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Nota di contenuto	Chapter 1. Ground Motions from Past Earthquakes -- Chapter 2. Ground Motions for Future Earthquakes -- Chapter 3. Response of One-Story Buildings -- Chapter 4. Response of Multi-Story Buildings -- Chapter 5. Sliding of Objects During Earthquakes -- Chapter 6. Rocking of Objects During Earthquakes -- Chapter 7. Response of Storage Racks -- Chapter 8. Response of Liquid-Storage Tanks -- Chapter 9. Response of Gantry Cranes.
Sommario/riassunto	This book describes methods used to estimate forces and deformations in structures during future earthquakes. It synthesizes the topics related to ground motions with those related to structural response and, therefore, closes the gap between geosciences and engineering. Requiring no prior knowledge, the book elucidates confusing concepts related to ground motions and structural response and enables the reader to select a suitable analysis method and implement a cost effective seismic design. Presents lucid, accessible descriptions of key concepts in ground motions and structural response and easy to follow descriptions of methods used in seismic analysis; Explains the roles of strength, deformability, and damping in seismic design; Reinforces concepts with realworld examples; Stands as a ready reference for performancebased/risk-based seismic design, providing guidance for achieving a cost-effective seismic design.