

Kinetic Aspects of Benzene Degradation over $\text{TiO}_2\text{-N}$ and Composite $\text{Fe/Bi}_2\text{WO}_6/\text{TiO}_2\text{-N}$ Photocatalysts under Irradiation with Visible Light

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Supplementary Materials

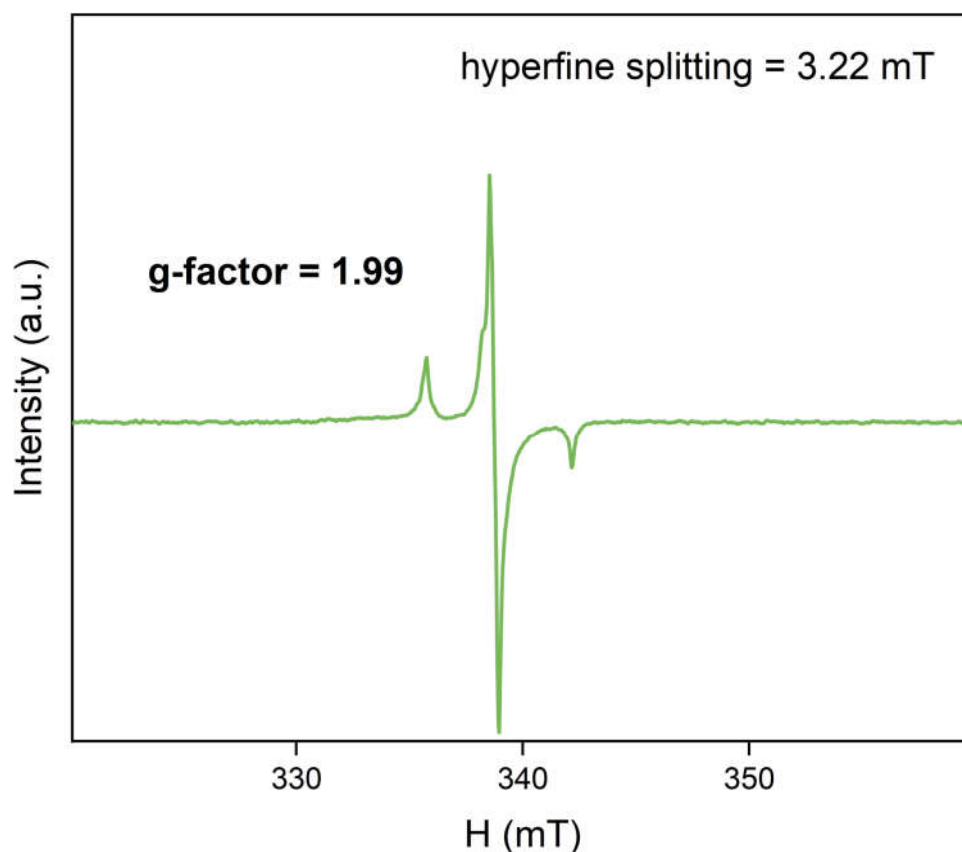


Figure S1. EPR signal of paramagnetic N centers in the synthesized $\text{TiO}_2\text{-N}$ photocatalyst.

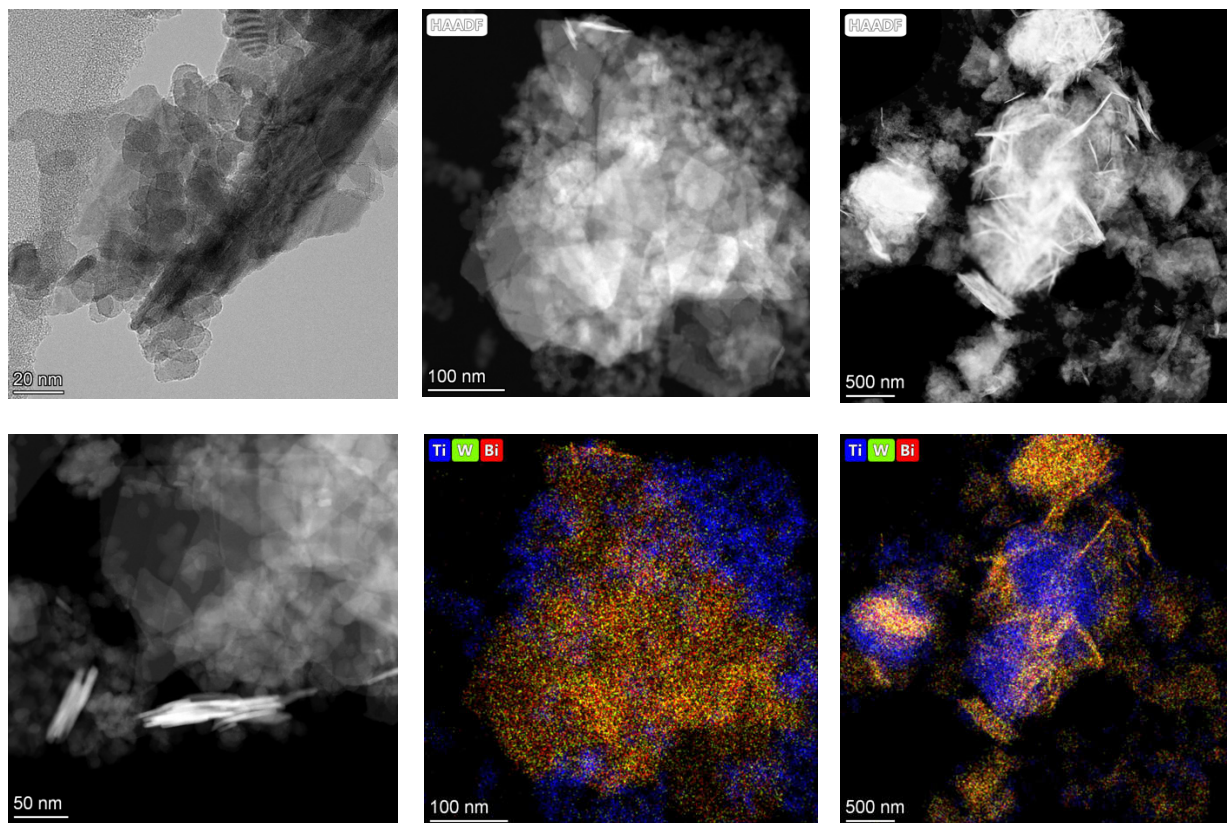


Figure S2. TEM micrographs of $\text{Bi}_2\text{WO}_6/\text{TiO}_2\text{-N}$ obtained using HAADF imaging and EDX mapping techniques.

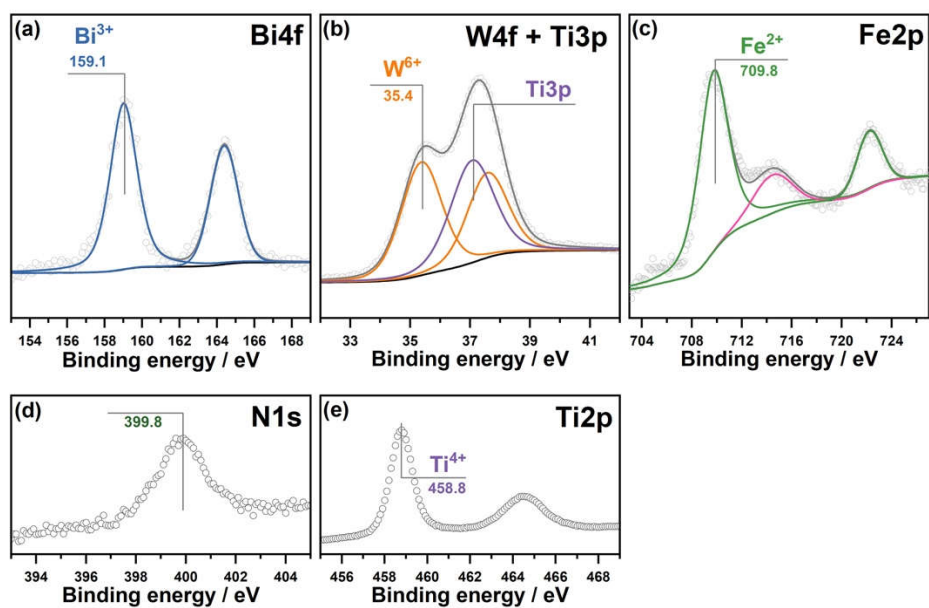


Figure S3. Photoelectron Bi4f (a), W4f+Ti2p (b), Fe2p (c), N1s (d), and Ti2p (e) spectral regions for the synthesized 0.3Fe/Bi₂WO₆/TiO₂-N sample.

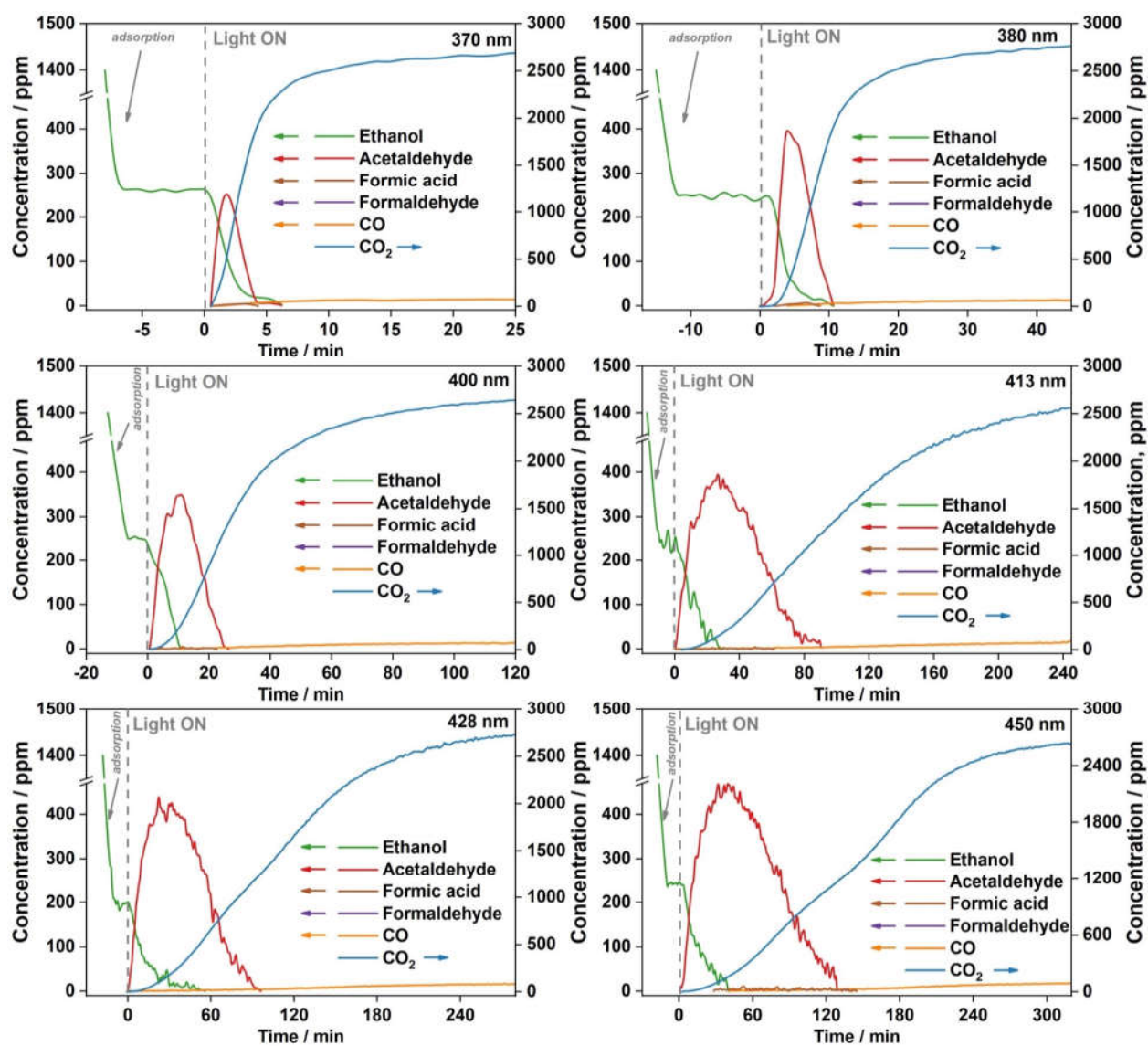


Figure S4. Kinetic plots of the reaction components during PCO of ethanol over $\text{TiO}_2\text{-N}$ under irradiation with a maximum at: 370, 380, 400, 413, 428, and 450 nm.

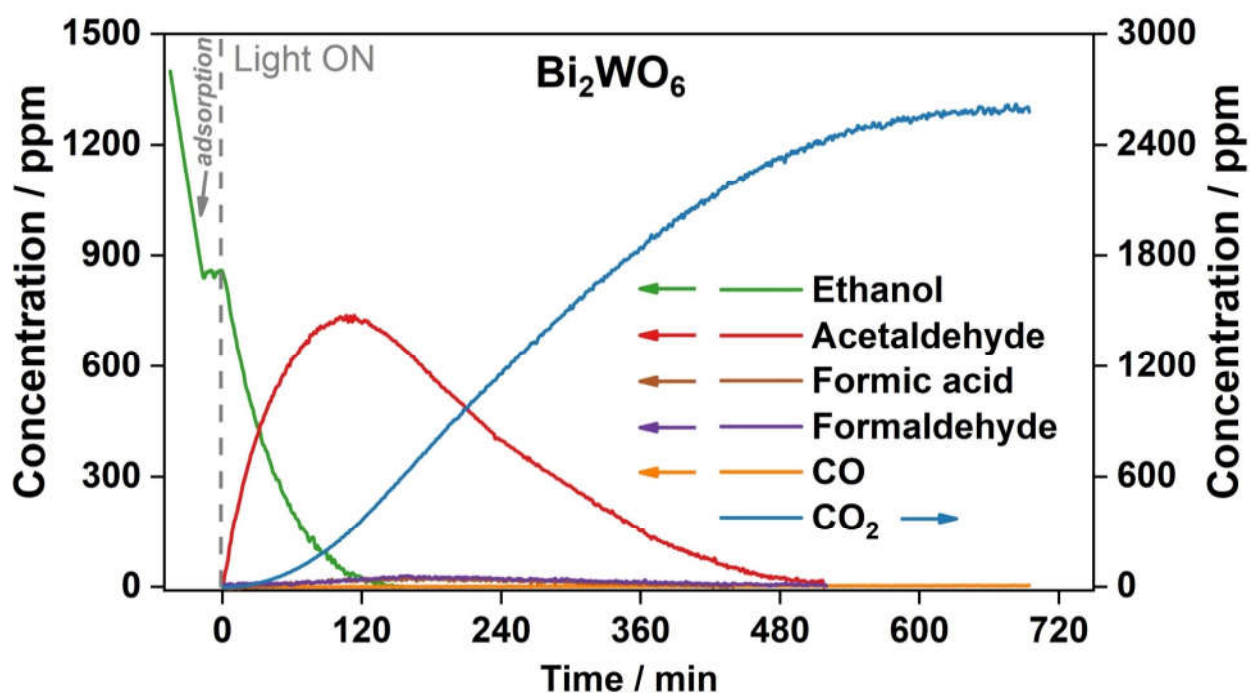


Figure S5. Kinetic plots of the reaction components during PCO of ethanol over Bi_2WO_6 under blue light.

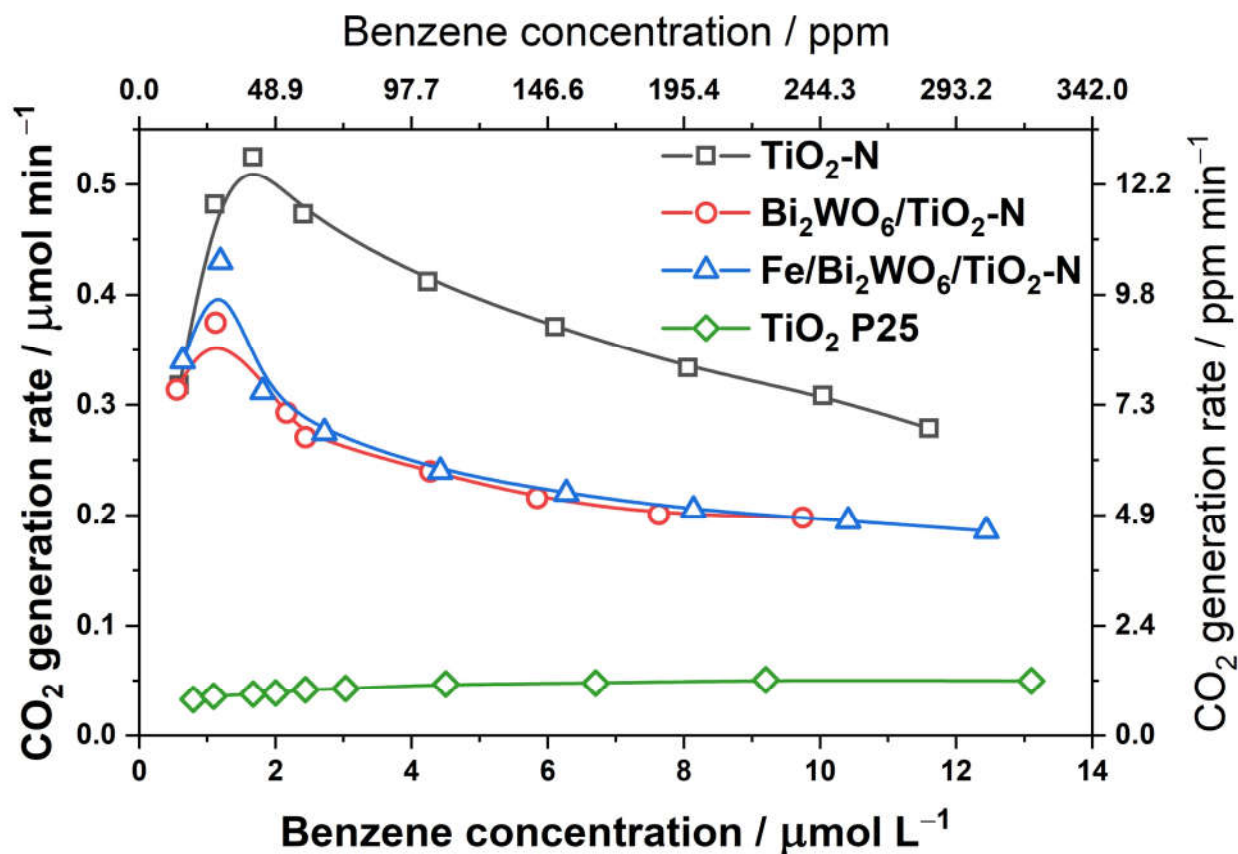


Figure S6. Effect of inlet benzene concentration on the rate of CO_2 formation during PCO of benzene over $\text{TiO}_2\text{-N}$, $\text{Bi}_2\text{WO}_6/\text{TiO}_2\text{-N}$, $\text{Fe}/\text{Bi}_2\text{WO}_6/\text{TiO}_2\text{-N}$, and Evonik TiO_2 P25 under blue light.

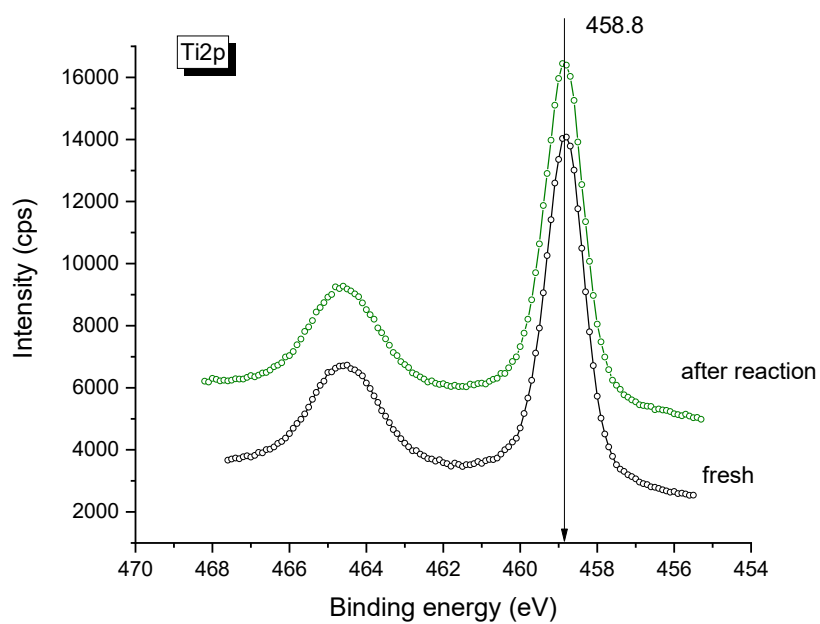


Figure S7. Ti2p core-level spectra for the TiO₂-N catalyst before and after the stability test.

Table S1. Atomic concentrations (%) of the elements on the surface of TiO₂-N before and after the stability test.

	C	N	Ti	O
Before reaction	40.5	0.5	16.6	42.5
After reaction	40.6	0.4	17.4	41.6