Special Issue

Battery Safety Diagnostics for Aerospace Electrification

Message from the Guest Editor

With the mandate of short-hull passenger flights by all-electric airplanes in 2040, the safety of battery systems never been of such great importance. Although batteries have successfully paved their way to the automotive industry, aerospace organizations continue to express concerns about battery safety. The academic and industrial communities thus need to extend their battery research that has so successfully accelerated the electrification of passenger cars into the future of air transport. To address these new challenges and opportunities, this Special Issue will focus on battery safety concerns and their diagnostic methodologies. Therefore, the topics of the contributions include but are not limited to:

- Review of battery safety methodologies;
- Recent progress on battery safety performance;
- Novel methodologies for battery safety characterization;
- Novel technologies for safer batteries;
- Experimental studies to evaluate battery safety performance;
- Battery safety modeling;
- Autopsy studies of failed battery pack/module/cell;
- New cell/module/pack design to improve battery safety performance;
- Lighter, safer materials/design of battery pack for aerospace applications.

Guest Editor

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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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