Supplementary Information

Enhanced visible light photocatalytic reduction of Cr(VI) over a novel square nanotube poly(triazine imide)/TiO_2 heterojunction

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Experimental Details

In order to get the exact quantity of TiO_2 in PTI/TiO_2 heterojunction, the real TiO_2 mass contents was determined by thermogravimetry method. In a typical procedure, 100mg obtained PTI hollow tube/TiO_2 heterojunction photocatalyst with different TiO_2 mass contents was placed in a muffle furnace and heated to 700°C for 2h. After cooling to room temperature, the powder obtained was weighed by precision electronic balance. Hence, the real TiO_2 mass contents in heterojunction was determined.

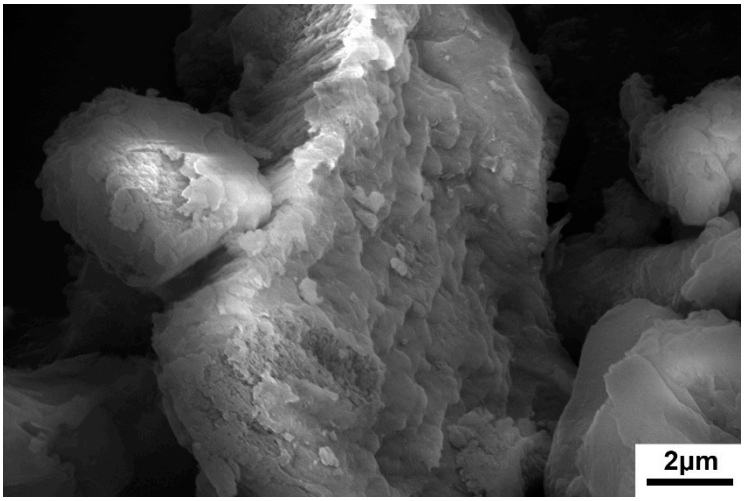

Fig. S1 SEM image of heptazine-based g-C_3N_4

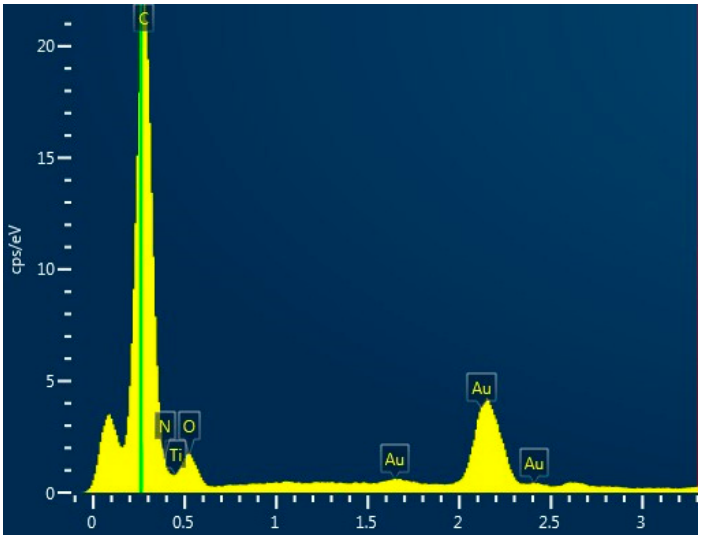

Fig. S2 EDS spectra of PTI/TiO_2-7wt% heterojunction

Table S1 BET surface area of the as-prepared samples

samples	g-C_3N_4	PTI	PTI/TiO_2-3 wt%	PTI/TiO_2-5 wt%	PTI/TiO_2-7 wt%	PTI/TiO_2-10 wt%
BET surface area (m^2g^{-1})	22.24	140.37	144.64	155.72	160.09	157.29