Special Issue

Recent Achievements and Developments in Micro/Nano-Forming: Theory, Technology and Applications

Message from the Guest Editors

Micro/nanoforming is a process to produce parts and structures with at least two dimensions ranging from sub-millimeter to nanometers using plastic deformation. which has the attractive advantages of high productivity, low cost, near-net-shape, and excellent mechanical properties. However, micro/nanoforming is far less established due to the so-called size effect in terms of the materials model, process laws and tooling design, etc. The understanding of basic issues on micro/nanoforming is not yet mature and is currently a topic of rigorous investigations. This Special Issue is an attempt at reporting recent findings in the field of micro/nanoforming. The primary objective of the Materials Special Issue is to present the latest achievements in basic theory, materials, processes, tooling design, and fabrication for micro/nanoforming, especially in the multiscale model of size effects, micro/nanoforming processes in new materials, and nontraditional energy field micro/nanoforming. Other new findings about micro/nanoforming are also suitable for this issue.

Guest Editors

Prof. Dr. Jie Xu Micro/Nano Technology Research Center, Harbin Institute of Technology, Harbin, China

Prof. Dr. Linfa Peng School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada 2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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