Supporting Information

Thermal Stability and Phase Transformation of Electrochemically Charged/Discharged $LiMnPO_4$ Cathode for Li-Ion Battery

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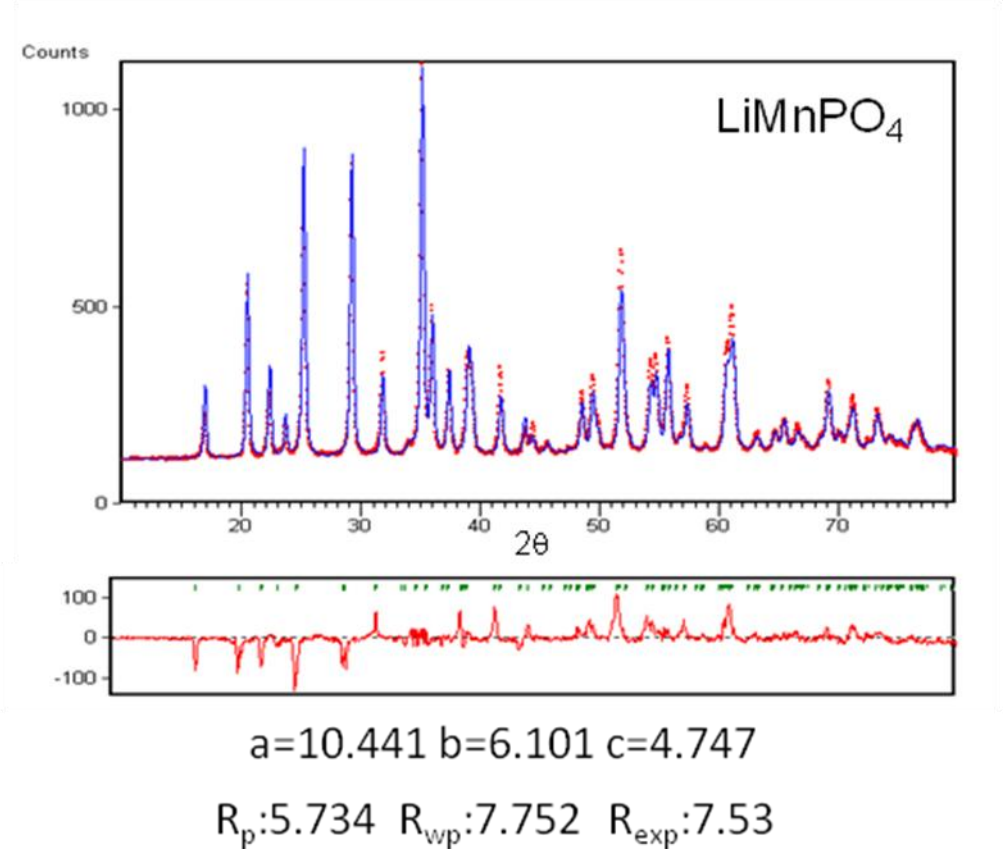

Fig. S1 Rietveld refinement of XRD pattern from the as-prepared $LiMnPO_4$ nanoplate.

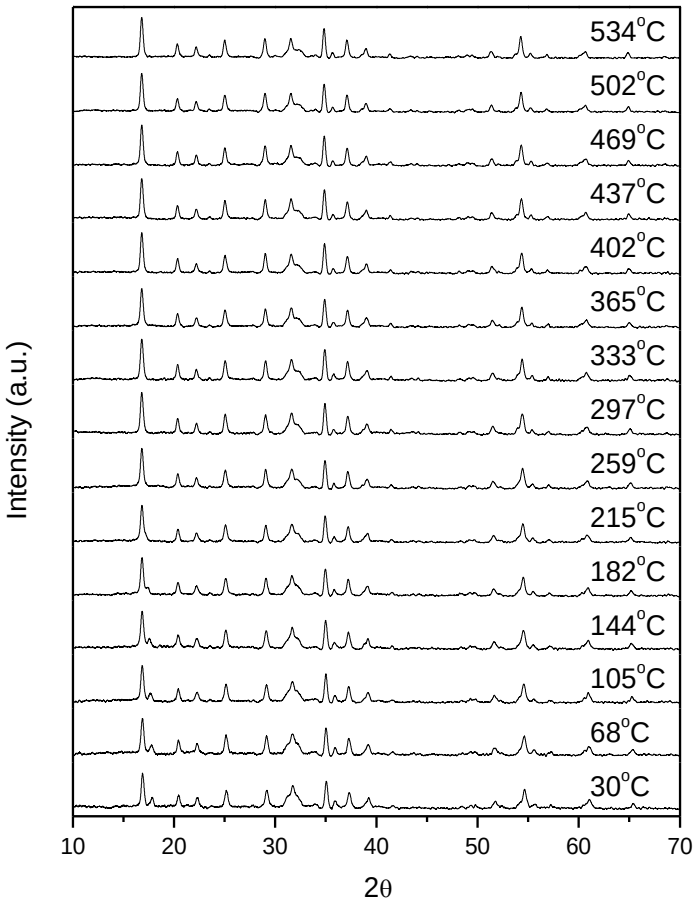

Fig. S2 *In-situ* hot-stage XRD characterization of the discharged $LiMnPO_4$ paper electrode at different temperatures under UHP-Ar atmosphere (heating rate: 5°C/min).

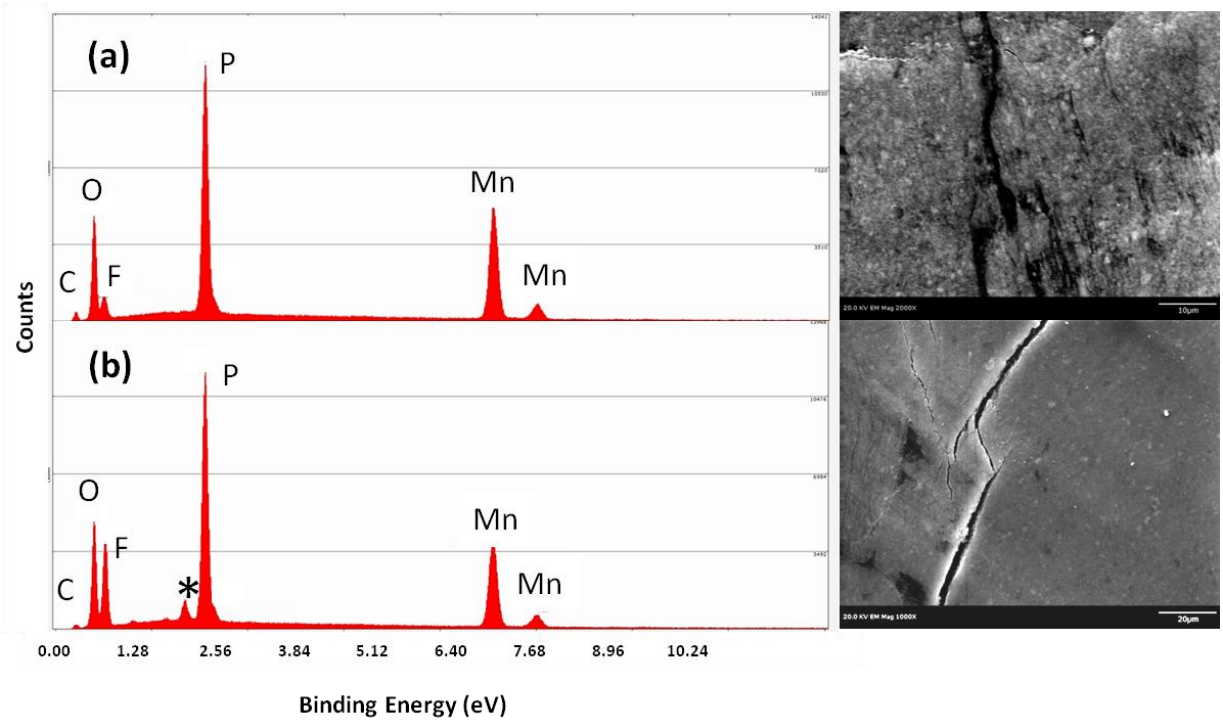

Fig. S3 SEM micrographs and EDAX results of (a) as-prepared $LiMnPO_4$ paper electrode and (b) after electrochemically cycled $LiMnPO_4$ electrode at discharged state (∗: unknown).

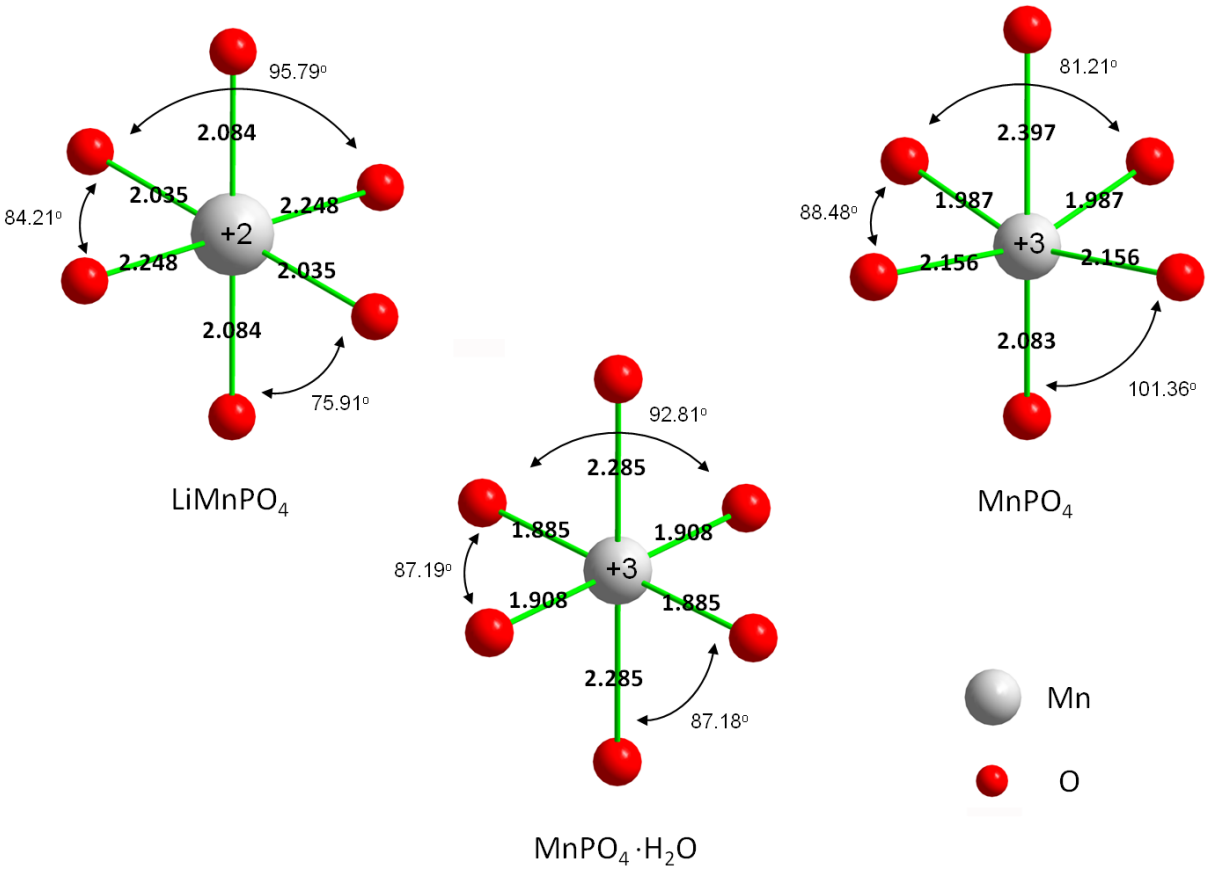

Fig. S4 MnO_6 polyhedra in $LiMnPO_4$, $MnPO_4{\cdot}H_2O$ and $MnPO_4$.