1. Record Nr. UNINA9910337892003321 Autore Searle Mike Titolo Geology of the Oman Mountains, Eastern Arabia / / by Mike Searle Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 3-030-18453-6 **ISBN** Edizione [1st ed. 2019.] 1 online resource (487 pages) Descrizione fisica Collana GeoGuide, , 2364-6497 Disciplina 555.353 Soggetti Geology Earth Geomorphology Mineralogy Popular Earth Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I: Geography, History and Exploration. - Arabia Geography and Exploration -- Exploration of the Oman - UAE Mountains -- PART II: Geology -- Geology of the Oman - UAE Mountains -- Ophiolites and Structure of the Oman – UAE Mountains -- Oil and Gas -- PART III. Regional GeoPark Sites -- Musandam and Straits of Hormuz -- United Arab Emirates -- Northern Oman Mountains -- Ibri - Wadi Hawasina --Rustag -- Jebel al-Akhdar -- Muscat - As Sifah. Sommario/riassunto This book describes in detail numerous geological sites throughout the mountains of Oman and the United Arab Emirates (UAE) in Eastern Arabia. The region is well known for its oil and gas reserves in the desert interior, and Permian-Mesozoic shelf carbonates exposed in the mountains of the Musandam peninsula, Jebel al-Akhdar and Saih Hatat, where deep wadi canyons provide impressive three-dimensional views into the crust. The region has numerous globally important geological sites, including the world's largest and best-exposed ophiolite complex, the Semail Ophiolite, which is a vast thrust sheet of Cretaceous ocean crust and upper mantle emplaced onto the Arabian

continental margin. Other sites include spectacular fossil localities.

subduction zone metamorphic rocks (eclogites, blueschists,

amphibolites), fold-thrust belts, giant sheath folds and Precambrian salt domes, as well as the huge sand dunes of the Rub al'Khali, the Empty Quarter, and the separate Wahiba (Sharkiyah) sandsea of Eastern Oman. Written by Mike Searle, who has worked on geological research projects throughout Oman and UAE almost every year since 1978, this book describes the field geology of each site and includes a wealth of maps, field photos and diagrams illustrating key features. It also discusses the history of exploration of Arabia and the search for its hidden geological secrets. The book provides the geological basis for the establishment of a series of World Heritage Sites, National GeoParks and Sites of Special Scientific Interest (SSSI) throughout the region. As such, it is of interest to geologists, tourists, mountaineers, trekkers, rock climbers and naturalists.