# **Special Issue**

# Recycling and Reuse of End-of-Life Lithium-Ion Batteries: Challenges and Strategies

### Message from the Guest Editors

The Special Issue presents contributions addressing, but not limited to, these major topics, defining protocols and strategies, highlighting challenges, and identifying possible routes for the management of the various aspects involved in the recycling and reuse of lithiumion batteries.

- Protocols for pre-treatments, cell discharge, and cell disassembly at laboratory and industrial scale;
- Protocols for the robust and fast analysis of the state of health and charge of the battery;
- Processes and materials for the degradation of battery components;
- Processes and materials for the recovery of critical/strategical raw materials through the isolation of target elements via separation, precipitation, and filtration;
- Upcycling and recycling of different components of waste lithium-ion batteries:
- Regeneration and healing of degraded battery components for their direct recycling;
- Assessment of the environmental and economical sustainability of all the above-mentioned aspects;
- New perspectives on the development of newgeneration lithium-ion battery materials and design to enable easy recycling.

#### **Guest Editors**

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### Deadline for manuscript submissions

closed (25 October 2024)



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## **About the Journal**

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Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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