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Transition Metal Compound Materials for Secondary Batteries

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Message from the Guest Editors

Dear Colleagues,

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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Special Issue

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Message from the Editor-in-Chief

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