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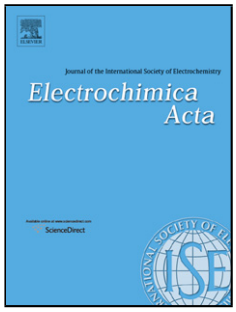

Title: Hierarchy concomitant in situ stable iron(II)−carbon source manipulation using ferrocenecarboxylic acid for hydrothermal synthesis of $LiFePO_4$ as high-capacity battery cathode

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Hierarchy concomitant in situ stable iron(II)–carbon source manipulation using ferrocenecarboxylic acid for hydrothermal synthesis of $LiFePO_4$ as high-capacity battery cathode

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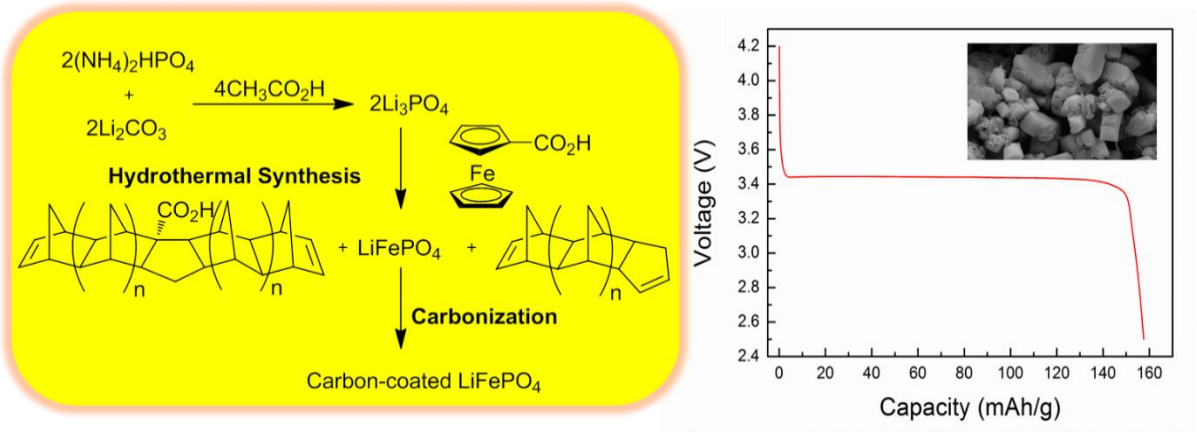
Graphical Abstract



Highlights

- Fe^{3+} Impurities free $LiFePO_4$ has been synthesized via hydrothermal method using ferrocene carboxylic acid as an iron source.
- Electron paramagnetic resonance spectroscopy has been used for determination of Fe^{3+} concentration in $LiFePO_4$.
- The $LiFePO_4$ electrode demonstrates good electrochemical performance.