

## Special Issue

# Welding Technologies for Materials: Simulation, Performance, and Quality Control

### Message from the Guest Editors

Modern production technologies integrate diverse fields, driving dynamic development in materials, their production, processing, and equipment manufacturing. This progress presents new challenges, demanding novel approaches and reliable engineering tools. Research is therefore crucial in numerical simulations of manufacturing processes, material and strength tests (often simulation-supported), and destructive and non-destructive techniques. Non-destructive tests are particularly valuable for providing both results and essential data for model calibration and validation. This Special Issue presents the latest developments in numerical simulations of welding, destructive and non-destructive testing, and tools for assessing the quality of joints and entire welded structures. We welcome articles on numerical analysis of welding processes, research on the heat cycle's impact on properties and stresses, and studies on testing welded joint quality.

### Guest Editors

Dr. Tomasz Kik

Department of Welding Engineering, Faculty of Mechanical Engineering, Silesian University of Technology, Poland

Dr. Mato Perić

Department of Mechatronics, University North, Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia

### Deadline for manuscript submissions

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## Materials

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*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

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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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### 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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