## **Special Issue**

# Characterization of Metallic Materials: Solidification, Deformation, Heat Treatment and Other Related Phenomena —Third Edition

## Message from the Guest Editors

This Special Issue features research and review articles on the characterization of metallic materials under various material conditions such as solidification. formation, and heat treatment. This Special Issue focuses on all types of characterization methods, including all forms of microscopy (transmission electron microscopy, scanning electron microscopy, etc.) and analytical techniques related to microstructure, interface, surface, etc. Studies focusing on analysis using computational science are also welcome. Recent studies dealing with the behavior of materials under various phenomena (solidification, phase transformation, oxidation, diffusion, deformation, and so on) that can occur in processes such as casting, plastic working, and heat treatment are suitable for publication in this Special Issue. This Special Issue will provide materials scientists with up-to-date information explaining the behavior of many types of metallic materials using novel approaches. This Special Issue covers all kinds of metallic materials.

### **Guest Editors**

Dr. Seong-Ho Ha

Industrial Materials and Process R&D Department, Korea Institute of Industrial Technology (KITECH), Incheon 21999, Republic of Korea

Dr. Young-Ok Yoon

Materials Supply Chain R&D Department, Korea Institute of Industrial Technology, Incheon 21999, Republic of Korea

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





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## About the Journal

## 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

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

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