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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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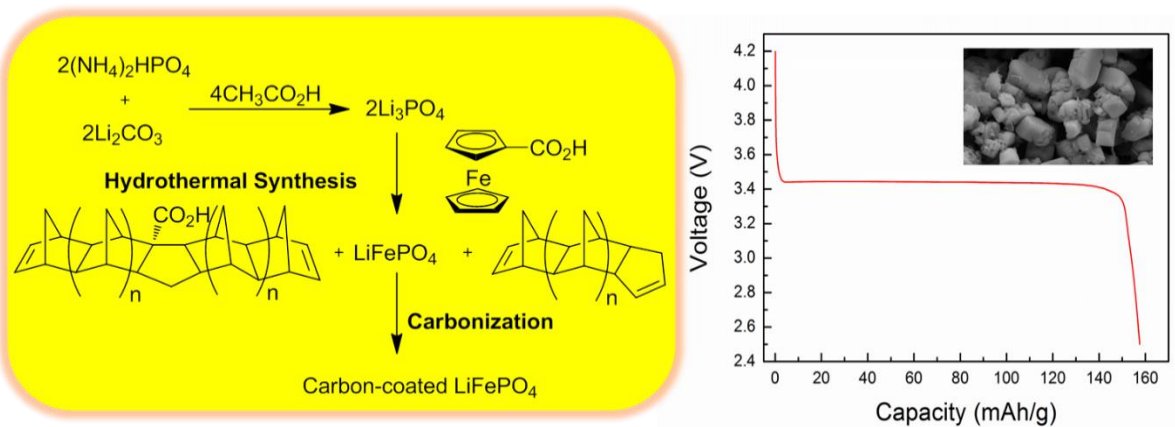
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Graphical Abstract



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.

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