Electronic Supplementary Information

Novel carbon-incorporated porous $ZnFe_2O_4$ nanospheres for enhanced photocatalytic hydrogen generation under visible light irradiation

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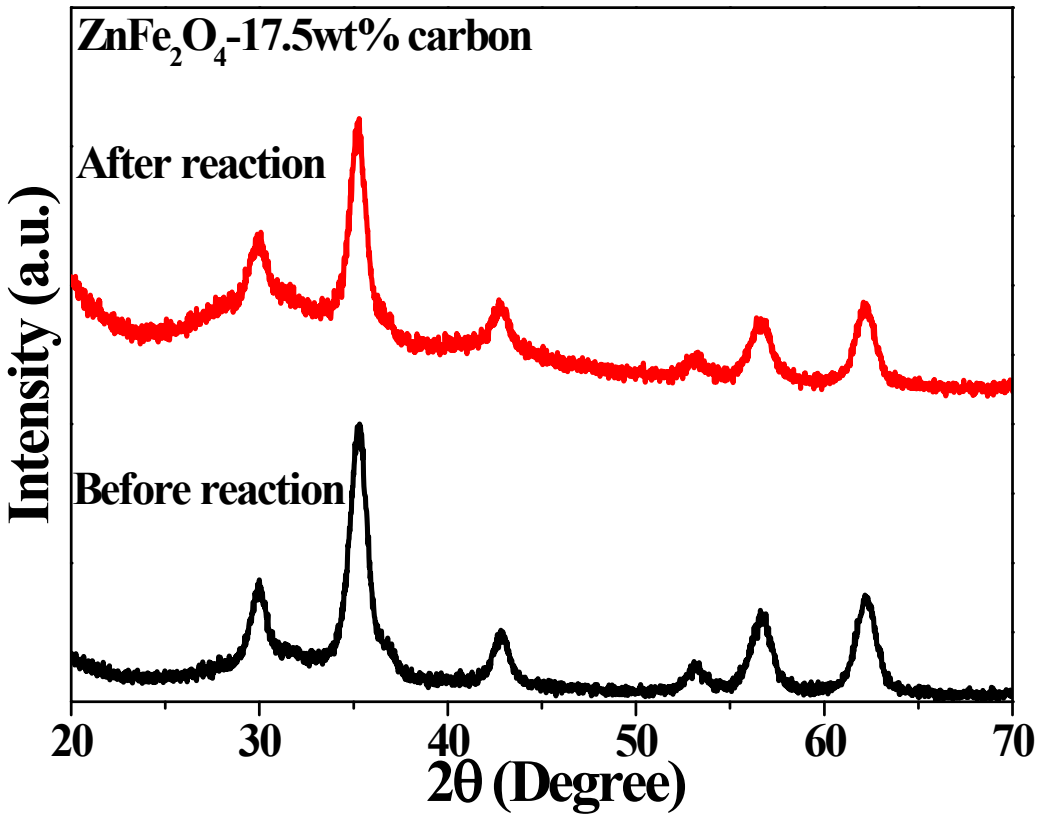

Fig. S1. XRD patterns of $ZnFe_2O_4$-17.5wt% carbon sample before and after the recycling experiments.

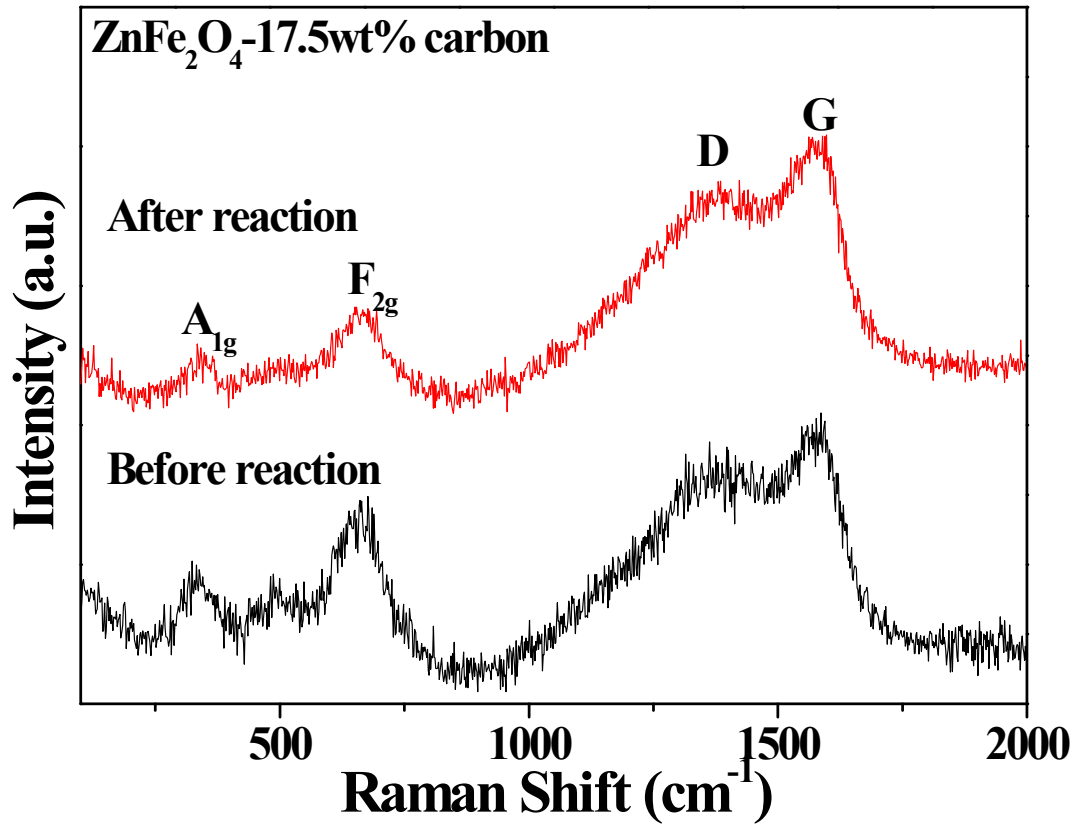

Fig. S2. Raman spectra of $ZnFe_2O_4$-17.5wt% carbon sample before and after the recycling experiments

Table S1. Comparison of photocatalytic activity in hydrogen evolution over $ZnFe_2O_4$ system photocatalyts.

Photocatalyst	Incident light	Reactant solution	Cocatalyst	H_2 generation rate ($\mu mol\ h^{-1}\ g^{-1}$)	Ref
$ZnFe_2O_4$ nanosphere	λ >420nm 300 W Xe-lamp	10 vol% CH_3OH	---	155.89	This work
$ZnFe_2O_4$-carbon Nanocomposites (sample ZF0-C3)	λ >420nm 300 W Xe-lamp	10 vol% CH_3OH	---	1160.40	This work
$ZnFe_2O_4$ porous Nanorod	λ >420nm 250 W Xe-lamp	20 vol% CH_3OH	---	47.40	10
$ZnFe_2O_4$ spherical Particles	λ >420nm 250 W UV-vis lamp	Sodium sulfite (0.05 M)	---	20	38