

Supporting information

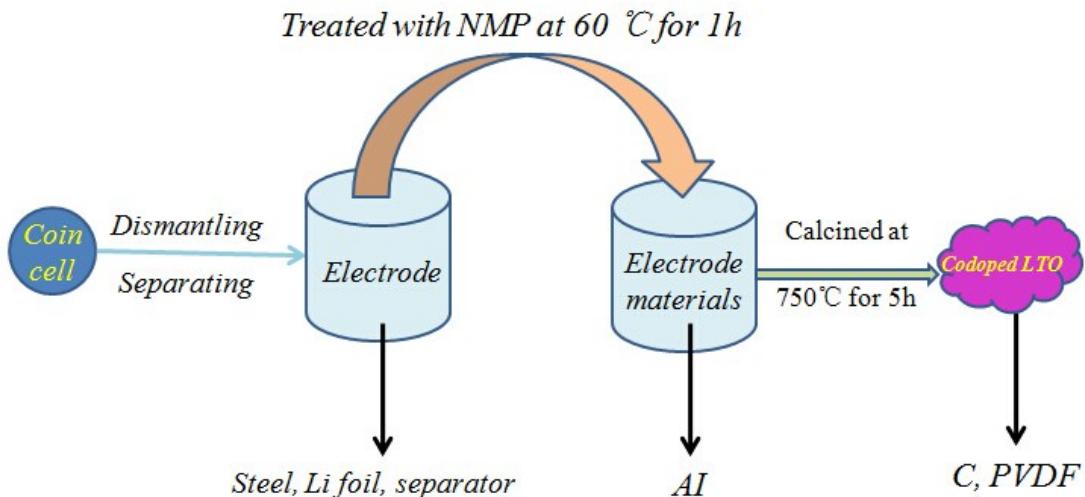


Fig. 1S Schematic illustration of the electrode materials for SEM after cycling.

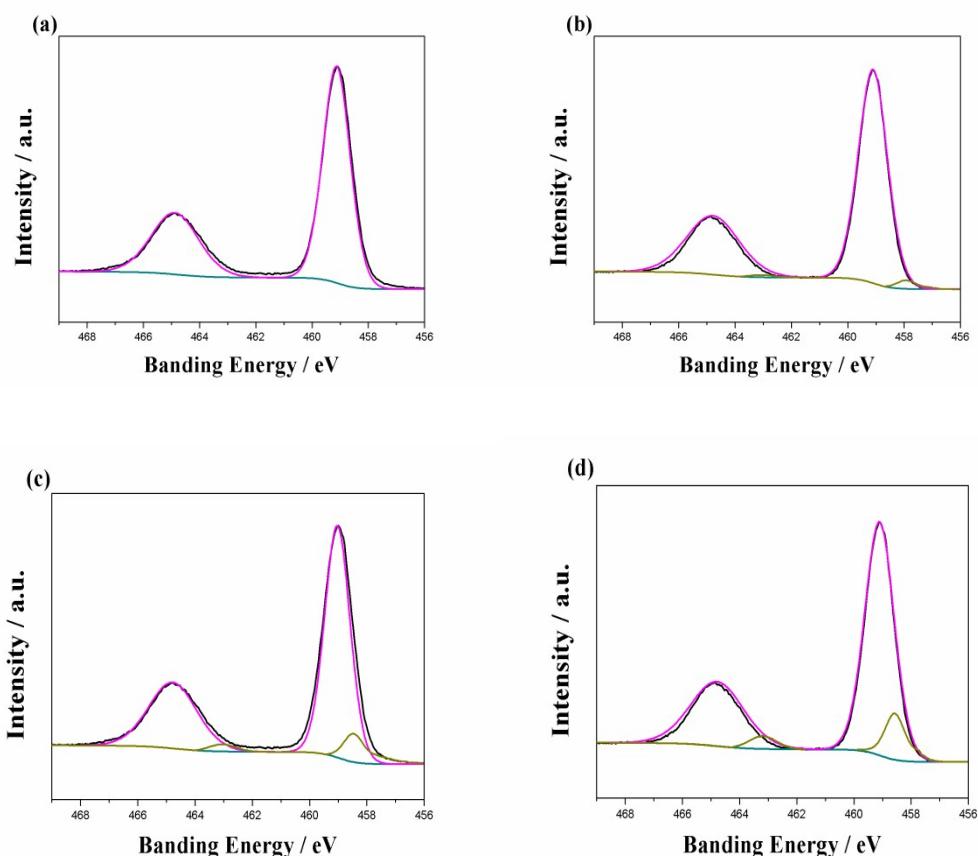


Fig. 2S Ti2p spectra of $\text{Li}_4\text{Ti}_{5-x}\text{W}_x\text{O}_{12-x}\text{Br}_x$ particles (a) $x=0$; (b) $x=0.025$; (c) $x=0.050$;
(d) $x=0.100$.

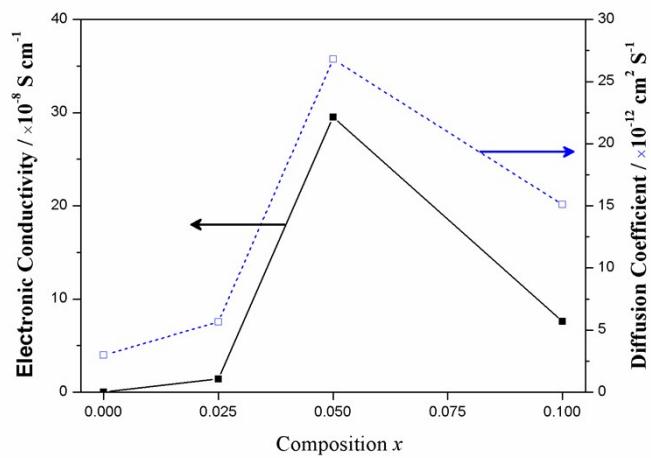


Fig. 3S Variations in electronic conductivity and Li-ion diffusion coefficient with composition x in $\text{Li}_4\text{Ti}_{5-x}\text{W}_x\text{O}_{12-x}\text{Br}_x$ ($0 \leq x \leq 0.100$).

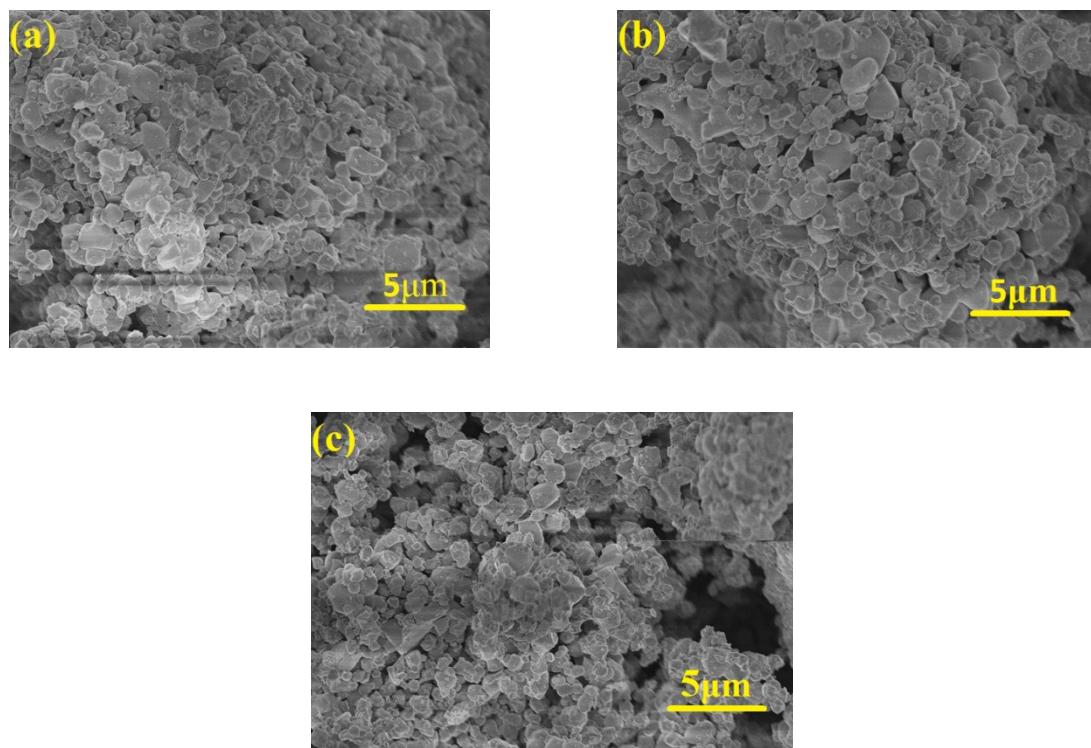


Fig. 4S SEM images of $\text{Li}_4\text{Ti}_{5-x}\text{W}_x\text{O}_{12-x}\text{Br}_x$ electrode materials after 200 cycles: (a) $x=0.025$, (b) $x=0.050$ and (c) $x=0.100$.