



Advances in Photovoltaic Materials

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Message from the Guest Editor

The most important material for solar cell production is silicon. Being the most often used semiconductor material, it has some important advantages. Though single-crystalline silicon solar cells have been the most efficient of all cells, their disadvantage is the cost factor.

Gallium arsenide is used in the production of high-efficiency solar cells. It is often utilized in concentrated PV systems and space applications. Their efficiency is as good. Cadmium telluride thin-film material produced by deposition or by sputtering is a promising low-cost foundation for photovoltaic applications in the future. The disadvantage of this procedure, however, is that the materials used in production are toxic. The cells are inexpensive, easy to produce, and can withstand long exposure to light and heat compared to traditional silicon-based solar cells. Further, the organolead halide perovskite-structured solar cell is considered one of the most promising photovoltaic technologies.

However, no ideal material has yet been found to compete with crystalline silicon. We kindly invite you to submit a manuscript(s) for this Special Issue. Full papers, communications, and reviews are all welcome.





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Message from the Editor-in-Chief

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