

Highly efficient $\text{Zn}_{1-x}\text{Cd}_x\text{S}$ catalysts with sphalerite structure for hydrogen production by water splitting synthesized by a novel green method

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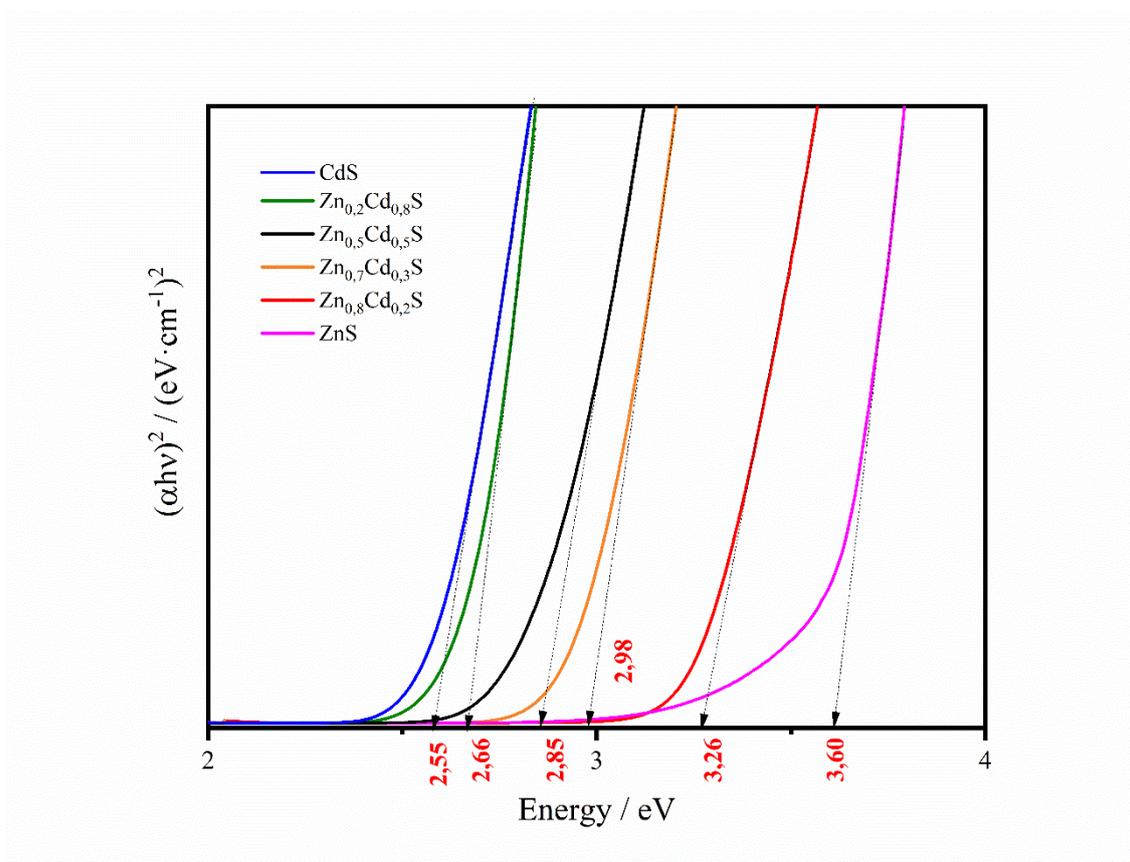


Fig. S1. Tauc Plot of all materials studied in this work, indicating the bandgap values for each material.

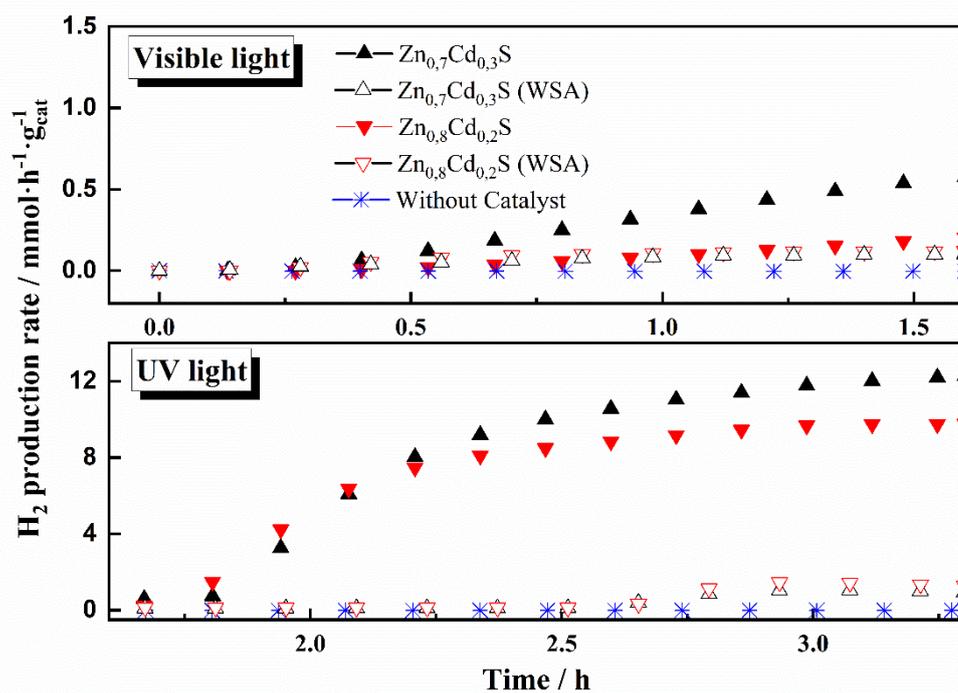


Fig. S2 Plots of hydrogen production vs. time for Zn_{0.7}Cd_{0.3}S and Zn_{0.8}Cd_{0.2}S with (full triangle) and without (WSA, empty triangle) sacrificial agent under visible and UV light; and for the pure sacrificial agent (asterisk). It proved that the H₂ production for the Zn_{0.8}Cd_{0.2}S catalyst is lower than that for the Zn_{0.7}Cd_{0.3}S.