



New and Emerging Battery Technologies

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Message from the Guest Editor

Despite their high energy density and good cyclability, the safety of lithium-ion batteries is still debatable. Therefore, safety is an important aspect in the development of this technology. Furthermore, the continuous development of nanotechnology and nanostructure materials and its enormous achievements in many fields of science have encouraged researchers to understand and to apply nanotechnology for battery materials in order to achieve the expectations of this ever-growing market.

Unlike traditional Li-ion batteries, which use cobalt oxide, manganese oxide, nickel oxide, and iron phosphate as active materials, nanobatteries are fabricated by employing nano-scale technology. This way, nanotechnology can address many shortcomings of the present day battery technologies such as the recharging time and battery memory.

This Special Issue will focus on recent developments concerning all-solid-state lithium batteries; alternative and sustainable electrochemical systems; nanobatteries; zinc-manganese oxide batteries; organosilicon electrolyte batteries; and Mg-S, Na-S (low temperature), K-ion, Na-ion, Mg-ion, and Ca-ion organic batteries.

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Message from the Editor-in-Chief

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