# Special Issue

# Functional Graphene-Based Nanodevices

## Message from the Guest Editors

Graphene is composed of single-layer *sp*2-bonded carbon atoms that are densely packed in a honeycomb crystal lattice. It has the characteristics of high carrier mobility, ultra-high specific surface area, high optical transparency, and good conductivity and thermal conductivity. Its unique physical and chemical properties make it possible to prepare various functional nanodevices. Therefore, graphene is widely studied and applied, such as in electronics, photonics and optoelectronic circuits, energy storage and conversion, biomedicine, sensors, and other fields. We invite researchers to contribute original and review articles on functional graphene-based nanodevices. Potential topics include but are not limited to the synthesis, modification, and functionalization of ultra-thin two-dimensional graphene and characterization, characterization methods, and applications of graphene-based nanodevices (including transistors, energy storage devices, sensors, photovoltaics, transparent electrodes, etc.).

## Guest Editors

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## Deadline for manuscript submissions

closed (20 January 2024)

**Nanomaterials**

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**Impact Factor 4.3**
**CiteScore 9.2**
**Indexed in PubMed**

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## 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
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