



Pyrometallurgical Extraction of Critical Metals for Sustainable Development

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Message from the Guest Editors

Critical metals are subject to supply chain risks, but they are simultaneously essential to sustainable development. Key industry sectors and developmental initiatives such as renewable energy transition, advanced manufacturing, aerospace, defense, battery technologies, consumer electronics, electric vehicles, among others, are affected by the supply of critical metals.

This Special Issue focuses on the resource identification, pyrometallurgical extraction, separation, and refining of critical metals for sustainable development. Topics include but are not limited to novel/improved processes for the production of:

- Ferrous metals: chromium, cobalt, manganese, nickel, niobium, tantalum, titanium, and vanadium;
- Precious metals: gold, silver, and platinum group metals (iridium, palladium, platinum, rhodium, and ruthenium);
- Other non-ferrous metals: aluminum, antimony, bismuth, cadmium, copper, indium, gallium, germanium, lead, lithium, and magnesium.





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Message from the Editor-in-Chief

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