

Special Issue

Advancements in Metallic Materials for Industrial Applications and Developing Medical Implants

Message from the Guest Editor

This Special Issue will explore the latest research on how different classes of materials are obtained, characterized, and applied in fields ranging from industrial applications to biomedical implants with embedded real-time data sensors. We encourage submissions that focus on developing advanced metallic materials, including studies on their structural, microstructural, and mechanical properties; corrosion resistance; biocompatibility; and sensor integration. Contributions that address the challenges and opportunities associated with innovations in the field of metallic biomaterials, and their potential impacts on patient care and implant safety, are particularly welcome. Metallic biomaterials have become key elements in human well-being. Embedding real-time data sensors within both traditional and innovative materials opens new possibilities for the development of medical implants, allowing for the continuous monitoring of implant performance and patient health. The metallic materials used also play important roles in antenna performance, especially in dielectric resonator antennas, which very much depend upon the type of material and the geometry used.

Guest Editor

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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

Prof. Dr. Yong Zhang

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