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Applications of Advanced Nanomaterials in Display

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Deadline for manuscript
submissions:

closed (20 March 2024)

Message from the Guest Editors

Nanomaterials are attracting a great deal of attention for their applications in displays due to their novel electrical, optical, physical, chemical, and structural properties. Important applications of the optoelectronic properties of nanomaterials in display areas include organic light-emitting diodes (OLEDs), quantum-dot light-emitting diodes (QLEDs), nano-light-emitting diodes (nano-LEDs), thin-film transistors (TFTs) and color conversion layers. In addition, the resistance to deformation breakage demonstrated by nanomaterials such as metal nanoparticles/nanowires, carbon nanotubes, graphene, and conductive polymers makes them an ideal alternative to ITO transparent conducting electrodes for flexible displays.

This Special Issue of *Nanomaterials* aims to consider the state of the arts in the fields of organic/inorganic/metallic nanomaterials in display areas. We welcome all submissions focusing on the various technological advances—including theoretical simulations, syntheses, or characterizations—of nanomaterials used in displays, and the fabrication techniques, design, characterizations, and applications of OLEDs, QLEDs, nano-LEDs, TFTs, etc.



mdpi.com/si/159099

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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