Record Nr. UNINA9910583387703321 Autore Mondal Sisir K. Titolo Processes and ore deposits of ultramafic-mafic magmas through space and time / / Sisir K Mondal, William L. Griffin Pubbl/distr/stampa Amsterdam, Netherlands:,: Elsevier,, 2018 ©2018 **ISBN** 0-12-811160-7 0-12-811159-3 Descrizione fisica 1 online resource (384 pages) Disciplina 553.1 Soggetti Ore deposits Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Global- to deposit-scale controls on orthomagmatic Ni-Cu(-PGE) and Nota di contenuto PGE reef ore formation -- Review of predictive and detective exploration tools for magmatic Ni-Cu-(PGE) deposits, with a focus on komatiite-related systems in western Australia -- Metallic ore deposits associated with mafic to ultramafic igneous rocks -- Mixing and unmixing in the Bushveld complex magma chamber -- Secular change of chromite concentration processes from the Archean to the Phanerozoic -- Petrogenetic evolution of chromite deposits in the Archean greenstone belts of India -- New insights in the origin of ultramafic-mafic intrusions and associate Ni-Cu-PGE sulfide deposits of the Noril'sk and Taimyr provinces, Russia: evidence from radiogenicand stable-isotope data -- Magmatic sulfide and Fe-Ti oxide deposits associated with mafic-ultramafic intrusions in China -- Alaskan-type complexes and their associations with economic mineral deposits --Experimental aspects of platinum-group minerals Sommario/riassunto Processes and Ore Deposits of Ultramafic-Mafic Magmas through Space and Time focuses on the fundamental processes that control the formation of ore deposits from ultramafic-mafic magmas, covering chromite, platinum-group element (PGE), Ni-sulfides and Ti-V-bearing magnetite. The exploration, exploitation and use of these magmatic

ores are important aspects of geology and directly linked to the global

economy. Magmatic ores form from ultramafic-mafic magmas and crystallize at high-temperature after emplacement into crustal magma chambers, and are genetically linked to the evolution of the parental magmas through space and time. This book features recent developments in the field of magmatic ore deposits, and is an essential resource for both industry professionals and those in academia. Elucidates the relationships between tectonic settings and magmatic ore mineralizationProvides the links between magma generation in the mantle and ore mineralization at crustal levelsFeatures the latest research on changing patterns in magmatic ore mineralization through time and their bearing on the chemical evolution of the Earth's mantle--