Supporting Information

One-pot Pyrolytic Synthesis of C-N-codoped Mesoporous Anatase TiO_2 with Enhenced Photo-degradation Properties

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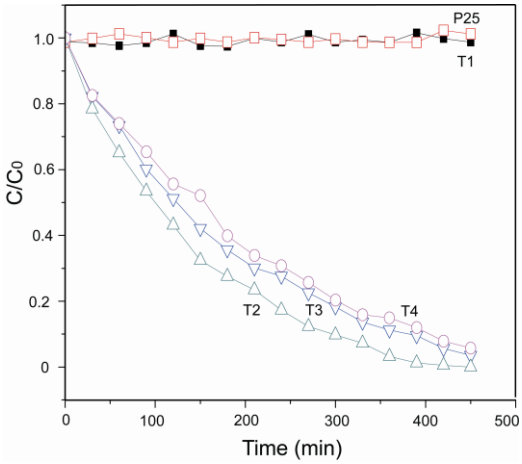

Fig. 1 Photocatalytic degradation of benzonic acid under visible light irradiation.

A 300 W Xe arc lamp was used as the visible light source and the visible wavelength was controlled through a 420 nm cutoff filter ($\lambda \geq 420$ nm). In a typical process, 30 mg of the mesoporous structured titania material was dispersed into 100 ml benzonic acid aqueous solution (15 mg/L) with stirring in the dark for 30 min to achieve adsorption equilibrium prior to light irradiation. During the irradiation, 2 mL of the mixture was taken at a given time interval and centrifuged for 5 min to remove the photocatalyst powers and the absorbance spectrum was monitored using a UV–vis spectrophotometer.

Table 1 Pore structure parameters of calcined materials

Sample	S_{BET} (m^2/g)	V_{BJH} (cm^3/g)	Pore diameter D (nm)
T1	129	0.17	4.1
T2	107	0.4	3.5
T3	64	0.18	8.4
T4	52	0.14	7.7