# Special Issue

# Optoelectronic Performance of Perovskites and Nanostructure Thin Films

### Message from the Guest Editors

Low-dimensional nanomaterials possess unique properties, such as a high surface-to-volume ratio and tunable electronic and optical properties. These materials have dimensions at the nanometer or sub-nanometer scale, which are significantly smaller than their bulk counterparts. The atomic-scale size of these materials enables them to exhibit novel physical phenomena not found in their macroscopically larger counterparts. Perovskites and nanostructure thin films hold great promise for the development of photoelectric device applications due to their unique properties and potential for integration with conventional electronic components. Their tuneable electronic and optical properties make them highly attractive for use in next-generation optoelectronic device applications. Continued research and development of these materials will undoubtedly lead to the creation of more innovative and advanced optoelectronic devices in the future. The present Special Issue of Nanomaterials aims to present the current state of the art in the use of perovskites and nanostructure thin films for optoelectronic performance, including, but not limited to, solar cells, photodetectors, and LEDs.

### Guest Editors

Dr. Giovanni Mannino
CNR-IMM, Zona Industriale Strada VIII n.5, 95121 Catania, Italy

Prof. Dr. Hai Li
School of Flexible Electronics and Institute of Advanced Materials (IAM), Nanjing Tech University, Nanjing 211816, China

### Deadline for manuscript submissions

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

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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.

## 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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