



Advanced Materials for Energy Storage and Conversion

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Message from the Guest Editor

Dear Colleagues,

Energy storage and conversion technologies have risen to the top of the research and industrial interests, given the proportionate growth of renewable energy sources. The extraordinary advancements in energy storage and conversion technologies are inextricably linked to the development of new materials. This Special Issue intends to report on the most recent advances and findings in developing innovative energy storage and conversion technologies, such as lithium/sodium/potassium-ion batteries, lithium-sulfur batteries, supercapacitors, electrocatalysis, and photocatalysis. The contribution of original research articles and reviews on the design, synthesis, theoretical calculation, characterization, characteristics, energy storage mechanism, industrial engineering, and application of various materials for energy storage and conversion are strongly welcomed.

We look forward to receiving your contributions.

Dr. Ning Sun

Guest Editor





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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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