

Supplementary Material

Photocatalytic Filtration of Zinc Oxide-Based Membrane with Enhanced Visible Light Responsiveness for Ibuprofen Removal

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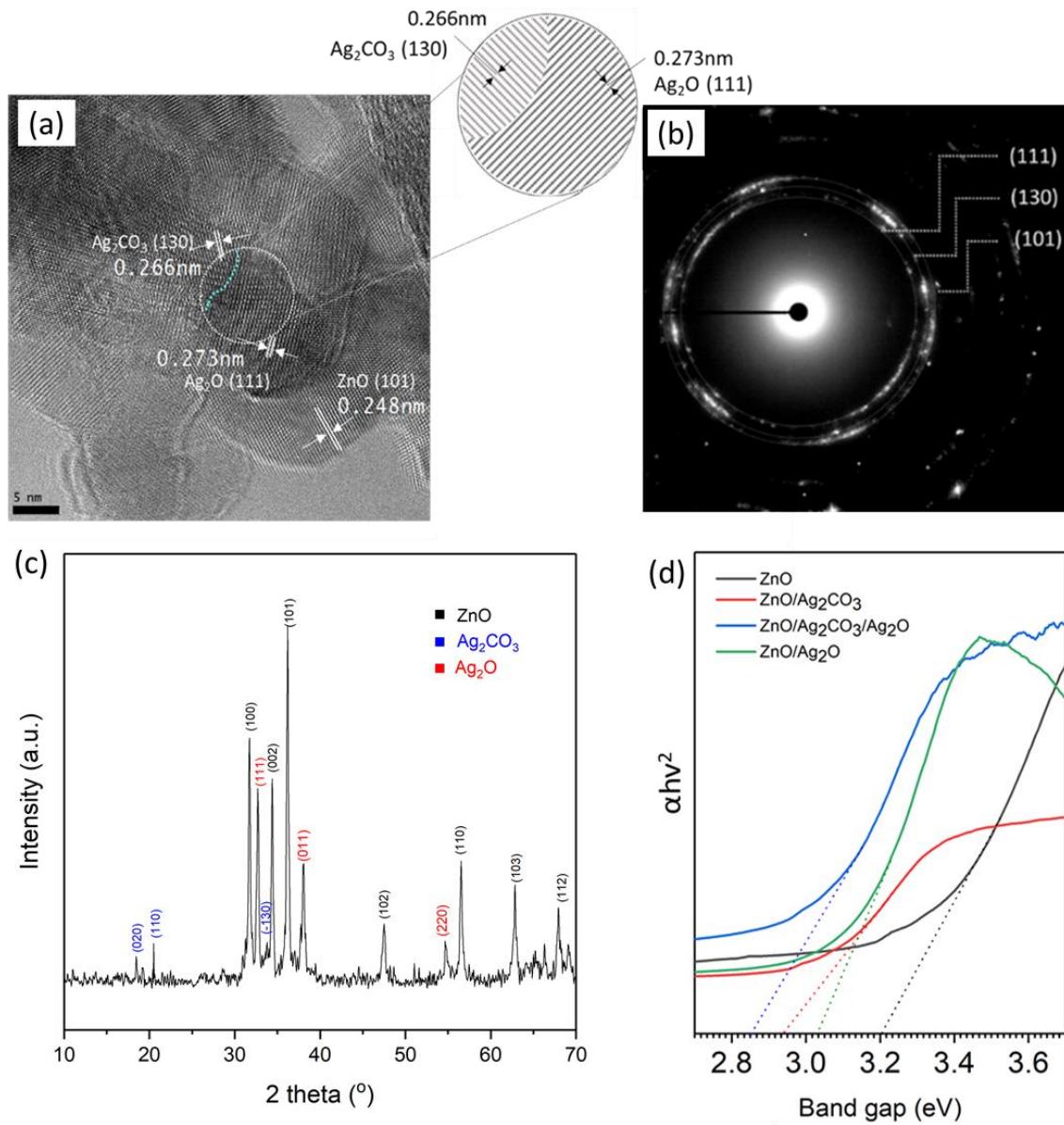


Figure S1. (a) TEM image; (b) SAED pattern; (c) XRD of $\text{ZnO}/\text{Ag}_2\text{CO}_3/\text{Ag}_2\text{O}$ photocatalyst; and (d) the band gaps value of prepared photocatalyst

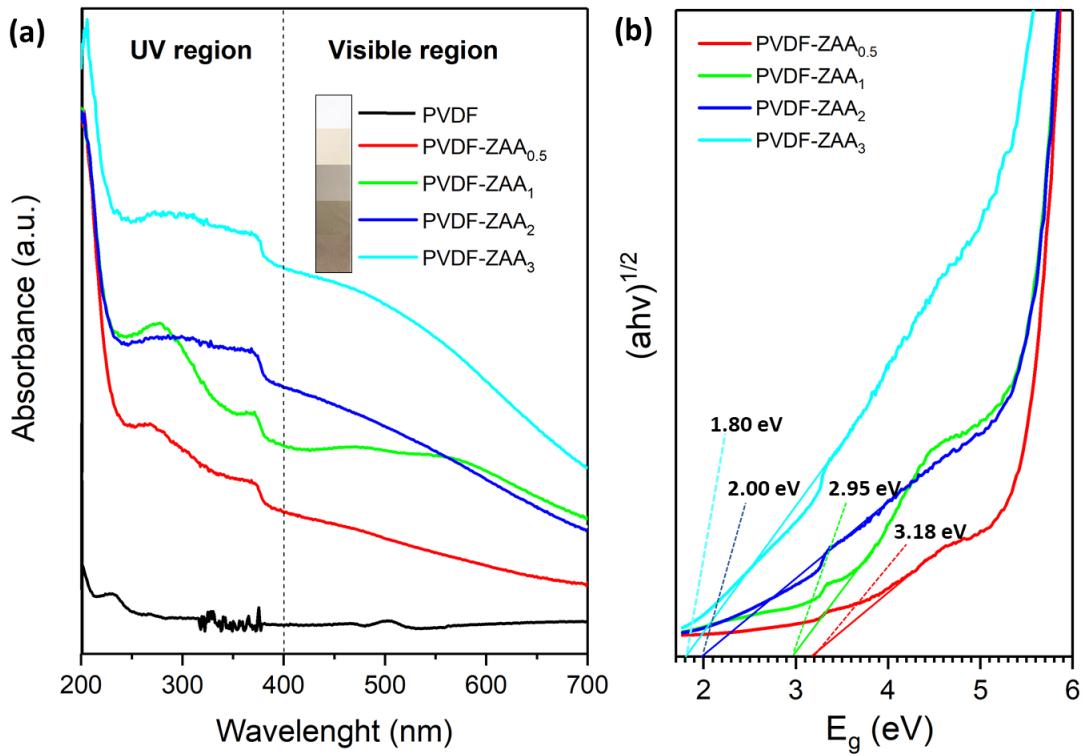


Figure S2. (a) UV-Vis absorption spectra for PVDF-ZAA membrane with different loading of ZnO/Ag₂CO₃/Ag₂O. (b) $(\alpha h\nu)^{1/2}$ versus vs the energy of absorbed light affords the band gaps of the different samples.

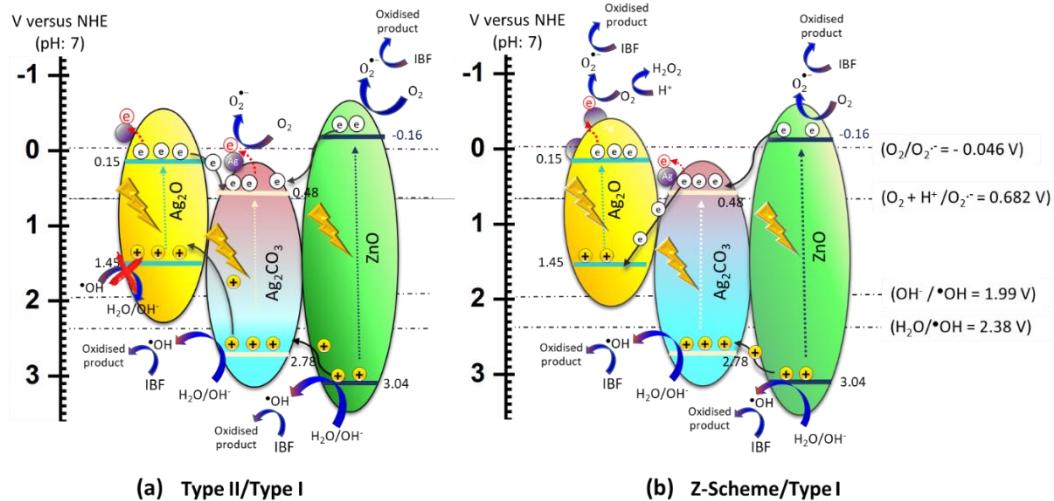


Figure S3. Schematic illustration for the photocatalytic reaction process of the ZnO/Ag₂CO₃/Ag₂O heterostructures under LED light irradiation (a) Type II/Type I and (b) Z-scheme/Type I mechanism