

Construction of 2D/2D heterojunction via integrating MoS₂ on Co-Doped
g-C₃N₄ to improve the photocatalytic hydrogen evolution under visible
light irradiation

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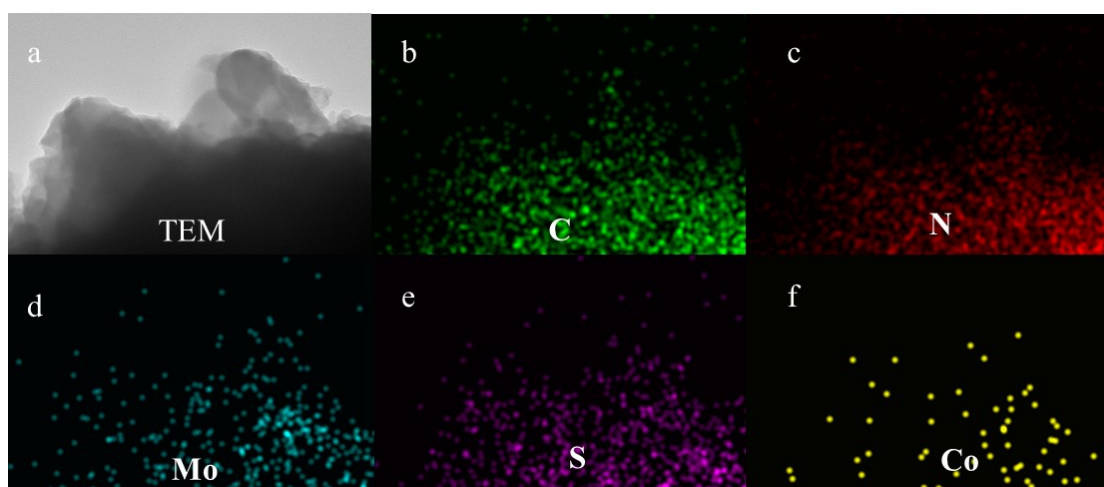


Fig S1. a) TEM images of MoS₂/CoCN-3, and the spatially resolved elemental maps of MoS₂/CoCN-3 containing (b) C, (c) N, (d) Mo, (e) S, (f) Co.

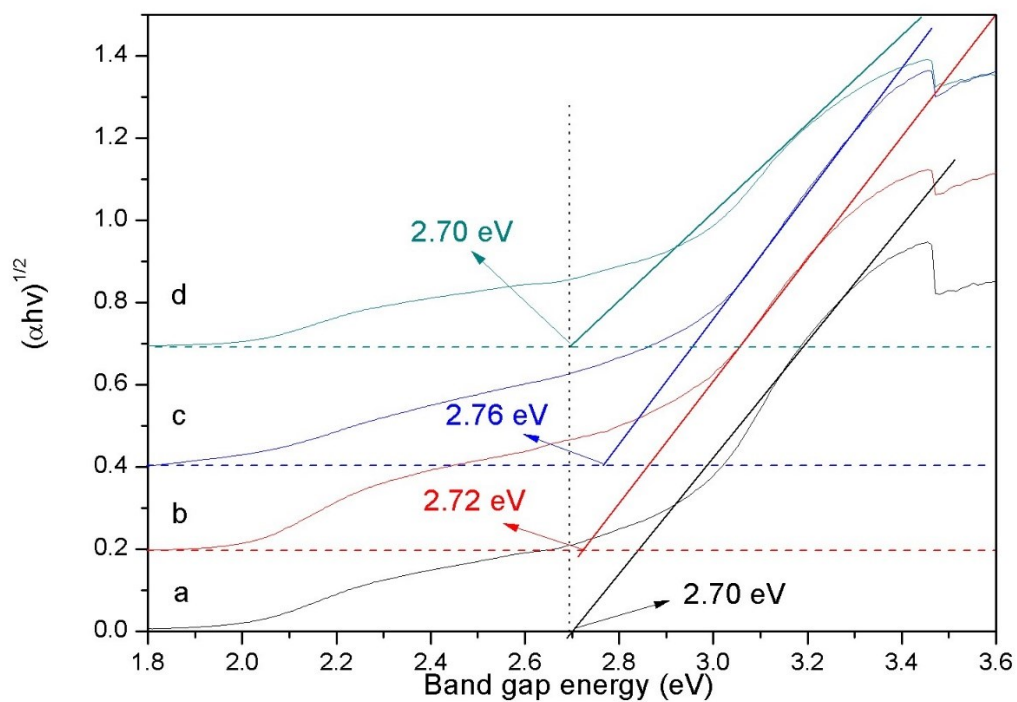


Fig S2. the band gap of samples determined from the $(\alpha h\nu)^{1/2}$ versus photon-energy plots of (a) B-CN, (b) B-CoCN, (c) 2D-CoCN, (d) $\text{MoS}_2/\text{CoCN-3}$.

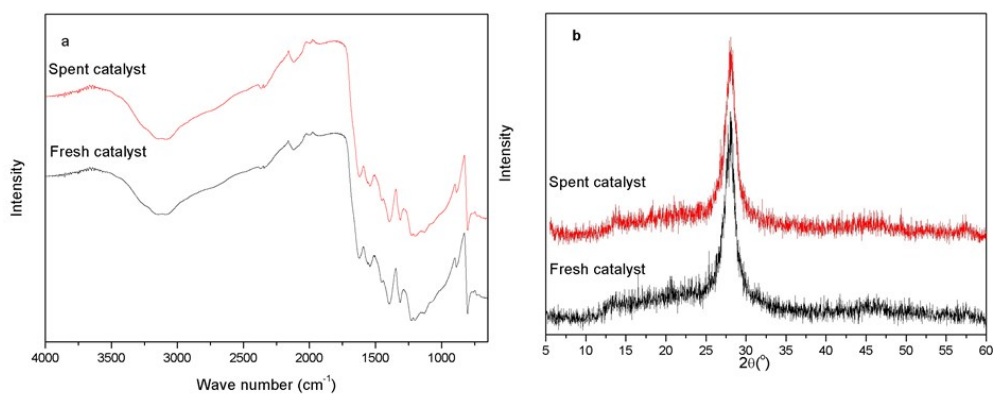


Fig. S3 The (a) IR and (b) XRD patterns of fresh and spent $\text{MoS}_2/\text{CoCN-3}$ catalyst.