

Special Issue

Metal Micro-forming

Message from the Guest Editor

Micro-forming of metals is an excellent technology as a mass production method with high productivity and good mechanical and functional properties to manufacture very small parts.

So far, several metal forming processes have been achieved by scaling down the process configuration, the dies and tools, and the forming machines. There are, however, several technological issues related to the occurrence of size effects due to miniaturization. Major issues include understanding materials properties and the deformation mechanism, micro-formability and -forming limits, etc. Moreover, to achieve high micro-formability and high dimensional accuracy, novel special micro-forming techniques combined with the laser system, ultrasonic vibration, special heating, or ultra-high pressure have been developed.

The aim of this Special Issue is to present the latest achievements in various metal micro-forming processes and the latest research. Through this Special Issue, enhancing the understanding of the present status and trend of metal micro-forming technology and further promoting are expected. Thus, all researchers in this field are invited to contribute.

Guest Editor

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Deadline for manuscript submissions

closed (29 February 2020)



Metals

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Impact Factor 2.5
CiteScore 5.3



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Message from the Editorial Board

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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