Special Issue

Nanodevices—Technologies and Applications in Semiconductor Industry

Message from the Guest Editors

The SI is focused on emerging semiconductor device technology initiating from FETs, high-electron mobility transistors (HEMTs), tunneling FETs (TFETs), and so on through novel structural and material options through modeling as well as fabrication. It is worth pointing that the material choices in device technologies have been advanced with the latest research findings by tsmc, Taiwan (Semiconductor industry) and MIT, USA (highly reputed university). Having said that, the several novel implementations on device options is always beneficial and needed for the emerging technology nodes in semiconductor industry. Here, 3D stacked multi-bridge vertical channel complementary FET, so-called the CFET with gate-all-around has also been invented to continue Moore's law. To do this, a method of manufacturing semiconductor devices and advanced processing equipment's are needed. Therefore, this SI focuses on,

- CMOS platform device technologies (FETs & CFETs, HEMTs, TFETs, etc.);
- Process module innovations and progresses in device technology;
- Material engineering and implementations in device technology;
- Device to circuit interactions and applications.

Guest Editors

Prof. Dr. Yiming Li

Prof. Dr. Yao-Jen Lee

Prof. Dr. Seiji Samukawa

Deadline for manuscript submissions

closed (31 October 2023)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/156518

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

mdpi.com/journal/nanomaterials

MDPI

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/nanomaterials

MDPI

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.

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)