

Special Issue

Research on Novel Energy Storage Materials and Devices

Message from the Guest Editor

Novel energy storage materials and devices is strongly demanded to meet the increasing demand of several sectors such as renewable energies, automobiles, mobile and wearable devices. The aim of this Special Issue is to present the latest developments of materials and their devices for advanced energy storage and relevant energy conversion (such as in metal-O₂ battery). This Special Issue invites contributions about significant new findings related to synthesis, fabrication, structure, performance and technological application of novel energy storage materials, as well as their devices for sustainable energy and development, through a combination of original research papers and review articles from leading groups around world. In particular, topics of interest for this Special Issue include

- Energy Storage Materials: Synthesis, Fabrication, Structure
- Batteries: Li-ion batteries, Sodium-ion batteries, Zinc-ion batteries, Metal-O₂ batteries
- Capacitors (CS): Electric double layer capacitors (EDLC), Pseudocapacitors
- Hydrogen storage

Guest Editor

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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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