Electronic Supplementary Material (ESI) for Catalysis Science & Technology.

Interfacial bonded $CuCo_2O_4/TiO_2$ nanosheets heterostructures for boosting photocatalytic H_2 production

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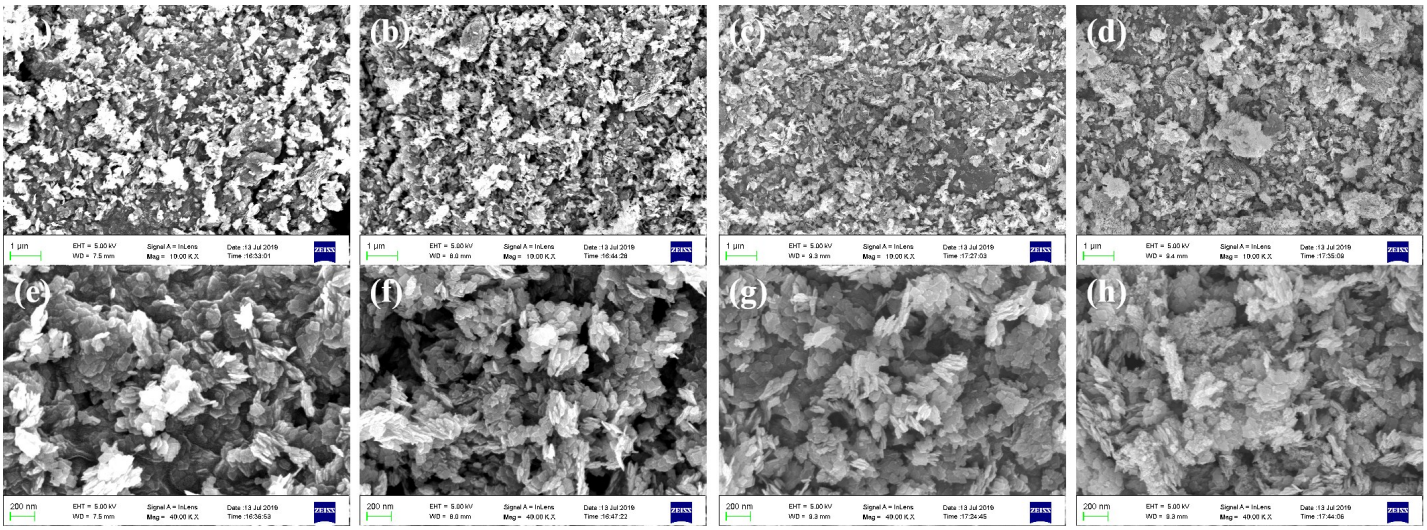

Figure S1. SEM images of 6%-$CuCo_2O_4/TiO_2$ (a, e), 8%-$CuCo_2O_4/TiO_2$ (b, e), 10%-$CuCo_2O_4/TiO_2$ (c, g) and 20%-$CuCo_2O_4/TiO_2$ (d, h).

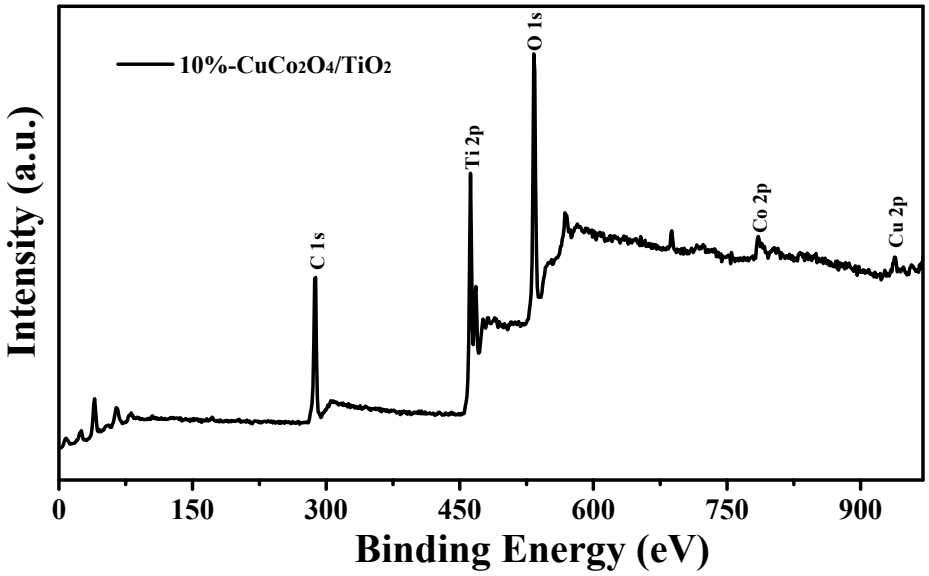

Figure S2. XPS survey spectra of 10%-$CuCo_2O_4/TiO_2$.

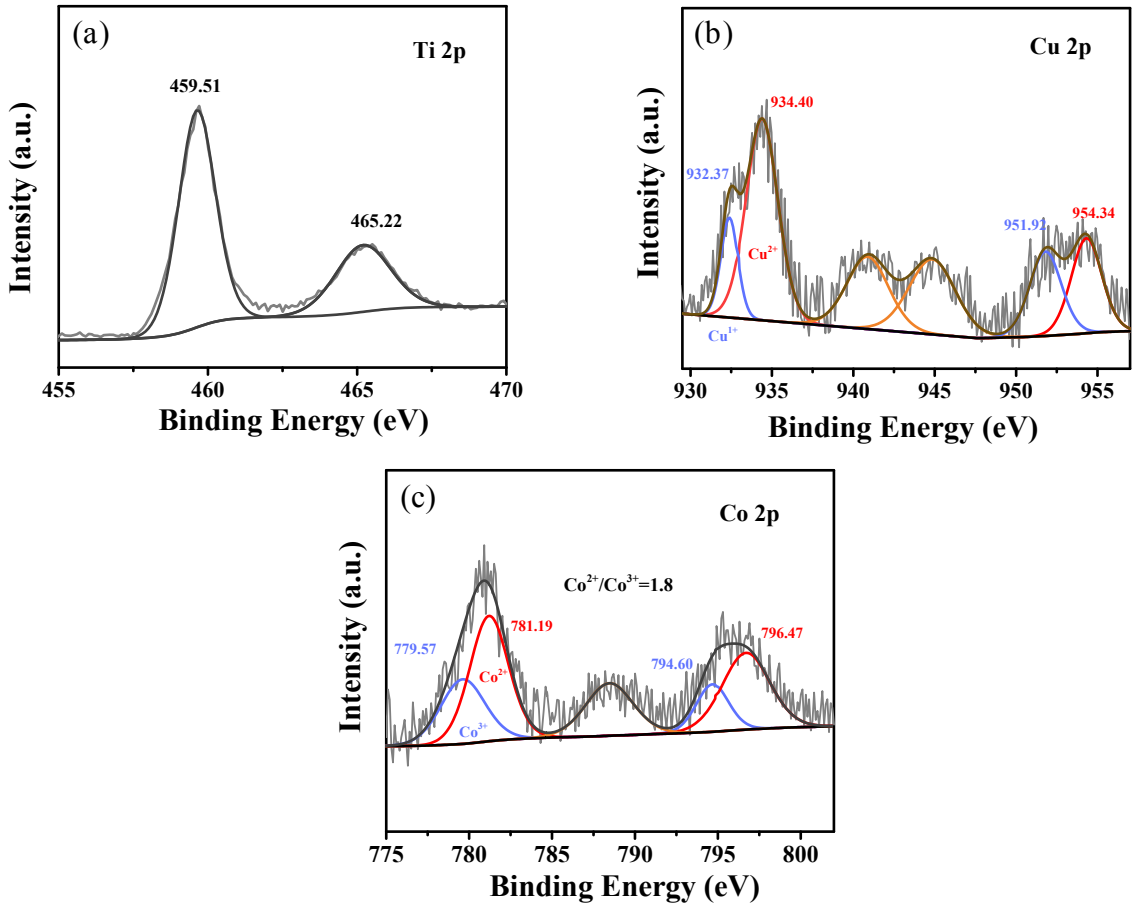

Figure S3. High-resolution XPS spectra of 10%-$CuCo_2O_4/TiO_2$ obtained by mechanical mixing (a) Ti 2p, (b) Co 2p and (c) Cu 2p.

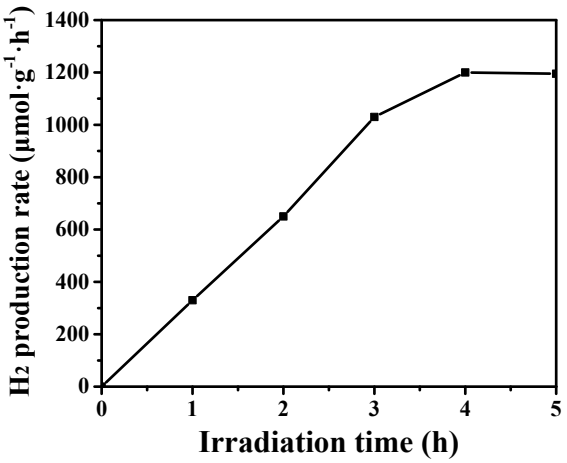

Figure S4. H_2 generation of 10%-$CuCo_2O_4/TiO_2$ prepared by mechanical mixing.

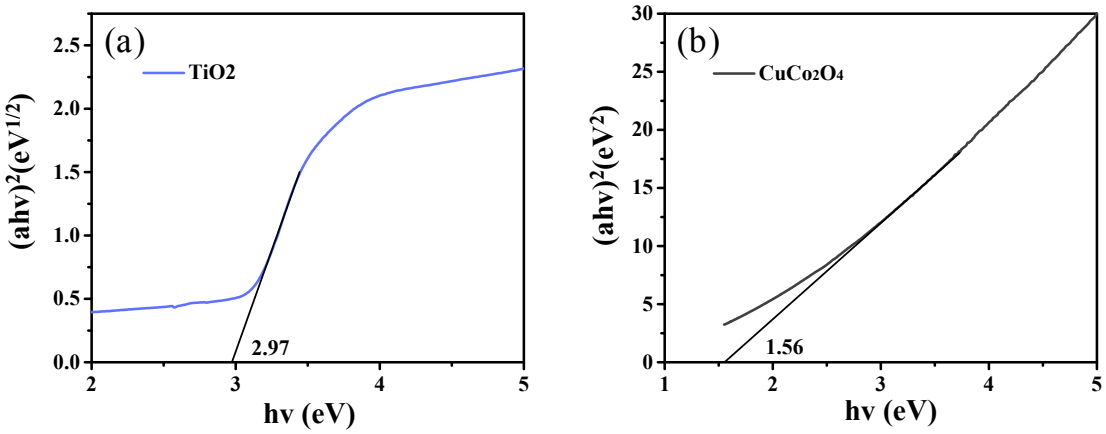

Figure S5. Kubelka-Munk plots of (a) TiO_2 and (b) $CuCo_2O_4$.

Table S1. BET surface area and the pore parameters of samples.

Samples	S_{BET} (m^2/g)	Pore volume (cm^3/g)	Average pore size (nm)
TiO_2	46.53	0.49	3.06
10%-$CuCo_2O_4/TiO_2$	102.04	0.56	16.78
$CuCo_2O_4$	105.42	0.60	17.43