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Multifunctional Nanomaterials and Hybrid Structures for Sensors, Actuators and Smart Technologies

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Deadline for manuscript submissions:

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Message from the Guest Editors

Dear Colleagues,

Advanced sensors, actuators, and related technologies are becoming key technologies to help address many of the global humanitarian challenges of today, ranging from clean water, renewable energy, and ecofriendly infrastructures to disaster relief, public health, and national security. Many of these devices can be very significantly boosted by nanoscale materials due to their high surface activities and novel quantum effects.

We are, therefore, excited to present this Special Issue focused on nanomaterials, nanocomposites, and hybrid structures related to these applications. Potential topics include, but are not limited to:

- recent progress in nanoscale sensors;
- materials for nanoactuators;
- environmental nanosensors;
- stimulus-responsive materials;
- bio-nano-detectors;
- carbon nanotubes and graphene;
- hybrid materials and nanocomposites;
- thin film coatings;
- nanomaterials for energy conservation.

Prof. Dr. Sharmila M. Mukhopadhyay

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Guest Editors



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Special Issue



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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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