Special Issue

Photovoltaics Materials Science

Message from the Guest Editor

Increasingly sophisticated device architectures are being employed to improve the performance of silicon, perovskite, and chalcogenide solar photovoltaic devices. Recent advances in passivation layers and carrier selective contacts for silicon, absorber composition, and charge transport layers for perovskites, selenium alloying, and group V doping for CdTe have been demonstrated. These have been enabled by investigations into the underlying microstructure and composition of these devices. Understanding and controlling the material properties are critical to further improving device efficiencies. This Special Issue highlights cutting-edge research in solar cell materials science, which is driving the next generation of devices. Submissions covering all aspects of solar cell material science and cell technologies are encouraged. Investigations focusing on novel interfaces, structures, compositions, and advanced simulation techniques are of particular interest.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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