

Supplementary Materials

One-Pot Synthesis of Nitrogen doped TiO₂ with Supported Copper Nanocrystalline for Photocatalytic Environment Purification under Household White LED Lamp

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Additional Figures and Captions

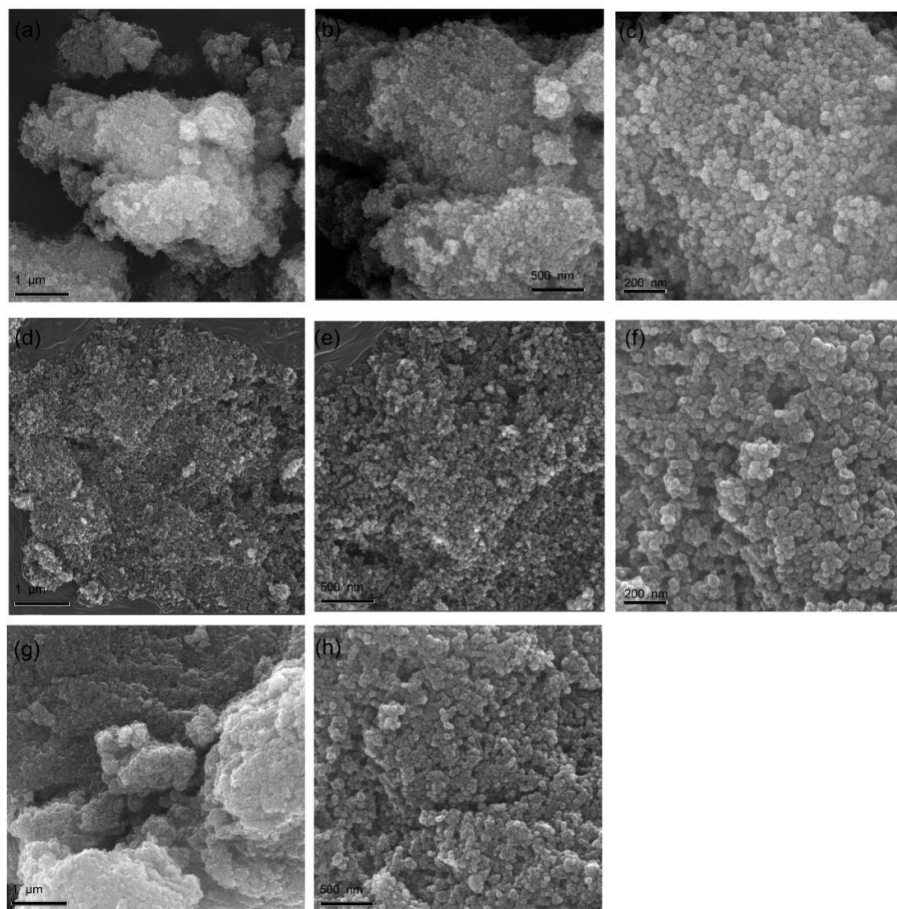


Figure S1 SEM images of (a-c) pristine TiO_2 , (d-f) N- TiO_2 , and (g-h) 1%Cu-N- TiO_2 .

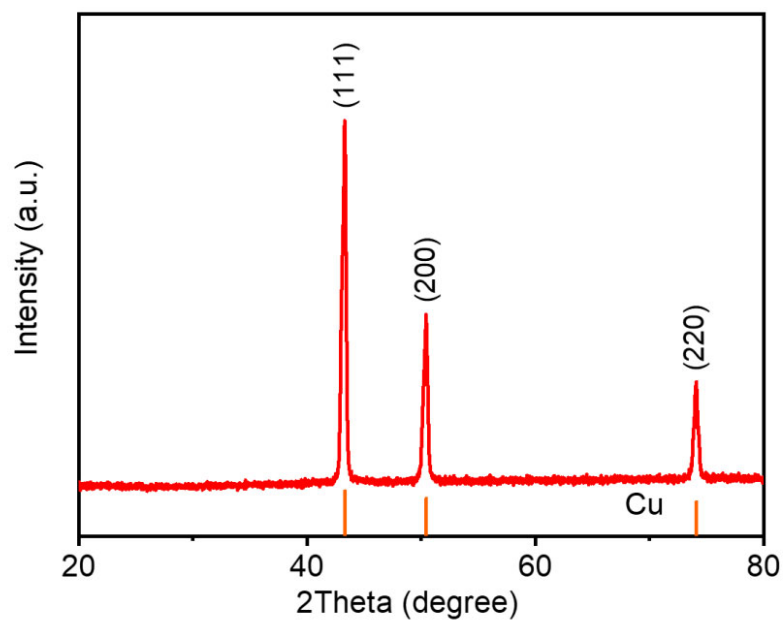


Figure S2 XRD pattern of product by nitridizing $\text{Cu}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$ powder under 773 K for about 3 h under NH_3 gas atmosphere.

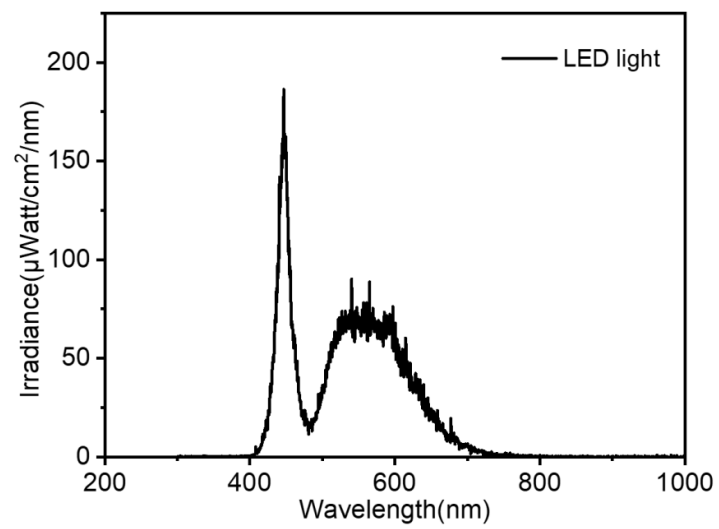


Figure S3 The irradiation spectrum of used white LED lamp.

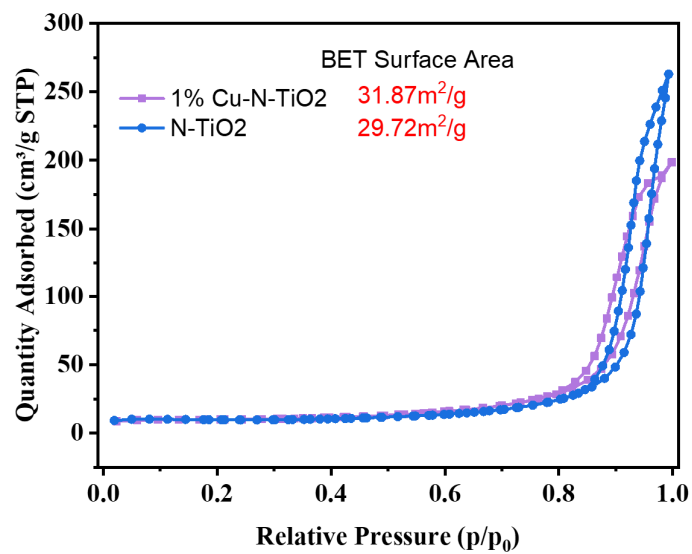


Figure S4 Nitrogen adsorption-desorption isotherms and calculated BET specific surface areas of the 1%Cu-N-TiO₂ and N-TiO₂.



Figure S5 The reaction cell used for isopropanol degradation experiments.

Table S1 XPS element content analysis of 1% Cu-N-TiO₂

Name	O 1s	N 1s	C 1s	Ti 2p	Cu 2p
Atomic %	54.79	0.81	16.9	26.83	0.68