

Free-standing Co/Zn sulfide supported on Cu-foam for efficient overall water splitting

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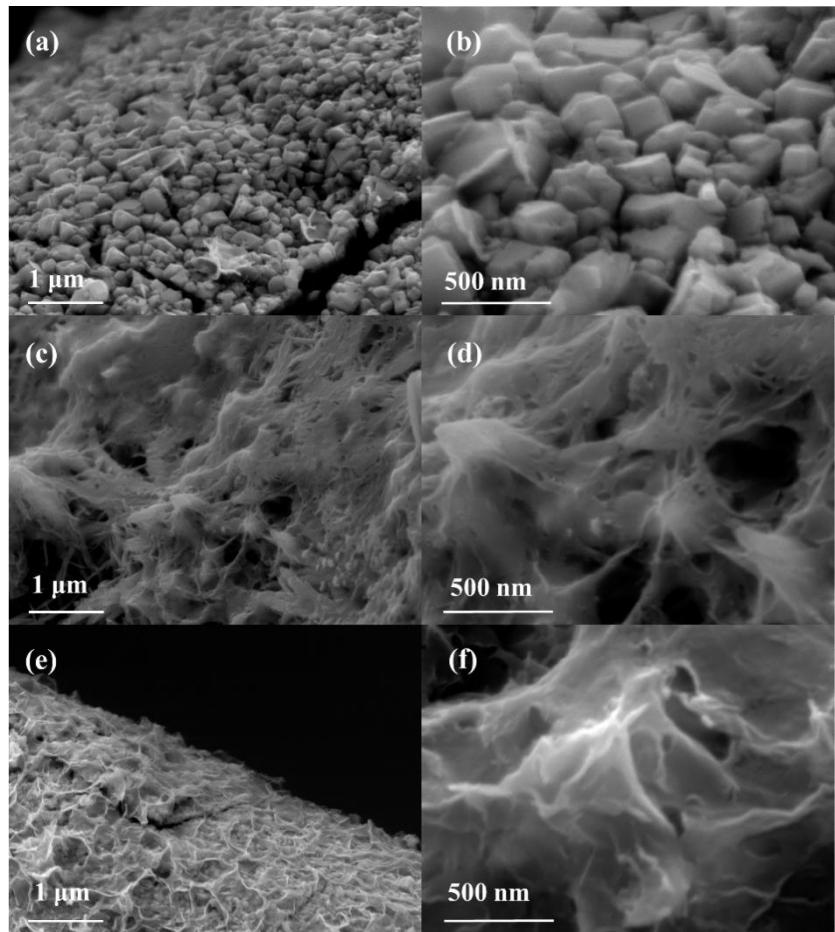


Fig. S1 SEM images of (a, b) Co-S/Cu-F, (c, d) Zn-S/Cu-F, and (e, f) CoZn-S/Cu-F.

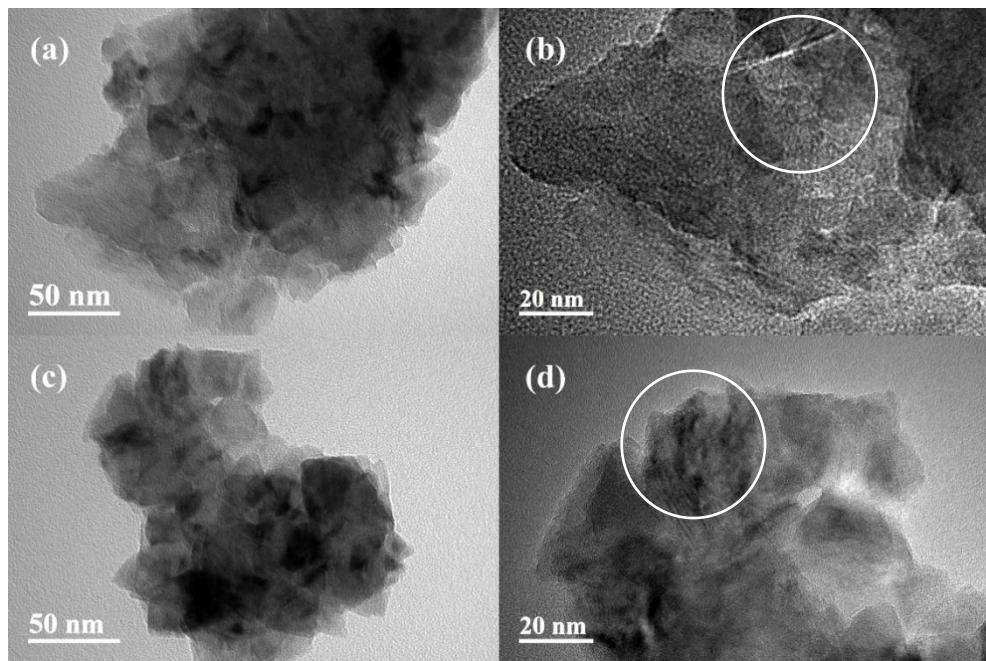


Fig. S2 TEM images of CoZn-S/Cu-F.

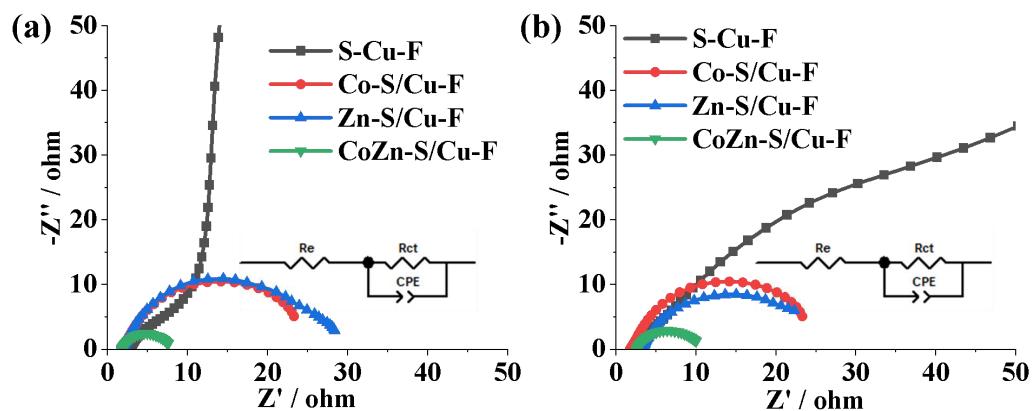


Fig. S3 Nyquist plots at 1.4 V and -0.1 V in 1 M KOH for (a) OER and (b) HER, from 100 kHz to 0.01 Hz using ac perturbation voltage of 10 mV.

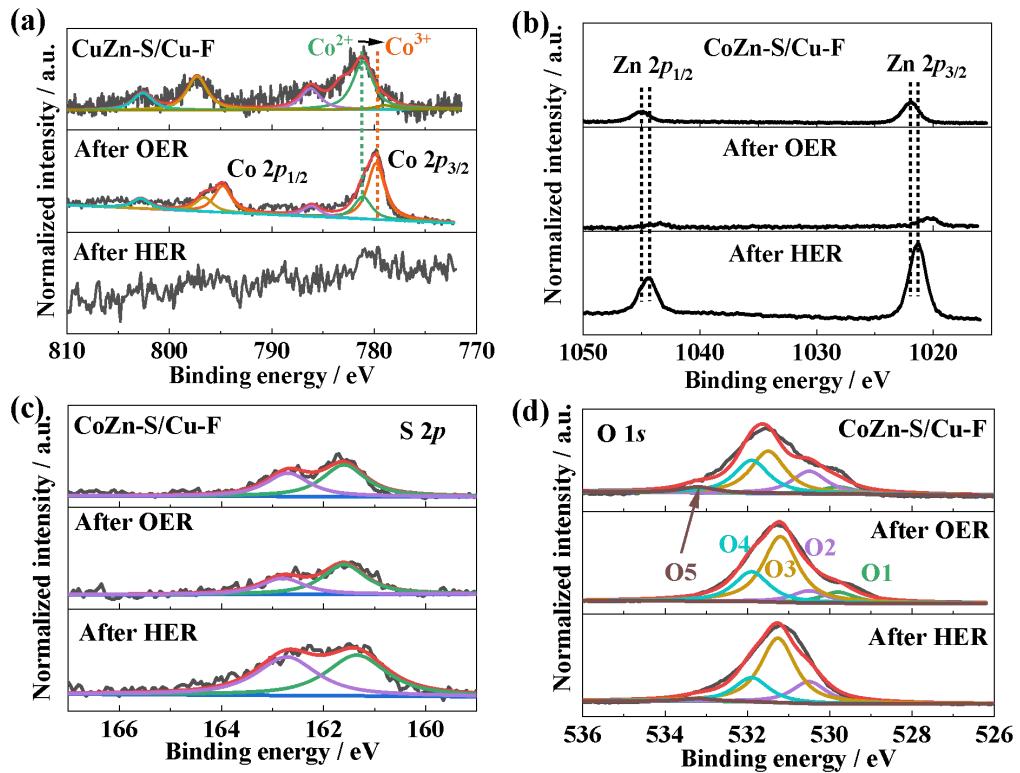


Fig. S4 (a) Co $2p$ spectra, (b) Zn $2p$ spectra, (c) S $2p$ spectra, and (d) O $1s$ spectra of CoZn-S/Cu-F before and after OER and HER stability tests.

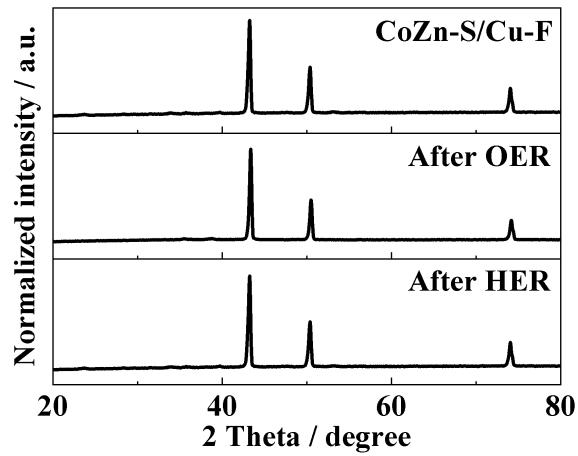


Fig. S5 XRD spectra of CoZn-S/Cu-F and after OER and HER stability tests.

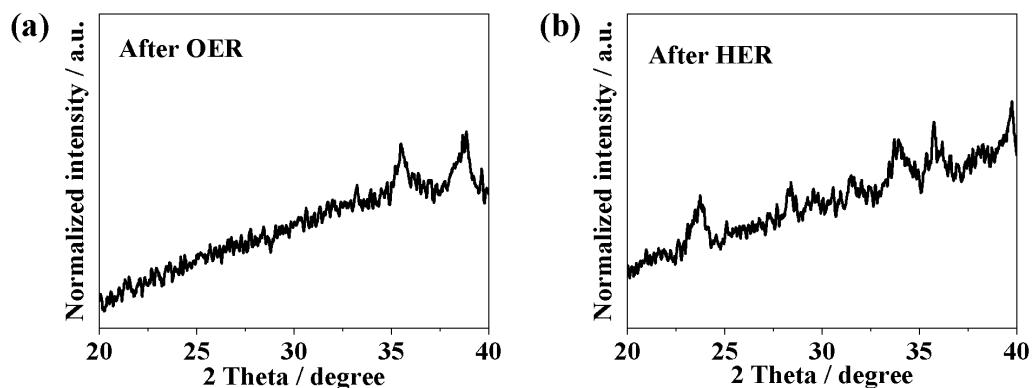


Fig. S6 XRD spectra of CoZn-S/Cu-F after (a) OER and (b) HER stability tests at a high magnification showing the presence of CuO and Cu(OH)₂, respectively.