# Special Issue

# Surface Coating in Advanced Energy Storage Devices

### Message from the Guest Editors

Surface coating is a typical topic related to advanced **energy conversion and storage** in electrochemical methods. A new emerging tendency in recent research and development should be highlighted by introducing coating materials and theories to describe and develop new knowledge and technologies for advanced batteries. To introduce bands, a built-in-field is used to describe the **battery's electrochemical performance and device physics**; in particular, recent nanomaterials and their heterostructure have been developed as high ionic transport systems for novel batteries. This Special Issue aims to cover the recent advances in designing nanostructured materials, and the functions of surfaces and heterostructures at various levels of materials and devices in relation to material properties and device performance. It also aims to cover semiconductor-based materials, nano-composite systems, and principles for electrochemical energy conversion and storage. **Keywords:**

- nanomaterials
- surface coating
- energy storage devices

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### Deadline for manuscript submissions

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# About the Journal

## Message from the Editor-in-Chief

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.

## Editors-in-Chief

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