

1. Record Nr.	UNINA9910566466803321
Autore	Menendez-Aguado Juan M
Titolo	Grinding and Concentration Technology of Critical Metals
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 online resource (146 p.)
Soggetti	History of engineering and technology Mining technology and engineering Technology: general issues
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>The production and supply of raw materials is a basic ecosystem service, the origin of multiple production value chains. In 2011, the European Union elaborated a list of critical raw materials (CRMs), taking the economic and strategic importance for the European economy and the supply risk. Although focused mainly on the energy sector, the USA, Canada, and other countries took recently similar steps. Despite the great inertia characterising the mineral raw materials sector, some steps towards the Industry 4.0 paradigm can be envisaged. Significant challenges to the mining sector are the appropriate process design using the best available technologies; the increase in energy efficiency; the responsible use of water and handling of mining wastes; the social acceptance of the activity; and the digitalisation challenge. This book aims to propose strategies that can help face those challenges, especially in increasing energy efficiency in comminution operations.</p>