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Electrochemical, Thermal and Safety Properties of Lithium and Post-Li Materials and Cells

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Message from the Guest Editor

New cheaper, safer, and more sustainable battery materials and technology concepts are urgently required for the decarbonization of the energy system and an extensive market penetration of electric vehicles and stationary storage systems. So-called post-Lithium batteries based on, e.g., Na or Mg ions which no longer rely on Li are promising alternatives that offer a huge potential. Therefore, characterization of electrochemical, thermal, and safety properties of the cells and their individual active and passive materials is required to obtain quantitative and reliable data, which are necessary to improve the current understanding in order to design and develop better materials and cells. This Special Issue addresses all techniques which are necessary for a holistic assessment from materials to cell level. I warmly invite you to publish your original research paper or a review paper in this Special Issue.

Share your results to get a deeper understanding of the electrochemical and thermal processes under both normal use and abuse conditions. This will be an important milestone to increase their safety and to exploit their full potential....









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Message from the Editor-in-Chief

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