Special Issue

Advances in Metal Forming and Plasticity

Message from the Guest Editors

Metal forming is one of the most efficient and economical manufacturing processes, driving innovation across various industries. Key factors shaping mechanical properties include the material's chemical composition, state of precipitation, work hardening, and crystallographic texture. Forming processes, which often involve large deformations and complex strain paths, are employed to produce increasingly complex shapes. However, these processes can also introduce challenges such as springback-induced distortion, material softening, the early onset of plastic instability, and fractures. This Special Issue aims to explore the latest research on metal forming processes, including theoretical, numerical, and experimental approaches, focusing on the full spectrum from material structure to industrial application. We invite submissions of full papers, communications, and review articles that contribute to this important area of research.

Guest Editors

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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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