Special Issue

Graphene-Based Nanostructures and Optoelectronic Applications

Message from the Guest Editor

Optoelectronic processes are taking place in devices, in which either an electric charge is used to generate light, such as in light emitting diodes and lasers, or light is used to generate electric current, such as in photovoltaic devices and photodetectors. Functional components of these devices, such as electrodes, involve a wide range of nanostructured materials. The exotic structural and conductive properties of twodimensional graphitic nanostructures have created a scientific frenzy towards the integration of such materials in optoelectronic devices. The development of graphene-based electrode materials for optoelectronic devices is the key to widening their applicability in reallife applications. This Special Issue addresses graphene-based nanomaterials for optoelectronic applications. I invite the scientific community to present the latest knowledge related to the aforementioned topics. All this gathered information will act as a spark towards the generation of new ideas, which are going to further develop the topic under study.

Guest Editor

Dr. Dimitrios Tasis

Department of Chemistry, University of Ioannina, 45110 Ioannina, Greece

Deadline for manuscript submissions

closed (30 April 2020)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/15551

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



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 nanometerscale 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)

