



an Open Access Journal by MDPI

Advances in Cadmium Telluride (CdTe) Thin Film Photovoltaic Solar Cells

Guest Editor:

Dr. Giray Kartopu

Swansea University, Centre for Solar Energy Research

Giray.Kartopu@swansea.ac.uk

Deadline for manuscript submissions: **30 November 2019**

Message from the Guest Editor

Dear Colleagues,

The research on thin film CdTe photovoltaic solar cells has been re-gaining momentum in recent years, due to commercial advances made with regard to CdTe technology. CdTe solar panels are now at parity with polycrystalline silicon for performance and cost. The recent work in this area appears to focus on increasing absorber carrier density and lifetime, engineering of the material bandgaps for the enhanced light capture and optimization of the oxide/telluride buffer layers for the front/back surface of the CdTe device.

This Special Issue aims to serve an improved understanding of the key issues with the state-of-the art CdTe solar cells to enable further advancement of R&D of the CdTe photovoltaic technology. Not only experimental reports on the CdTe device performance and scaling-up but also theoretical papers, particularly on band-alignment and doping issues, are warmly welcome.



mdpi.com/si/17492

Specialsue





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

Professor of Biomedical Engineering, Professor of Bioengineering, Professor of Expereimental Surgery, Associate Dean—Resaerch and Graguate Studies, Department of Biomedical Engineering, Faculty of Medicine/Faculty of Dentistry, Duff Medical Science Building, Room 313, 3775 University Street, Montreal, QC, H3A 2B4, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers eleven comprehensive topics: biomaterials, energy materials, advanced composites, structure analysis and characterization, porous materials, manufacturing processes and systems, advanced nanomaterials, smart materials, thin films, catalytic materials and carbon materials. The distinguished and dedicated editorial board and our strict peer-review process ensure the highest degree of scientific rigor and review of all published articles. Materials provides an unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High visibility: indexed by the Science Citation Index Expanded (Web of Science), Ei Compendex and other databases. For more information on the journal's Impact Factor, see here. Citations to become available in PubMed soon, full-text archived in PubMed Central.

Rapid publication: manuscripts are peer-reviewed and a first decision provided to authors approximately 15 days after submission; acceptance to publication is undertaken in 5.38 days (median values for papers published in the first six months of 2018).

Contact us

Materials MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 Fax: +41 61 302 89 18 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com ➔@Materials Mdpi