Special Issue

Plastic and Plastic Processing of Metallic Materials

Message from the Guest Editor

Plasticity is an important property of metallic materials, as it determines the adaptability of metal during processing and the quality of the final product. Metal materials with high plasticity can be used to manufacture parts requiring complex shapes. The main processing methods used to enhance the plasticity of metals include forging, stamping, drawing, extrusion and rolling. The aim of this Special Issue is to publish original, valuable, and developed research papers that focus on plasticity and the plastic processing of metallic materials. The scope of this Special Issue includes, but is not limited to, the following topics: plastic property tests (such as tension, compression and torsion , etc); plasticity theory (such as constitutive equation, stress-strain, plastic springback, etc); metal material stamping, forging, extrusion, bending, or rolling processing; finite element simulation technology; the evolution of the microstructure; mechanical properties tests; and simulation during plastic processing.

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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