

Supporting Information

Manuscript title:

A Net-Structured Filter of $\text{Co}(\text{OH})_2$ -Anchored Carbon Nanofibers with Ketjen
Black for High Performance Li-S Batteries

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Number of pages: 7.

Number of figures: 6.



Figure S1. Optical image of Co(OH)₂@CNF/KB-modified separator with the folding test.

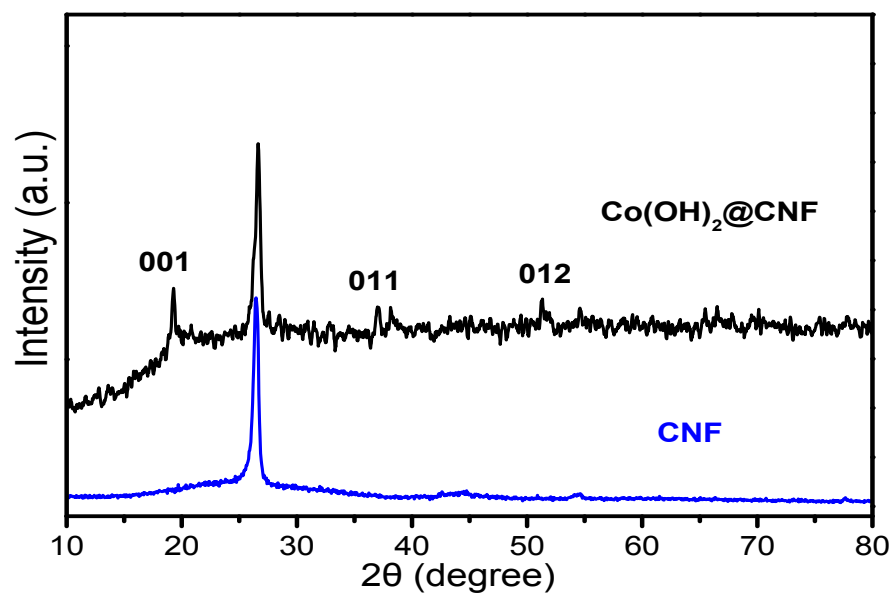


Figure S2. XRD inspection of CNF and Co(OH)₂@CNF/KB.

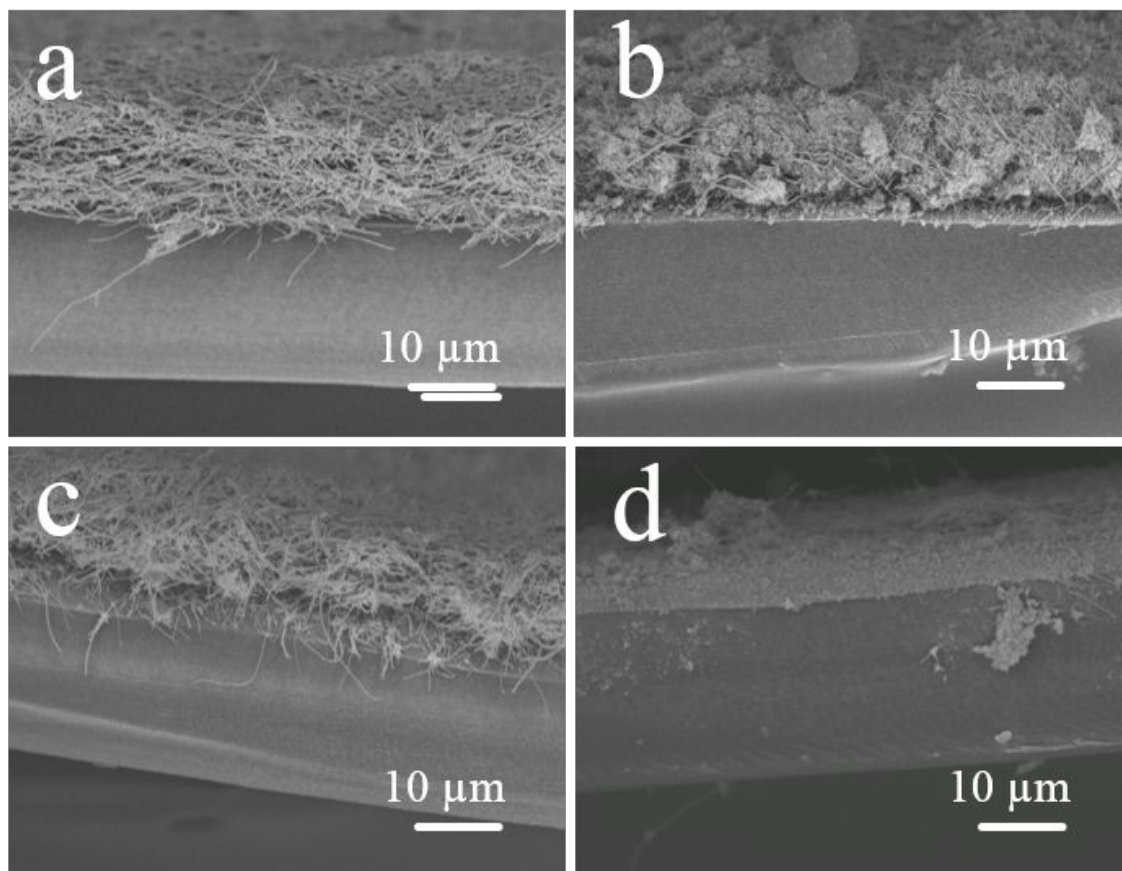


Figure S3. Cross-section SEM observation of (a) the CNF, (b) CNF/KB, (c) Co(OH)₂@CNF and (d) Co(OH)₂@CNF/KB layer on the commercial separator.

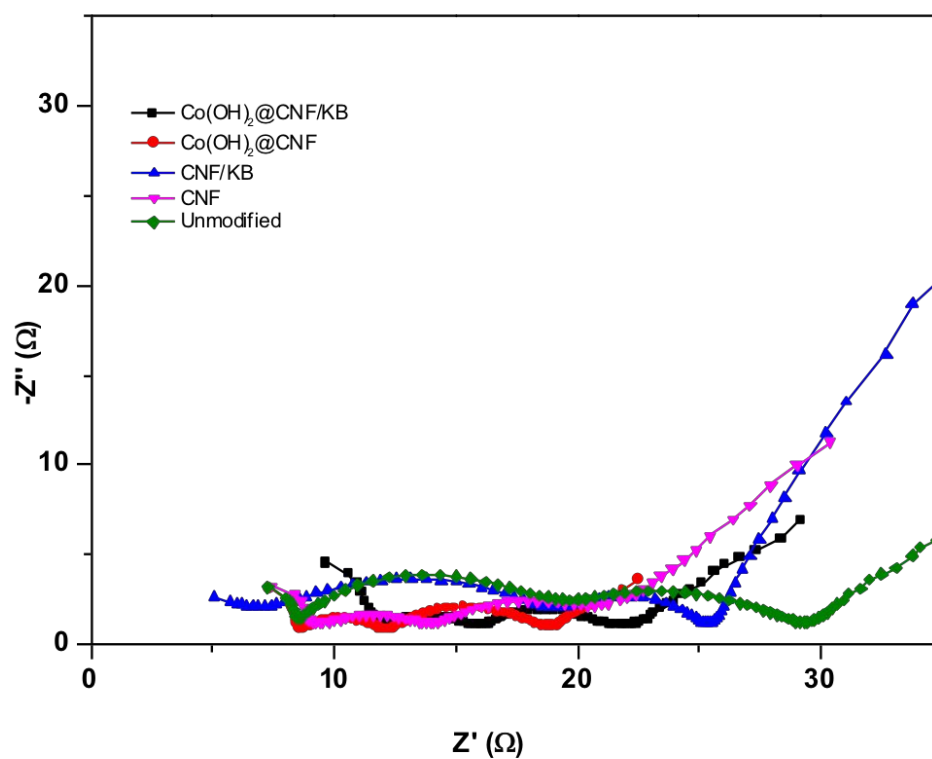


Figure S4. EIS performance of the cycled cells (100 cycles at 1.0 C rate) with different coating layers on the separator.

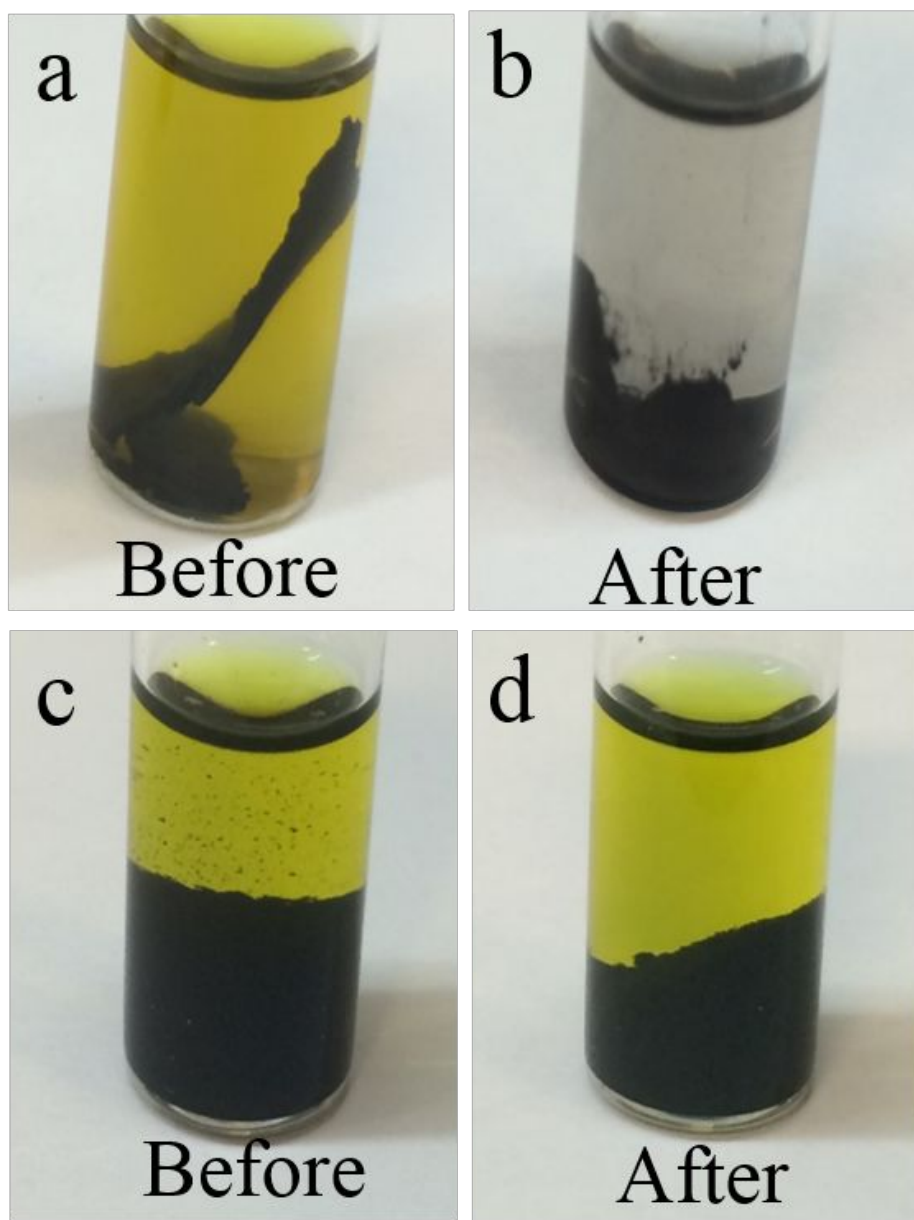


Figure S5. Visualized adsorption of Li_2S_4 by $\text{Co}(\text{OH})_2@\text{CNF}$ (a) before and (b) after stirring.
Visualized adsorption of Li_2S_4 by CNF (a) before and (b) after stirring.

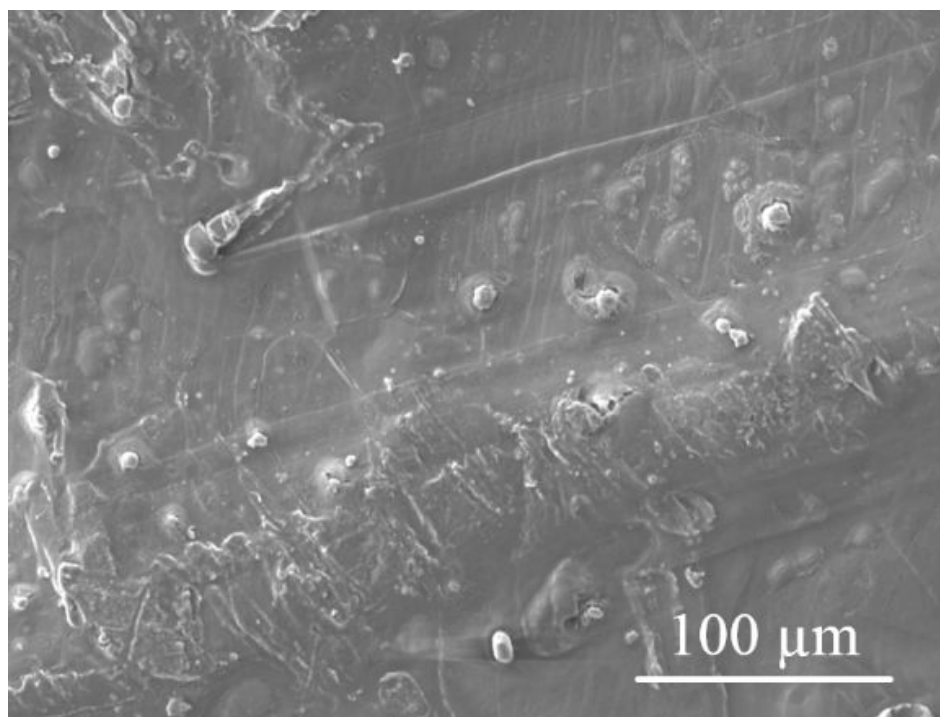


Figure S6. SEM inspection of fresh lithium anode.