

1. Record Nr.	UNINA9910162799003321
Titolo	CO2 sequestration by ex-situ mineral carbonation // editors, Aimaro Sanna (Heriot-Watt University, UK), M. Mercedes Maroto-Valer (Heriot-Watt University, UK)
Pubbl/distr/stampa	New Jersey : , : World Scientific, , [2017] ©2017
ISBN	1-78634-160-3
Descrizione fisica	1 online resource (193 pages) : illustrations (some color), color maps
Disciplina	628.5/32
Soggetti	Carbon dioxide mitigation Carbon sequestration Carbonate minerals Silicate minerals Artificial minerals
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from PDF title page (viewed May 4, 2017).
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"To meet human energy needs, the use of fossil fuels is set to continue well into the second half of the 21st century. In order to avoid irreversible climate change, carbon dioxide capture and storage (CCS) must be integrated into industrial processes. Mineral carbonation (MC) is increasingly seen as an effective technology solution for CCS of CO2. With the potential to sequester billions of tonnes per year, remarkable developments in mineral carbonation technology are taking place, particularly in USA, Australia and the European Union. This book brings together some of the world's leading experts in the field of sequestration to provide a critical assessment of progress to date. Chapters cover the resources available for MC, and also give a critical analysis of the technologies developed for sequestering carbon from industrial and power plants, including the use of the resultant carbonated product. The studies conclude with evaluation of key technical and economic obstacles which need to be addressed for future research, development and application. CO2 Sequestration by

Ex-Situ Mineral Carbonation is essential reading for engineers, chemists and materials scientists in graduate or research positions, and for those interested in sustainability, the environment and ecology."--
Publisher's website.
