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Advances in Energy Materials Surface and Interface Analysis

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Deadline for manuscript
submissions:

closed (31 October 2021)

Message from the Guest Editors

Advanced energy storage materials are recognized as key element for future applications. It is a great challenge to improve degradation behavior as well as enabling fast charging accompanied by highest safety standards for next-generation batteries, independent of their exact nature like Lithium-Ion, Lithium-sulfur or Metal-air batteries. All relevant electrochemical processes like (de)intercalation, ion transport, are taking place at interfaces between individual materials like anode, (composite, solid) electrolyte and cathode and are determined by the microstructure. The electrode-electrolyte interfacial properties play a key role in determining the battery performance, including component/structure evolution, reaction pathway and surface dynamics. Therefore, advances in energy materials surface and interface analysis will significantly contribute to outstanding battery performance in future and will be highlighted in this special issue.



mdpi.com/si/70134

Special Issue



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Message from the Editor-in-Chief

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