

Supporting information

for

Atomic layer deposited ZnO layer on hydrated vanadium dioxide cathode against vanadium dissolution for stable zinc ion battery

Supporting Figures

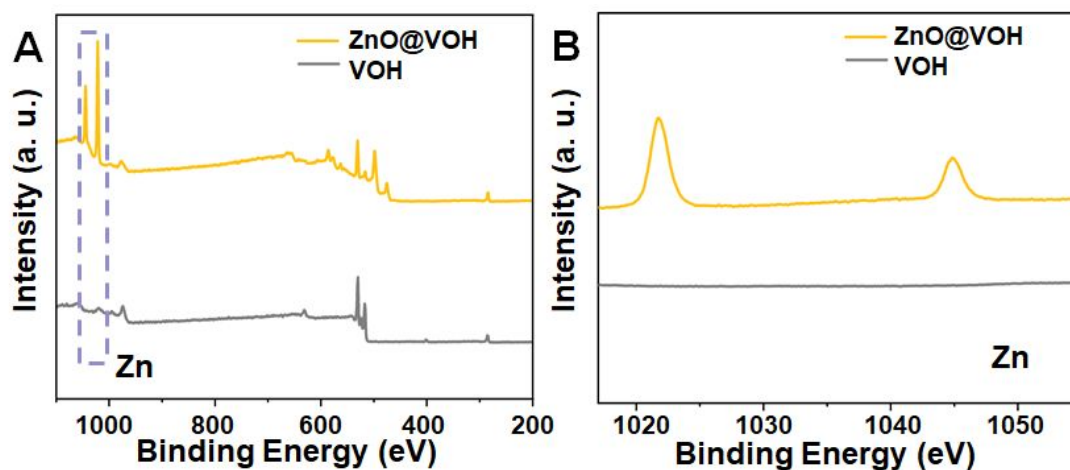


Fig. S1. The overall XPS spectra (A) and XPS spectra of Zn 2p (B) of the VOH and ZnO@VOH.

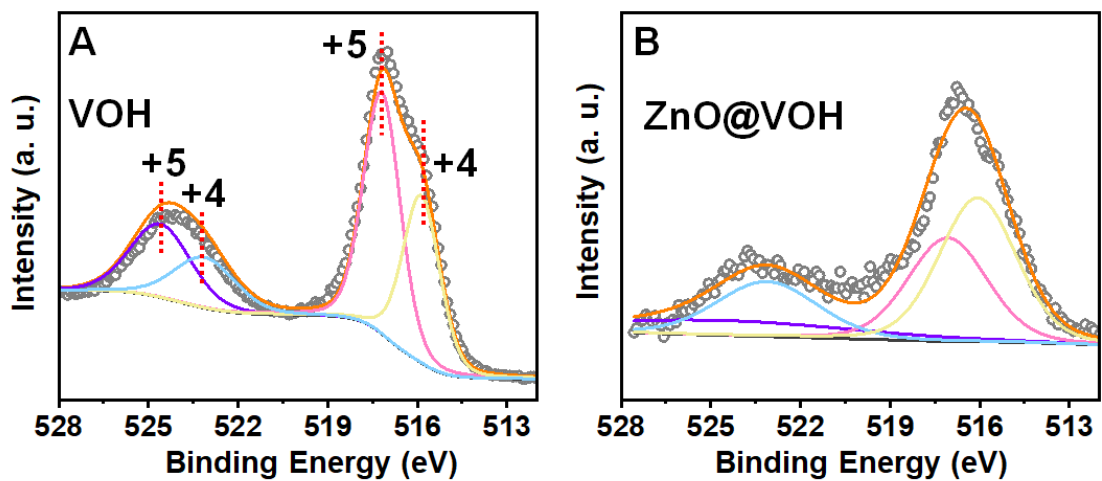


Fig. S2. The XPS spectra of V 2p of the VOH (A) and ZnO@VOH (B).

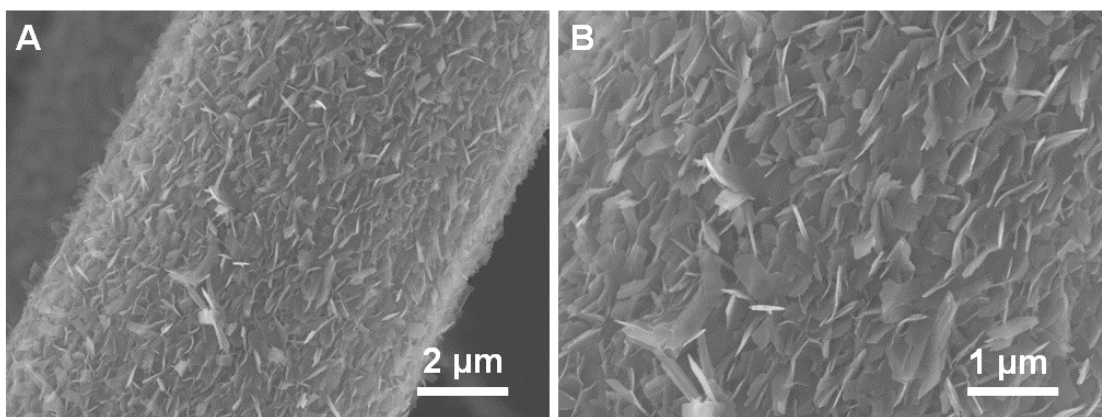


Figure S3. (A, B) SEM images of the obtained VOH.

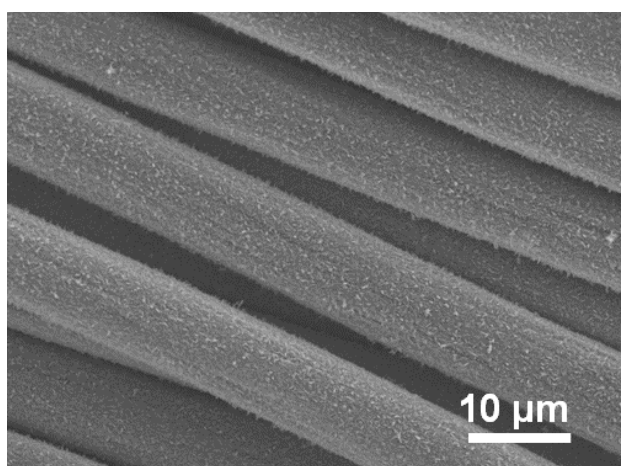


Figure S4. Low-magnification SEM image of the obtained ZnO@VOH.

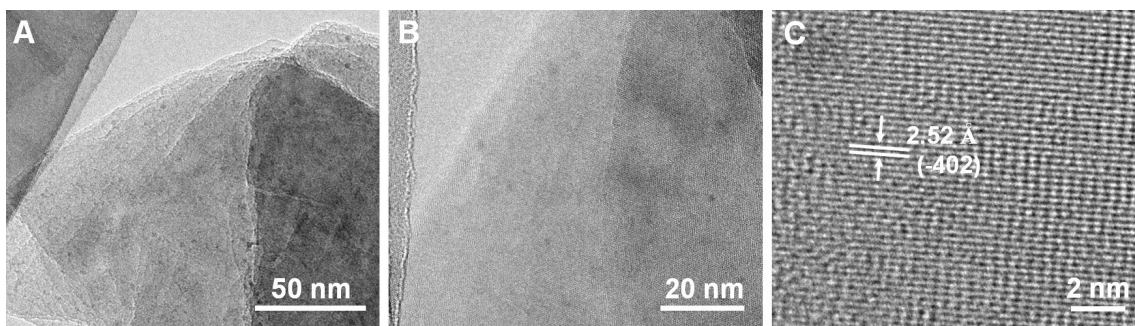


Figure S5. TEM (A, B) and HRTEM (C) images of the VOH.

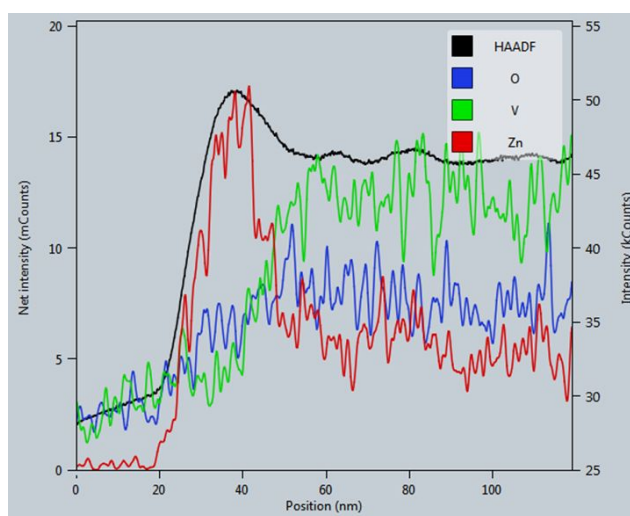


Figure S6. The EDS linear scan spectrum of ZnO@VOH in Figure 1D.

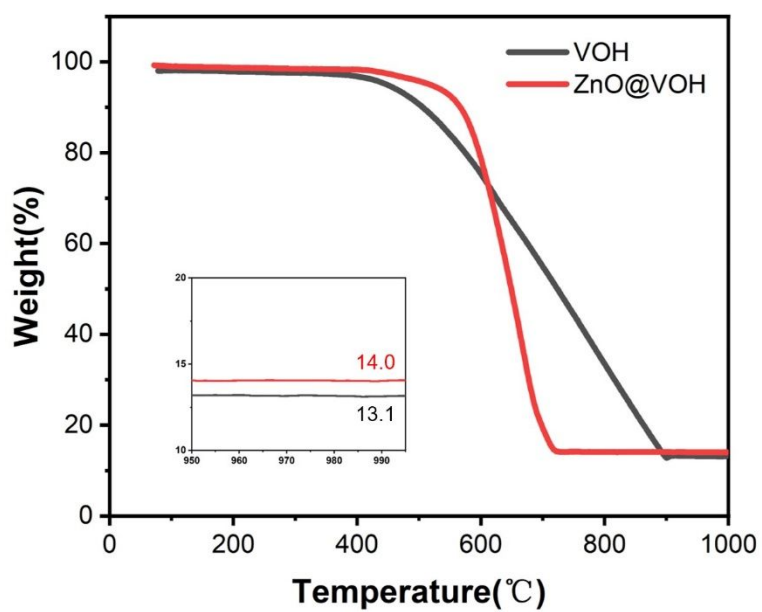


Figure S7. TG curves of VOH and ZnO@VOH.

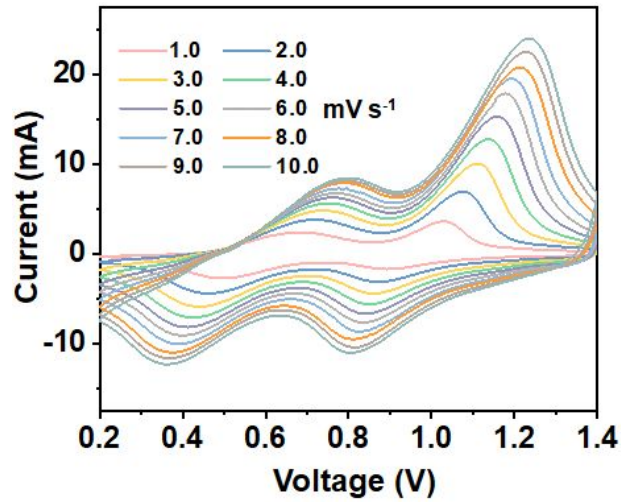


Figure S8. The CV curves of ZnO@VOH cathode under 1.0 to 10.0 mV s^{-1} .

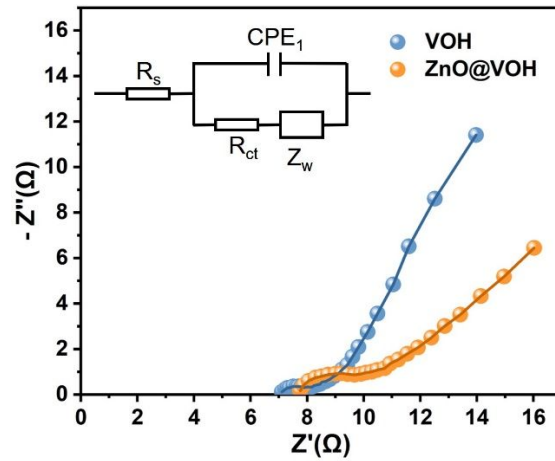


Figure S9. EIS spectra of VOH and ZnO@VOH.

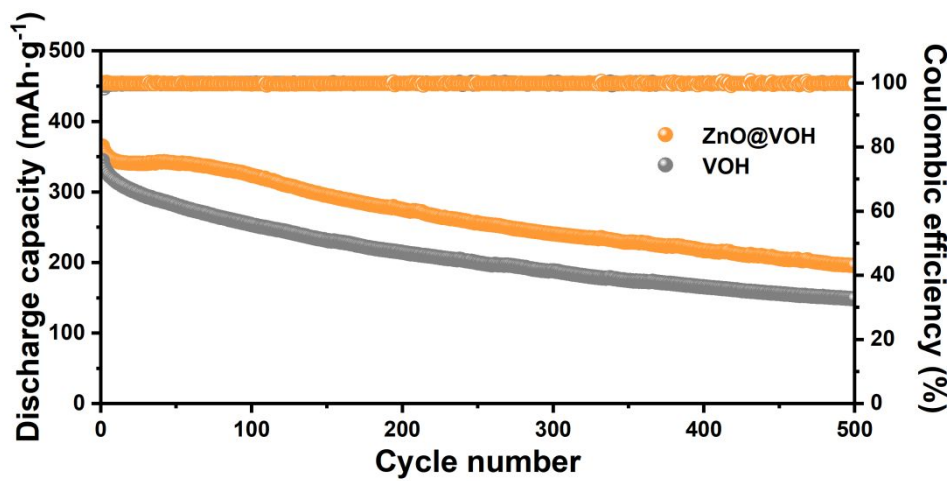


Figure S10. Cycling performances of VOH and ZnO@VOH at the current density of 0.5 A g^{-1} .

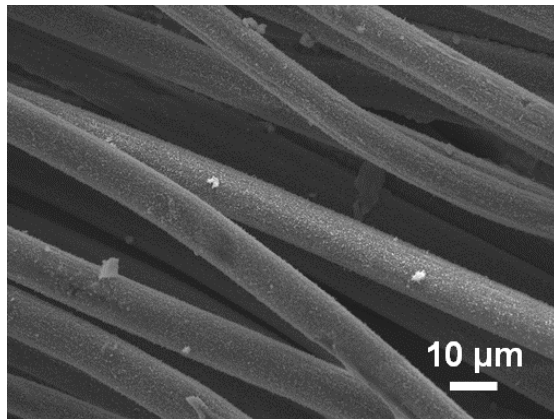


Figure S11. Low-magnification SEM image of the ZnO@VOH electrode after 20 cycles.

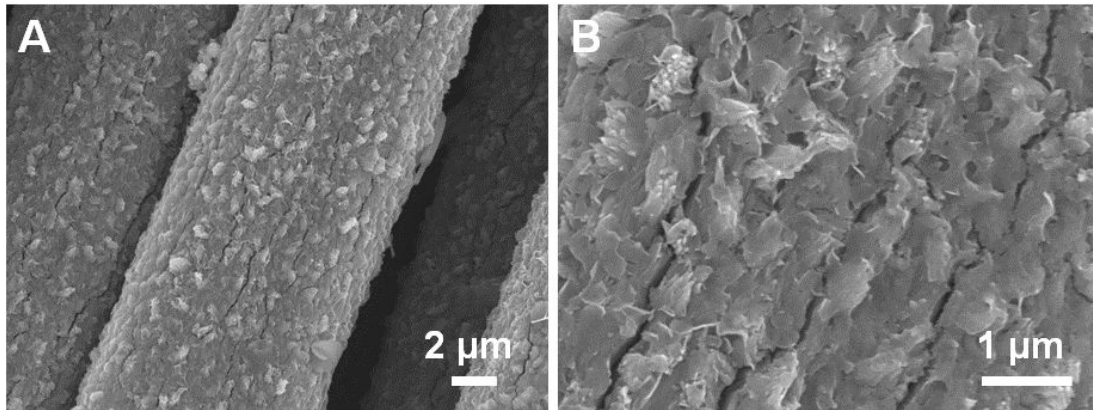


Figure S12. SEM images of the VOH electrode after 20 cycles.