Special Issue

Nanoscale Electrical Characterization of Low Dimensional Materials for Electronics

Message from the Guest Editors

Dear colleagues, In this context, combining nanometric spatial resolution with a wide range of physical properties that can be detected, scanning-probe-based characterization techniques have proved themselves to be essential tools to investigate the structural, electrical, chemical and optical properties of low dimensional systems and their heterojunctions with bulk (3D) semiconductors. This Special Issue will be devoted to new developments in nanoscale electrical characterization techniques, and their applications to the analysis of low dimensional materials, including (i) synthesis, (ii) integration and (iii) novel device architectures. The Special Issue is open to correlation studies of local electrical/optical measurements with high resolution structural/chemical analyses, as well as to theoretical and modelling works for the interpretation of experimental results in these nanoscale systems. It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, short communications, and reviews are welcome.

Guest Editors

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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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