Special Issue

Extractive Metallurgy for the Sustainable Supply of Metals in Lithium-Ion Batteries

Message from the Guest Editors

The energy transition relies on developing technologies that make it possible to sustainably produce energy from resources such as wind, sun, potential energy, etc. The energy produced as part of the energy transition is often intermittent, and it is, therefore, necessary to be able to store and restore it reversibly. Electric mobility is also a major contributor to reducing the impacts of human activity on the environment and the climate since it contributes to reducing greenhouse gas emissions. Lithium-ion batteries (LiBs) are at the heart of energy storage for stationary applications and for electric mobility (electric vehicles, EV's). Their increasing use in EVs is indisputable. Although mining is essential to meet the raw material demand for LiBs production, recycling can contribute to facing the future demand in lithium, cobalt, nickel, manganese, and graphite arising from the huge increase in electric vehicle production in the next decade. This Special Issue aims to gather outstanding works on the development of hydrometallurgical processes for recycling lithium-ion batteries and the comprehension of the physicochemistry involved in their unit operations.

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About the Journal

Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editor-in-Chief

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