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Titolo	Porous models for wave-seabed interactions / / Dong-Sheng Jeng
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Descrizione fisica	1 online resource (297 p.)
Collana	Springer Environmental Science and Engineering
Disciplina	500
Soggetti	Submarine topography Ocean bottom Submarine geology
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Wave-Induced Seabed Response in an Isotropic Seabed -- Wave-Induced seabed Instability -- Cross-Anisotropic Soil Behavior -- Non-Homogeneous Seabed -- Wave-Driven Seepage flux in Marine Sediments -- Dynamic Analysis for Wave-Seabed Interactions -- Wave-Induced Pore Pressure Accumulation in Marine Sediments -- Dynamic Analysis for Wave-Seabed Interactions -- Dynamic Analysis for Wave-Seabed Interactions -- Wave Propagation over Coulomb-Damped Seabed -- Wave-Induced Pore Pressure Accumulation in Marine Sediments -- Random wave-induced seabed response 295 -- Wave-Induced Progressive liquefaction in a porous seabed -- Poro-Elastoplastic model for Wave-Seabed Interactions -- Response of Seabed to Combined Wave and Current Loading -- ANN model for Wave-Induced Liquefaction 341 -- Models for Wave-Seabed-Structure Interaction.
Sommario/riassunto	"Porous Models for Wave-seabed Interactions" discusses the Phenomenon of wave-seabed interactions, which is a vital issue for coastal and geotechnical engineers involved in the design of foundations for marine structures such as pipelines, breakwaters, platforms, etc. The most important sections of this book will be the fully detailed theoretical models of wave-seabed interaction problem, which are particularly useful for postgraduate students and junior researchers entering the discipline of marine geotechnics and offshore

engineering. This book also converts the research outcomes of theoretical studies to engineering applications that will provide front-line engineers with practical and effective tools in the assessment of seabed instability in engineering design. Prof. Dong-Sheng Jeng works at Shanghai Jiao Tong University, China.
