Special Issue

Applications and Research Progress in Thin Film Solar Cells

Message from the Guest Editor

The field of thin-film solar cells has experienced remarkable progress in recent years. This Special Issue aims to highlight recent advances in the design, fabrication, and characterization of thin-film solar cells, including, but not limited to, technologies based on copper indium gallium selenide solar cell, CdTe, perovskites, organic photovoltaics, and tandem structures. Special emphasis will be placed on innovations in materials engineering, interface optimization, and scalable deposition techniques, including sputtering, atomic layer deposition (ALD), pulsed laser deposition (PLD), and others. Furthermore, the issue will include studies focused on improving the stability, flexibility, and environmental performance of these devices. Contributions addressing simulation, modeling, life cycle analysis, and the integration of these cells into emerging applications—such as building-integrated photovoltaics (BIPV), portable devices, and agrivoltaics—are also welcome. This Special Issue offers an open platform for researchers, engineers, and industry professionals to share their findings and insights on the future of thin film solar energy.

Guest Editor

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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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