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Recent Advances in Silicon Solar Cells

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Deadline for manuscript submissions:
closed (30 June 2023)

Message from the Guest Editors

Over recent decades, photovoltaic devices have shown a big potential to obtain electric power from solar irradiation when compared with other sources. Currently, photovoltaic silicon-based technologies are the most used around the world. In particular, the new presence of novel concepts of silicon solar cells such as HJT and TOPcon solar cells with high efficiency enhances this status.

To continually improve the efficiency and stability of silicon solar cells, new methods of designing, manufacturing processes, and inspection methodologies for silicon solar cells are involved. Furthermore, the rapid development of machine learning promotes the detection efficiency and accuracy of defects from silicon-based wafers to cell fabrication and photovoltaic modules based on state-of-the-art imaging tools.

The proposed Special Issue covers many of the topics mentioned above. The primary aim of this Special Issue is to provide newly developed advanced progress in the field of silicon solar cells.

It is our pleasure to invite you to submit your original research papers, as well as review papers, within the scope of this Special Issue.

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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