strong ground motions.-Chapter 8: Ground response analyses and local site effects -- Chapter 9: Seismic hazard analyses: zonation, microzonation, risk assessment -- Chapter 10: Ground improvement techniques for reduction of seismic hazard -- Chapter 11: Role of building codes in reduction of seismic risk.
Sommario/riassunto	This book will present the select proceedings of the 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (8ICRAGEE) held at the Indian Institute of Technology (IIT), Guwahati between December 11 and 14, 2024. This

book contains the latest research papers covering the contributions and accomplishments in the field of geotechnical earthquake engineering and soil dynamics in the last four years. It covers a wide range of topics including but not limited to the seismic design of shallow and deep foundations, dynamic soil-structure interaction, estimation of dynamic properties, seismic design of retaining structures, marine structure and dams, seismic slope stability and landslides, engineering seismology and seismic microzonation. Further, recent technologies such as Artificial Intelligence (AI) and Machine Learning (ML) applications for geo-hazards, sensors and satellite technologies for disaster mitigation are also covered. This book will be valuable not only be valuable for researchers and professionals to draw an agenda for future courses of action in the safe design of high-rise buildings, power plants, dams and other structures from the perspective of geotechnical earthquake engineering.
