

A novel 3D ZnO/Cu₂O nanowires photocathode material with highly efficient photoelectrocatalytic performance

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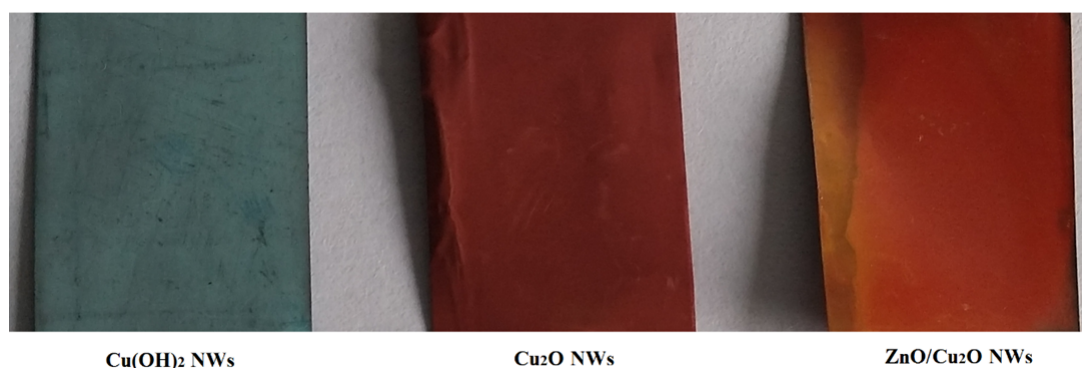


Figure S1 Visual images of Cu(OH)₂ NWs electrode, Cu₂O NWs electrode and 3D ZnO/Cu₂O NWs electrode

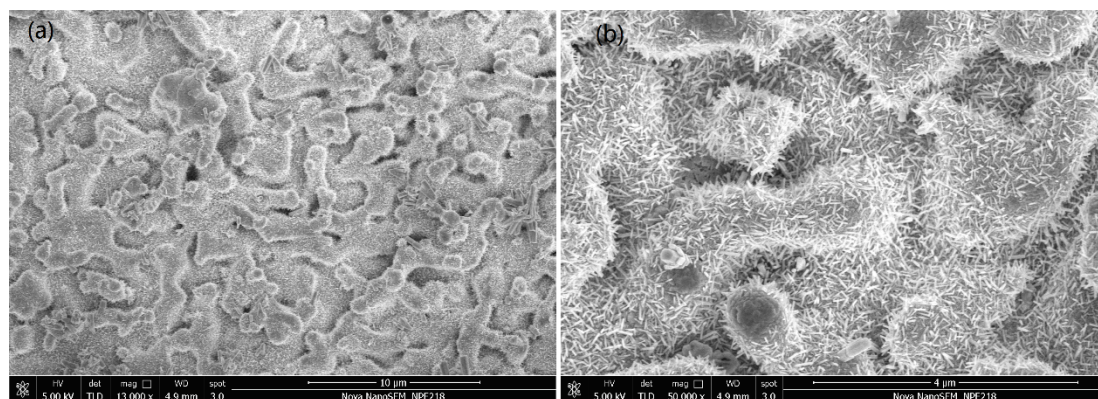


Figure S2 SEM images of ZnO/Cu₂O NWs electrode obtained at an annealing temperature of 700°C: (a) low magnification and (b) high magnification

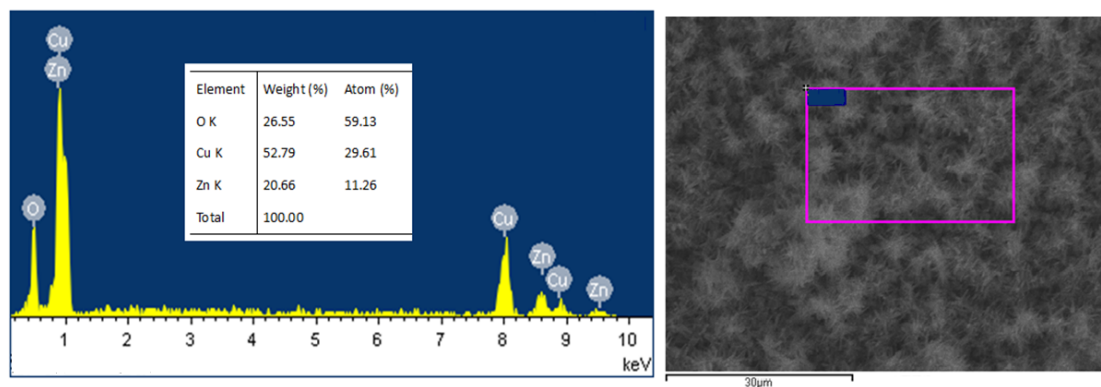


Figure S3 EDX of 3D ZnO/Cu₂O NWs electrode

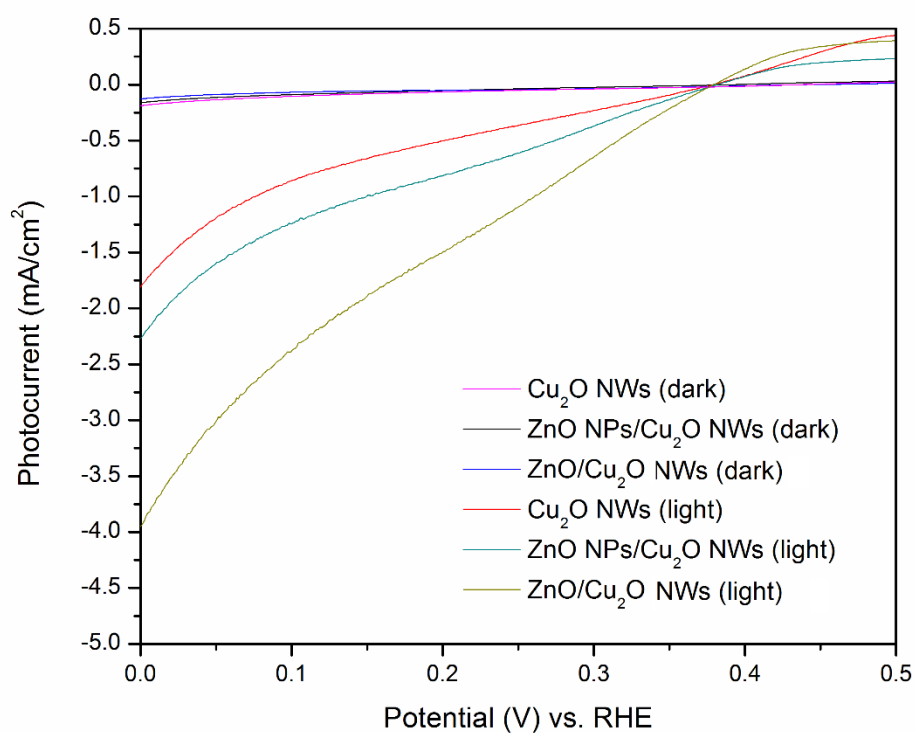


Figure S4. Photoelectrochemical response of pure Cu₂O NWs , ZnO NPs/Cu₂O NWs and (b) 3D ZnO/Cu₂O NWs (1500rpm, 25 cycles, 500°C) under dark and illumination of AM 1.5G.

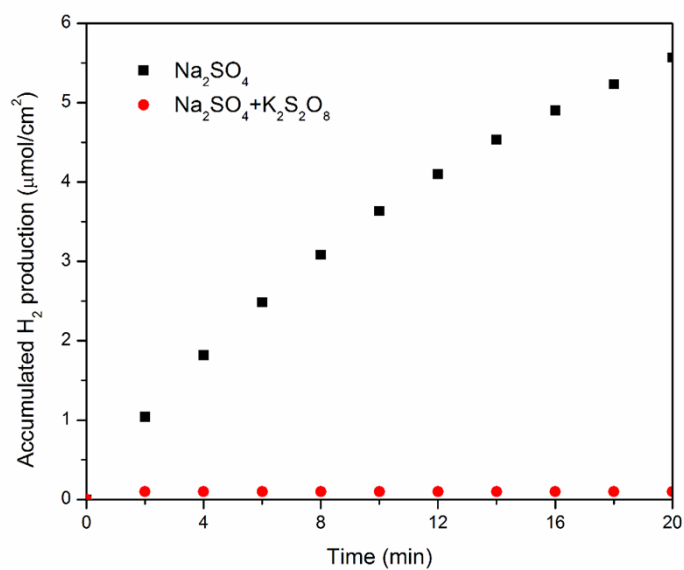


Figure S5 H₂ production rate with and without sacrificial electron acceptors (K₂S₂O₈)

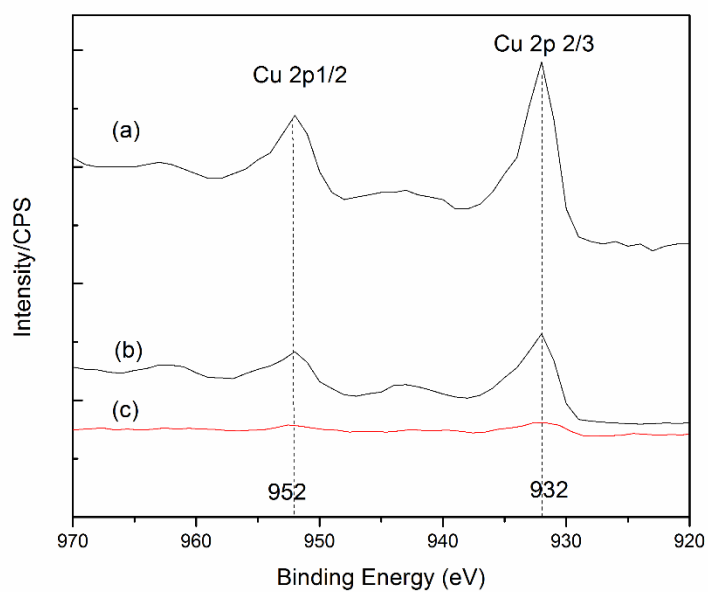


Figure S6 XPS survey of 3D ZnO/Cu₂O NWs: (a) as-prepared and (b) after the 900s of stability testing and (c) Cu₂O NWs after the 900s of stability testing.