Special Issue

Material Design and Characterization Analysis for Sustainable Next Generation Solar Cells

Message from the Guest Editor

This Special Issue seeks to assess current advances in solar cell technologies from novel material design and community case study implementation perspectives, as well as highlight potential materials for near commercial solar cells. Transforming energy access through sustainable solar cell technologies is central to this cause. Exploring novel material designs with the potential to advance solar energy initiatives is a pivotal route to sustainability, while simultaneously allowing for the mitigation of energy and climate change challenges.

In this Special Issue, original research articles and reviews are welcome. Topics include, but are not limited to, the following:

- near commercial solar cell technologies and manufacturing;
- circular economy for solar energy technology;
- energy storage hotspots for solar cells;
- transforming solar energy access to marginalized communities;
- carbon materials for solar cell counter electrodes;
- solid-state electrolyte materials for third generation solar cells;
- solar materials for sustainable end-of-life and solar cell stability tests.

Guest Editor

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