

Electronic supplementary information

Polyhedral $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ with excellent electrochemical properties for lithium-ion batteries

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Figure S1. IR spectroscopy of the synthesized samples: LNMO-COh and LNMO-Oh.

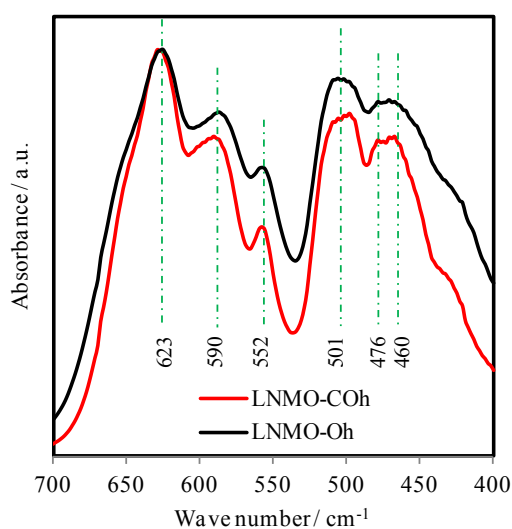


Figure S2. SEM images for the precursor synthesized under air (a) and O₂ (b) at 400 °C, respectively; And their counterparts XRD patterns (c and d).

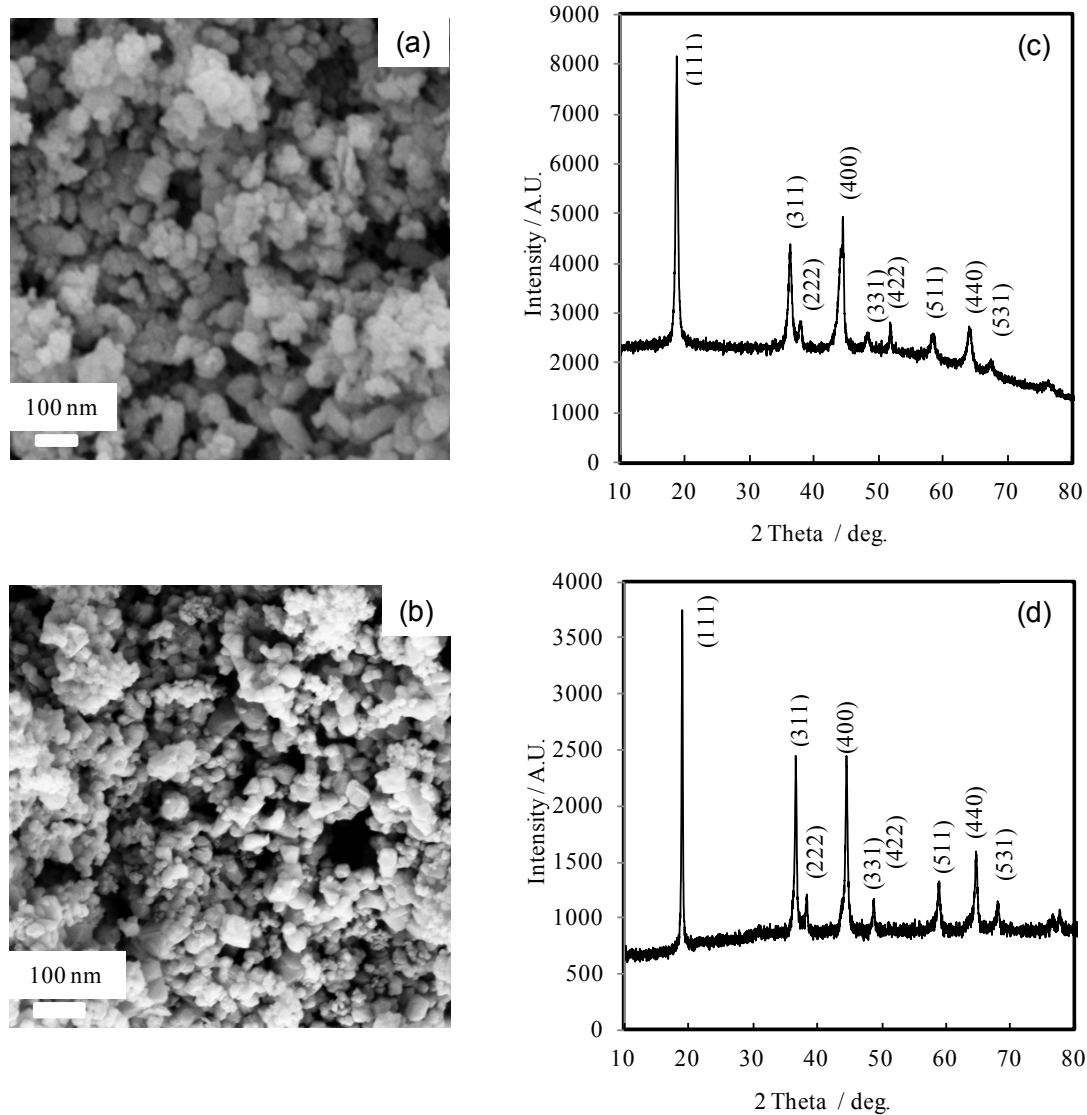


Figure S3. (a) XRD patterns for the samples calcined at b') 700 °C, c') 800 °C and d') 950 °C. And their counterparts SEM images (c, b and d).

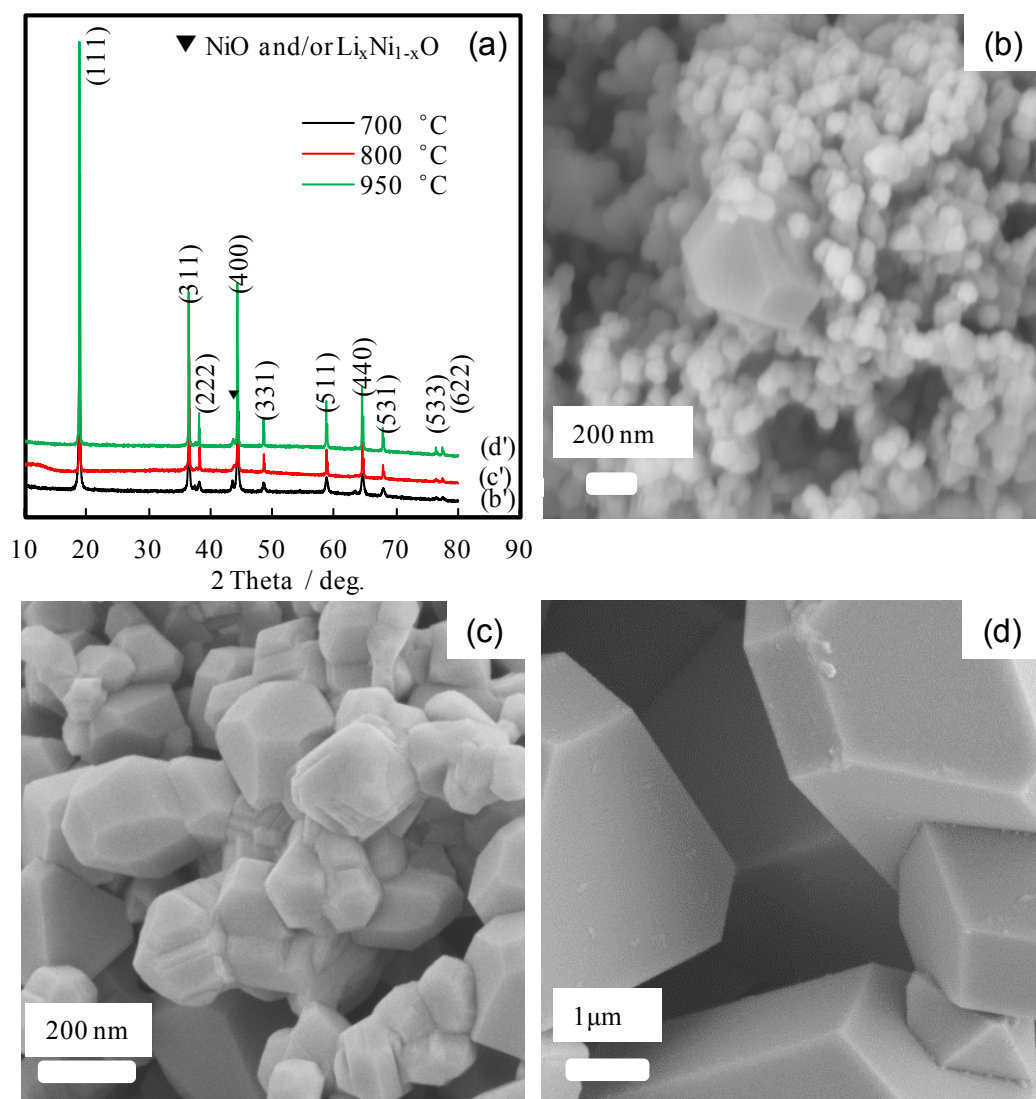


Figure S4. XRD patterns of the electrodes of (a) LNMO-CO_h after 200 cycles at 55 °C; (b) LNMO-CO_h after 500 cycles at 25 °C; (c) LNMO-O_h after 200 cycles at 55 °C; (d) LNMO-O_h after 500 cycles at 25 °C.

