

Supporting information

The Pros and Cons of Polydopamine-Sensitized Titanium Oxide for the Photoreduction of CO₂

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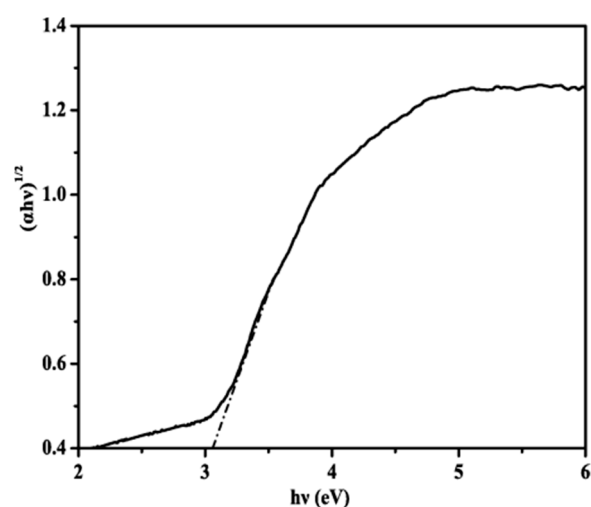


Figure S1. The plot of $(\alpha h\nu)^{1/2}$ versus $h\nu$ for the bandgap calculation of A-Ti.

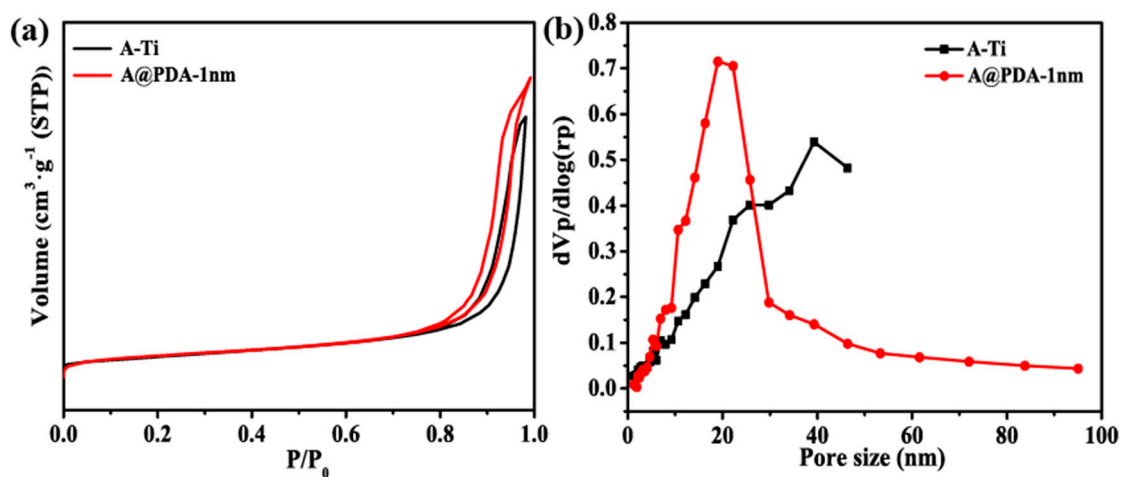


Figure S2. (a) Nitrogen adsorption and desorption isotherms and (b) pore size distribution curves of A-Ti and A@PDA-1nm.

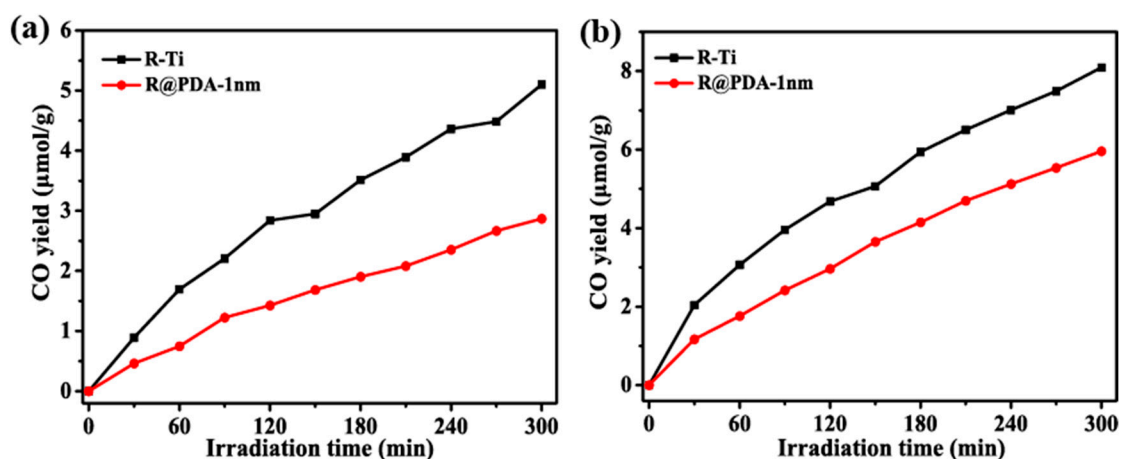


Figure S3. CO yield comparison of R-Ti and R@PDA-1nm under Visible light (a) and UV-vis light(b) for the photoreduction of CO₂.

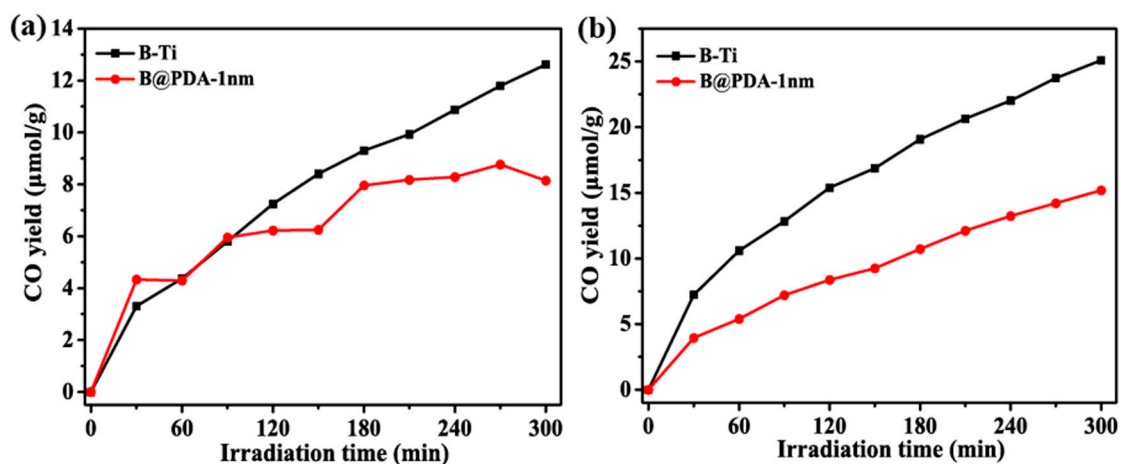


Figure S4. CO yield comparison of B-Ti and B@PDA-1nm under Visible light (a) and UV-vis light(b) for the photoreduction of CO₂.

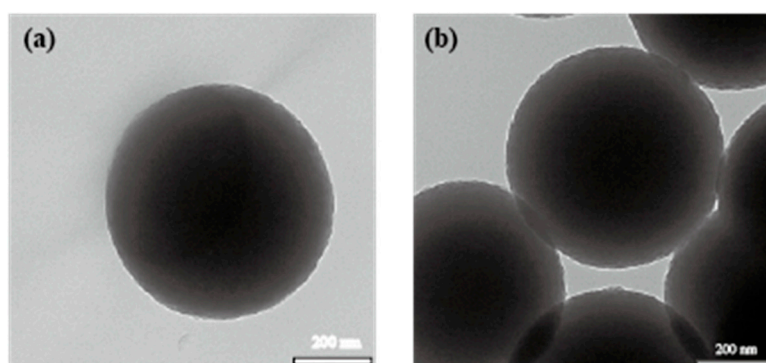


Figure S5. TEM images of (a) pristine PDA and (b) PDA after illuminating under UV-vis light in N₂ for 6h.

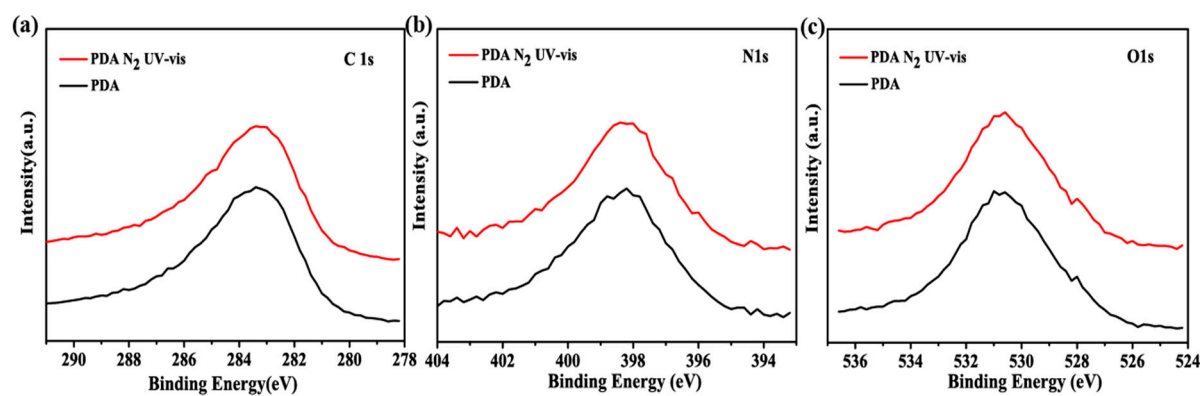


Figure S6. XPS spectra of PDA and PDA after illuminating under UV-vis light in N₂ for 6h: (a)C1s, (b)N1s, and (c)O1s.