Special Issue

Advanced Catalysts for Electrochemical Energy Storage and Conversion

Message from the Guest Editors

Meeting energy demands with clean, secure, and sustainable sources is one of the most remarkable yet arduous missions of the 21st century. Therefore, the new technological revolution in renewable energy has been regarded as the foundation for sustainable social development. Due to the intermittent nature of renewable energy sources, a global energy transformation can only be implemented if large-scale energy storage and conversion systems are developed, with many electrochemical energy technologies expected to play key roles in renewable energy utilization. The development of advanced catalysts and deeper fundamental understandings of electrocatalytic processes are at the core of many electrochemical technologies, being critical components of related systems and devices. In this Special Issue, we aim to collect the most recent advances in material design and development for electrocatalytic energy conversion and storage processes.

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