

Special Issue

Emerging Topics in Advanced Electrode Materials for Metal-Ion Batteries

Message from the Guest Editor

Metal-ion batteries are now a promising alternative to LIBs for economic and safety reasons. This scenario is illustrated by the advances made in the field of Na-ion batteries, which already reach interesting levels of performance despite some limitations. Large-scale applications and the growing demand for energy storage reinforce the interest in metal-ion batteries, including a wide range of systems: Na, K, Mg, Zn and Ca-ion batteries with the double challenge of finding for each system an appropriate positive and negative electrode. This Special Issue provides an update on the electrochemical and structural properties presented in outstanding positive or negative electrode materials for the M-ion batteries. In addition to performance in terms of capacity, energy density and cycle life, the structure–electrochemistry relationships should be at the heart of the discussion. Research topics will cover advanced and/or original cathode and anode materials including oxides, polyanionic frameworks, chalcogenides etc. Organic electrolytes will be considered, as well as some specific aqueous electrolytes. In this Special Issue, original research articles and reviews are welcome.

Guest Editor

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