

## Special Issue

# Development, Application, and Characterization of New Electrode Materials for Advanced Batteries

### Message from the Guest Editors

The purpose of this Special Issue is to provide an overview of new electrode materials for advanced batteries, by taking into account both developments and applications. Synthesis strategies and applications for different chemistries including sodium ion and multivalent technologies are welcome. It also provides responses to scientific questions by adopting the most suitable technique for battery characterization using the peculiar characteristics of X-rays. Researchers working in these fields are strongly encouraged to submit a contribution.

- LIBs, SIBs, multivalent chemistries;
- Synthesis and characterization;
- Electrode/electrolyte interface;
- Electrode intercalation mechanism and secondary reactions;
- X-ray diffraction, SAXS, WAXS;
- EXAFS, XANES, X-Ray Microscopy;
- Operando and ex situ experiments;
- Photoelectron Spectroscopy.

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### Guest Editors

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### Deadline for manuscript submissions

20 October 2025



## Batteries

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## About the Journal

### Message from the Editor-in-Chief

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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### Editor-in-Chief

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