



Thin Films and Heterostructures for Optoelectronics

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Message from the Guest Editors

Dear Colleagues,

Over the last several decades, nanomaterials—especially semiconductors—have made great advances in the development of optoelectronics. The main focus has been directed to methods for the fabrication of several types of heterojunctions, such as organic–organic, organic–inorganic and inorganic–inorganic. These types of heterostructures/heterojunctions with new or enhanced optical and electrical properties are used in the development of optoelectronic devices, such as solar cells, photodetectors and light-emitting diodes. The aim of this *Special Issue* is to publish high-quality research papers addressing current and future advances on the preparation and characterization of thin films and optoelectronics devices.

In particular, the topics of interest for this Special Issue include, but are not limited to:

- Nanostructured materials for optoelectronics applications;
- Functional thin films and heterostructures (including deposition techniques and technology)
- Design and synthesis of thin films/heterostructures;
- Interface phenomena in oxide heterostructures;
- Physico-chemical and electrical characterizations.





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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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