Topical Collection

Feature Papers in Battery Mechanisms and Fundamental Electrochemistry Aspects

Message from the Collection Editor

For this Topical Collection, we are seeking contributions in the following topics related to the research, development, and application of batteries:

- Fundamentals of battery electrochemistry;
- Kinetics of the intercalation and conversion reaction;
- Reaction mechanism and dynamics of electrochemical processes;
- Electrochemical-based methods;
- Models and methods for the characterization of interfaces in batteries;
- Evolution of SEI and CEI;
- Computational methods;
- Methods for the identification of interphases;
- Analyses of electrode materials and analysis of interphases;
- Advanced in situ and ex situ characterization techniques;
- Post-mortem analysis of batteries;
- Timescale and length-scale methods;
- Analytical methods for the study of the electron and ion movement in batteries;
- Synchrotron-based methods;
- Structural and electronic reversibility in batteries;
- Chemometric methods for the study of the operando dataset in batteries.

Collection Editor

Prof. Dr. Marco Giorgetti
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Batteries

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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.

Editor-in-Chief

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