Special Issue

Advanced Materials Insights: An Electron Microscopy Approach

Message from the Guest Editor

Electron Microscopy (EM) is regarded as a standard investigation technique in materials science. The need for exhaustive scientific information with good spatial localization (down to Angstrom scale) is transforming traditional EM into a dynamic environment accommodating techniques for morphological, chemical and structural characterizations. Moreover, most of the EM related techniques are able to also provide 3D information regarding the investigated material. This Special Issue aims to provide a selection of contributions which reflect the advancements in the electron microscopy field. The following topics are encouraged: -electron tomography;
-novel methods for EM data acquisition and processing;
-in situ EM studies (gas, liquid);
-EM study of materials under external excitation (temperature, electrical currents);
-sample preparation by focused ion beam;
-rotation electron diffraction;
-crystallographic mapping (phases, orientations);
-strain mapping in thin films.

Guest Editor

Dr. Andrei Cristian Kuncser
National Institute of Materials Physics, Atomistilor 405A, 077125 Magurele, Romania

Deadline for manuscript submissions

closed (10 July 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/95093

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

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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