

Supplementary Information

Controllable growth of durable superhydrophobic surface on copper substrate via electrodeposition method

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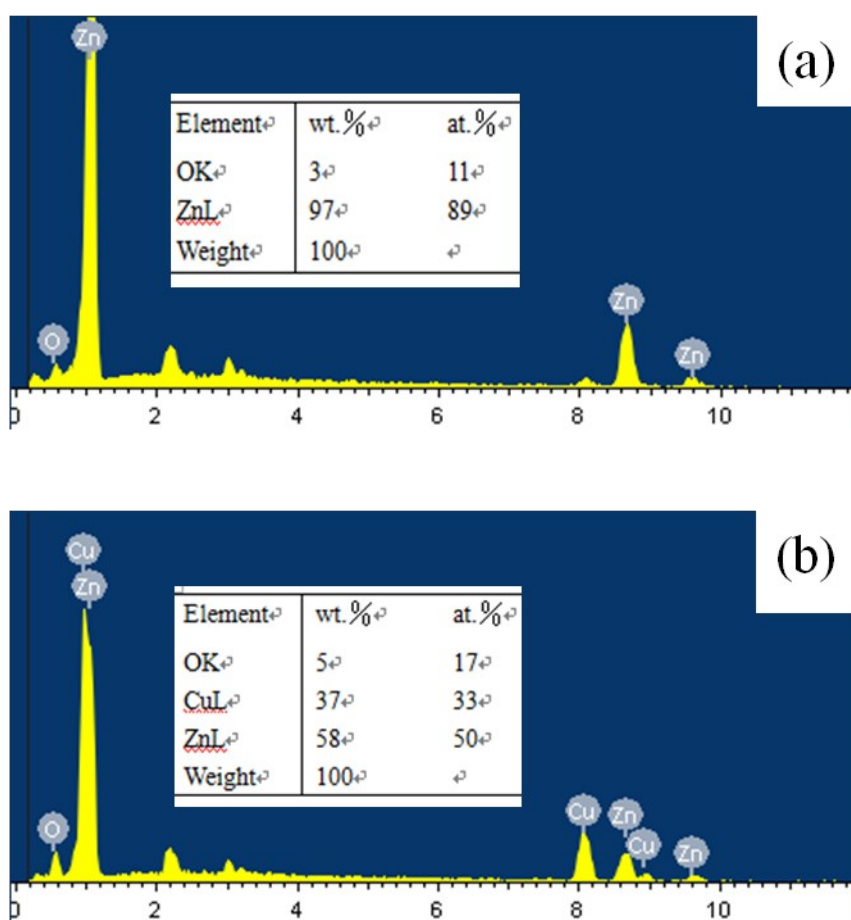


Fig. S1 EDS spectrum of the interceptions of crystal A marked with red oval in **Fig. 1d**, (b) EDS spectrum of the interceptions of crystal B marked with red oval in **Fig. 1d**.

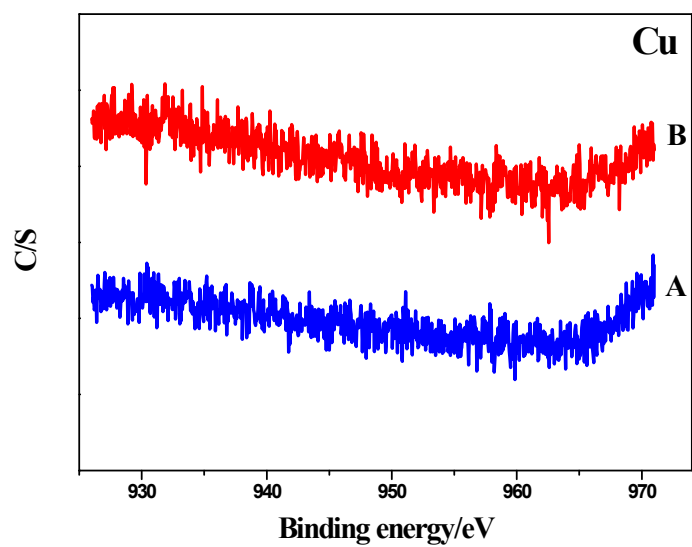


Fig. S2 Cu₂p high resolution XPS spectra of the zinc film electrodeposited at -1.35V for 25 min before (A) and after (B) annealing at 190°C for 60 min in air.

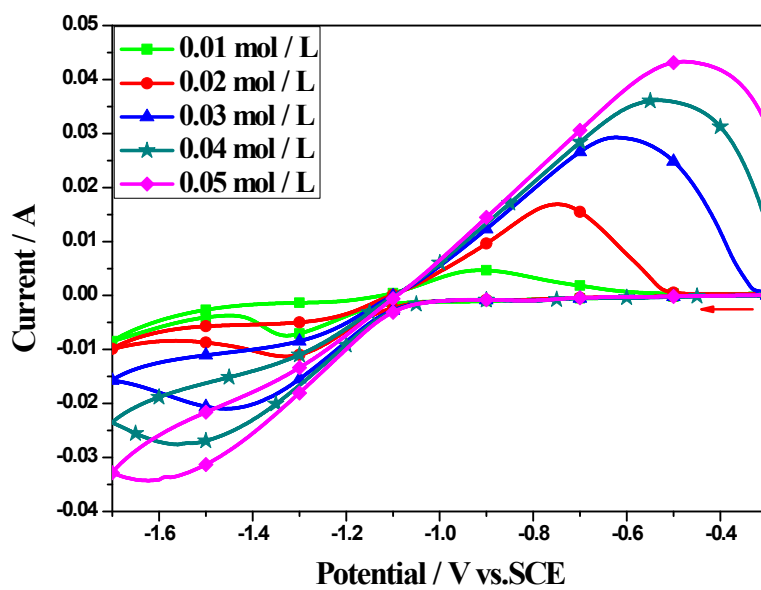


Fig. S3 Cyclic voltammograms (CVs) acquired in 0.1 mol/L KCl and 0.017 mol/L $\text{NH}_3 \cdot \text{H}_2\text{O}$ solution containing different CZI. The arrow indicates the scan direction.

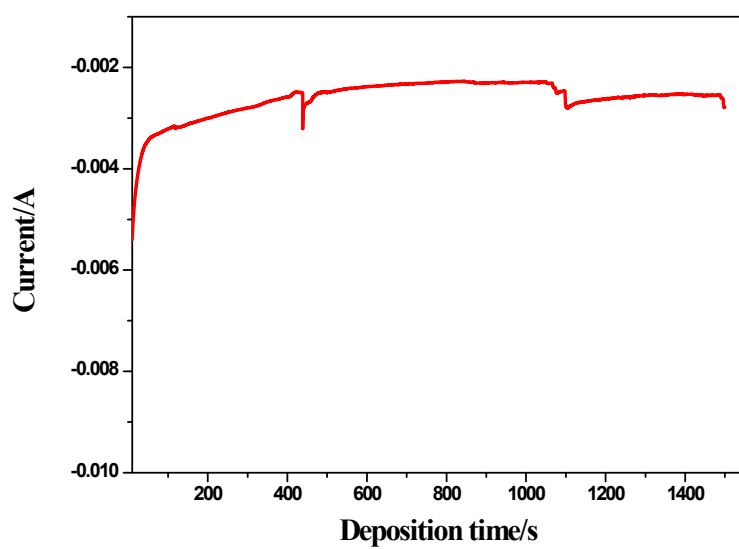


Fig. S4 The curve of the current with the deposition time deposited at -1.35V, while other condition kept constant.

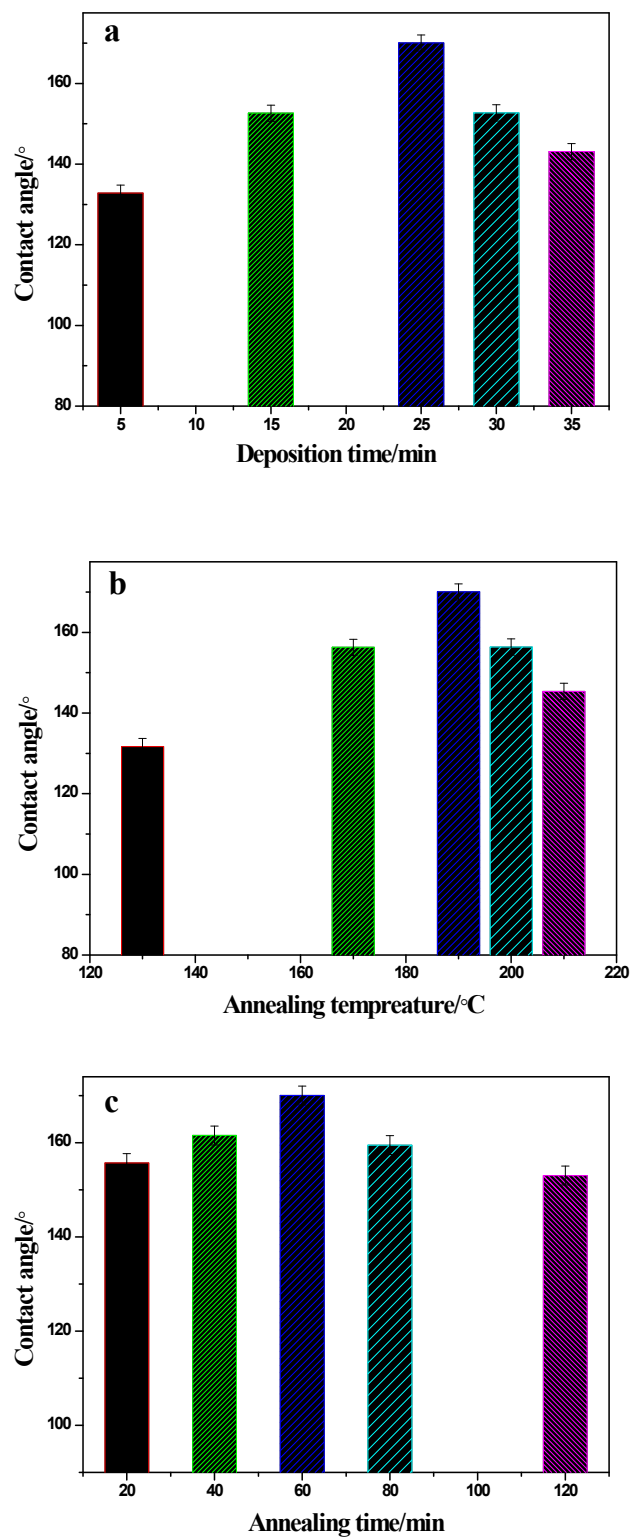


Fig. S5 WCAs of the as-prepared surfaces at: (a) different deposition times at -1.35 V and annealed at 190°C for 60 min, (b) different annealing temperatures for 60 min, (c) different annealing times at 190°C; the sample was deposited at -1.35 V for 25 min.