Special Issue

Role of Heterojunction in Photovoltaic Devices

Message from the Guest Editor

Heterojunction-based photovoltaic devices are a type of solar cell that relies on the interface between two different semiconducting materials to convert sunlight into electricity. The junction between these materials creates a built-in electric field that separates the photo-generated carriers and facilitates their collection at the respective electrodes. Heterojunction-based solar cells can achieve higher efficiencies compared to homojunction solar cells due to their ability to collect photo-generated carriers from a wider range of the solar spectrum. These photovoltaic devices have found applications in both traditional flat-plate solar panels and in emerging technologies such as perovskite and organic photovoltaics. Ongoing research is focused on improving the efficiency and stability of these devices, as well as reducing their manufacturing costs to make them more competitive with traditional energy sources. The purpose of this Special Issue is to solicit original contributions and publish recent advances in heterojunction-based photovoltaic devices.

Guest Editor

Dr. Sadia Ameen

Advanced Materials and Devices Laboratory, Department of Bio-Convergence Science, Advance Science Campus, Jeonbuk National University, Jeongeup 56212, Republic of Korea

Deadline for manuscript submissions

closed (30 July 2024)

Solar

an Open Access Journal by MDPI

CiteScore 4.3
Tracked for Impact Factor

mdpi.com/si/167152

Solar
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
solar@mdpi.com

mdpi.com/journal/solar

Solar

an Open Access Journal by MDPI

CiteScore 4.3
Tracked for Impact Factor

mdpi.com/journal/solar

About the Journal

Message from the Editor-in-Chief

Solar is a new international, open access journal for solar technologies. Climate change is real! Therefore, fast and wide-spread application of solar technologies is of utmost importance. Consequently, *Solar* aims to publish articles which make a real, influential, and often cited contribution not only to basic research and development, but also to the application of photovoltaics as well as to solar thermal conversion. In addition, articles discussing the politics, economy, environmental, and social issues of solar technologies are also welcome. We encourage authors to submit high-quality original articles, letters, and review articles. Our editorial and technical team guarantees a high-quality, fast reviewing process, fast publication, and promotion. With your articles, our journal will rank among the best soon!

Editor-in-Chief

Prof. Dr. Jürgen Heinz Werner
Institute for Photovoltaics and Research Center SCoPE, University of Stuttgart, 70569 Stuttgart, Germany

Author Benefits

Open Access:

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

High Visibility:

indexed within ESCI (Web of Science), Scopus and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

MDPI