

Supplementary File

Interface-Engineered Magnetically Recoverable $\text{CoFe}_2\text{O}_4/\text{g-C}_3\text{N}_4/\text{TiO}_2$ and $\text{CoFe}_2\text{O}_4/\text{g-C}_3\text{N}_4/\text{ZnO}$ Ternary Nanocomposites for Efficient Photocatalytic Wastewater Treatment

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1. Synthesis Methods

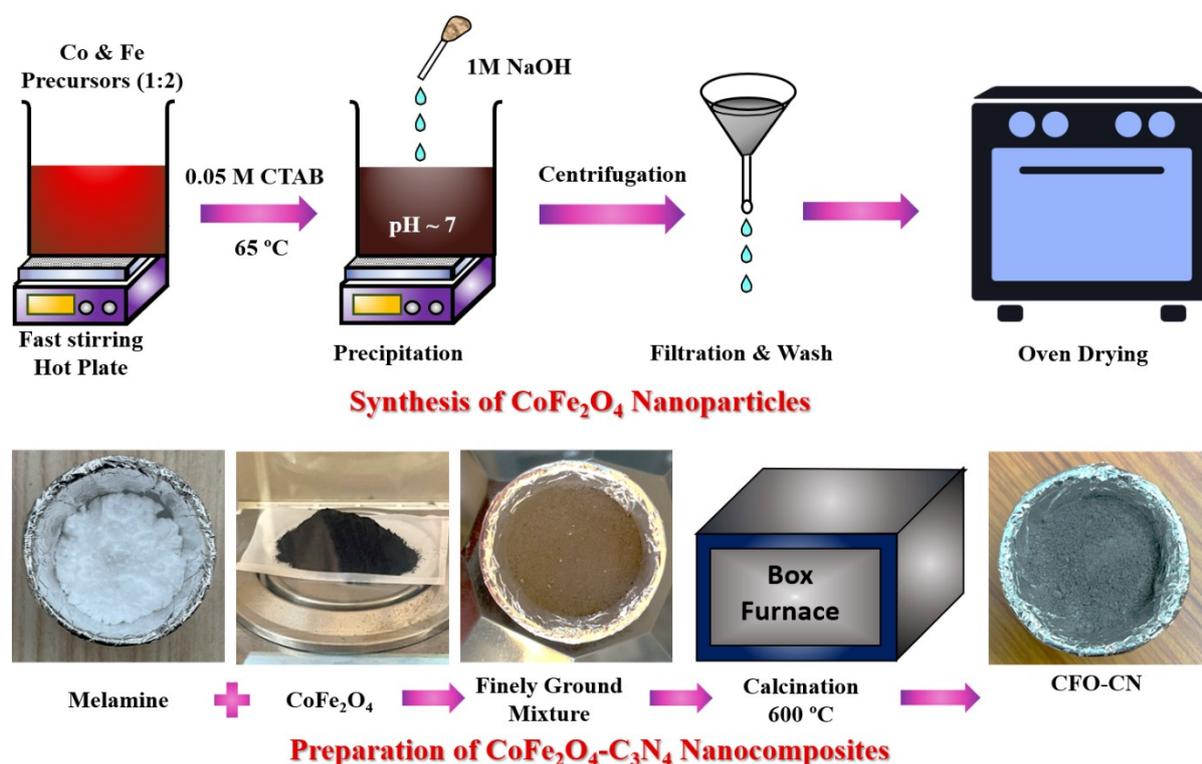


Fig. S1 Schematic representation of the synthesis method for CoFe_2O_4 nanoparticles and $\text{CoFe}_2\text{O}_4\text{-g-C}_3\text{N}_4$ nanocomposite

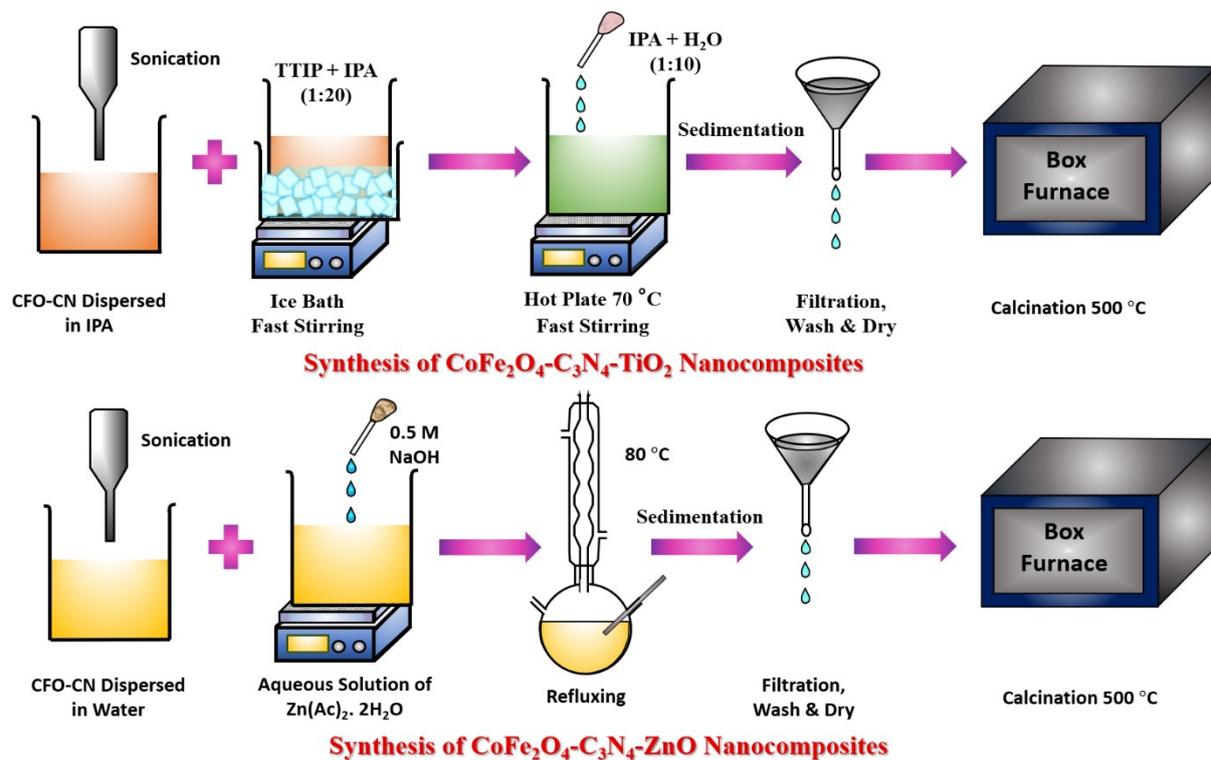


Fig. S2 Schematic representation of the synthesis method for $\text{CoFe}_2\text{O}_4\text{-g-C}_3\text{N}_4\text{-TiO}_2$ and $\text{CoFe}_2\text{O}_4\text{-g-C}_3\text{N}_4\text{-ZnO}$ nanocomposite

2. X-ray Photoelectron Spectroscopy (XPS)

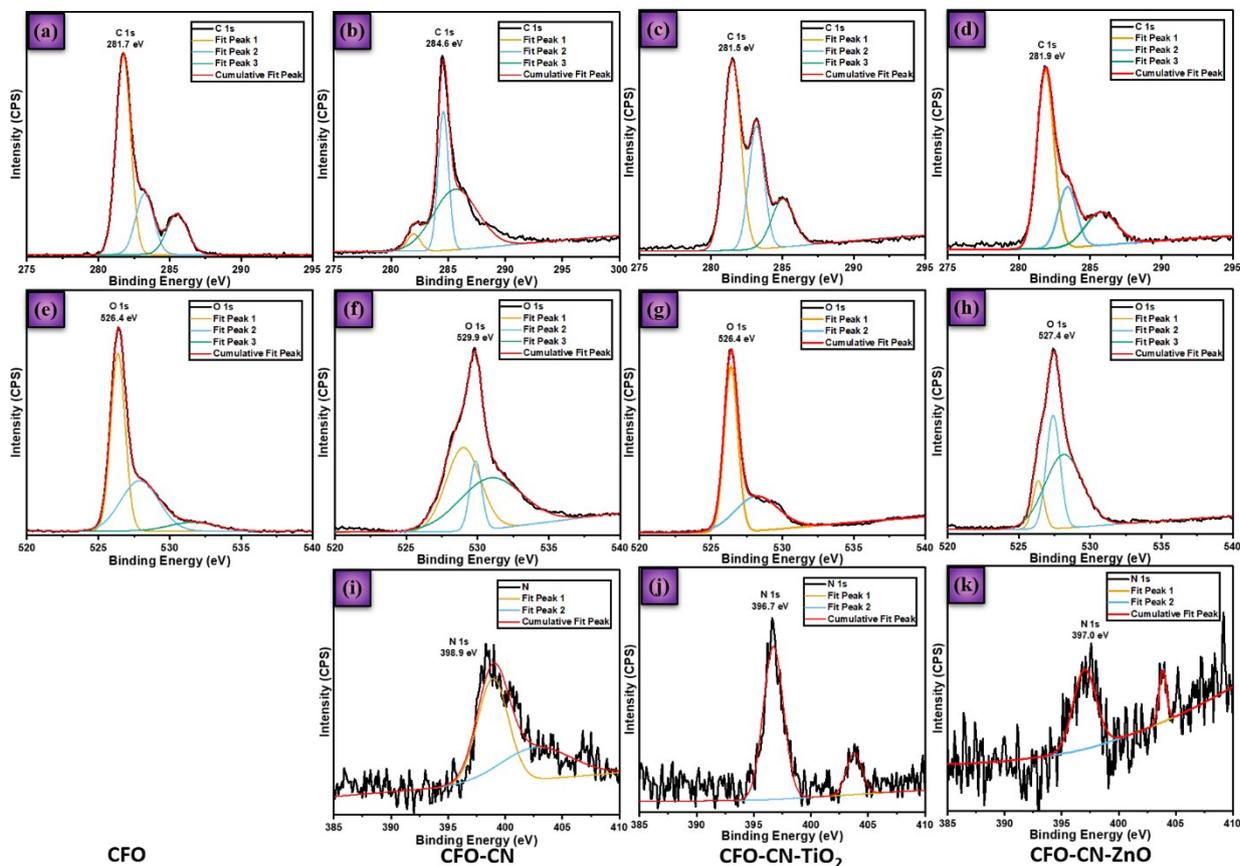


Fig. S3 Core-level XPS spectra for C, O, and N elements for the prepared nanocomposites

2. Transmission Electron Microscopy (TEM)

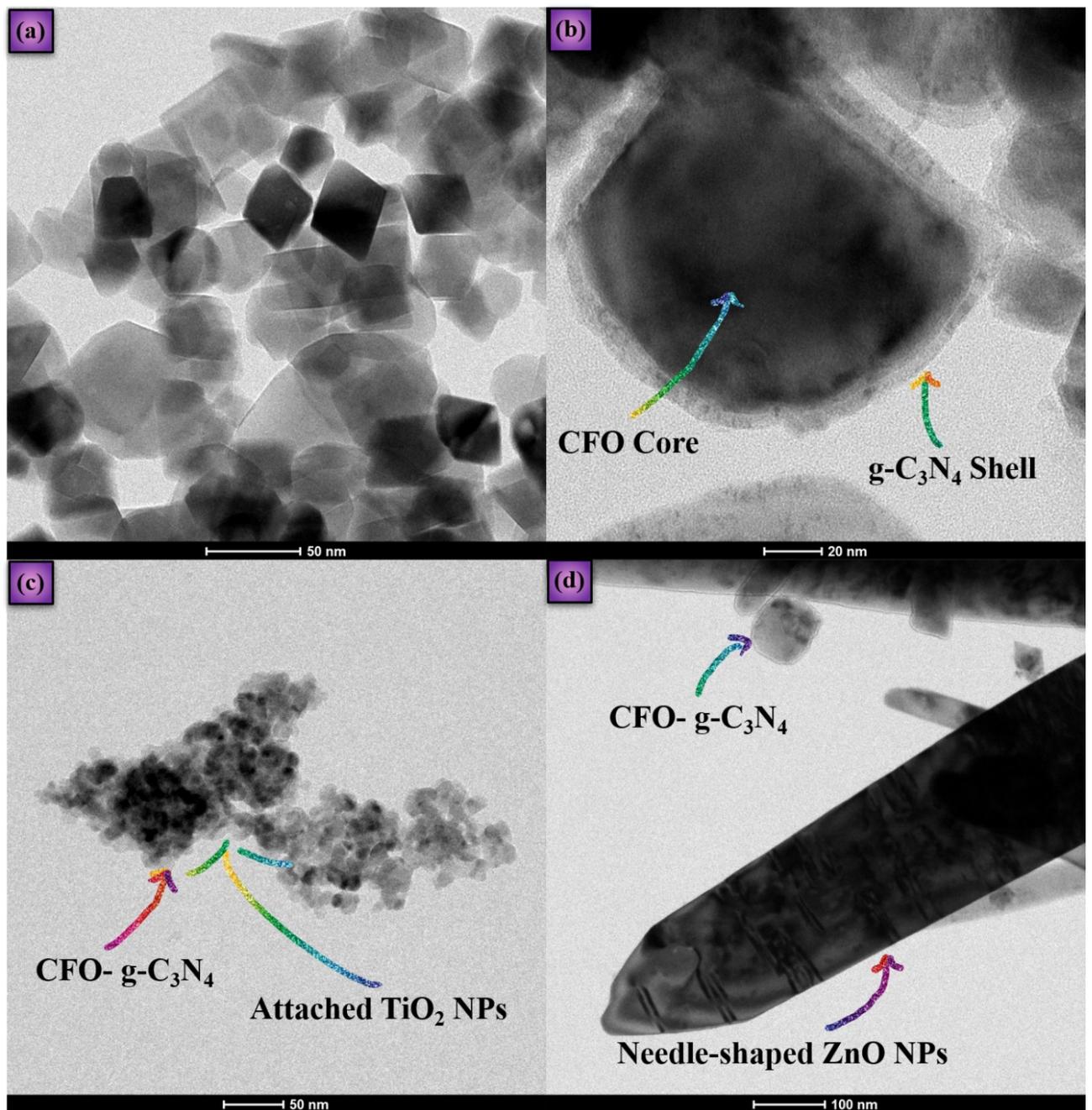


Fig. S4 Close-up TEM images of (a) CFO, (b) CFO-CN, (c) CFO-CN-TiO, and (d) CFO-CN-ZnO

3. Photocatalysis Experiments

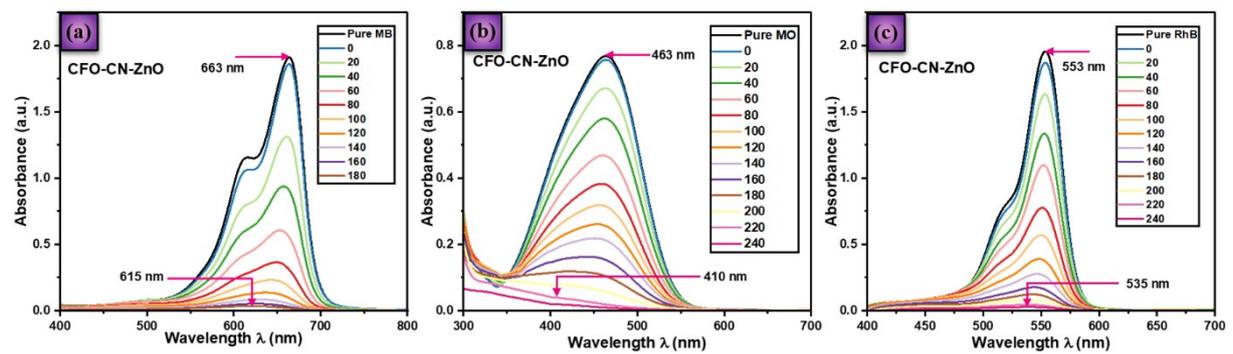


Fig. S5. Temporal absorption spectra of (a) MB, (b) MO, and (c) RhB dye by the sample CFO-CN-ZnO

4. Magnetic recovery of Ternary samples

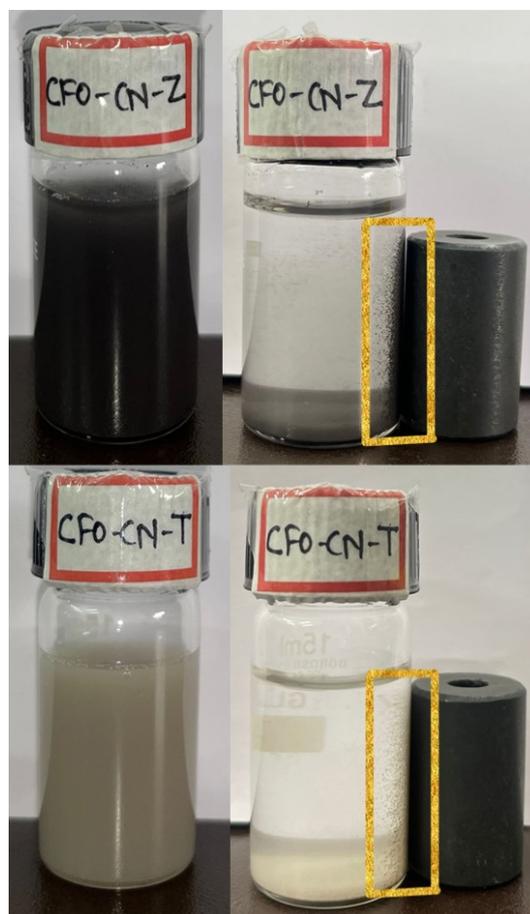


Fig. S6 Magnetic recovery of Ternary nanocomposites from aqueous solution

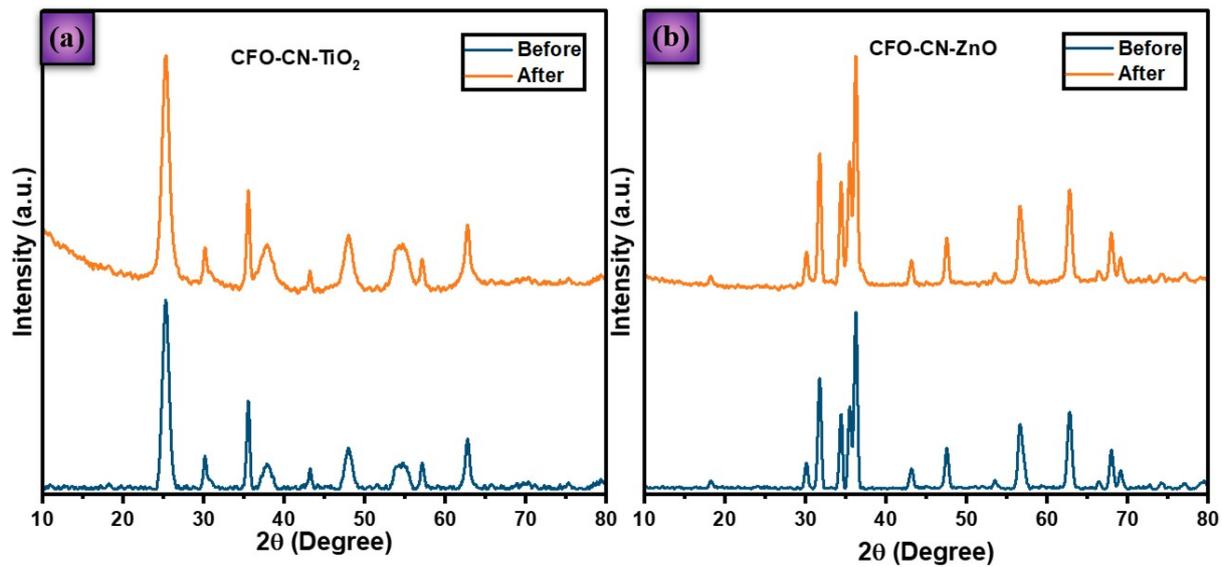


Fig. S7 XRD of the ternary materials before and after the reusability test