Record Nr. UNINA9910633959703321 Drilling engineering and technology: recent advances new perspectives **Titolo** and applications / / edited by Mansoor Zoveidavianpoor Pubbl/distr/stampa London:,:IntechOpen,,2022 **ISBN** 1-80356-363-X Descrizione fisica 1 online resource (174 pages) Disciplina 622.24 Soggetti Boring machinery Boring - Technological innovations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The book contains seven chapters on drilling engineering. It discusses drilling fluids, well control, unconventional drilling, thermal conductivity estimation, and modelling of drilling problems. Drilling fluids are crucial for successful drilling because they maximize recovery while reducing the time it takes to produce hydrocarbons. The topic is addressed in this book by unveiling two of the most promising additives in drilling operations: biodegradable polymeric nanoparticles and biopolymers. Other topics include early kick detection systems, an innovative drilling technique for hydraulic loosening and recovery of methane from gas-bearing coal seams, analytical solutions for stress accumulations near holes in elastic plates, prediction of pipe sticking

problems, and estimation of thermal conductivity.