



Stability and Optimization of Flow Battery Performance

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Message from the Guest Editor

Stability and efficient long-term energy storage techniques are important for the renewable energy utilization. The flow battery is one of the most potential long-term energy storage techniques. The more fundamental principles and optimizing strategies are needed to promote the battery performance and stability of the redox flow battery, which involves multidisciplinary researches in many fields, such as the functional materials, flow field design, integration strategy and electrode modification, etc.

This Special Issue invites authors to contribute on flow fields design for redox flow batteries, electrode materials modification, electrolyte materials modification, membrane materials design and stability and optimization of flow batteries performance.

Research areas:

1. Electrode materials and structure design for redox flow batteries;
2. Flow fields design for redox flow batteries;
3. Membrane materials in redox flow batteries;
4. Transport phenomenon and dynamics in redox flow batteries;
5. Modelling, optimization, and numerical simulation;
6. Electrode and membrane modification;
7. Optimization of the redox flow batteries;
8. Integration of the redox flow batteries;





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