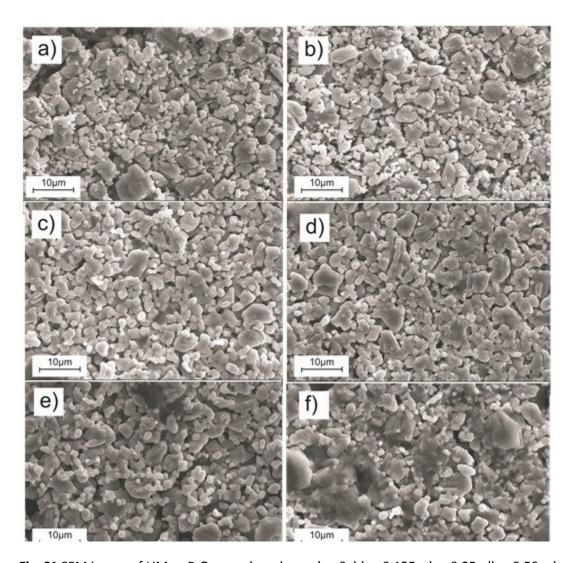
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## **Supplementary Information**

Enhancement of battery performance of LiMn<sub>2</sub>O<sub>4</sub>: Correlations between electrochemical and magnetic properties

- S. Demirela, E. Oza, S. Altina, A. Bayria, E. Altinb, S. Avcic
- <sup>a</sup> Inonu University, Physics Department, 44280 Malatya, Turkey
- <sup>b</sup> Inonu University, Scientific and Technological Research Center, 44280 Malatya, Turkey
- <sup>c</sup> Istanbul Medeniyet University, Faculty of Engineering and Naturel Sciences, 34700 Istanbul, Turkey



**Fig. S1** SEM image of LiMn<sub>2-x</sub>B<sub>x</sub>O<sub>4</sub> samples where a) x=0, b) x=0.125, c) x=0.25. d) x=0.50, e) x=0.75 and f) x=1.

Figure S1 shows the scanning electron microscopy images of  $LiMn_{2-x}B_xO_4$  samples. The images indicate that Boron substitution does not significantly affect the morphology. In x=0 sample there are large and

small grains. The sizes of the grains become more homogenous as the boron content increases for x<0.75 sample. For x=0.75 and 1 samples, various sizes of grans appears due to appearance of impurity phases.