

Special Issue

Advances in Low-Cost Energy Materials and Thin Films

Message from the Guest Editor

The development of novel energy materials has been boosting the revolution of the energy structure in recent decades. Nowadays, renewable energy technologies such as batteries, fuel cells, supercapacitors, solar cells, and electro(photo)catalytical hydrogen generation, play an increasingly important role in modern society.

However, it is still a challenge to widely integrate these novel energy technologies into modern society due to a lack of appropriate materials to meet the demand of low-cost and satisfying performance. Research on low-cost and high-performance materials requires continuous effort. In this Special Issue, we would like to solicit manuscripts reporting recent progress in this area. The topics of interest include, but are not limited to, the following:

- Novel approaches of material design, synthesis and processing for energy applications;
- Synthesis of novel energy materials;
- Understanding of structures and properties of novel materials;
- Thin film energy devices;
- Nanomaterials and nanostructures for energy applications;
- Low-cost materials and manufacturing approaches.

Guest Editor

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closed (20 March 2024)



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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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