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# II-VI Semiconductor Nanocrystals and Hybrid Polymer-Nanocrystal Systems

Guest Editor:

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Deadline for manuscript submissions: closed (31 October 2020)



mdpi.com/si/18249

### Message from the Guest Editor

Dear Colleagues,

II-VI semiconductor nanocrystals and hybrids polymernanocrystal systems have been subject of intense interdisciplinary research activity in the last few years.

This research includes the development of synthesis protocols for obtaining nanocrystals with high control of chemical composition, shape, size and optical and electronic properties, the investigation of the electronic properties by a wide range of advanced spectroscopic techniques and the demonstration and optimization of a wide range of devices, such as light emitting diodes, solar cells, optically-pumped lasers, and sensors. Moreover the combination of nanocrystals with organic polymers allows the development of novel functional materials combining the best properties of the components and thus with performances improved with respect to the ones of the individual components.

This Special Issue of *Nanomaterials* aims to describe the state-of-the-art and the recent advances of the synthesis methods of II-VI nanocrystals, of the photophysics investigation of their electronic properties and of their possible applications in photonic and optoelectronic devices.

Dr. Marco Anni *Guest Editor* 







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## **Editor-in-Chief**

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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, metalorganic 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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