Special Issue

Perovskite Solar Cell: Materials, Current Status and Opto-Electronic Properties

Message from the Guest Editor

To achieve green and sustainable development and reduce CO2 emissions, it is deemed necessary to continue to promote and develop clean energy technologies, such as photovoltaics. The new generation of photovoltaic technologies, such as organic–inorganic hybrid perovskite solar cells, has characteristics better suited to the requirements of future devleopment, such as their low-cost, light weight, and simple manufacturing processes. The current maximum efficiency of perovskite solar cells has exceeded 25%. However, the inherent instability of the material and its sensitivity to environmental factors, such as water, heat, oxygen, and ultraviolet light, have become the primary problems limiting its further development. In this Special Issue, we mainly focus on perovskite materials and the structure and photoelectric properties, as well as efficiency and stability, of devices they are used in and other issues to provide guidance for the development of efficient and stable perovskite solar cells.

Guest Editor

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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.

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