



an Open Access Journal by MDPI

Nanotechnology for Electronic Materials and Devices

Guest Editors:

Dr. Patrick Fiorenza

Dr. Raffaella Lo Nigro

Dr. Béla Pécz

Dr. Jens Eriksson

Deadline for manuscript
submissions:

closed (15 May 2022)

Message from the Guest Editors

Today, nanomaterials for electronic devices are of growing interest, since their reduced dimensionality can be associated with unique properties which are currently finding rapid application in many technological areas (such as high-frequency electronics, power devices, displays, energy conversion systems, energy storage, photovoltaics, and sensors). This Special Issue will cover the most recent developments on nanomaterials and nanotechnologies for electronic devices and sensors, from synthesis to advanced characterization, up to device fabrication.

- Nanoscaled material and their properties: nanostructured thin films (oxides, nitrides), nanocomposites, nanoparticles, and 2D materials (graphene or MX_2 $\text{M} = \text{Mo}, \text{W}$, etc. and $\text{X} = \text{S}, \text{Se}, \text{Te}$, etc.);
- Synthesis techniques for nanomaterials and thin films: processes and novel approaches;
- Advanced nanoscale characterization techniques (surface analytical and scanning-probe methods, electron beam methods, optical methods, X-ray methods);
- Applications of nanostructured materials and nanotechnologies to electronic devices (high frequency and power devices, photovoltaics, sensors, etc.).



mdpi.com/si/63560

Welcome your contribution!

Special Issue



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](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)