



Electrochemical Materials and Devices for Energy Conversion and Storage

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Message from the Guest Editors

With the rapid development of society, the overuse of coal, oil, diesel, and other non-renewable energy resources results in the extreme shortage of traditional fossil fuel. To address this issue, the conversion and storage technologies of electrochemical energy, such as electrochemical capacitors/batteries and fuel cells, have received extensive attention based on their distinguishing properties, e.g., energy/power densities, cyclability, and efficiencies.

This Special Issue aims at covering recent progress and new developments in electrochemical materials and devices for energy conversion and storage, including, but not limited to, the following topics:

- (1) the precise synthesis and design methods of electrochemical materials;
- (2) advanced characterization techniques, especially operando/in situ spectroscopy technology;
- (3) theoretical calculations for electrocatalysts and electrode materials;
- (4) advanced electrolytes and membranes for electrochemical energy conversion and storage devices;
- (5) low-/non-platinum electrocatalyst for low-temperature fuel cells;
- (6) Advanced materials for supercapacitors;
- (7) Review articles that describe the current state of the art.





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Message from the Editor-in-Chief

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