Special Issue

Halide Perovskites as Emergent Semiconductors: Materials Preparation, Basic Physics and Possible Applications

Message from the Guest Editors

The research into perovskite is very broad and includes the development of methods for active materials synthesis and their deposition, the investigation of fundamental electronic properties, and the realization, characterization and optimization of solar cells, light emitting diodes and optically pumped lasers. It is also interesting that even if some of these materials have been exploited for the realization of devices with quickly improving performance, many basic aspects of the photophysics of perovskites are still unclear and the subject of debate, like the nature of the emitting species (excitons or free carriers), the role of defects, and the origin of the temperature dependence of the emission properties. This Special Issue aims to describe the actual state of the art of the wide research on perovskite semiconductors, including the open issues that still require a fuller understanding, and possible future development directions.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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