Supporting information

Ternary-Structured Graphite Carbon Nitride Quantum Dots/TiO_2 Nanotubes/3D SiO_2 Photonic Crystals for Enhanced Dye Photodegradation

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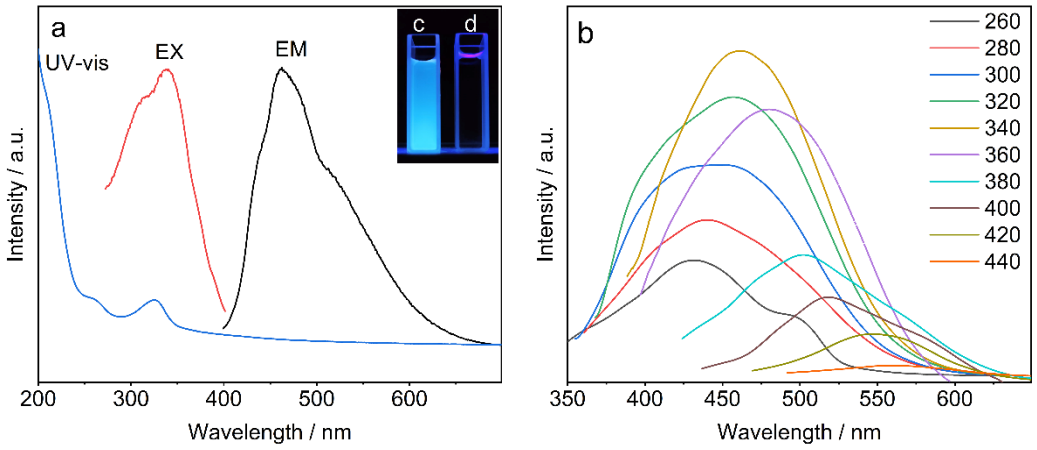

Figure S1. Optical characterization of g-CNQDs (a) UV–Vis absorption spectra and fluorescence excitation (Ex) or emission (Em) spectra, (b) Fluorescence emission spectra excited by different excitation light. Inset: fluorogram under 365 nm UV light, (c) the g-CNQDs, (d) the water.

Table S1. The fluorescence emission of g-CNQDs under different excitation.

Excited wavelength /nm	Emission wavelength /nm	Excited wavelength /nm	Emission wavelength /nm
260	432	360	482
280	440	380	501
300	448	400	520
320	458	420	548
340	462	440	574

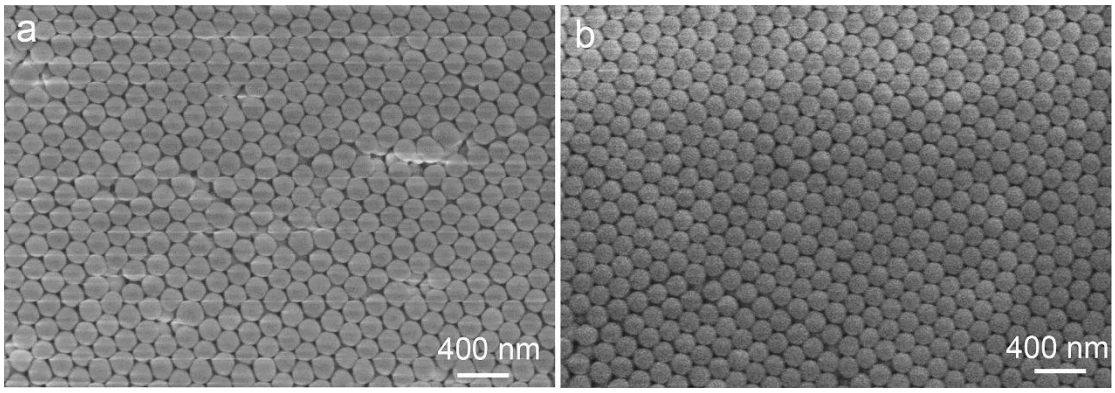

Figure S2. SEM of SiO_2 PCs self-assembled by SiO_2 microspheres with diameter of 225 nm before calcination (a) and after calcination (b).

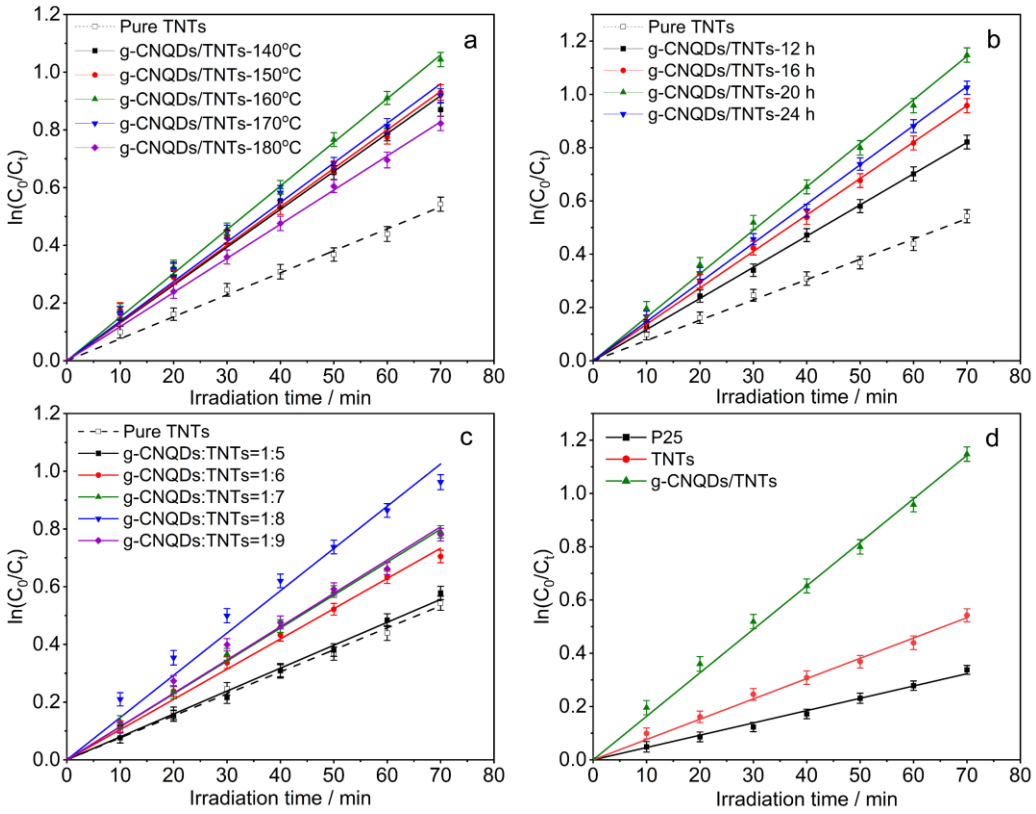

Figure S3. The effect of hydrothermal temperature (a), hydrothermal time (b), loading ratio of g-CNQDs/TNTs (c) on photocatalytic activity of g-CNQDs/TNTs and photodegradation kinetic curves (d) of P25, TNTs, and g-CNQDs/TNTs. The photodegradation data are expressed as the mean ± standard deviation (experiments times n=3).