

Advances in Thin Films for Energy Storage and Conversion

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Message from the Guest Editors

Dear Colleagues,

To meet the growing demands of energy supply and overcome worldwide energy shortages, thin films for energy storage and conversion technologies have recently attracted increasing attention due to their capability of providing specific physical and chemical properties to the surface of bulk materials with the versatility and ease. Material development, characterization, and simulation, as well as performance evaluation of thin films, have been conducted in energy storage and conversion devices.

This Special Issue aims to provide a platform for researchers to demonstrate and exchange the latest research findings on thin films for energy storage and conversion applications. Research areas may include (but are not limited to) the following:

- Novel thin films or coatings for electrochemical applications;
- Fuel cells;
- Water electrolyzers;
- Lithium/sodium-ion batteries;
- Solar energy conversion and storage;
- Capacitors and supercapacitors;
- Materials for cathodes, anodes, and electrolytes;
- Electrochemical characterization;
- Nano/microstructured materials;
- Flexible electronics energy storage devices.

We look forward to receiving your contributions.



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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.

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