Special Issue

Beyond the Lithium-Ion Battery Storage Technology

Message from the Guest Editors

Lithium-ion (Li-ion) batteries are currently the most widespread battery technology on the market. However, their capital cost is still significant, possibilities of their energy density improvement is limited, and they create a certain environmental impact. These challenges can be addressed by looking into second life use, which shall improve the cost and their footprint per stored kWh. Alternatively, different materials and technologies can be used to enhance the energy storage characteristics. Battery chemistries such as Lithium-Sulfur or Sodium-Sulfur seem very promising in terms of improving energy density and of reducing the environmental impact. For very high power applications, new technologies such as Lithium-ion capacitors can significantly improve the performance of traditional Lithium-ion batteries. Thus, we would like to encourage you to submit to this Special Issue, entitled "Beyond the Lithium-Ion Battery Storage" Technology," manuscripts focusing on the following topics:

- Second life battery use
- Lithium-Sulfur batteries
- Sodium-Sulfur batteries
- Lithium-ion capacitors
- Novel energy storage technologies, beyond Li-ion batteries

Guest Editors

Prof. Dr. Daniel-Ioan Stroe

Department of Energy Technology, Aalborg University, Pontoppidanstræde 111, 9220 Aalborg, Denmark

Dr. Václav Knap

GomSpace A/S, 9220 Aalborg East, Denmark; Department of Energy Technology, Aalborg University, 9220 Aalborg, Denmark

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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

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