Special Issue

Advanced Nanoindentation in Alloys

Message from the Guest Editor

The nanoindentation technique is currently one of the most essential tools for characterizing nano-/micromechanical properties of advanced metals and nanostructured materials, such as additive manufacturing materials, high-entropy alloys, nanocrystalline/nanotwinned metals, and nanoporous materials. Its great success is due in part to the simplicity of the sample requirements. In addition, the progress in the capabilities of hardware and experiment methods makes it possible to measure various mechanical properties (e.g., hardness, elastic modulus, strain-rate sensitivity, creep stress exponent, activation volume, and activation energy) under environmentally controlled conditions as well as high-temperature conditions. Therefore, this Special Issue titled "Advanced Nanoindentation in Alloys" will present the latest advances in characterizing small-scale mechanical properties of various metals and alloys with novel nano-/micromechanical testing techniques.

Guest Editor

Dr. In-Chul Choi School of Materials Science and Engineering, Kumoh National Institute of Technology, Gumi, Korea

Deadline for manuscript submissions

closed (30 June 2021)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/62957

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

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



materials



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

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)