



Nanomaterials for Electronic and Photonic Applications

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Message from the Guest Editors

Nanomaterials are interesting in different disciplines such as electronics, photonics, and medicine. Nanostructures can be engineered to present unique optical and photonic properties. Effects and applications include absorption, photoemission, scattering, nonlinear optics, ultrafast phenomena, photoconduction and photovoltaics, plasmonics, and lasing. Electronics are the introduction of vertical MOSFETs as well as the development of new tunneling, high-electron-mobility, and single-electron devices. Available applications for nanomaterials include wireless sensors, wide-bandgap semiconductors, superconductors, supercapacitors, medicine, magnetic materials, thin films, photovoltaic materials, and flexible biomaterials.

The goal of the present Special Issue is to attract academic and industrial researchers to further improve the properties of nanomaterials and propose new ideas for future applications and new technologies through continuous in-depth research on existing photonic and electronic nanocomposites. The Guest Editors invite authors to contribute original research articles and review articles covering the current progress on these materials.





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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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