Special Issue

Advances in Battery Technologies for Electric Vehicles

Message from the Guest Editors

EVs are the future and the solution of zero-emission mobility, and even beyond that. By 2030, it is estimated that EVs will represent more than 62% of vehicles sold globally. Billions of dollars are spent globally on the research, testing, and manufacture of next-generation EV battery technology, which can enable higher energy density, higher power input/output, lighter materials, longer lifetimes, and safer operation, and require more abundant and eco-friendly minerals to be mined and recycled. The aim of this Special Issue of *Energies* is to propose, explore, and introduce research innovation and theoretical and practical industrial concepts within complex system engineering, which includes new battery pack design, smart battery management, advanced thermal-electrical and mechanical management, new battery chemistry for EVs, new battery electrodes and electrolyte materials, solid state batteries, advanced fast charging system, and re-usability of the EV battery pack for 2nd, 3rd, or nth life applications.

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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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