Special Issue

Advances in Nanomaterials and Printing Approaches for Electrochemical and Bioelectrochemical Systems

Message from the Guest Editors

Recent advances in nanoscience and nanotechnology have led to the development of novel nanometer-scale devices and materials. This progress has been driven by the demand for miniaturized electronic, optical, sensing, and actuating systems and components. Carbon nanomaterials are a cornerstone of nanotechnology, and nanocomposite carbon-paste electrodes (NC-CPEs), comprising various dispersed, conductive carbon nanostructures within an insulating polymer, have become pivotal in analytical electrochemistry.

This Special Issue of *Nanomaterials* aims to explore current trends in the application of carbon-based nanocomposite electronic devices and printing technologies for (bio)sensing. This includes all nanoallotropic carbon forms and their tuning and (bio)functionalization with nanoparticles, biological elements, active biomolecules, or magnetic beads, encompassing both inkjet- and 3D-printed approaches.

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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

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