



Superconducting- and Graphene-based Devices

Guest Editor:

Dr. Filippo Giubileo

Superconducting and Other
Innovative Materials and Devices
Institute—National Research
Council (SPIN-CNR), Via Giovanni
Paolo II, 132, 84084 Fisciano, Italy

Deadline for manuscript
submissions:

closed (28 February 2021)

Message from the Guest Editor

Dear Colleagues,

This Special Issue aims to collect new or improved ideas to exploit superconducting materials, as well as graphene, towards achieving innovative devices, either at a small scale, as well as at a large scale. Several potential applications of graphene are enhanced by the possibility to modify its surface to introduce a non-zero bandgap, to tune adhesion and/or hydrophobicity/hydrophilicity, etc. These surface properties are crucial to the realization of graphene-based devices. Papers demonstrating graphene and/or superconducting devices, device processing, characterization, and applications, are particularly welcomed.

Topics in this Special Issue include, but are not limited to:

- Graphene devices
- Graphene based heterostructures
- Superconducting interfaces
- Superconducting devices
- Electronic, optical, photonic and magnetic properties
- Surface and interfacial characterization techniques
- Device integration and fabrication

Dr. Filippo Giubileo

Guest Editor



mdpi.com/si/16759

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](#)