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Perovskite Nanostructures: Synthesis, Properties and Applications

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Message from the Guest Editors

Dear Colleagues,

Perovskite nanostructures have gained significant attention in recent years due to their exceptional properties and promising applications in various fields. The enhanced light absorption, tunable bandgaps, high charge carrier mobility, and exceptional catalytic activity exhibited by perovskite nanostructures are results of their quantum confinement effects and surface/interface phenomena. They are affected strongly by synthesis approaches, so characterizing these properties and understanding their synthesis mechanisms, structure–property relationships, and manipulation techniques are vital for harnessing their full potential and advancing various technological domains.

The Special Issue focuses on the latest developments in and practical applications of perovskite nanostructures. It aims to attract both academic and industrial researchers in order to enhance the current knowledge on perovskite nanostructures and present new ideas for a wide range of future applications and technologies.

Please see more details at the following link: mdpi.com/si/178799

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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