

# Special Issue

## Superconductivity 2022

### Message from the Guest Editors

We present a Special Issue for the journal *Metals* with the title “Superconductivity 2022”. A hundred and ten years after the discovery of superconductivity in Hg, the research of superconductivity in metals and metallic alloys is currently found at the forefront of science, considering the discovery of (near) room-temperature superconductivity in La(HfO)-hydrides, even if only at high pressures. Thus, there is a lot of interesting research considering metallic materials and superconductivity, arising from breaking news such as: the high-pressure research of elements with the current record holder being Ca having a superconducting transition temperature,  $T_c$ , of 20 K or above; the finding of the enormous stability of superconductivity at high pressures (261 GPa) of the NbTi alloy with an increased  $T_c$  of up to ~20 K. The intention of this Special Issue is to assemble a complete collection of research works on the current “hot” topics, demonstrating the advances this field has seen in recent years. We welcome full papers, communications and review articles emphasizing the broad scope of the topic.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 January 2023)



## Metals

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## About the Journal

### 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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### Editors-in-Chief

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JCR - Q2 (Metallurgy and Metallurgical Engineering) /  
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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).