Special Issue

Advances in Electrode Preparation and Interphase with Electrolytes in Energy Storage Devices

Message from the Guest Editor

As the demand for energy storage devices, such as electric vehicles, continues to rise, the need for reliable and durable energy sources has driven significant advancements. Rechargeable batteries have emerged as one of the most promising solutions due to their long lifespans and ability to provide continuous energy. To achieve higher energy output, it is crucial for the electrodes to feature a structure that enables efficient ion and electron conduction while accommodating larger amounts of Faradaic materials for optimal utilization. Additionally, minimizing side reactions between the electrode and electrolytes is essential for extending battery life, as these reactions generate byproducts that can create conduction barriers. In this Special Issue, we will explore the latest advancements in electrode preparation techniques and interphase designs to enhance the electrochemical performances of batteries. We will provide insights and guidance on how to further develop materials and functions to drive progress in practical applications.

Guest Editor

Dr. Ju-Myung Kim

Energy and Environment Directorate, Pacific Northwest National Laboratory, Richland, WA 99354, USA

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Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt
Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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