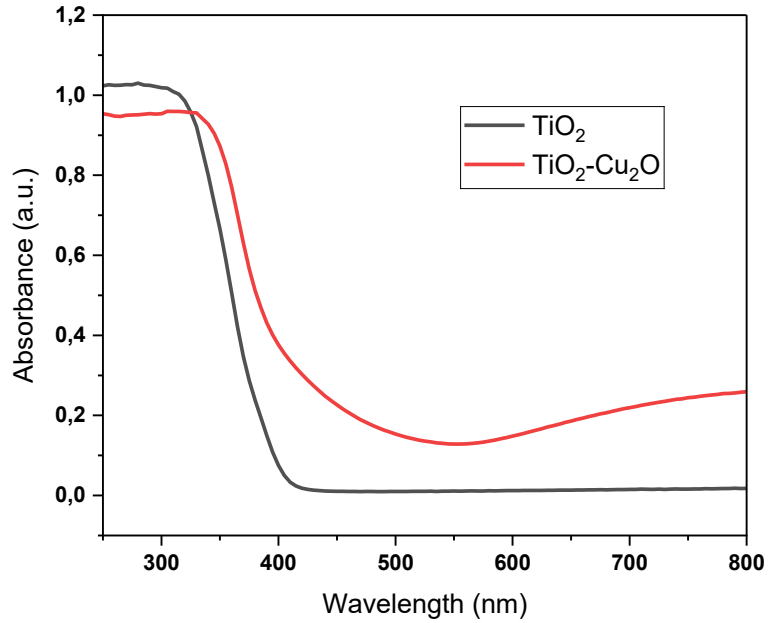


Figure S1: UV–Vis absorption spectra of pristine TiO_2 and TiO_2-Cu_2O samples. The TiO_2-Cu_2O composite exhibits enhanced absorption in the visible region compared to bare TiO_2, indicating the effect of Cu_2O incorporation on the optical properties of the material [1].

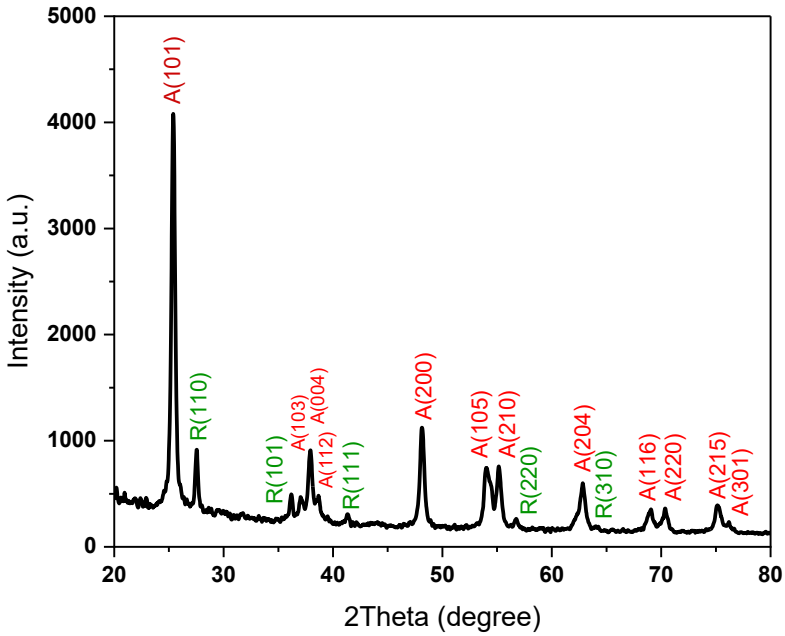


Figure S2: X-ray diffraction (XRD) pattern of the TiO_2-Cu_2O composite. The diffraction peaks correspond to the anatase (A) and rutile (R) phases of TiO_2 [2]. No distinct diffraction peaks attributable to crystalline Cu_2O are observed, suggesting that Cu_2O is either highly dispersed, present in low concentration, or poorly crystalline.

References

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