Special Issue

Developments in Perovskite Solar Cells

Message from the Guest Editor

Ever since the first perovskite solar cell was reported by Miyasaka et al. in 2009 with an efficiency of 3.8%, perovskite solar cells have rapidly become a hot research topic as a promising photovoltaic technology due to their significant potential for high efficiency and low production costs. Furthermore, perovskites are a versatile material that allows for high tunability compared to conventional silicon-based solar cells. Single-junction perovskite solar cells have since surpassed 25% with the highest perovskite-based tandem device (perovskite/silicon) over 32%. This Special Issue is open to a broad range of topics within the perovskite solar cell field, including but not limited to the following:

- Long-term stability
- Lead-free non-toxic solutions
- Deposition methods and techniques
- Tandem and multijunction devices
- Commercialization aspects
- Perovskite materials characterization
- Perovskite nanocrystals, quantum well, or quantum dots
- Reverse bias, hysteresis, and ion migration studies
- Interfaces and surface recombination
- Electron and hole transport materials
- Machine learning, deep learning, and artificial intelligence

Guest Editor

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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

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