



Advanced Photovoltaic Materials: Synthesis, Properties and Applications

Guest Editor:

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Message from the Guest Editor

Solar energy, as a clean and sustainable energy, has witnessed an incredible increase in academic and industrial activity over the past several decades. To seek much more affordable PV technologies, advanced materials for cost-effective PV technologies including organic solar cells, organic–inorganic hybrid solar cells, quantum-dot solar cells, compound semiconductor solar cells, dye-sensitized solar cells, perovskite solar cells, tandem/multijunction solar cells, etc. have been explored in both academia and industry. Among them, most PV technologies are still in lab-scale research and are far from practical use. Efforts in cutting-edge research outcomes into action plans for cost-effective PVs are particularly critical in the research community.

This Special issue aims to cover the most recent progress on advanced PV materials, with a particular focus on synthesis, properties, and applications. All kinds of advanced PV materials are welcome. We especially encourage the submission of manuscripts addressing hot materials such as perovskite, organic, quantum dots, organic–inorganic hybrid materials, nanostructured silicon, etc.





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Message from the Editor-in-Chief

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