

Supporting Information

Enhanced Photocatalytic Removal of NO over Titania/Hydroxyapatite (TiO₂/HAp) Composites with Improved Adsorption and Charge Mobility Ability

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1. The glass dish coated with as-synthesized catalyst

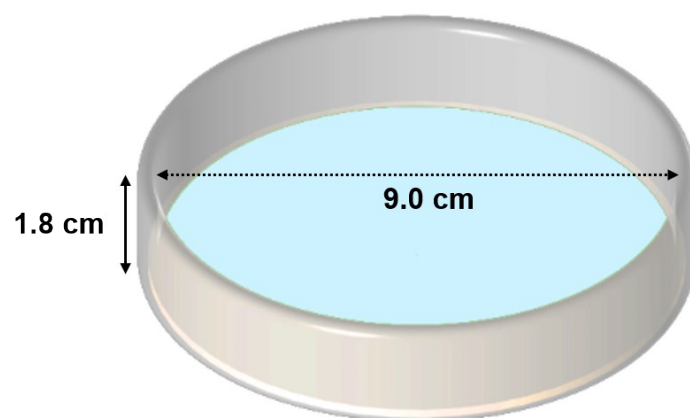


Figure S1. The diagram of glass dish coated with as-synthesized catalyst.

2. BET Surface Area and Pore Size Distributions

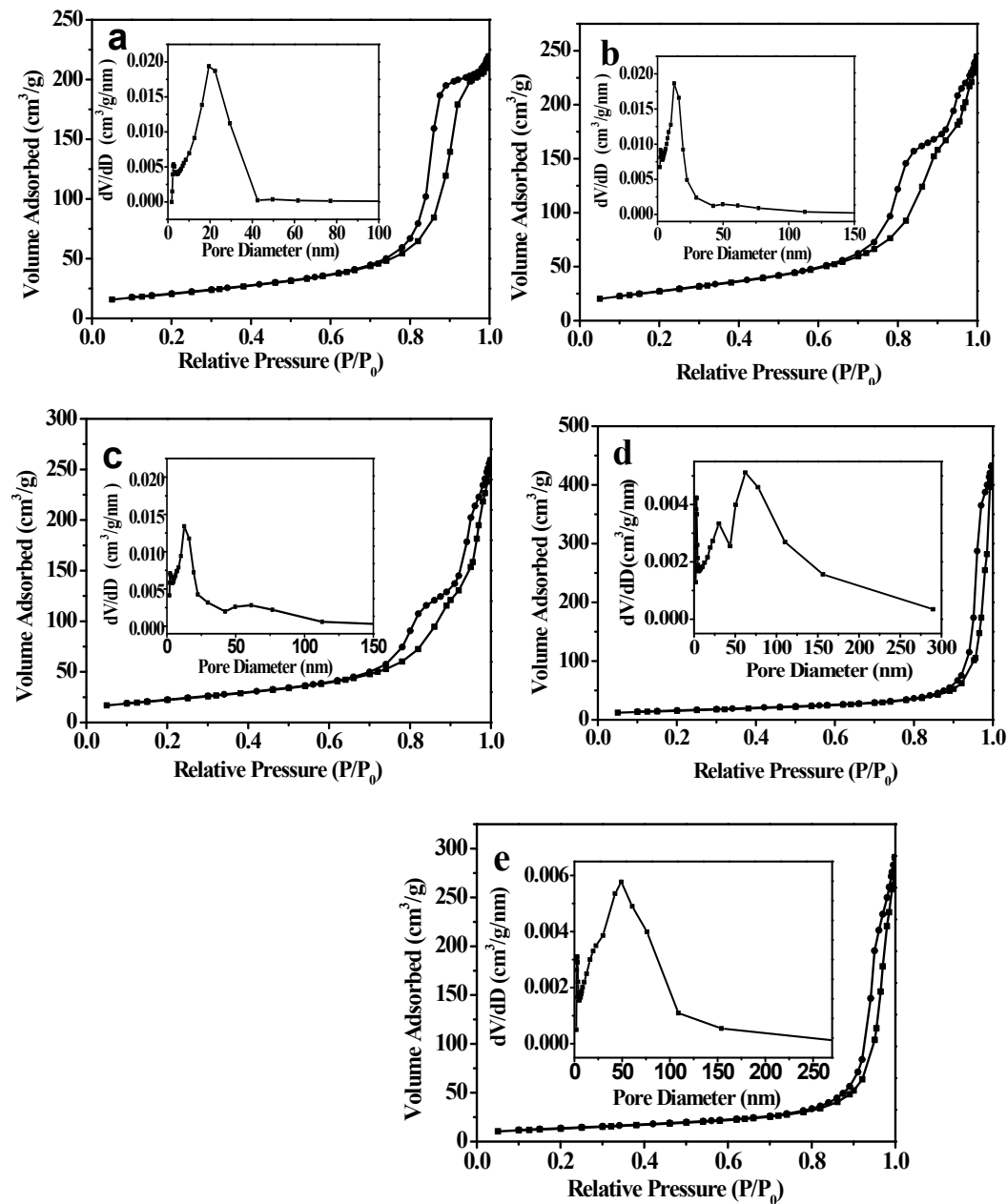


Figure S2. N_2 sorption isotherms of (a) pure TiO_2 , (b) 83% TiO_2 /HAp composite, (c) 75% TiO_2 /HAp composite, (d) 50% TiO_2 /HAp composite and (e) pure HAp. Inset: BJH pore size distributions of each sample.

3. *The optical absorption edges and band gap energies (E_g)*

Table S1. The optical absorption edges and band gap energies (E_g) of pure TiO₂, HAp, TiO₂/HAp composites

Sample	Optical absorption edge/nm	Band gap energy (E_g)/eV
TiO ₂	413	3.01
83% TiO ₂ /HAp	402	—
75% TiO ₂ /HAp	403	—
50% TiO ₂ /HAp	398	—
HAp	250	4.96

4. The NO removal activity over the 75% TiO₂/HAp composite with and without light irradiation.

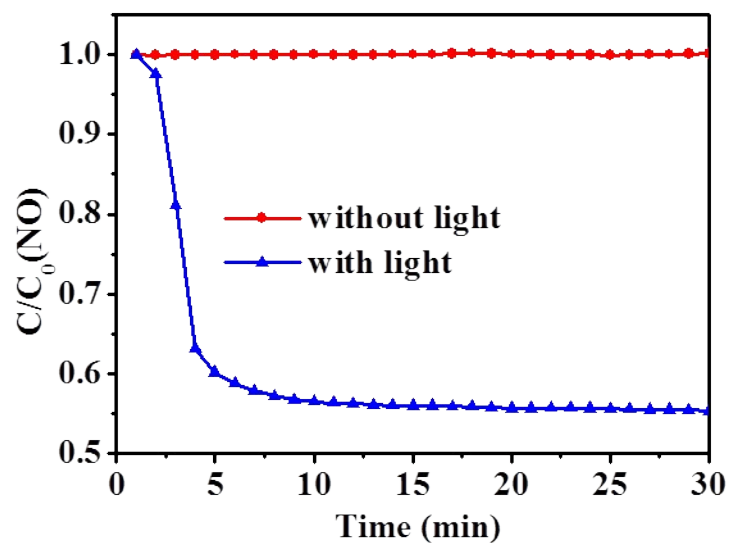


Figure S3. The NO removal activity in air over the 75% TiO₂/HAp composite with and without light irradiation.

Table S2. The reaction rate constants k_{NO} of 75% TiO₂/HAp composite with and without light irradiation.

Photocatalyst	Light source	$k_{\text{NO}}/\text{min}^{-1}$
75% TiO ₂ /HAp composite	—	0
75% TiO ₂ /HAp composite	simulated solar light	0.1462