Special Issue

Transition Metal Compound Materials for Secondary Batteries

Message from the Guest Editors

Tremendous efforts have been devoted to improving the unbeatable performance of Li-ion batteries at all levels. As a result, some new battery systems emerged, including Na/K-ion and aqueous Zn-ion batteries. Incremental breakthroughs essentially rely on materials with high theoretical capacity and natural abundant resources. Transition metal compounds (TMCs) are typical electrode materials and the mechanism involved in batteries was reversible conversions between the high and low valence states of metal, delivering remarkably high capacity values. Up to now, these materials are involved in cathode, anode, electrolyte, separator, etc. It is therefore meaningful to set a Special Issue to collect the TMC materials for batteries and to illustrate the direction of development in the future.

Potential topics include, but are not limited to:

- TMC eletrode materials for Li/Na/K/Al/Mg/Ca-ion batteries
- TMCs modified separators
- TMCs modified lithium anode
- TMCs modified solid-state electrolyte
- TMCs for aqueous Zn-ion batteries

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Deadline for manuscript submissions

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Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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