



International Journal of Photoenergy

Special Issue on
Solar Cells Using Earth-Abundant Materials

CALL FOR PAPERS

PV technologies using earth-abundant materials and low cost fabrication process are of high importance to fulfil their mission to deliver cost-effective, competitive electricity generated by the sun. Among them, solar cells using earth-abundant chalcopyrite materials with the structure of I₂-II-IV-VI such as Cu₂ZnSn(S, Se)₄ (CZTSSe), nanostructured solar cells including the recent discovery of perovskite solar cells (PSC) based on lead halides, and organic/polymer solar cells have demonstrated promise towards cost-effective solar electricity in the future.

We invite researchers to contribute original research articles and review articles that will help and advance the development of earth-abundant solar cells through in-depth understanding of underlying mechanism or new technology that can improve the property of materials and performance of solar cells.

Potential topics include, but are not limited to:

- ▶ Synthesis of organic/inorganic semiconductor materials and thin films with controlled and desirable optical and electronic properties for solar cells
- ▶ Fabrication of solar cells with improved performance through material and device engineering
- ▶ Characterisation of materials/thin films and solar cells
- ▶ Modelling and simulation of both materials and solar cells for in-depth understanding of the interaction involved that influences the device performance
- ▶ Lightweight, flexible earth-abundant thin film solar cells
- ▶ Factors that influence the stability of earth-abundant solar cells
- ▶ Pb-based perovskite and its environmental impact
- ▶ Synthesis and characterisation of Pb-free Perovskite absorber materials and their application in device
- ▶ New techniques for characterisation of the photochemistry and photophysics involved in solar cells

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ijp/sceam/>.

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