

Special Issue

Recent Advances in Materials for Emerging Solar Cells

Message from the Guest Editors

Solar photovoltaics (PV) has become a strategic technology to mitigate climate change and enable ecological transition towards a carbon-free system. The astonishing growth of silicon-based PV technology suggests that the theoretical goal of 75 TWp installed worldwide by 2050 may be achievable. Given this high renewable demand in the coming years, there is a plenty room for a mix of PV technologies, and emerging materials, as small-molecule absorbers or In-free inorganic thin-films, whose production requires less energy and less raw material consumption than Si, could be competitive even for its scalability. This Special Issue will rapidly publish original and review contributions on the recent advances in theoretical and experimental research of new molecular materials for solar energy and novel architecture concepts for thin-film cells. The following topics are subject to particular interest:

- All-Small-Molecules organic solar cells
- Molecular charge transport layers in perovskite solar cells
- II-IV-N₂ Compounds
- Antimony/Bismuth Chalcogenides and Chalcogenides
- Earth-abundant and non-toxic absorbers

Guest Editors

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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