

## Special Issue

# Advances in Batteries and Energy Storage Technology

### Message from the Guest Editors

Energy storage systems (ESSs) are ubiquitous in the era of electrification to counteract climate change and greenhouse gas emissions, where different batteries play a pivotal role in existing ESSs. Owing to their complicated dynamics, a clear understanding of the internal physical processes and meticulous management of operations is required to enhance the safety, performance, and reliability of these ESSs. Therefore, understanding the internal mechanisms, characterizing various properties, and developing proper management strategies for batteries and other energy storage technologies are of great importance. In recent years, there are emerging methodologies that bring new opportunities to the understanding, modelling, control, and management of energy storage technologies to unlock the potential of ESSs.

Within this scope, this Special Issue aims to encourage ideas and solutions to address the emerging challenges in batteries and energy storage technology. Original research articles, state-of-the-art reviews, and perspectives are invited for submission.

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### Guest Editors

Dr. Jia Guo

Dr. Yunhong Che

Dr. Xinrong Huang

Dr. Yusheng Zheng

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### Deadline for manuscript submissions

closed (31 January 2025)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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