nanomaterials

IMPACT FACTOR 4.4

Indexed in: PubMed

CITESCORE 8.5

an Open Access Journal by MDPI

Electronic Nanodevices

Guest Editor:

Prof. Dr. Antonio Di Bartolomeo
Department of Physics "E.R. Caianiello", University of Salerno, 84084 Fisciano, Italy

Deadline for manuscript submissions:
closed (28 February 2022)

Message from the Guest Editor

Dear Colleagues,

The start of high-volume production of field-effect transistors with a feature size below 100 nm at the end of the 20th century signaled the transition from microelectronics to nanoelectronics. Since then, downscaling in the semiconductor industry has continued until the recent development of sub-10 nm technologies.

Although the basic operating principles of transistors have remained more or less the same during the transition to the nanoscale regime, several phenomena related to the wave nature of electrons have gradually appeared, and some traditional issues, such as short-channel effects, junction or dielectric leakages, have become more severe. Tunneling and other quantum effects or fluctuations in several transistor parameters due to the granularity of matter have become more relevant.

The new phenomena and issues as well as the technological challenges of the fabrication and manipulation at the nanoscale have spurred an intense theoretical and experimental research activity...For further reading, please follow the link to the Special Issue website at: https://www.mdpi.com/si/57963

Prof. Dr. Antonio Di Bartolomeo
Guest Editor

nanomaterials

IMPACT FACTOR 4.4 | Indexed in: PubMed | CITESCORE 8.5

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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.

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 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
𝕏@nano_mdpi