Enhanced electrochemical properties of cellular CoPS@C nanocomposite for HER, OER and Li-ion battery

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Fig. S1 XPS survey spectrum of CoPS@C nanocomposite.



Fig. S2 OER stability test of the CoPS@C electrode with an initial polarization curve and after 1000 cycles in 1.0 M KOH solution.



Fig. S3 Cyclic voltammograms of bulk CoPS at different scan rates.



Fig. S4 HER stability test of the CoPS@C electrode with an initial polarization curve and after 1000 cycles in $0.5 \text{ M H}_2\text{SO}_4$ solution.



Fig. S5 The four voltammograms of CoPS@C nanocomposite electrode after 50 cycles at 0.2 A g^{-1} between 0.01 V and 3 V.



Fig. S6 Cycle testing of an ex situ XRD pattern of the CoPS@C nanocomposite electrode.