

## Special Issue

# Perovskite-Based Nanostructures and Nanodevices

### Message from the Guest Editors

The perovskite based nanostructures (e.g., waveguide, metamaterial, metasurface, etc.) and nanodevices (photovoltaic, light emitting diode, photodetector, laser, memristor, etc.) have become the topics and have been intensively studied. This Special Issue of *Nanomaterials* welcomes contributions of original research articles, reviews, perspectives and comments concerning the challenges facing in the research area of perovskite based nanostructures and nanodevices. The topics include the synthesis of new perovskite with versatile (inorganic) material composition and engineering of (0D, 1D, 2D and 3D) perovskite nanostructures such as the waveguide, metamaterial, metasurface. It also includes the research work that contributes to develop high-efficiency perovskite based nanodevices such as photovoltaic, light emitting diode, photodetector, laser, memristor etc., as well as the theoretical and experimental understanding to unveil the working mechanisms. Beyond the above topics, other original research closely related to perovskite based nanostructures and nanodevices are also highly welcome.

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### Guest Editors

Dr. Xingang Ren

Dr. Di Zhang

Dr. Fengxian Xie

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### Deadline for manuscript submissions

closed (30 November 2022)



## Nanomaterials

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*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of  
Birmingham, Birmingham B15 2TT, UK

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