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Descrizione fisica	1 online resource (XI, 339 p. 155 illus., 1 illus. in color.)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Basic law of percolation -- Steady state percolation of single-phase incompressible fluid -- Interference theory of wells under rigid water drive -- Unsteady state percolation of slightly compressible fluid -- Percolation law of natural gas -- Foundation of water/oil displacement theory -- Percolation theory of oil-gas two phases (dissovled gas drive) -- Percolation in dual-media -- Percolation of non-Newtonian liquid -- Theory of similarity.
Sommario/riassunto	This book discusses various aspects of percolation mechanics. It starts with the driving forces and driving modes and then examines in detail the steady state percolation of single-phase incompressible fluids, percolation law of natural gas and percolation of non-Newtonian fluids. Progressing from simple to complex concepts, it also analyzes Darcy's law, providing a basis for the study of reservoir engineering, oil recovery engineering and reservoir numerical simulation. It serves as a textbook for undergraduate students majoring in petroleum engineering, petroleum geology and groundwater engineering, and offers a valuable reference guide for graduate students, researchers and technical engineers engaged in oil and gas exploration and

development.