



Nanofabrication and Nanomanipulation in Graphene

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Message from the Guest Editor

The nanofabrication and manipulation of matter at the nanoscale are at the core of all modern technological advances. Both top-down and bottom-up approaches are actively being developed to gain unprecedented dimensional accuracy and design variability. When the full potential is realized, one can expect to reach not only morphological control, but also the molecular or even atomic-level tuning of nanostructured chemical compositions. In this regard, graphene represents an ideal testbed due to its diverse chemical functionalization, outstanding performance, and industrial potential. This Special Issue plans to present a cross-section through current research regarding nanofabrication and nanomanipulation in graphene. Potential topics include, but are not limited to:

- Nanofabrication and nanopatterning of graphene-based materials;
- Nanostructured chemical functionalization of graphene surfaces (covalent or supramolecular);
- Preparation of graphene heterostructures;
- Nanomanipulation of graphene sheets and flakes;
- Fabrication and testing of graphene-based micro-/nano electromechanical systems (MEMS and NEMS);
- Graphene-based metasurfaces





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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.

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