

## Supplementary Information

### Mesoporous $\text{Li}_4\text{Ti}_5\text{O}_{12}$ nanoclusters anchored on super-aligned carbon nanotubes as high performance electrodes for lithium ion batteries

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### Supplemental Figures

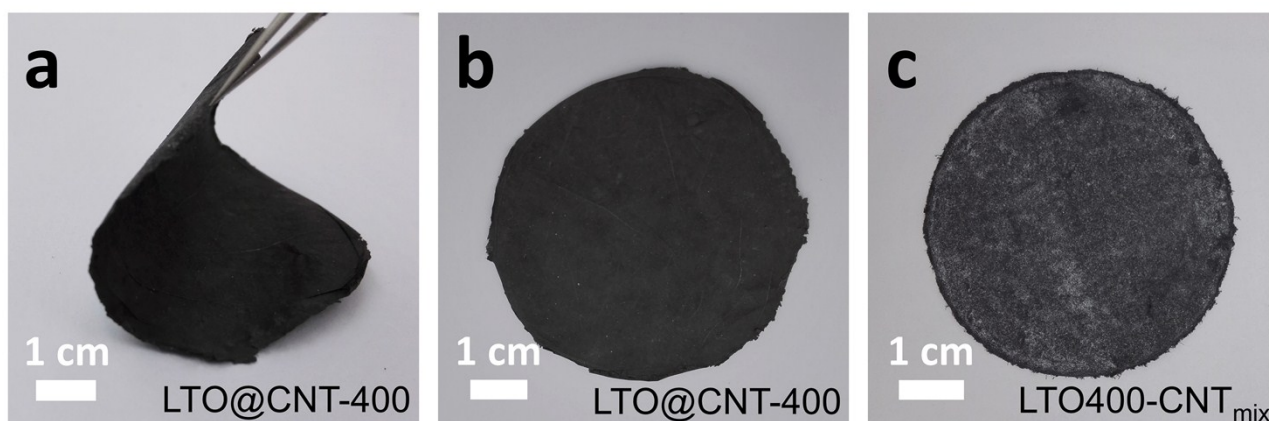


Fig. S1 Photos of (a, b) LTO@CNT-400 and (c) LTO400-CNT<sub>mix</sub> composites.

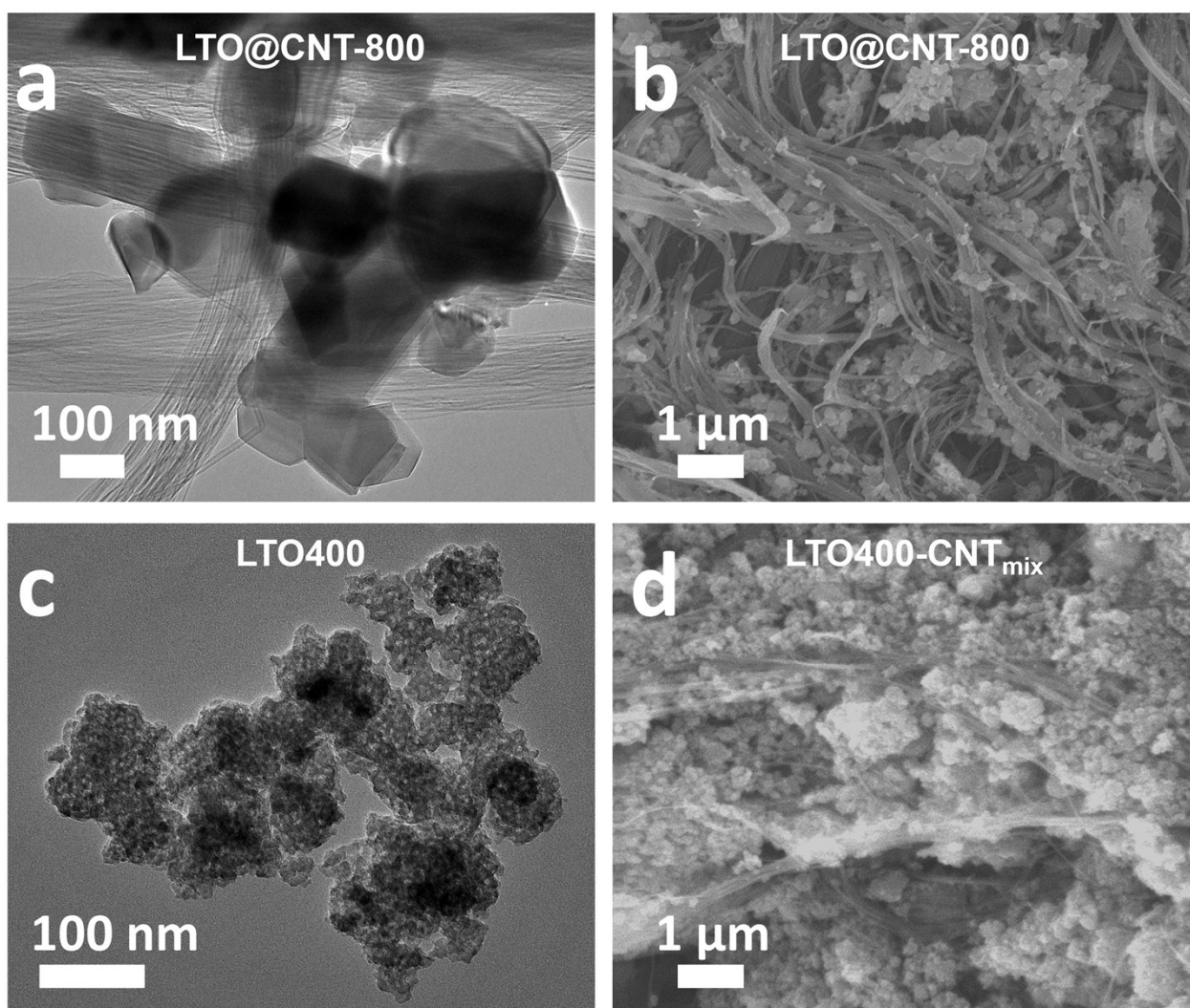


Fig. S2 (a) TEM and (b) SEM images of LTO@CNT-800. (c) TEM image of LTO400. (d) SEM image of LTO400-CNT<sub>mix</sub>.

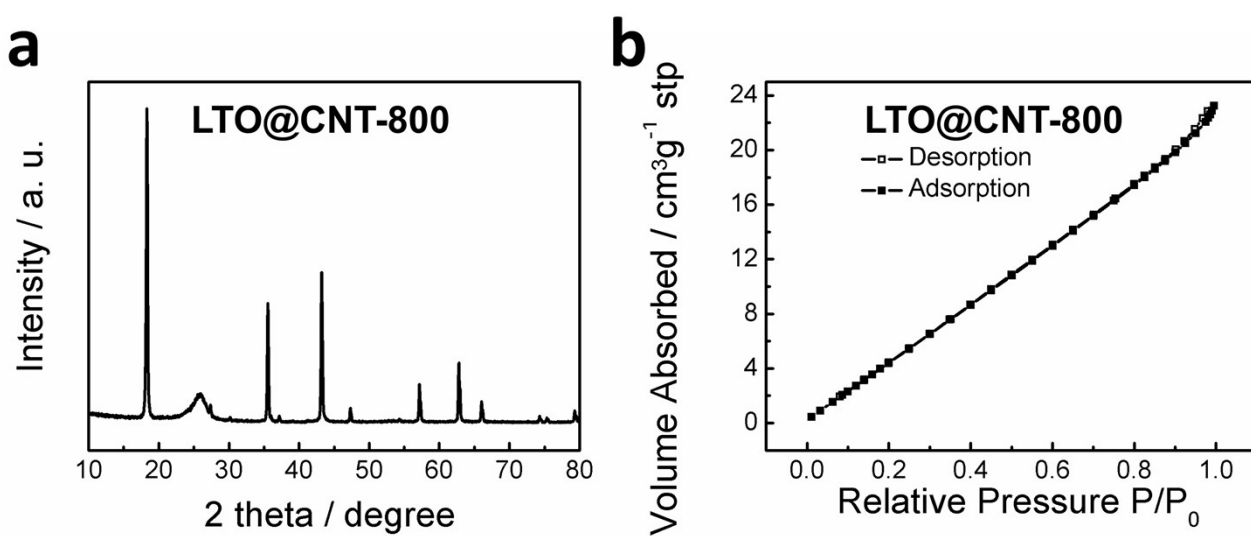


Fig. S3 (a) XRD pattern and (b) N<sub>2</sub> adsorption-desorption isotherm loop of the LTO@CNT-800 composite.

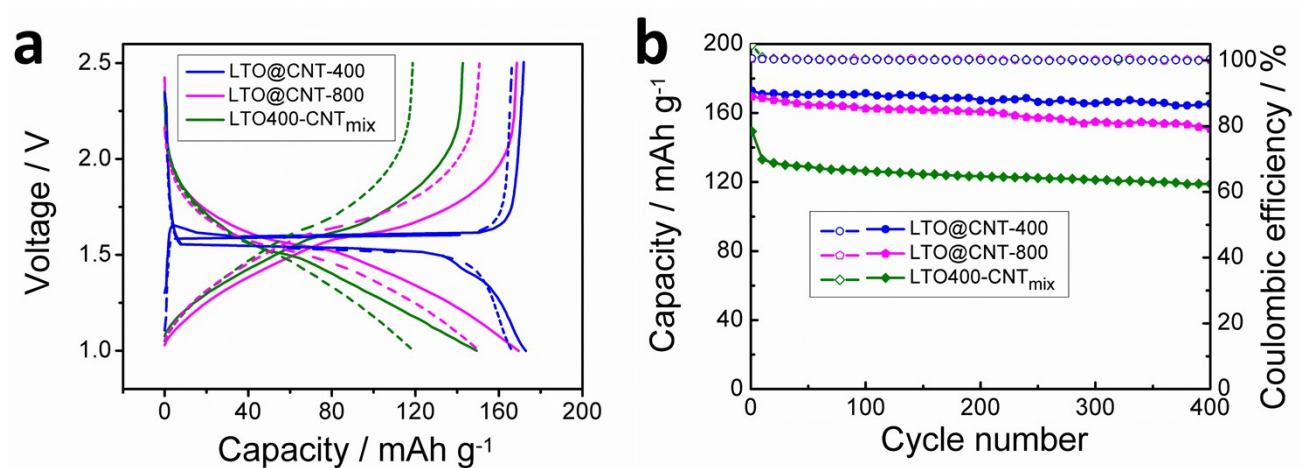


Fig. S4 (a) Galvanostatic charge/discharge profiles and (b) Cycling behaviors of the LTO@CNT-400, LTO@CNT-800 and LTO400-CNT<sub>mix</sub> composites at 1C. The solid lines and the dash lines in (a) plotted the charge/discharge curves at the 1<sup>st</sup> cycles and the 400<sup>th</sup> cycles, respectively.