

DEVELOPMENT OF $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ FOR LITHIUM BATTERIES VIA SOLIDSTATE REDOX METHOD

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ABSTRACT

In this work, $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$, which is a potential cathode active material in the 5 V class, is prepared by the solid-state redox method. The precursor material was obtained when the mixture reactants were heated at 500°C for 10 hours and calcined at different temperatures in the range between 650°C and 950°C for 12 hours. The structures of the synthesized materials were verified with X-ray diffraction (XRD) measurements and Scanning Electron Microscope (SEM). The electrochemical properties i.e. the charge/discharge technique were determined using Solartron 1470.

<http://journal.masshp.net/wp-content/uploads/Journal/2006/Azrulnizam%20141-146.pdf>

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