Improved the Light Adsorption and Separation of Charge Carriers to Boost Photocatalytic Conversion of CO_2 by Using Silver Doped ZnO Photocatalyst

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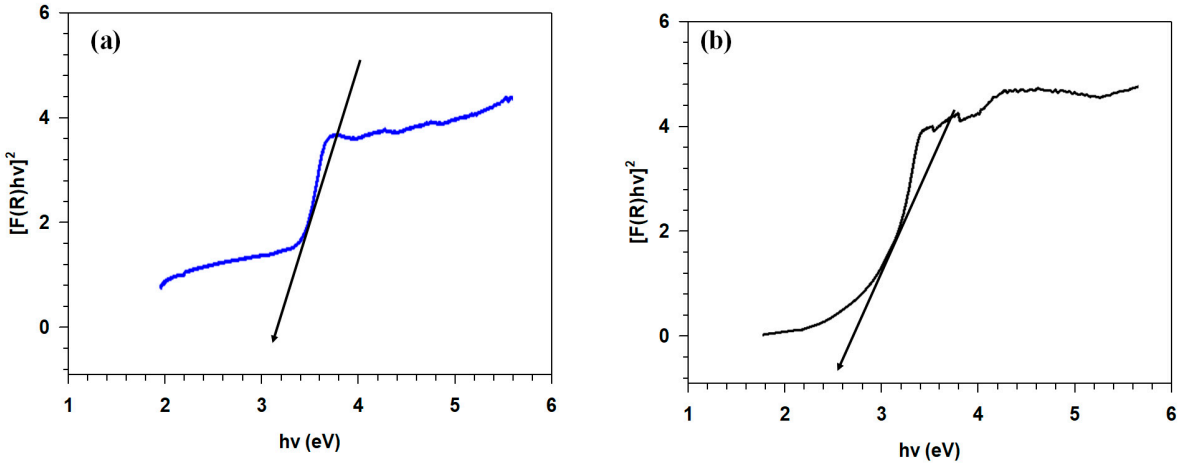

Figure S1. Touc plot of (a) ZnO and (b) Ag-ZnO.

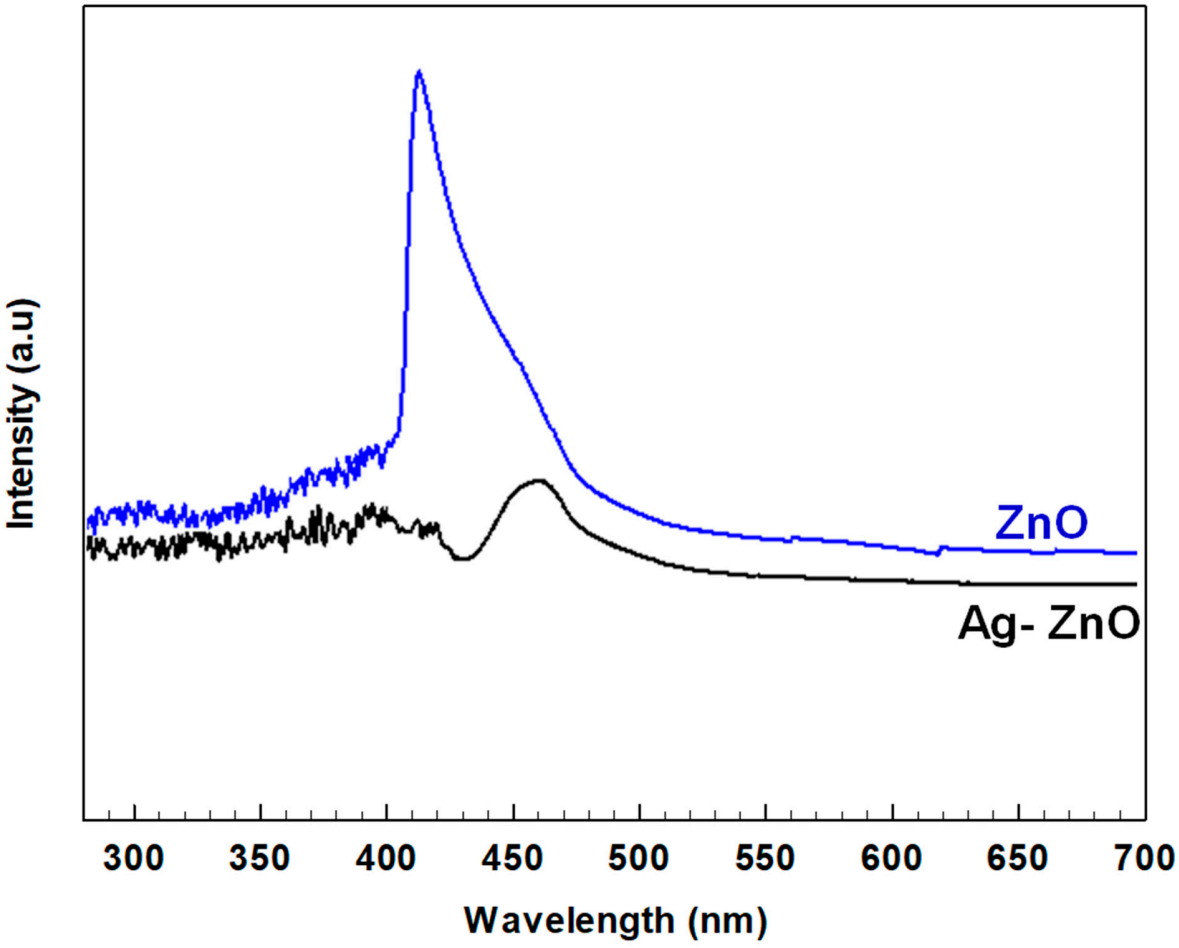

Figure S2. Photoluminescence analysis of ZnO and Ag-ZnO.

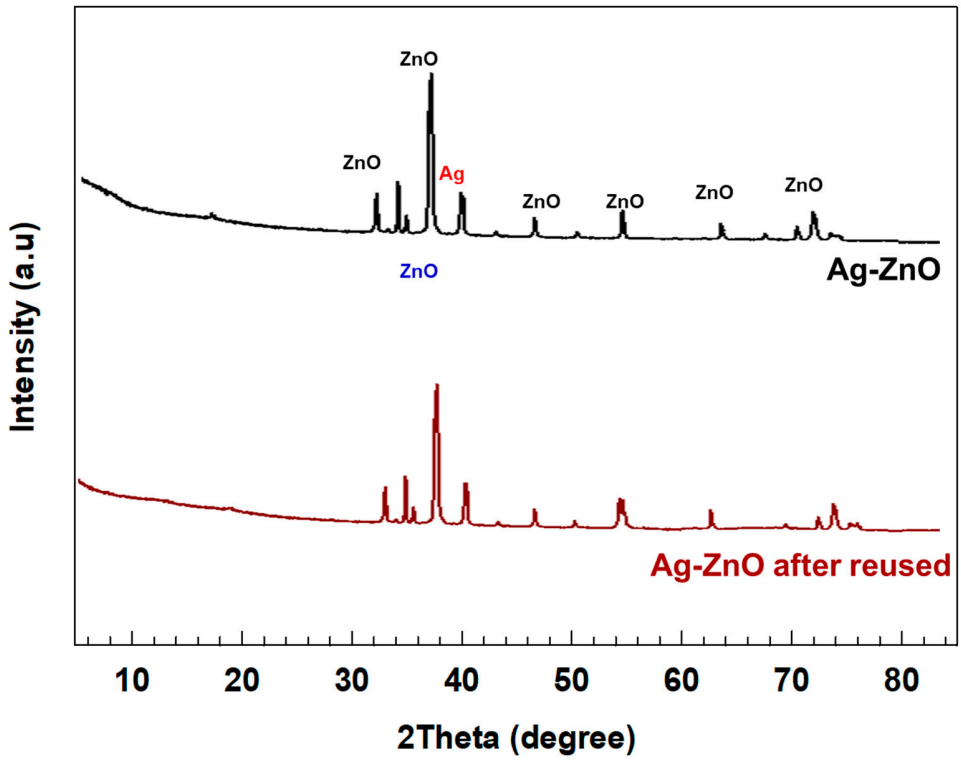

Figure S3. XRD patterns of Ag-ZnO and reused Ag-ZnO photocatalysts.

Table S1. The photocatalytic CO_2 conversion of different photocatalysts.

Materials	CO ($\mu mol\ g^{-1}\ h^{-1}$)	CH_4 ($\mu mol\ g^{-1}\ h^{-1}$)	Ref.
ZnO/g-C_3N_4 (UV light)	38.7	5	[34]
Cu-TiO_2 (UV light)	763	18	[35]
Cu/g-C_3N_4 (UV light)	10.2	-	[36]
Au@CdS/TiO_2 (UV light)	41.6	0.6	[37]
Ag-ZnO/g-C_3N_4 (UV light)	36	14	[38]
Pt^{2+}-Pt^0/TiO_2 (UV light)	55	64	[39]
ZnO (Solar light)	3.2	0.56	This study
Ag-ZnO (Solar light)	9.8	2.4	This study

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