Special Issue

Innovative Thin Films and Coatings for Solar Cells

Message from the Guest Editors

This Special Issue is dedicated to exploring the innovative use of thin films and coatings designed for solar cell applications. The focus includes a variety of coatings applied to key components of solar cells, such as light absorbers and electron and hole transport layers. We invite contributions that utilize a diverse range of coating methods, both vacuum-based and non-vacuum-based. We encourage submissions related to a wide array of solar cell types, including thin-film solar cells, lead and lead-free halide perovskite solar cells, organic solar cells, hybrid solar cells, and dyesensitized solar cells. Contributions should address, but are not limited to, the following topics:

- Proposing and developing novel energy materials that enhance solar cell performance.
- The application and optimization of coating techniques for solar cell materials, using either vacuum or non-vacuum processes.
- Investigating and analyzing the effects of different absorbers and transport layers on solar cell efficiency and overall performance.
- Introducing innovative coating processes specifically designed for solar cell applications, detailing the methodologies and potential impacts.

Guest Editors

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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