Record Nr. UNINA9910299437803321 Autore **Etiope Giuseppe** Titolo Natural Gas Seepage: The Earth's Hydrocarbon Degassing // by Giuseppe Etiope Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-14601-7 Edizione [1st ed. 2015.] 1 online resource (203 p.) Descrizione fisica 055 Disciplina 550 Soggetti Earth sciences Earth Sciences, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Introduction -- Gas seepage classification and global distribution --Gas migration mechanisms -- Detecting and measuring gas seepage --Seepage applied to field geology and petroleum exploration --Environmental impact of gas seepage -- Seepage in serpentinised peridotites and on Mars -- Gas seepage and past climate change --Seeps in the ancient world: myths, religions, and social development. The book offers a modern, comprehensive, and holistic view of natural Sommario/riassunto gas seepage, defined as the visible or invisible flow of gaseous hydrocarbons from subsurface sources to Earth's surface. Beginning with definitions, classifications for onshore and offshore seepage, and fundamentals on gas migration mechanisms, the book reports the latest findings for the global distribution of gas seepage and describes detection methods. Seepage implications are discussed in relation to petroleum exploration, environmental impacts (hazards, pollution, atmospheric emissions, and past climate change), emerging scientific issues (abiotic gas and methane on Mars), and the role of seeps in ancient cultures. With an updated bibliography and an integrated

analysis of available data, the book offers a new fundamental

and influences all of Earth's external "spheres", including the

awareness - gas seepage is more widespread than previously thought

hydrosphere, atmosphere, biosphere, and anthroposphere.