



materials



an Open Access Journal by MDPI

Surface and Interface Defects of Semiconductor Materials

Guest Editor:

Dr. Shengkai Wang

Institute of Microelectronics of
the Chinese Academy of
Sciences, Beijing 100029, China

Deadline for manuscript
submissions:

closed (20 August 2024)

Message from the Guest Editor

Understanding the static and dynamic properties of defects is one of the key research areas in semiconductor materials science. Especially for semiconductor devices, surface and interface defects of semiconductor materials affect or even determine the performance and reliability of the devices. An in-depth understanding of the structure and characteristics of defects at the surface and interface and their impact on electrical properties is important for the performance optimization of semiconductor devices.

Considering the above, this Special Issue aims to bring together cutting-edge research and covers topics contributing to a better understanding of surface and interface defects and their applications. We aim to share, present, and discuss innovative methods of analysis, characterization, and regulation which may help us to further identify surface and interface defects and improve the performance of semiconductor devices. The submission of original research and review articles is welcome, whether they are about theoretical calculations or experimental characterization techniques.



mdpi.com/si/192761

Special Issue



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

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)