Special Issue

Innovation in Nanoelectronic Semiconductor Devices and Materials

Message from the Guest Editors

From cell phone to mainframe computer, precision surgery to autonomous driving, semiconductors have been playing pivotal roles in our daily lives. The emergence of 3D devices and heterogeneous integration brings forth opportunities to fulfill critical specifications. This Special Issue aims to provide a forum for the most up-to-date, high-caliber research efforts in nanoelectronic semiconductor devices and materials. Potential topics include, but are not limited to:
Novel FINFET and nanosheet device architectures and characterization.
Materials innovations in gate-all-around nanosheet devices.
SiGe and new strained layers for devices.
Gate materials and processing for nano devices.
Materials and processing issues for 3D NAND memories.
Electrode materials and characterization for PCM, MRAM, and other memory devices.
ALD and CVD materials for semiconductors.
Advanced BEOL interconnects and metallizations.
FCVD, SOG, and polymeric materials in advanced semiconductor devices. See more information in: https://www.mdpi.com/si/150585

Guest Editors

Dr. Wei-Tsu Tseng
IBM Semiconductor Technology Research, Albany, NY 12203, USA
Dr. Victor Chan
IBM Semiconductor Technology Research, Albany, NY 12203, USA

Deadline for manuscript submissions

closed (1 January 2024)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/150585

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

mdpi.com/journal/nanomaterials

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/nanomaterials

About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

MDPI