

Structural modulation of CdS/ZnO nanoheterojunction arrays for the full solar water splitting and the degradation mechanisms

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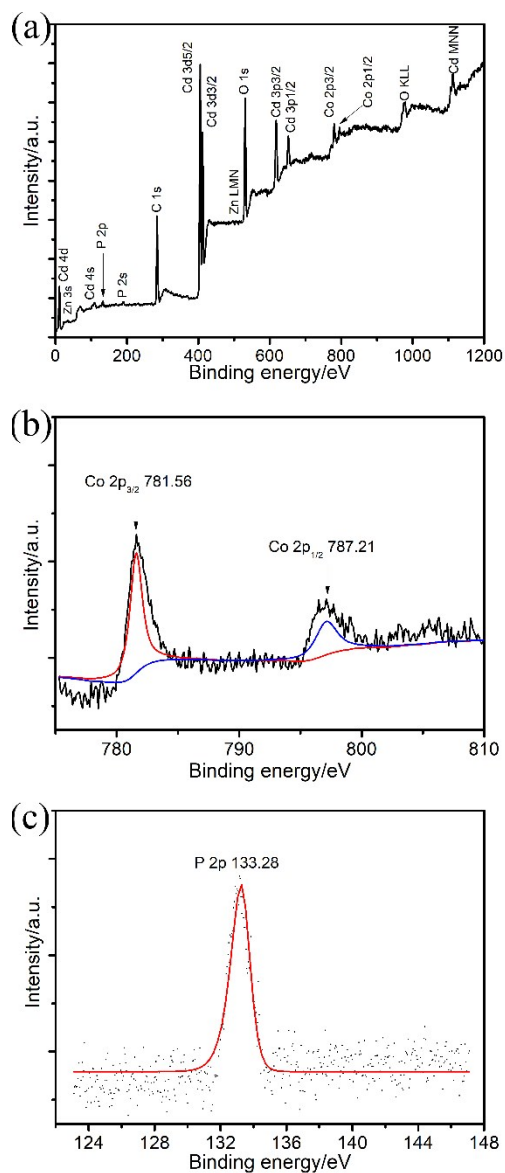


Fig. S1 XPS survey scan from CdS/ZnO-CoPi electrode. (a) over a large range at low resolution, (b) Co 2p and (c) P 2p at high resolution.

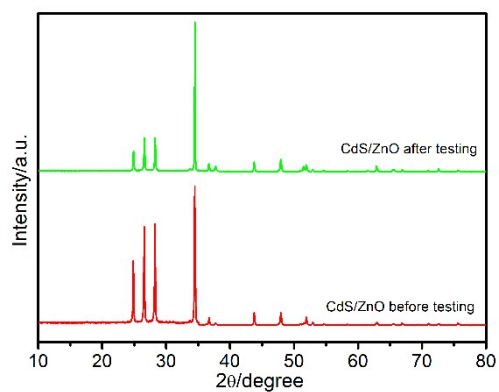


Fig. S2 XRD patterns of CdS/ZnO NHA before and after PEC test.

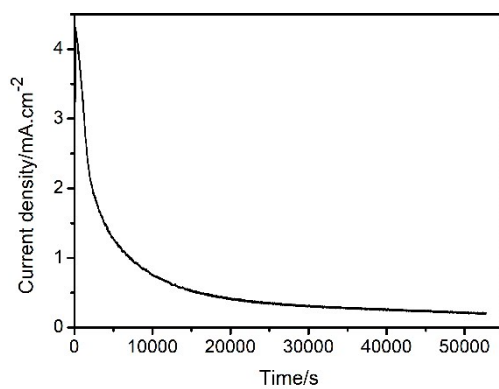


Fig. S3 The i-t curve of CdS/ZnO-CoPi NHA with CdCl₂ heat treatment in 1M phosphate electrolyte

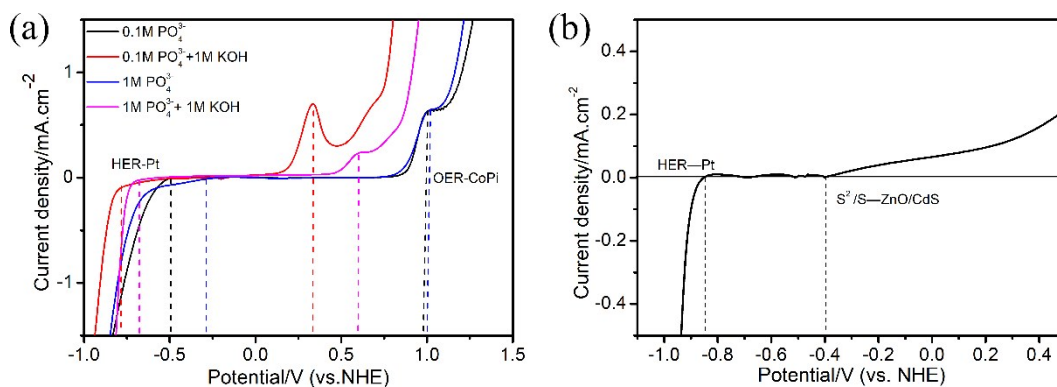


Fig. S4 (a) The LS curves measured on Pt and FTO/CoPi electrode in different electrolyte solutions. (b) The LS curves measured on Pt and CdS/ZnO electrode in 0.35 M Na_2S and 0.25 M Na_2SO_3 sacrificial solution.

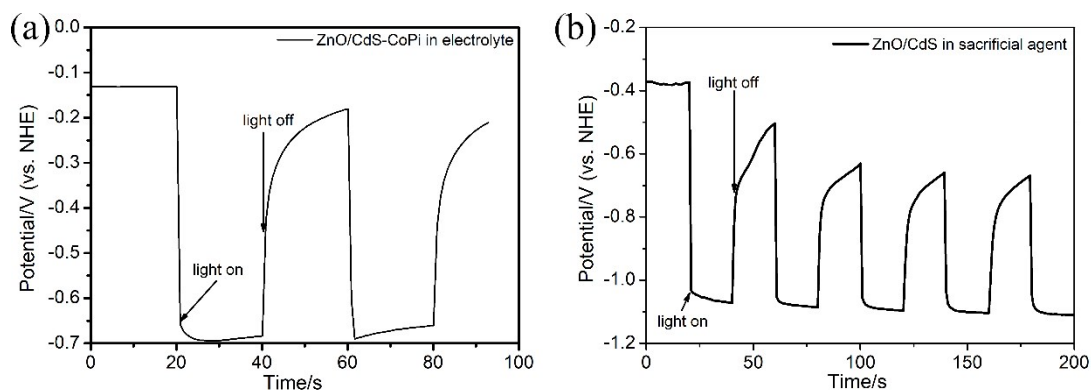


Fig. S5 The dark and light potential measured in different electrolyte solutions in open circuit configuration. (a) CoPi-CdS/ZnO NHA with CdCl_2 heat treatment in 0.1 M phosphate solution (pH=14) for the full water splitting. (b) CdS/ZnO NHA in the 0.35 M Na_2S and 0.25 M Na_2SO_3 sacrificial solution.