Special Issue

Advanced Electrode Materials and Electrolytes for Next-Generation Rechargeable Batteries

Message from the Guest Editor

Designing effective electrolytes and electrodes is key to the success of emerging battery systems. Electrode materials play an important role in the energy density, power density, and cycling life of batteries, and the design of reasonable electrode materials is essential for promoting the development of novel battery technologies. As the only component that interfaces with every other component in the batteries, the electrolyte must simultaneously satisfy several criteria, including rapid ion and mass transportation, effective electron insulation, and electrochemical inertness. The associated electrolyte–electrode interfacing chemistry is the essence of electrolyte engineering, dictating the power, energy, and reversibility of a battery during its entire service life. This Special Issue will cover the key topics in next-generation "beyond Li-ion" battery technologies, including electrolytes, electrodes, and interphases.

Guest Editor

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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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