

## Supplemental Information

### Electrochemical Insertion of Li into Nanocrystalline MnFe<sub>2</sub>O<sub>4</sub>: a Study of the Reaction Mechanism

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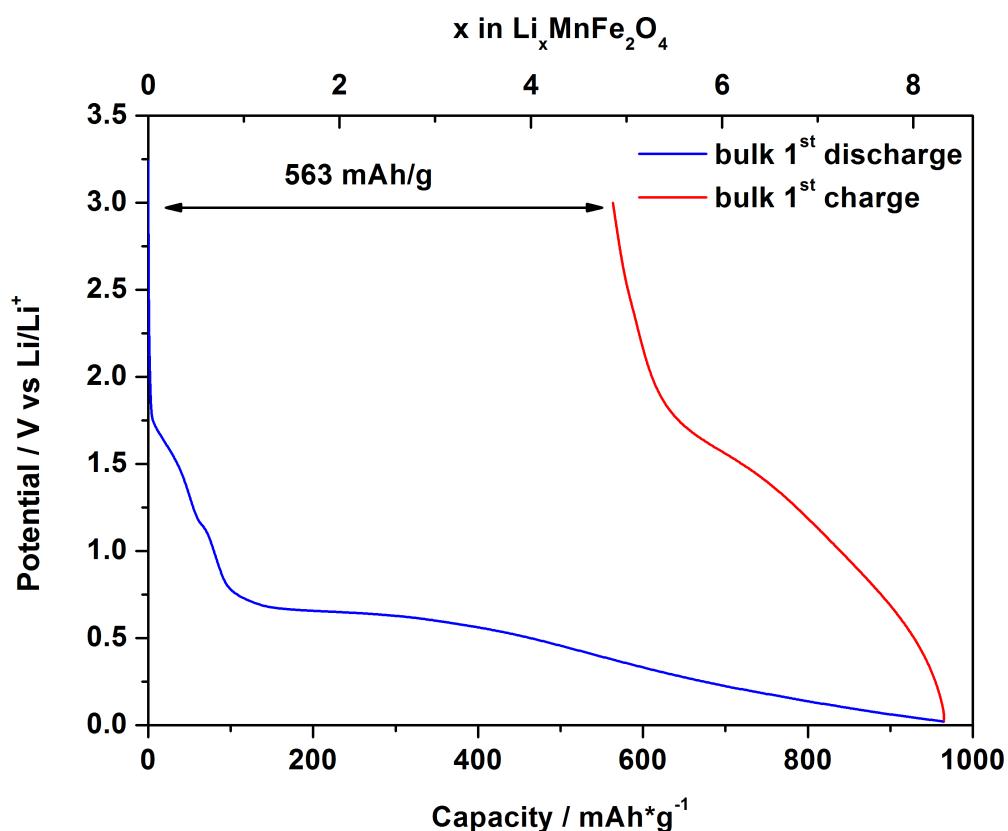
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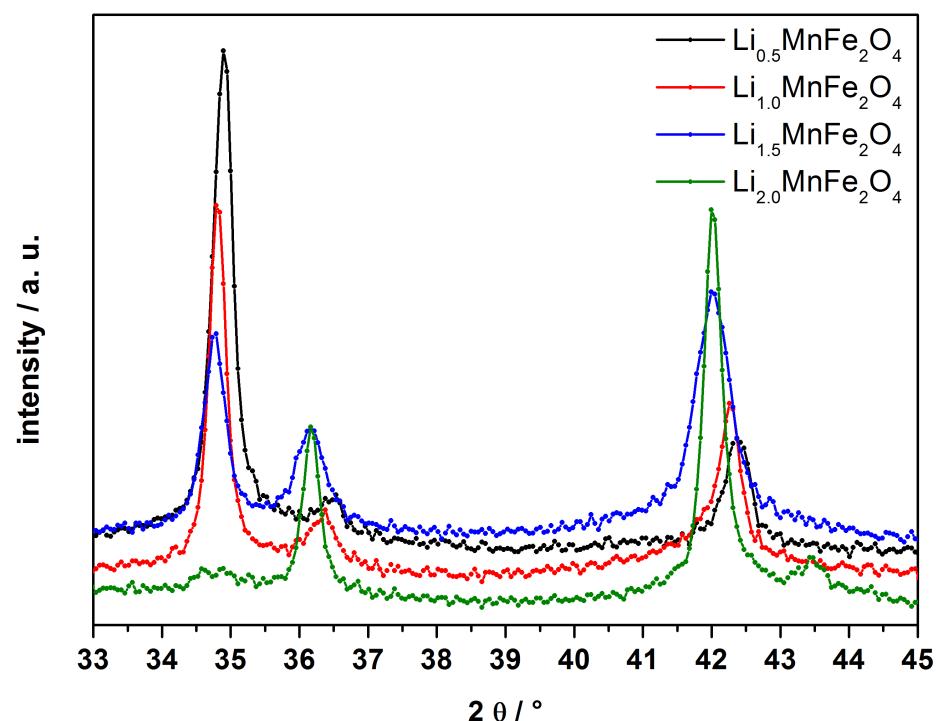
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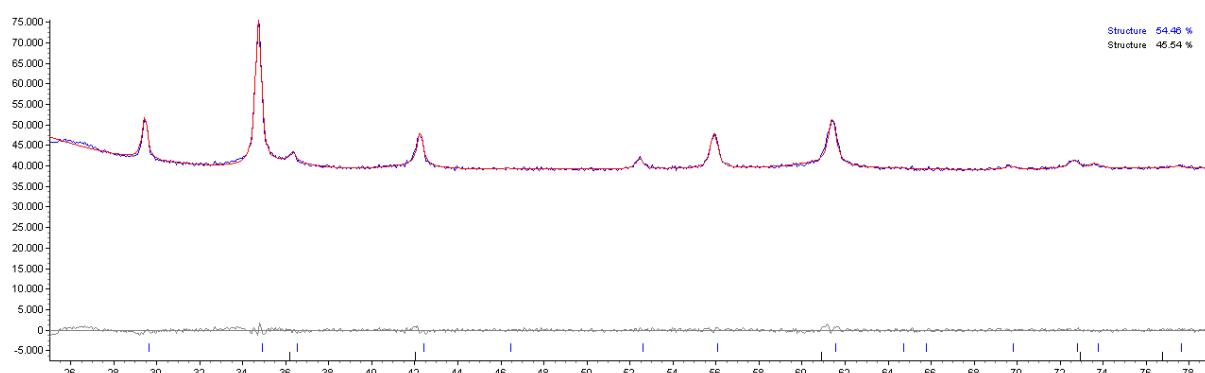
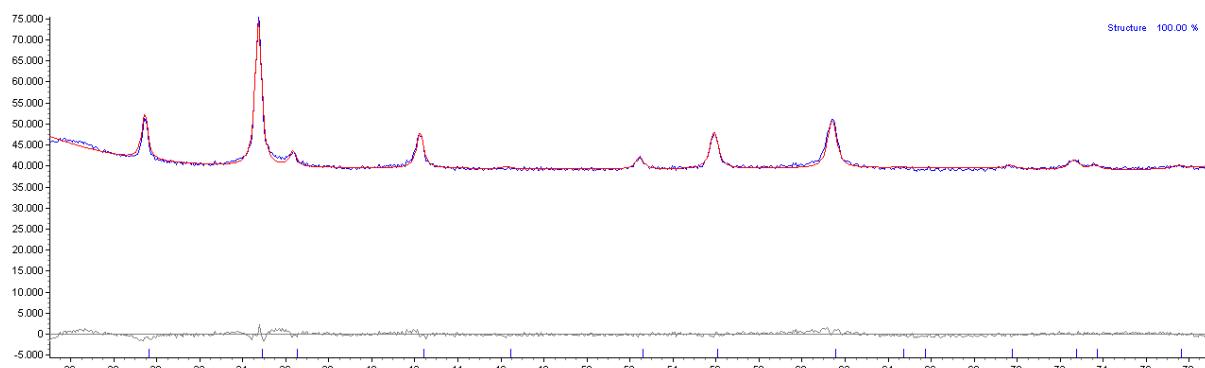
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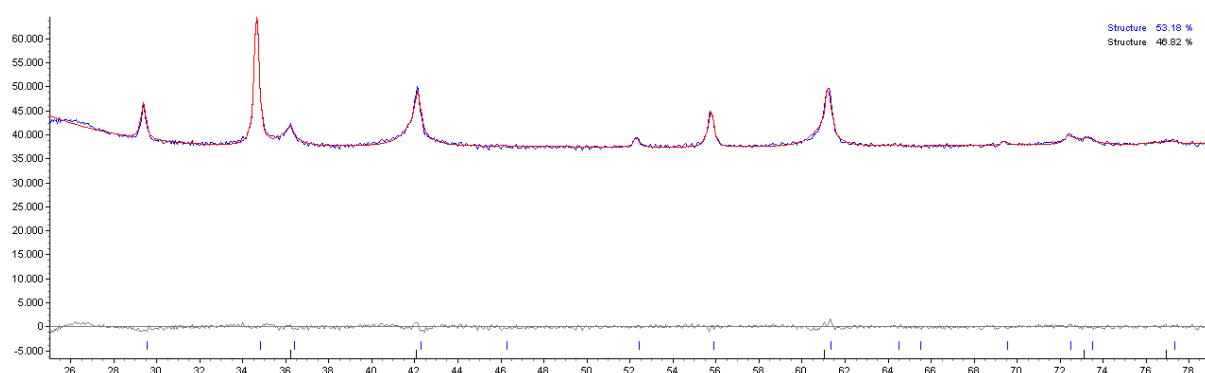
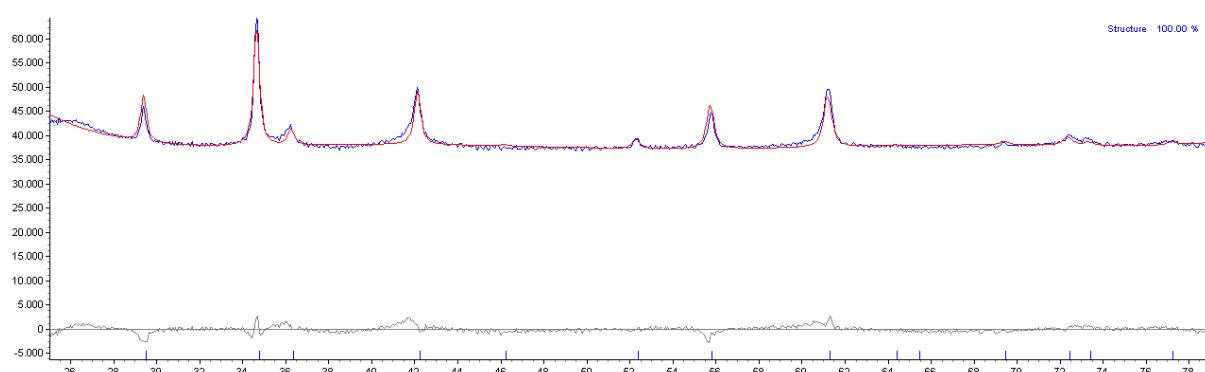
**Figure S1:** First discharge and charge curve of bulk MnFe<sub>2</sub>O<sub>4</sub> against Li|Li<sup>+</sup>. The capacity is shown in the bottom axis and the corresponding Li uptake in the top.



**Figure S2:** XRD pattern of nanocrystalline MnFe<sub>2</sub>O<sub>4</sub> after insertion of 0.5, 1, 1.5 and 2 Li in a aperture of 33-45 ° 2θ.



Result of the Rietveld refinement of the sample containing 0.5 Li per formula unit. Top: only  $\text{MnFe}_2\text{O}_4$  and bottom: two phase refinement using  $\text{MnFe}_2\text{O}_4$  and a monoxide.



Result of the Rietveld refinement of the sample containing 1 Li per formula unit. Top: only  $\text{MnFe}_2\text{O}_4$  and bottom: two phase refinement using  $\text{MnFe}_2\text{O}_4$  and a monoxide.