

Supporting Information

Adsorption-Assisted Photocatalytic Activity of Nitrogen and Sulfur Codoped TiO₂ under Visible Light Irradiation

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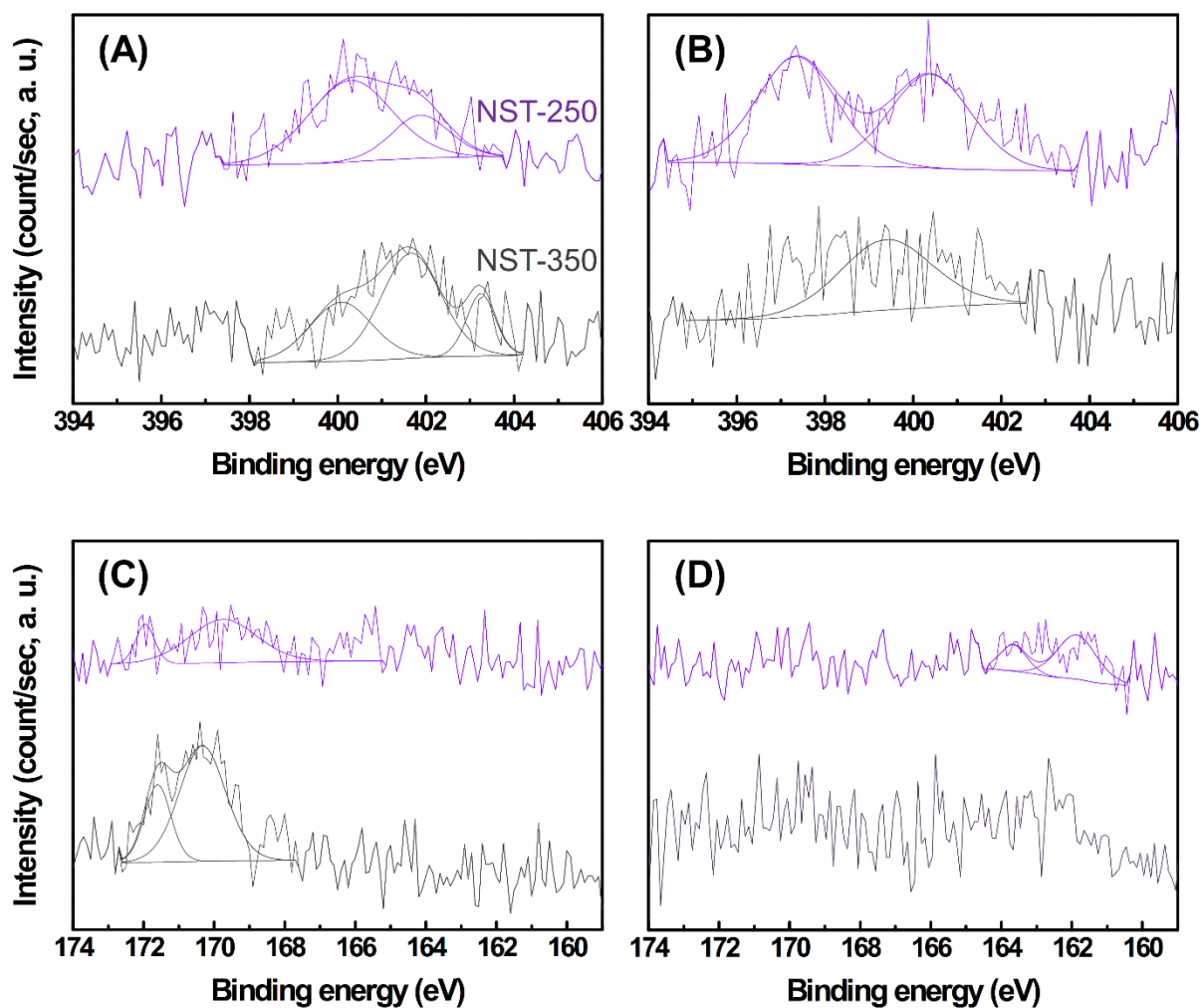


Figure S1. XPS spectra of (A) nitrogen (surface), (B) nitrogen (inside), (C) sulfur (surface) and (D) sulfur (inside). The sample names are NST-250 (1st line), NST-350 (2nd line).

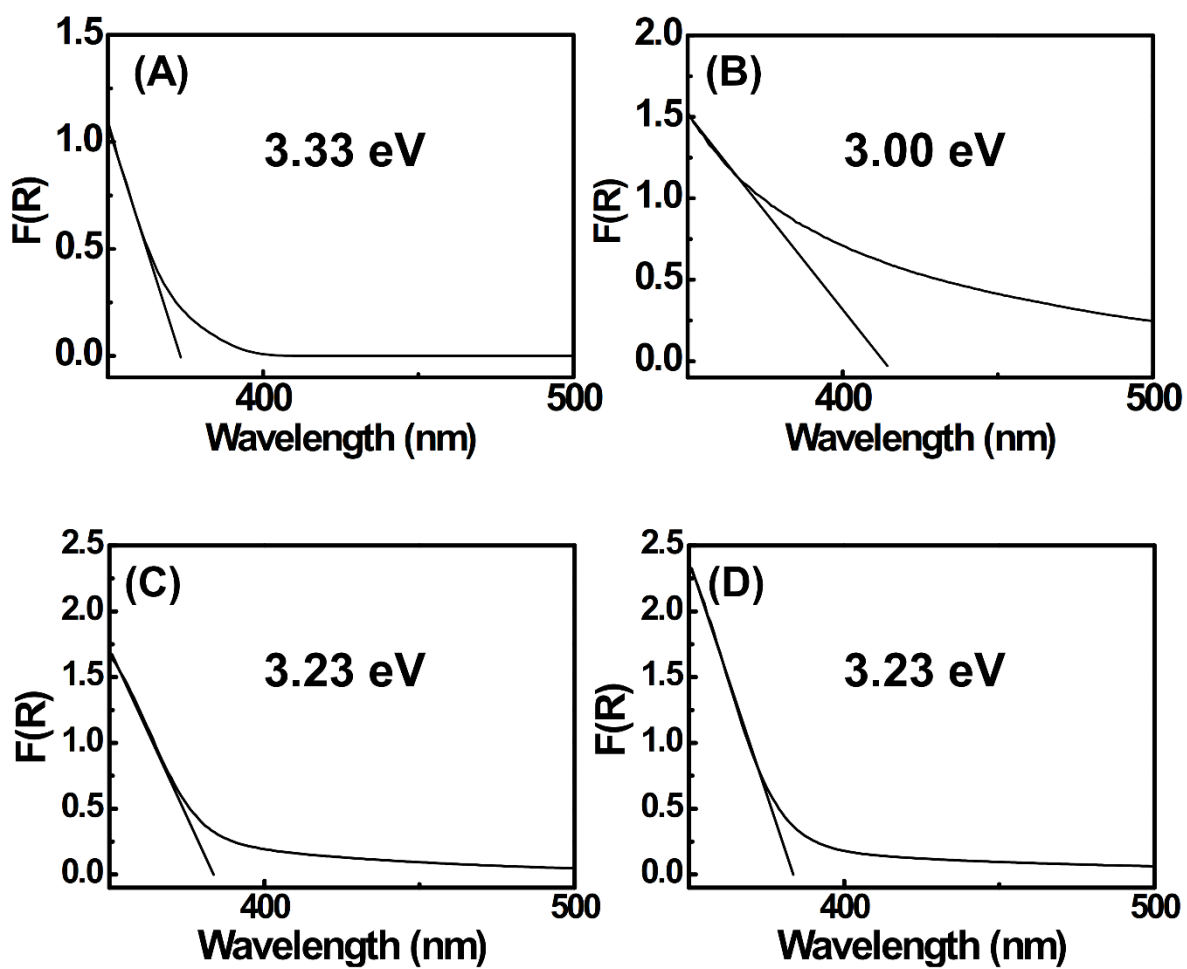


Figure S2. Absorbance at visible light region and band gap energy of (A) P25, (B) NST-As, (C) NST-350, (D) NST-400

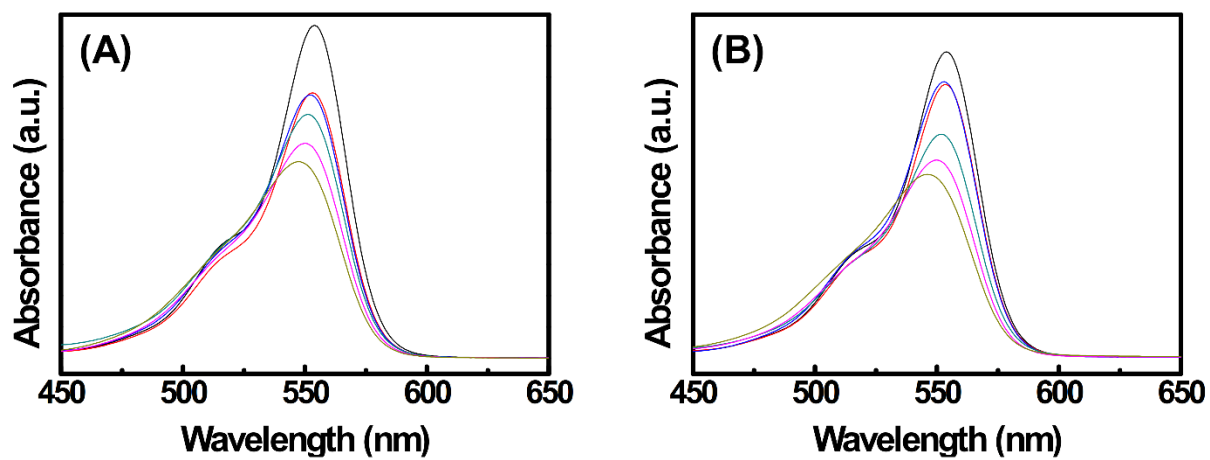


Figure S3. UV-Vis spectral changes of rhodamine B solution under visible light irradiation with (A) NST-350, and (B) NST-400

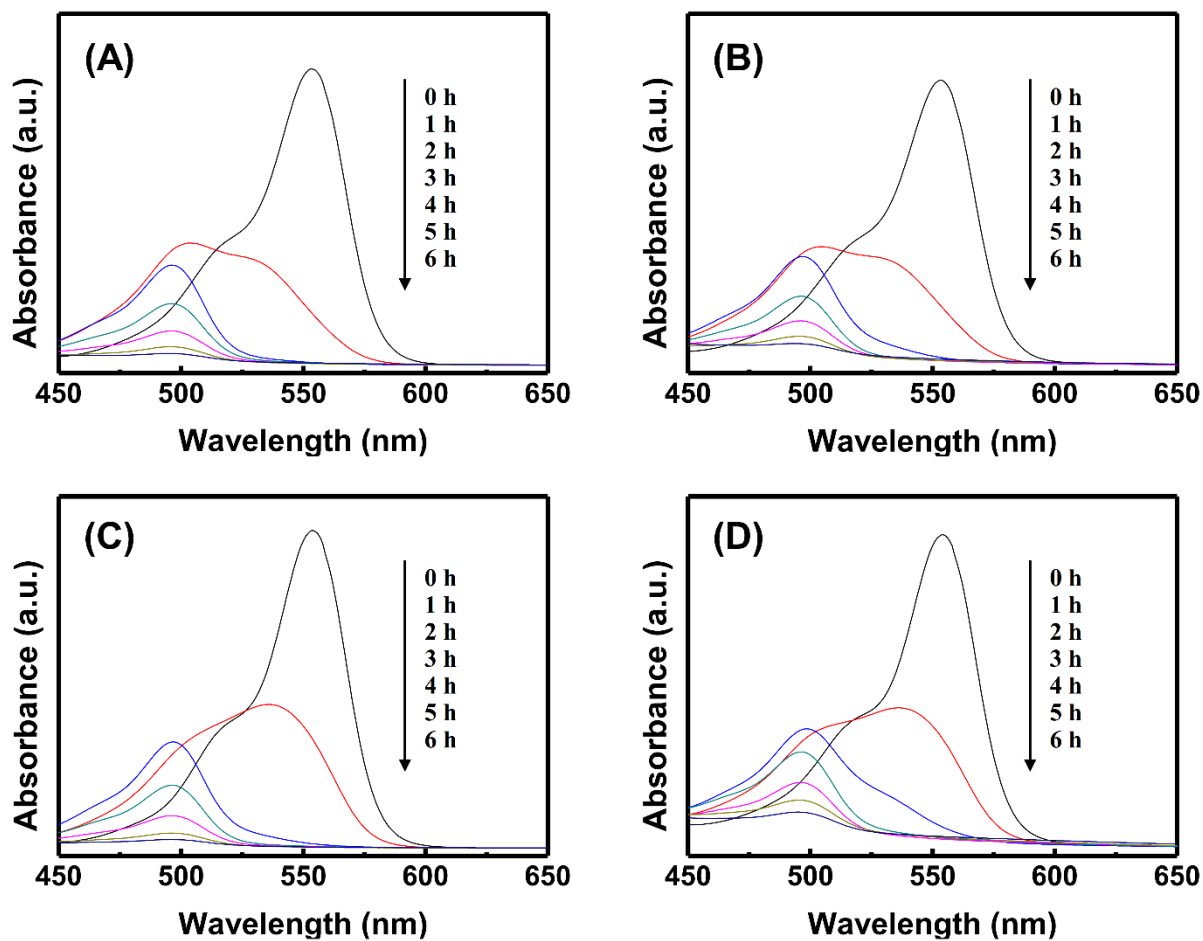


Figure S4. UV-Vis spectral changes of rhodamine B solution under visible light irradiation with NST-As in the (A) 1st cycle, (B) 2nd cycle, (C) 3rd cycle, and (D) 4th cycle

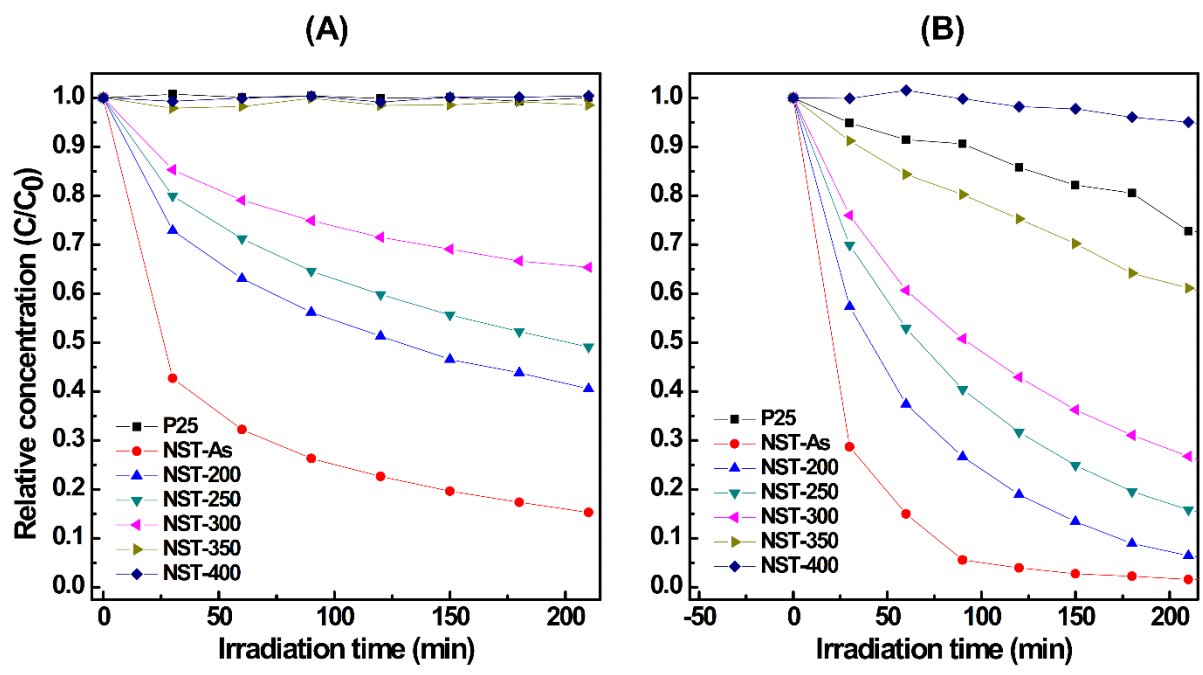


Figure S5. Relative concentration of (A) methylene blue in dark room and (B) under visible light irradiation

Table S1. Relative atomic ratios of the sulfur dopants in the NSTs, measured by ICP-AES.

Sample	NST-As	NST-200	NST-250	NST-300	NST-350	NST-400
S/Ti (at%)	0.99	1.00	0.97	1.06	1.05	1.07

Table S2. Rhodamine B removal efficiency of NST-As under 4 cycles of photodecomposition test under visible light irradiation

Cycle	1st	2nd	3rd	4th
Removal efficiency (2 h)	99%	97%	99%	93%