## **Supporting Information**

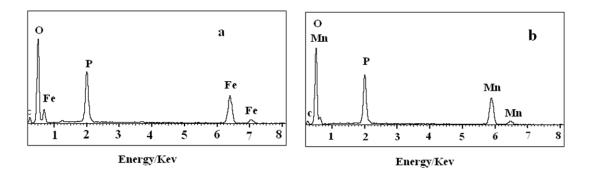


Fig. S1 EDS pattern of hierarchical LiMPO<sub>4</sub> microsphere prepared by solvothermal treatment at 180 °C for 24 h: (a) LiFePO<sub>4</sub> and (b) LiMnPO<sub>4</sub>.

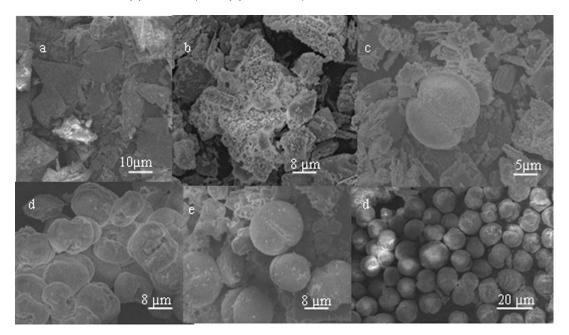


Fig. S2 The SEM images of the LiMnPO<sub>4</sub> products collected by solvothermal treatment at  $180 \, ^{\circ}$ C at different intervals: (a) 4 h, (b) 8 h, (c) 10 h, (d) 12 h, (e) 13 h and (f) 24 h.

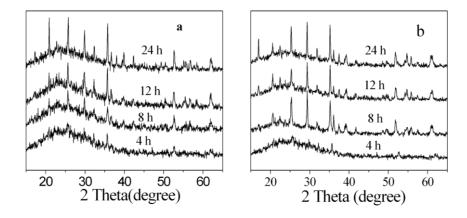


Fig. S3 XRD patterns of LiMPO<sub>4</sub> products prepared by solvothermal treatment at 180 °C for different reaction times: (a) LiFePO<sub>4</sub> and (b) LiMnPO<sub>4</sub>.

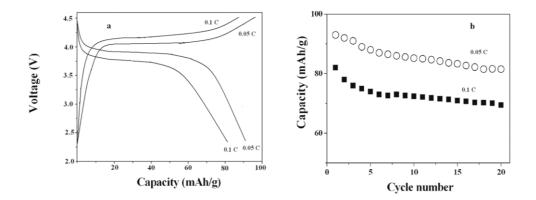


Fig. S4 The galvanostatic charge/discharge voltage profiles of LiMnPO<sub>4</sub> electrode between 2.3 and 4.5 V at different current densities, and (b) the corresponding cycling performance of at different current rates.