Special Issue

New Leaching Processes for the Recovery of Copper from Primary Copper Resources

Message from the Guest Editor

Over the last 30 years, the recovery of copper via heap leaching of amenable ores has advanced rapidly to account for approximately 20% of world copper production. Ore-containing copper oxides or secondary copper sulfides are easily treated by heap leaching or heap bioleaching technologies, respectively. The use of heap leaching for primary copper mineralization is now advancing rapidly with the goal of avoiding the costly grinding necessary to prepare these ores for flotation. The key obstacle to heap leaching of primary ores is the low recoveries achieved by conventional heap leaching. However, several technologies currently under development attempt to address this issue through the use of alternative lixiviants or specific additives which catalyze the oxidation of chalcopyrite. The purpose of this Special Issue is to collect works related to research and development of novel processes for the recovery of copper from primary copper sulfide resources. It is my pleasure to invite you to submit manuscripts for this Special Issue. Full papers, communications and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2021)

Metals

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CiteScore 5.3

mdpi.com/si/45689

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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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