Supporting Information

Simultaneous Manipulation of Ion Doping and Cocatalyst Loading in

Mn_{0.3}Cd_{0.7}S Nanorods toward Significantly Improved H₂ Evolution

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Fig. S1. XRD pattern of sample.



Fig. S2. XPS spectra of (a) Mn 2p, (b) Cd 3d, (c) S 2p, (d) Ni 2p, (e) P 2p of Ni₂P/Ni²⁺-Mn_{0.3}Cd_{0.7}S-10 at different etching depth.



Fig. S3. TEM images of (a, b) $Ni_2P/Ni^{2+}-Mn_{0.3}Cd_{0.7}S-10$.



Fig. S4. H_2 evolution rate of composites.



Fig. S5. The H_2 evolution rate of $Ni_2P/Ni^{2+}-Mn_{0.3}Cd_{0.7}S-10$ in different sacrifice reagent.



Fig. S6. Mott-Schottky plots of (a) $Mn_{0.3}Cd_{0.7}S$, (b) Ni_2P and (c) $Ni_2P/Ni^{2+}-Mn_{0.3}Cd_{0.7}S$ -10.