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Advances in Energy Storage and Conversion Devices Utilizing Ionic Liquid Electrolytes

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Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

Ionic liquids (ILs) are organic salts with melting points lower than their decomposition temperature. Being salts in the liquid state, they show attractive and tunable physical and chemical properties, such as negligible vapour pressure, modest ionic conductivity, low flammability, and wide electrochemical window.
In the last two decades, ILs have been exploited in almost any field of chemistry, industry, and engineering.

Throughout this collection, we aim at gathering a series of papers together focused on the most recent advances in the uses of ILs in energy conversion and storage electrochemical devices. The contributions will tackle (but not limited to) smart-design for task-specific applications, implementation as electrolytes for solar cells, proton-shuttling media in fuel-cells, solvation-specific solvent for multivalent ions in post-lithium batteries, optimization of SEI formation for lithium-ion batteries, structure-properties relationship in electrochemical performances. Both theoretical and experimental approaches are equally welcomed.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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