

## Special Issue

# Graphene and Graphene-Based Polymer Composites: From Preparation to Applications

### Message from the Guest Editor

The mechanical, electrical, thermal, magnetic, optical, and biological properties of graphene have attracted a significant amount of attention from the research community since the isolation of single-atom-thick graphene layers. Presenting a very high surface-to-volume ratio, relatively simple processability, and low cost, graphene and graphene-related materials were soon identified as promising nanofillers for polymer matrixes. Reports have shown substantial property enhancements for graphene-polymer composites (GPC) at very low filler loadings. This Special Issue will cover basic scientific and engineering aspects, such as novel manufacturing approaches for graphene-based composites and their structural manipulation for a diverse range of applications, involving, but not limited to, pharmaceutical nanotechnology, tissue engineering, energy storage, water treatment, catalysis, 5G Communications, and optoelectronics. We would like to invite you to submit a manuscript to this Special Issue. Short communications, full papers, and reviews related to graphene-based composites are all welcome.

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### Guest Editor

Prof. Dr. Guohua Chen

College of Materials Science and Engineering, Huaqiao University,  
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### Deadline for manuscript submissions

closed (20 August 2024)



## Nanomaterials

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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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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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