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Descrizione fisica	1 online resource (XVI, 219 p. 40 illus., 31 illus. in color.)
Collana	Advances in Geophysical and Environmental Mechanics and Mathematics, , 1866-8356
Disciplina	363.70015118
Soggetti	Physical geography Computational intelligence Computer simulation Data mining Mathematical physics Earth System Sciences Computational Intelligence Computer Modelling Data Mining and Knowledge Discovery Mathematical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Environmental engineering applications related to flow and transport in the subsurface -- Mathematical/numerical solution methods: An overview -- Numerical simulation: Implementation, data processing, software concepts -- The science-policy interface in subsurface environmental modelling -- Challenging subsurface modelling and policy-making -- Conclusions.
Sommario/riassunto	This book provides a broad overview of essential features of subsurface environmental modelling at the science-policy interface, offering insights into the potential challenges in the field of subsurface flow and transport, as well as the corresponding computational modelling and its impact on the area of policy- and decision-making. The book is divided into two parts: Part I presents models, methods and software at

the science-policy interface. Building on this, Part II illustrates the specifications using detailed case studies of subsurface environmental modelling. It also includes a systematic research overview and discusses the anthropogenic use of the subsurface, with a particular focus on energy-related technologies, such as carbon sequestration, geothermal technologies, fluid and energy storage, nuclear waste disposal, and unconventional oil and gas recovery.
