Special Issue

Advances in Silicon Solar Cells

Message from the Guest Editor

In this Special Issue, we aim to bring together up-to-date views of past and current developments in the field, with a particular focus on the most recent theoretical and experimental discoveries concerning topics such as novel materials, device structures, and fabrication techniques for silicon solar cells. We hope you opt to participate in this Special Issue by contributing original research articles or critical review papers. Topics of interest for publication include but at not limited to:

- silicon heterojunction solar cells (a-Si/c-Si, organic/inorganic, Schottky, etc.);
- carrier selective contacts;
- high-efficiency silicon solar cells (PERC, HIT, IBC, etc.);
- perovskite/silicon tandem solar cells;
- thin crystalline silicon solar cells;
- silicon nano/micro structures (black Si, nanowire, microwire, etc.);
- novel passivation layers and techniques;
- metal contacts and metallization techniques;
- plasmonic and up/down conversion materials;
- advanced characterization methods for silicon solar cells.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2021)

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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