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## Research on Mechanical Properties, Deformation, and Microstructures of Metallic Materials

Guest Editor:

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Deadline for manuscript submissions:

**closed (10 June 2025)**

### Message from the Guest Editor

There have been continuous advances in the design and manufacturing of microstructures, as well as the new understanding of the microstructure–property relations of metallic materials for structural applications in recent years. This Special Issue, entitled “Research on Mechanical Properties, Deformation, Microstructures of Metallic Materials”, will underline the most recent discoveries and progress in the microstructure and mechanical behaviors of various types of metallic materials. Topics include, but are not limited to, nanostructured and ultrafine-grained metals, metal–matrix composites, high-temperature alloys, high-entropy alloys, metallic biomaterials, heterogeneous nano/micro-structure design, 3D-printing, surface engineering, deformation manufacturing, strengthening and toughening mechanisms, high-strain-rate deformation, microstructure tailoring during advanced forming and manufacturing, heat treatment of metals, etc. We welcome the submission of original research articles, communications, and reviews on recent advances in the related areas of metallic materials.



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**Special** Issue



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## 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.

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