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Advances in Thin Films for Solar Energy Devices

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Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editor

Dear Colleagues,

Solar energy devices directly convert sun energy into electrical energy via a photovoltaic effect. During the past decades, a variety of photovoltaic devices have been developed, including silicon-based solar cells, compound thin-film solar cells, and new-concept solar cells. The rise of new materials and new technologies has opened up new frontiers for the development of high-efficiency next-generation photovoltaics. In particular, the advances in thin films continuously lead to the improvement of device performance, enabling the use of low-cost materials and simple manufacturing processes to achieve effective capture of photons and rapid separation and extraction of photogenerated carriers.

This Special Issue of *Materials*, “Advances in Thin Films for Solar Energy Devices”, aims to present the current state-of-the-art research in novel thin-film properties and advanced film processing for photovoltaic applications. This includes the fabrication and characterization of thin films and corresponding devices, as well as related device physics. We invite authors to contribute original research articles and review articles.



mdpi.com/si/202445

Special Issue



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Message from the Editor-in-Chief

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