

Spraying amorphous carbon coated zinc as powder-based anodes for long-life zinc-ion batteries

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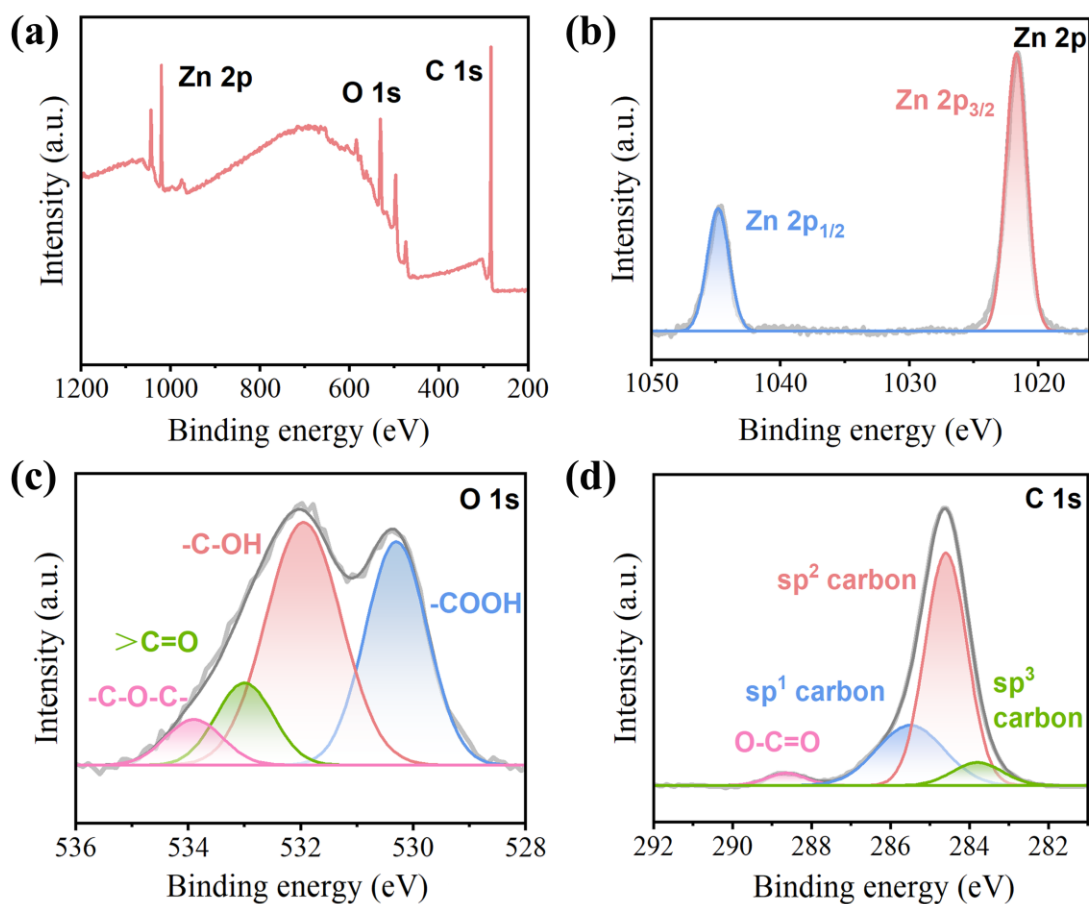


Figure S1. (a) XPS survey spectrum of the C@Zn-P anode. High resolution spectra of elements Zn 2p (b), O 1s (c), and C 1s (d).

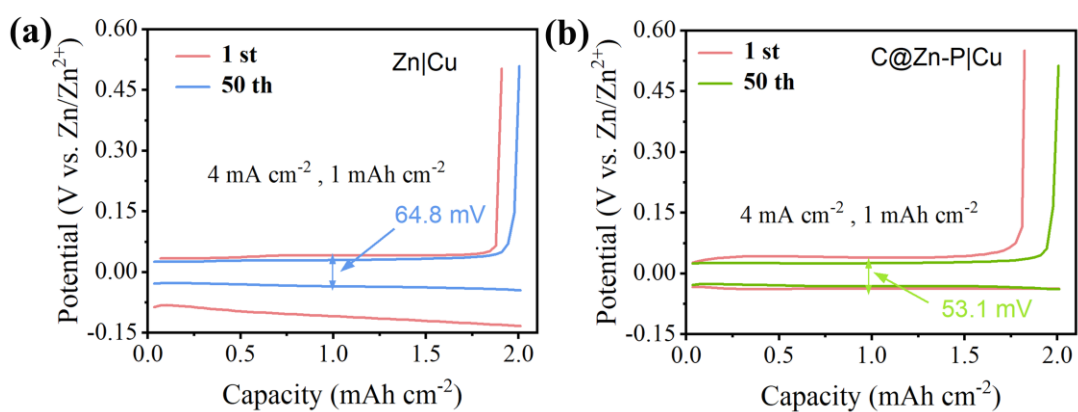


Figure S2. Voltage profiles for cycling performance of the Zn|Cu asymmetric cells (a) and C@Zn-P|Cu asymmetric cells (b) at current density of 1 mA cm⁻².

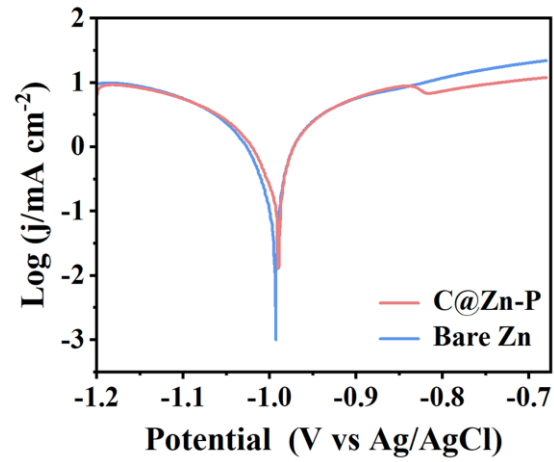


Figure S3. Linear polarization curves of the corrosion on bare Zn and C@Zn-P anode

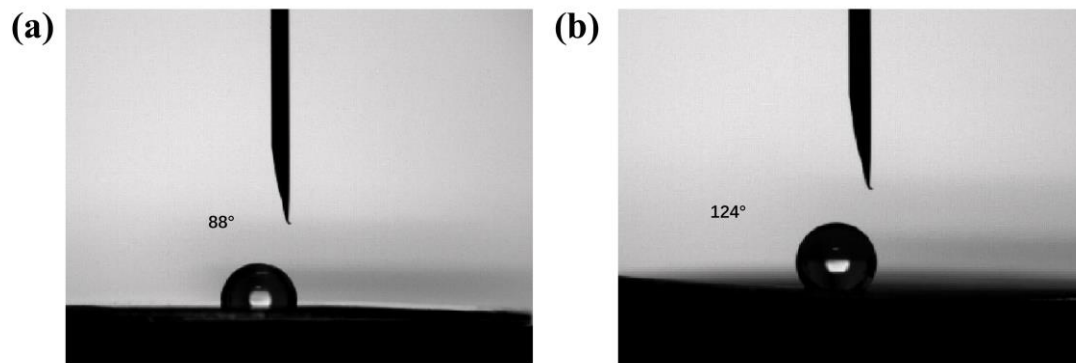


Figure S4. Contact angles of the bare (a) Zn and (b) C@Zn-P.

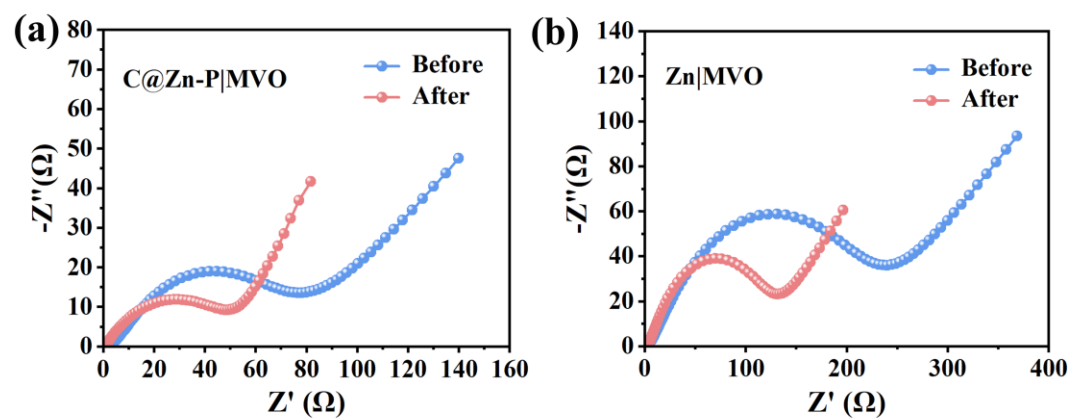


Figure S5. Nyquist plot comparing EIS spectra of C@Zn-P|MVO full cells (a) and Zn|MVO full cells (b).

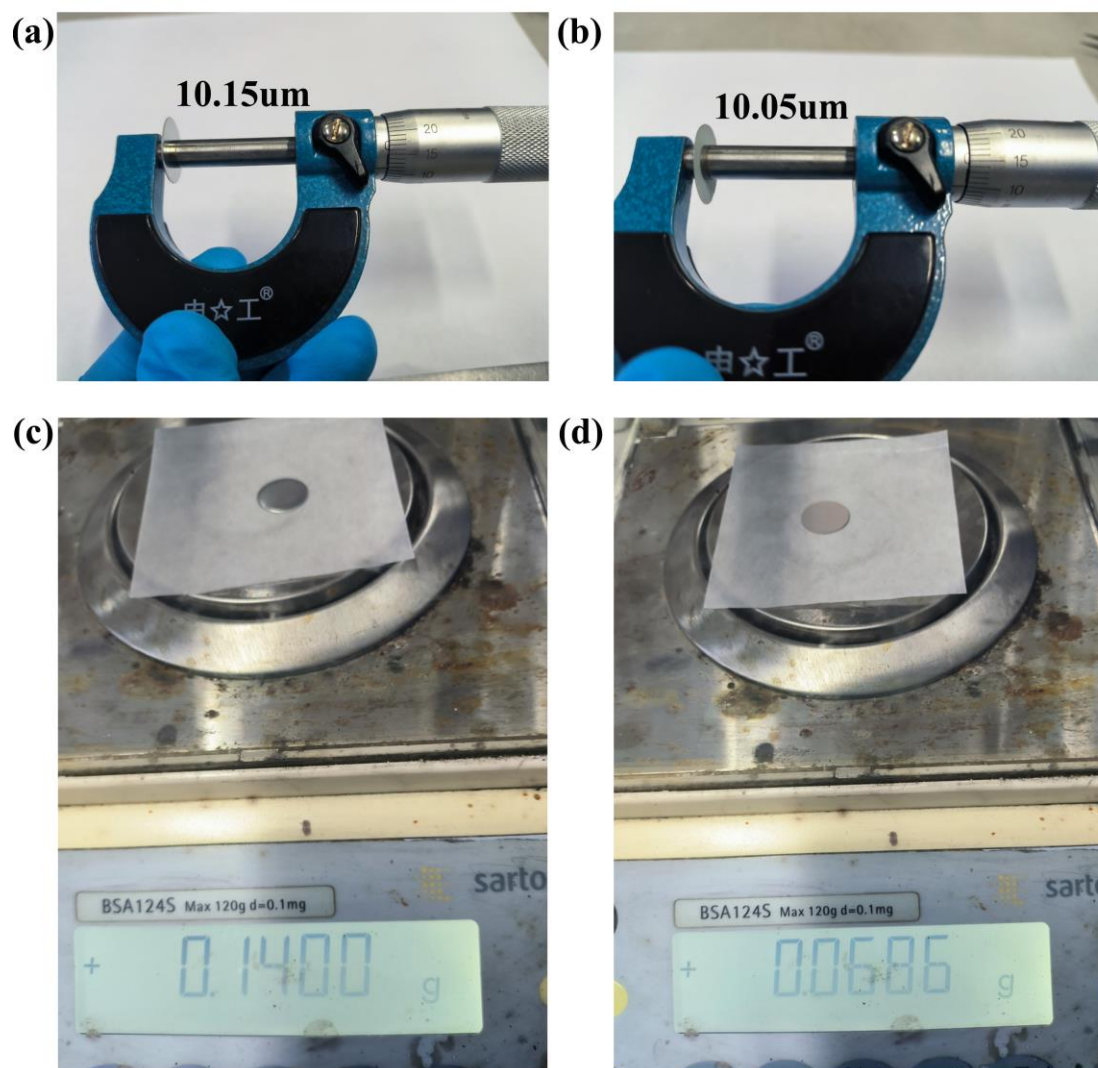


Figure S6. Optical photographs of weight and thickness measurements of (a,c) bare Zn and C@Zn-P anode (b,d).

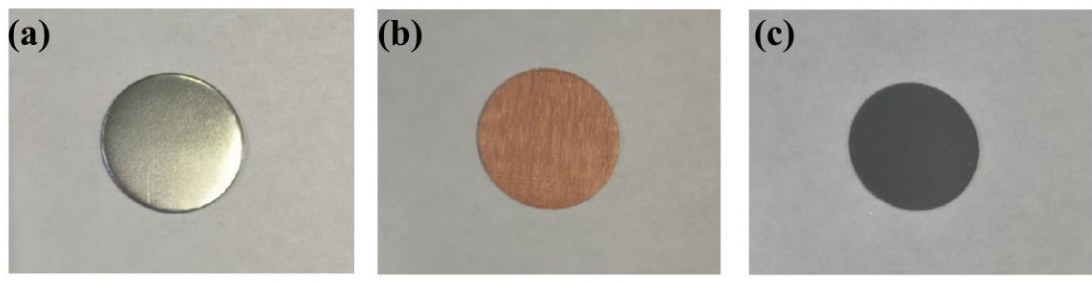


Figure S7. Optical photographs of bare Zn (a), Cu mesh substrate (b) and C@Zn-P anode (c).

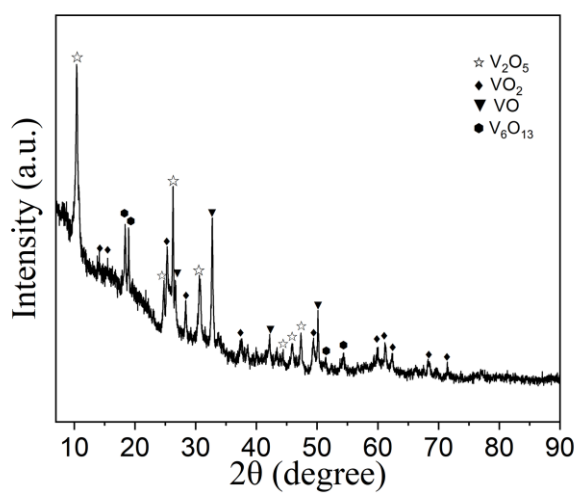


Figure S8. XRD patterns of the cathode material.