Supplementary Material

Li-Ion Batteries with a Binder-Free Cathode of Carbon Nanotubes-$LiFePO_4$-Al Foam

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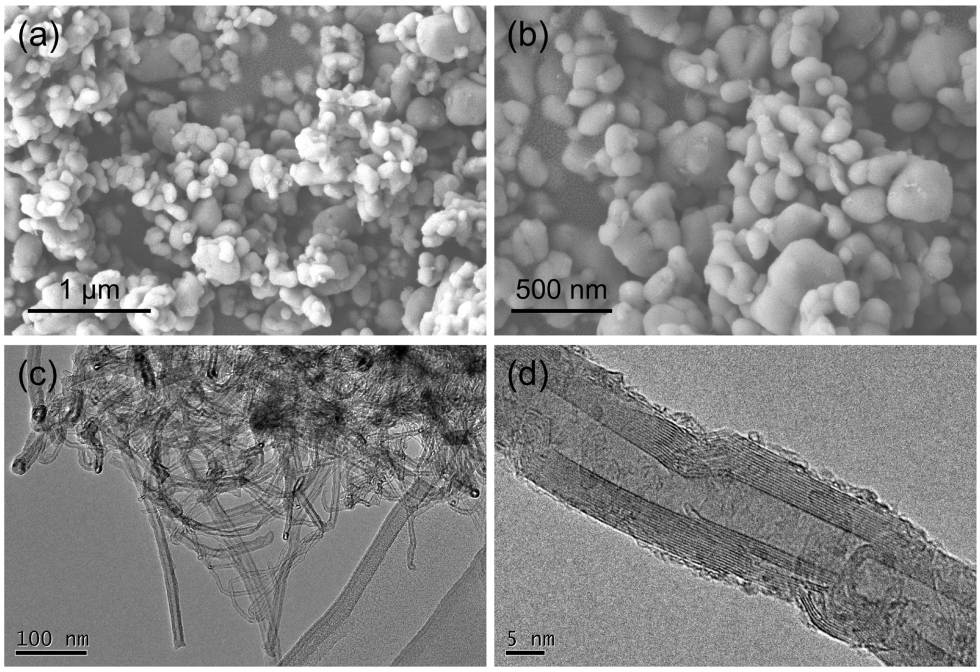


Figure S1. (a–b) Scanning electron microscope (SEM) images of LFP nanoparticles. (c–d) Transmission electron microscope (TEM) images of CNTs powders.



Figure S2. Optical image of the binder-free cathodes with 3% CNTs: (a) Al foil-based, (b) Al foam-based.

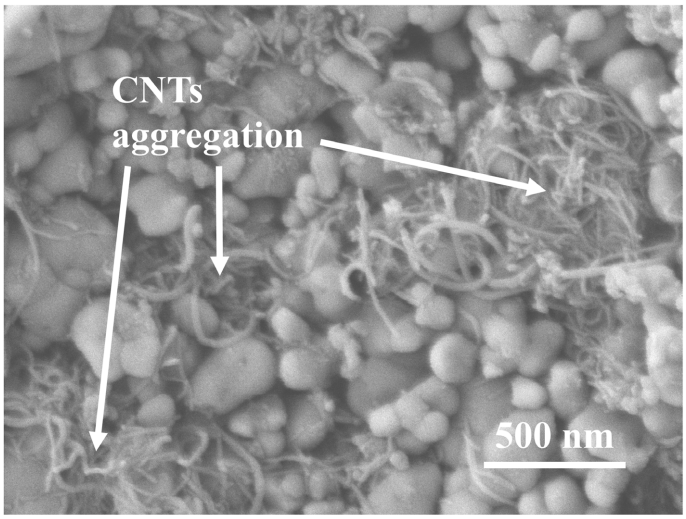


Figure S3. SEM image of 5% CNTs cathode, showing that the excessive content of CNTs lead to poor dispersion and severe aggregation.

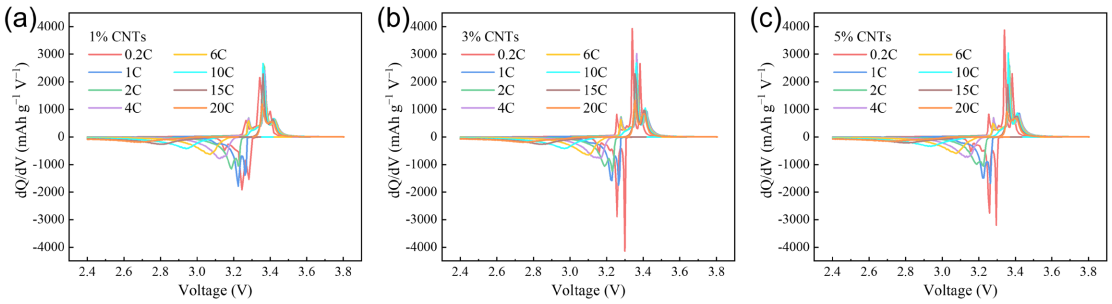


Figure S4. The differential capacity curves (dQ/dV) of the pouch cells with binder-free cathodes: (a) 1% CNTs, (b) 3% CNTs, (c) 5% CNTs.

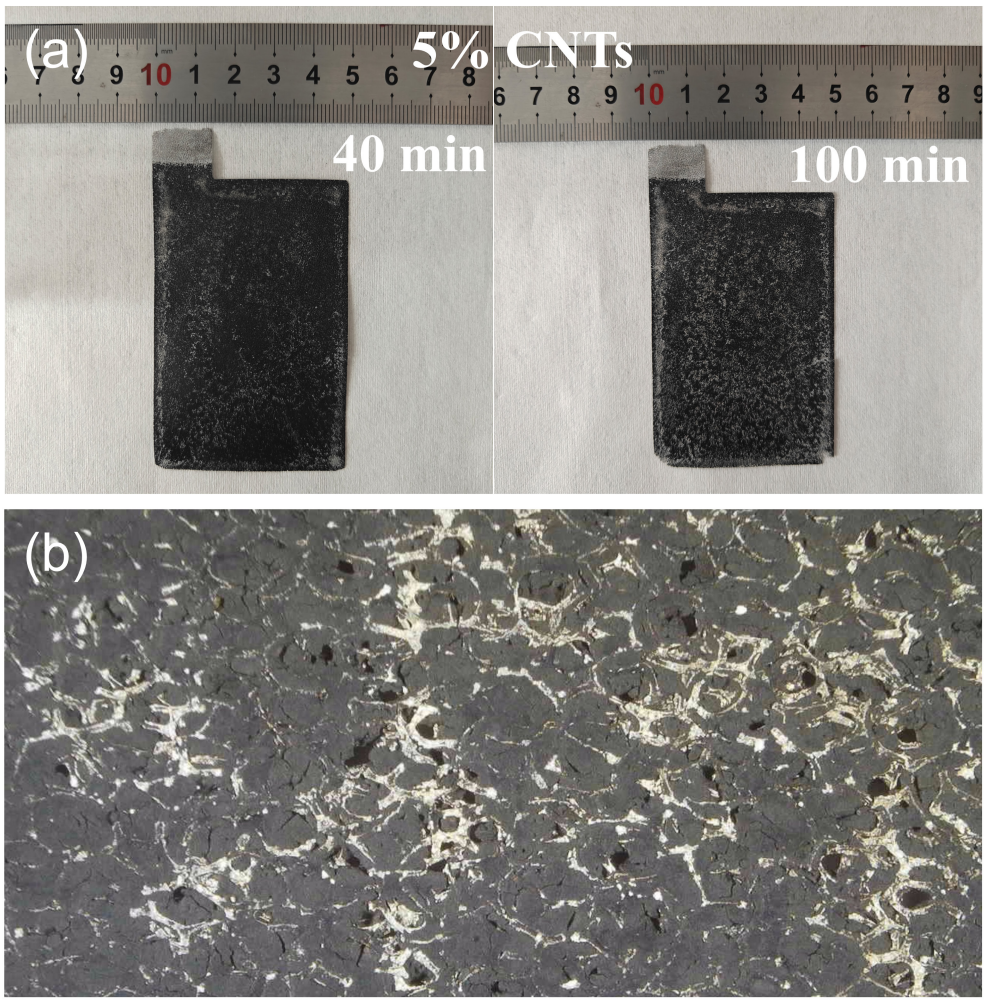


Figure S5. (a) Optical images of the binder-free cathode with 5% CNTs after ultrasonic treatment for 40 min and 100 min. (b) Optical micrograph of the binder-free cathode with 5% CNTs after ultrasonic treatment for 100 min.