Special Issue

Recent Progress in Metal Extraction and Recycling

Message from the Guest Editor

The demand for metals in low-carbon economy and high-tech industries has recently exploded. The development of clean, efficient, and convenient metal extraction methods and new technologies for high-value recycling of metal secondary resources will help to achieve a sustainable supply of metals and promote the rapid development of strategic emerging industries.

However, high-grade raw metal minerals are increasingly depleted. In the process of metal resources mining, selecting, smelting, and utilization, a large number of complex metal wastes are produced can easily cause serious environmental pollution. Typical metal wastes (such as non-ferrous metallurgical slag, spent lithium-ion batteries, electronic waste, electroplating sludge, anode mud, etc.) are often rich in gold, silver, nickel, copper, zinc, chromium, and other valuable metals, which are valuable secondary metal resources worthy of recycling.

This Special Issue aims to provide the readership of Metals with the most up-to-date research in Metal Extraction and Recycling to explore a promising route for metallurgy in environmental protection, technological innovation and economic feasibility.

Guest Editor

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Message from the Editorial Board

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.

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