Supporting Information

Photocatalytic NO_x Reduction to Ammonia Using Zirconium Incorporated g-C_3N_4 Catalyst

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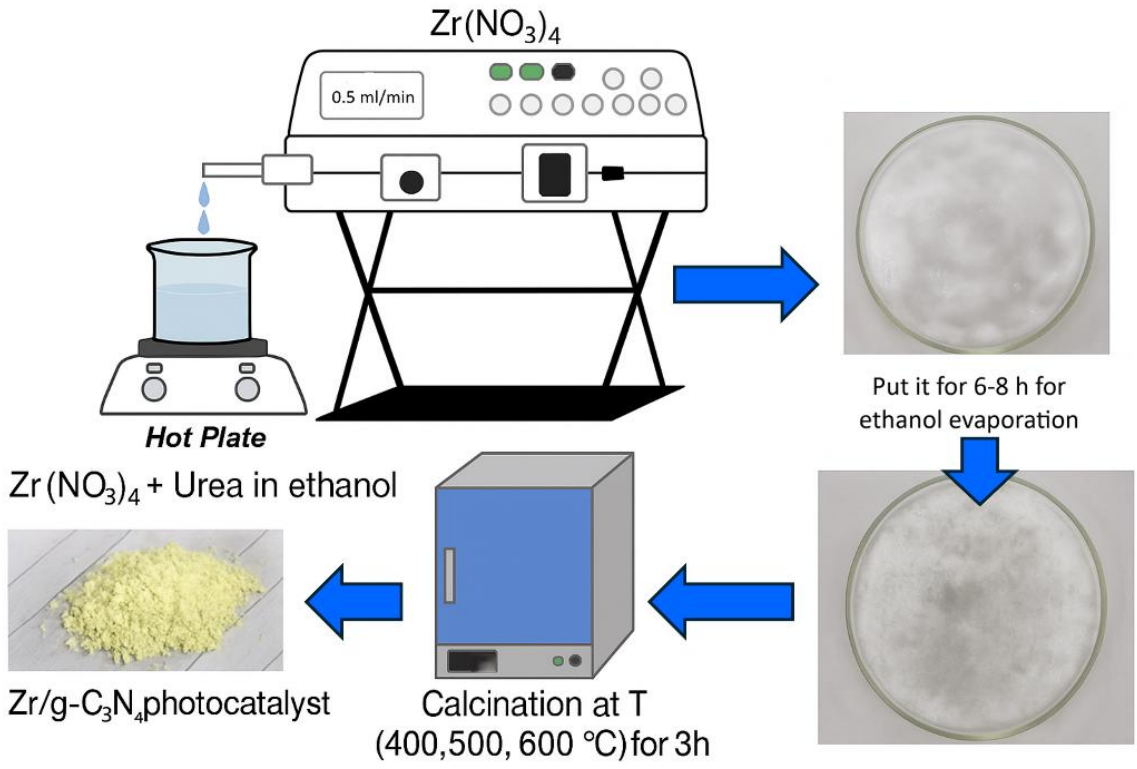

Figure S1. Schematic of photocatalyst synthesis

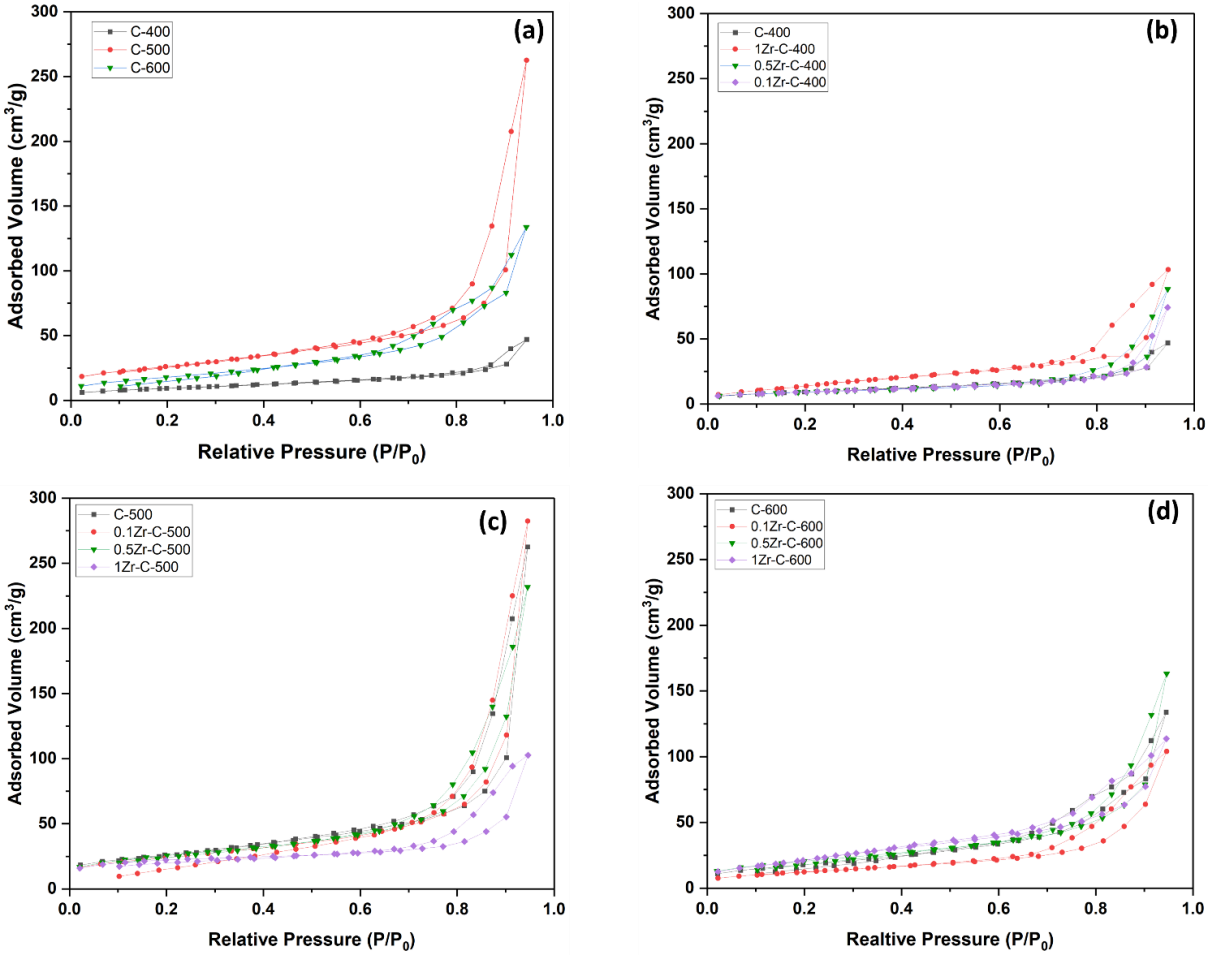

Figure S2. Nitrogen physisorption isotherms of Zr/g-C_3N_4 photocatalysts. (a) Pure g-C_3N_4 calcined at 400 °C, 500 °C, and 600 °C. (b) Zr-modified g-C_3N_4 calcined at 400 °C. (c) Zr-modified g-C_3N_4 calcined at 500 °C. (d) Zr-modified g-C_3N_4 calcined at 600 °C.

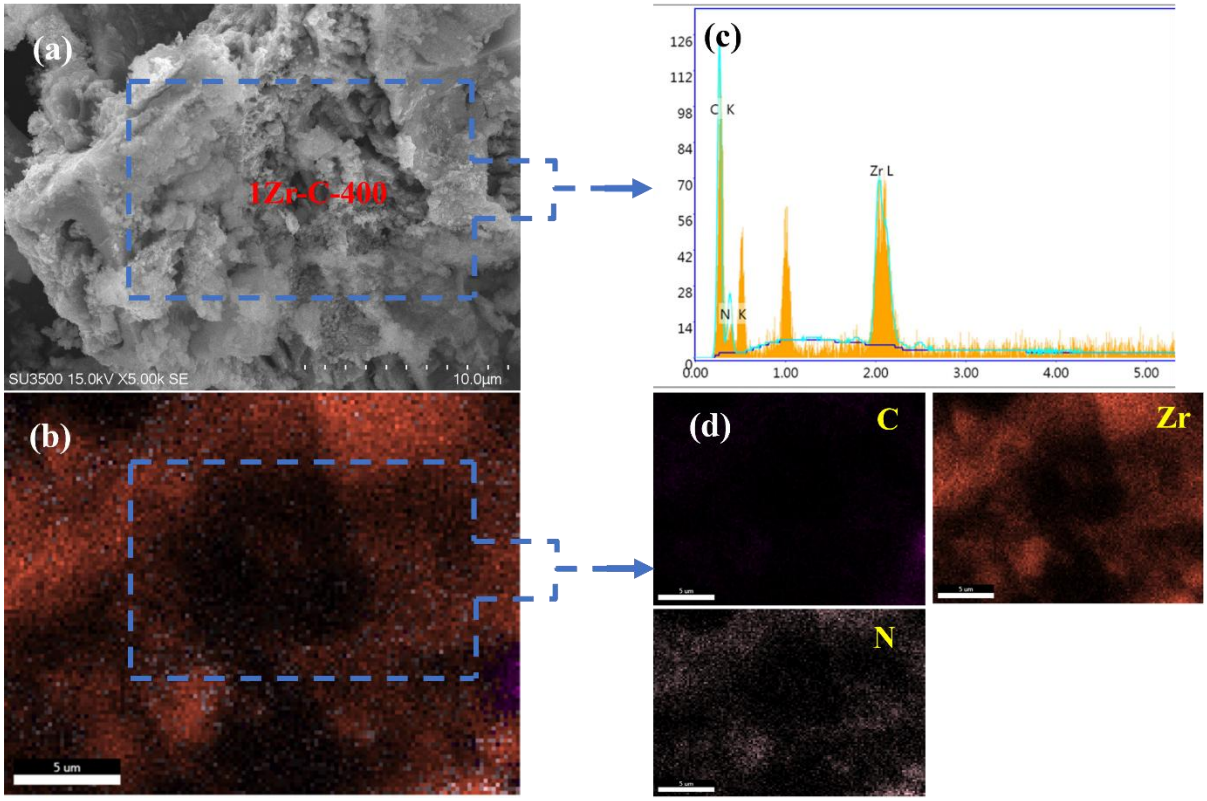

Figure S3. SEM-EDX analysis of 1Zr-C-400 photocatalyst. (a) SEM image showing surface morphology. (b) Elemental mapping overlay. (c) EDX spectrum confirming the presence of C, N, and Zr. (d) Individual elemental maps of C, N, and Zr distribution