

Special Issue

Advances in Multifunctional Carbon-Based Nanocomposites: Synthesis, Characterization and Applications

Message from the Guest Editors

This Special Issue aims to provide a comprehensive collection of the latest advances in the development of synthesis approaches, processing methods, characterizations, and current applications of carbon-based nanocomposites. Novel synthetic methods, new fundamental findings in science and technologies of carbon materials, and innovative techniques to characterize carbon nanostructures and interfaces are of high importance to this Special Issue. In addition, this Special Issue particularly seeks to explore the progress of carbon-based nanocomposites in terms of their multifunctionality and emphasizes high-quality work focusing on their emerging applications in the following diverse areas: chemical and biosensing, electrochemical performance, supercapacitors, catalysis and photocatalysis, hydrogen evolution reaction, and the reinforcement of mechanical and electrical properties. We welcome original research manuscripts related to multifunctional carbon-based nanocomposites to this Special Issue. Review manuscripts closely related to the above aspects are also welcome.

Guest Editors

Dr. Igor De Rosa

Prof. Dr. Fabrizio Sarasini

Dr. Wenbo Xin

Deadline for manuscript submissions

closed (31 August 2021)



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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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