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Recent Developments and Future Challenges in Photovoltaic Materials

Guest Editors:

Dr. Daniel Horatiu Ursu

National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania

Dr. Marinela Miclau

National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania

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Message from the Guest Editors

This research topic is aimed at showcasing the recent developments and future challenges in new advanced materials for solar cell technology using methods other than fabrication and characterization, followed by the demonstration of their innovative applications for photovoltaic solar cells. Furthermore, we intend to invite the whole community of academic and industrial researchers involved in both fundamental studies and applied solutions to share their recent findings, views, and expectations in this challenging field of research concerning new advanced materials and their integration in a solar cell technology.

Specific research areas of interest include, but are not limited to, the following: Advances in the synthesis and characterization of new advanced materials for solar cell technology; Quantum dot photovoltaic materials and devices; New methods for the deposition of advanced materials based on thin films; New concepts and device architectures for the next generation of solar cells; Carbon nanomaterials for the improvement of PV devices; The large-scale production of third-generation solar cell technologies using nanostructured metal oxide.













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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi