Special Issue

Energy Field-Assisted Metal Forming

Message from the Guest Editors

Metal forming is an important area in the field of modern engineering. By processing metallic materials, the shape, microstructure, and comprehensive properties of the material can be altered, enabling it to be more suitable for different engineering applications. Therefore, studying the forming of metals provides important guidance for the design and manufacturing of new high-performance integral components. The recent thriving energy field-assisted forming technique, to activate unregular multi-scale effects during the plastic deformation process, has been found to be a promising methodology in driving directional microstructure evolution. This Special Issue focuses on the energy field-assisted forming processes of metallic materials, including, but not limited to, the energy effect of materials, electrically assisted forming, ultrasonic vibration-assisted forming, electromagnetic forming, energy-assisted treatments such as electromagnetic shocking and coupled electromagnetic treatment, and the microstructure and property changes of materials during these processes. Research contributions and review articles in these fields are all welcome.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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