

Supporting Information

Synthesis of Cu₃P nanocubes and their excellent electrocatalytic efficiency for hydrogen evolution reaction in acidic solution

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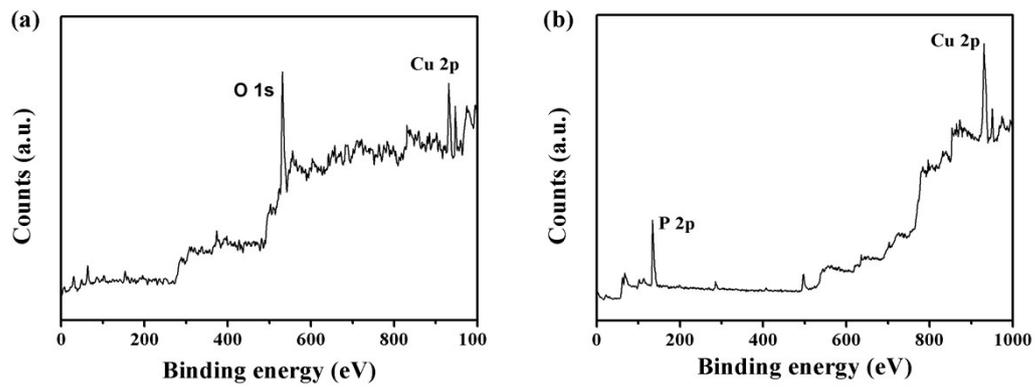


Fig. S1, Survey spectra of X-ray photoelectron spectroscopy (XPS) for both (a) Cu_2O and (b) Cu_3P nanocubes.

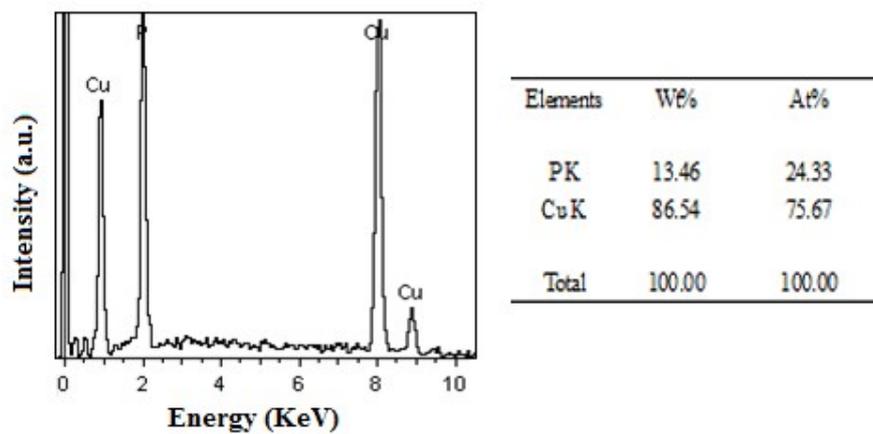


Fig. S2. The EDS spectrum of Cu_3P product.

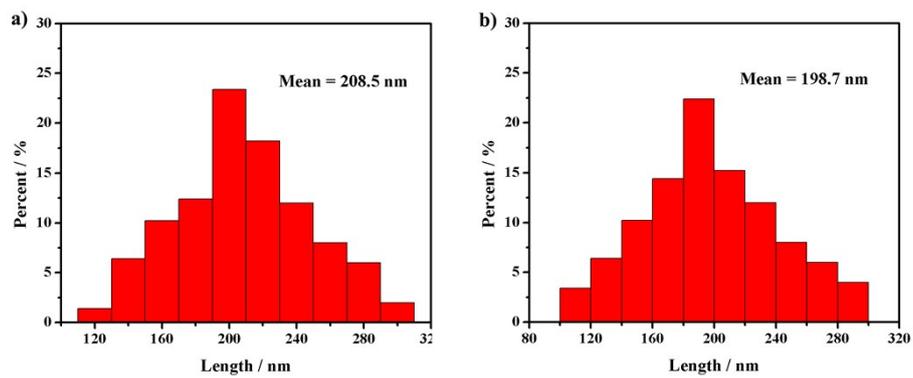


Fig. S3. The length distribution diagrams of (a) Cu_2O and (b) Cu_3P nanocubes.

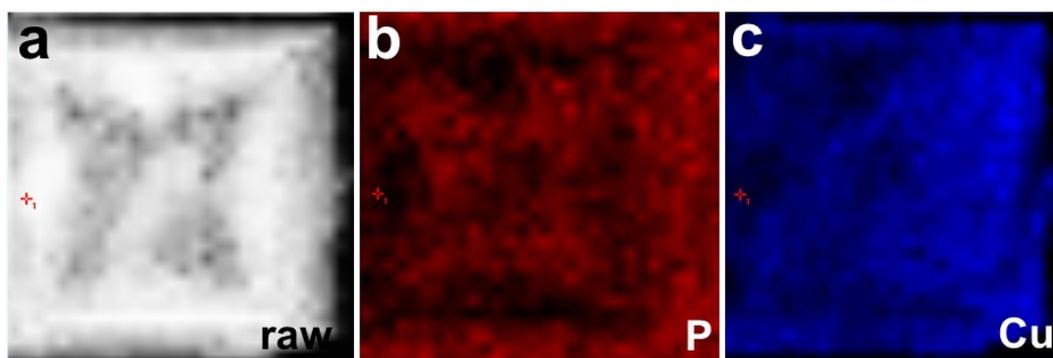


Fig. S4. EDX elemental mapping of Cu₃P nanotube: (a) raw, (b) P, and (c) Cu element.

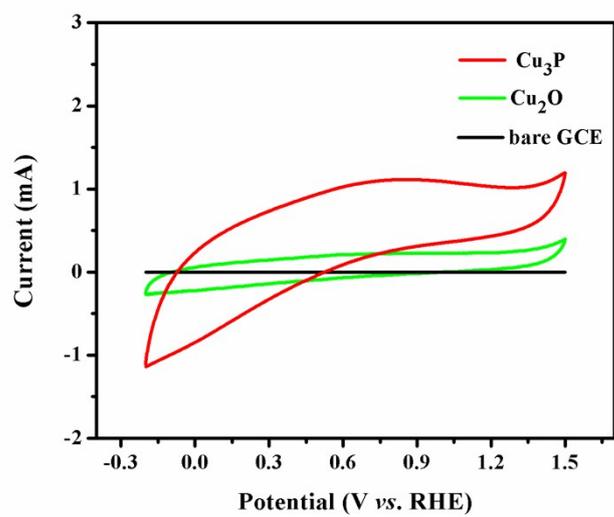


Fig. S5. CV curves of the Cu₃P, Cu₂O and bare GCE.

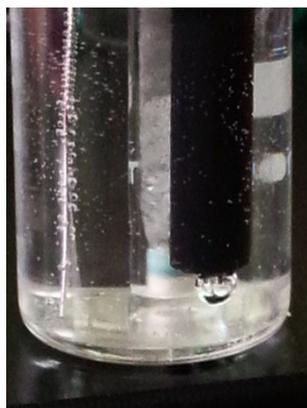


Fig. S6. Optical photograph showing the generation of hydrogen bubbles on Cu_3P composite modified GCE.

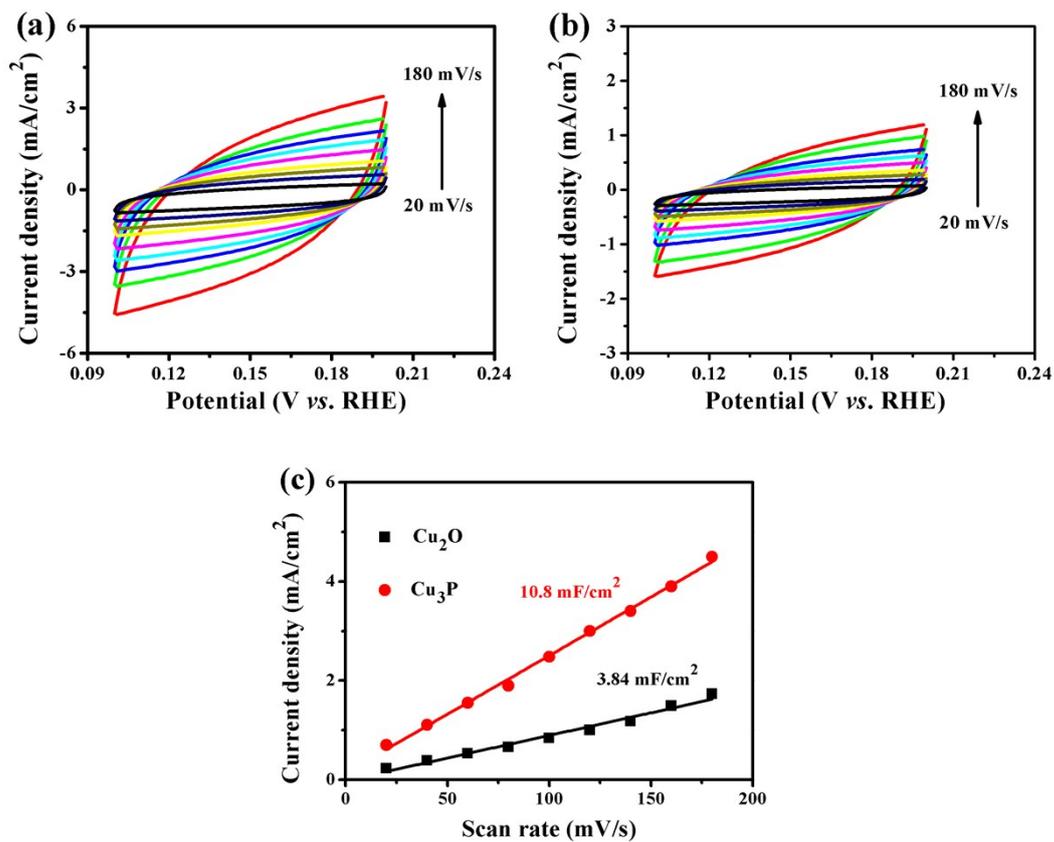


Fig. S7. CV curves of (a) Cu_3P and (b) Cu_2O nanocubes at various sweep rates (20-180 mV/s). (c) The capacitive currents at 0.15 V as a function of scan rate for both Cu_2O and Cu_3P nanocubes.

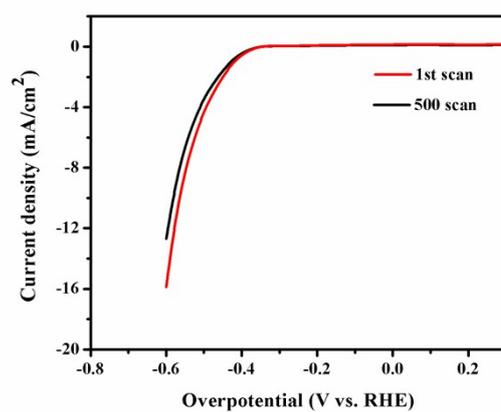


Fig. S8. The LSV polarization curves of the Cu₂O electrode at the 1st and the 500th cycle number.