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ARTICLE TYPE

Electronic Supplementary Information

Title: Preparing $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Nanoplates with Superior Properties in Lithium-ion Batteries Using Bimetal-Organic Coordination-Polymer as Precursors (ID: TA-ART-01-2014-000505)

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15 †Electronic Supplementary Information (ESI) available:

The crystal structures of NiMn-CPs and Ni-Mn-O were investigated by X-ray diffractometry (XRD, X' pert PRO MPD) using Cu K α radiation ($\lambda=0.15418$ nm) with a scanning rate of 5°/min between 10° and 80°. The FT-IR spectra were collected using KBr discs on Fourier Transform

20 Infrared spectrometer (FT-IR, VERTEX70) in the range of 4000 ~ 400 cm^{-1} .

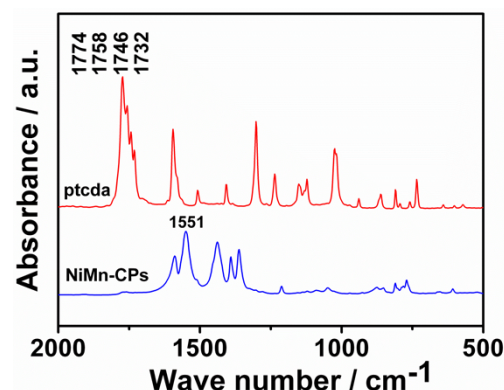
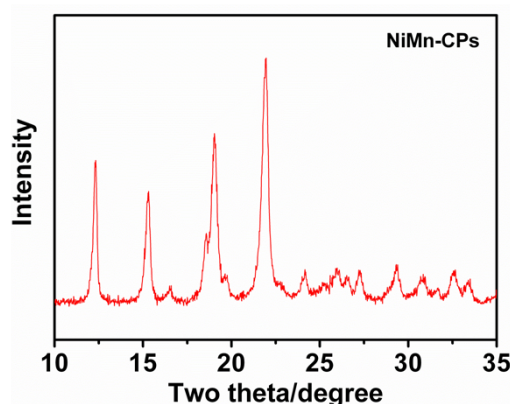
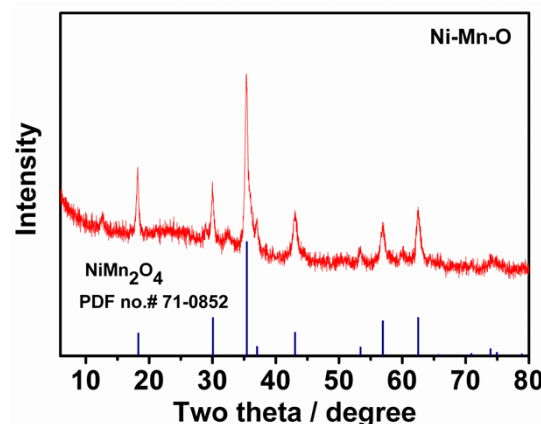


Figure †S2. IR spectrum of ptcds (the starting material) and Ni, Mn-ptcds coordination polymers (NiMn-CPs)



25 Figure †S1. XRD pattern of Ni, Mn-ptcds coordination polymers (NiMn-CPs) obtained after hydrothermal reaction



30 Figure †S3. X-ray diffraction patterns of Ni-Mn-O obtained by thermal decomposition of NiMn-CPs