Record Nr. UNINA9910799213103321 Physics of Petroleum Reservoirs / / edited by Xuetao Hu, Shuyong Hu, **Titolo** Fayang Jin, Su Huang Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2017 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (IX, 506 p. 290 illus.) Springer Mineralogy, , 2366-1585 Collana 622 Disciplina Soggetti Mineral resources Chemical engineering Fossil fuels Mineral Resources Industrial Chemistry/Chemical Engineering Fossil Fuels (incl. Carbon Capture) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references at the end of each chapters. The Physical Properties of Reservoir Rocks -- The Physical Properties of Nota di contenuto Reservoir Fluids -- Flow Mechanism of Multiphase Fluid Through Porous Media -- Principles of Enhanced Oil Recovery. Sommario/riassunto This book introduces in detail the physical and chemical phenomena and processes during petroleum production. It covers the properties of reservoir rocks and fluids, the related methods of determining these properties, the phase behavior of hydrocarbon mixtures, the microscopic mechanism of fluids flowing through reservoir rocks, and the primary theories and methods of enhancing oil recovery. It also involves the up-to-date progress in these areas. It can be used as a reference by researchers and engineers in petroleum engineering and a textbook for students majoring in the area related with petroleum exploitation.