materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

Properties of Interfaced Materials and Films

Guest Editors:

Prof. Dr. Nuggehalli M. Ravindra (Ravi)
Department of Physics, New Jersey Institute of Technology, Newark, NJ 07102, USA

Dr. Anthony T. Fiory
Bell Labs (Retired), Summit, NJ 07901, USA

Deadline for manuscript submissions:
closed (10 January 2023)

Message from the Guest Editors

This Special Issue will focus on electrical, electronic, and microscopy characterization techniques revealing the mechanics of stress formation at grain boundaries as well as other techniques that are necessary to understand evolution in surfaces and interfaces. Relevant parameters of studies will be the depth of stress fields and their effect on bandgap and their elastic and plastic limits before forming dislocations. This Special Issue also aims at correlating these interfacial stress and strains mechanics with the observed electrical, electronic, and optical properties and to understand their influence on carrier mobility, carrier confinement, and bandgap modulations. It is our pleasure to invite you to submit a manuscript on the topic. Full papers, communications, and reviews are all welcome.

Keywords

- evolution of interfaces
- lattice matching
- interface chemistry
- misfit dislocations
- semiconductors
- metals
- insulators
- tunneling mechanisms
- microscopy–AFM, STEM, TEM
- heterostructures
- devices

materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi