Special Issue

Properties of Interfaced Materials and Films

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

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Deadline for manuscript submissions

closed (10 January 2023)

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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.

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