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Uniform  $\text{Li}_{1.2}\text{Ni}_{0.13}\text{Co}_{0.13}\text{Mn}_{0.54}\text{O}_2$  hollow microspheres with improved electrochemical performance by a facile solvothermal method for lithium ion batteries

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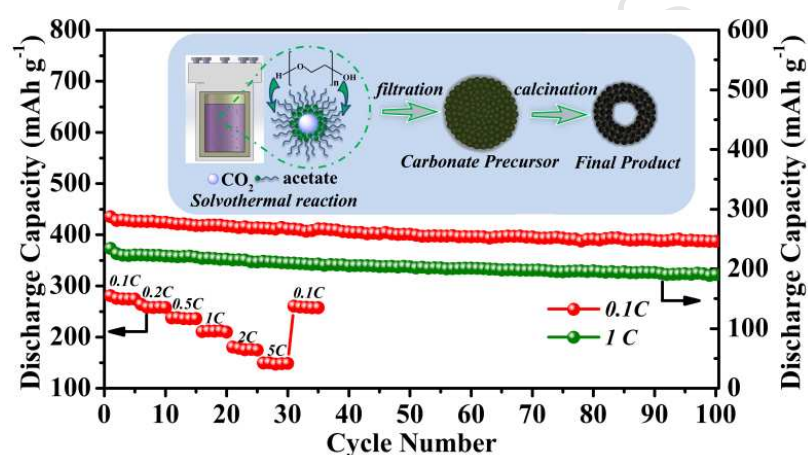
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## Table of Content:



We designed a facile solvothermal method to prepare  $\text{Li}_{1.2}\text{Ni}_{0.13}\text{Co}_{0.13}\text{Mn}_{0.54}\text{O}_2$  hollow microspheres with considerable uniformity and monodispersity. In this method, lithium ions and transition metal are precipitated simultaneously in the ethanol-PEG mixed solvent system to form carbonate precursors, which subsequently transform into self-assembled hollow microspheres by a heat treatment. As cathode material for LIBs,  $\text{Li}_{1.2}\text{Ni}_{0.13}\text{Co}_{0.13}\text{Mn}_{0.54}\text{O}_2$  hollow microspheres exhibit remarkable cycling stability and excellent rate capability with improved electrochemical kinetics properties.

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