Special Issue

Experimental and Computational Methods for Materials Characterization

Message from the Guest Editor

The development of experimental and computational analysis methods is a major challenge for materials science. This Special Issue aims to bring together the research of young scientists and experts interested in studying the changes in physical properties at different scales. Novel scientific and review articles that present new computational and/or experimental findings will therefore be considered for publication. This Special Issue is open to scientists conducting experimental and/or numerical research in one of the fields listed below, but not limited:

- Defect characterization in structural materials;
- Corrosion characterization;
- Characterization of mechanical properties of materials;
- Inverse techniques for materials characterization;
- Numerical modeling for materials characterization;
- Characterization of materials under extreme conditions:
- Imaging techniques for materials characterization;
- Structural behavior and failure mode interpretation;
- Use of machine/deep learning in data analysis;
- Numerical modeling and analytical study;
- Novel characterization methods;
- New applications for in situ materials characterization.

Guest Editor

Dr. Mourad Bentahar

Laboratoire d'Acoustique de l'Université du Mans (LAUM), UMR 6613, Institut d'Acoustique—Graduate School (IA-GS), CNRS, Le Mans Université, Avenue Olivier Messiaen, CEDEX 9, 72085 Le Mans, France

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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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