

Supporting Information

The preparation of tubular heterostructures based on titanium dioxide and silica nanotubes and their photocatalytic activity

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Results and discussion

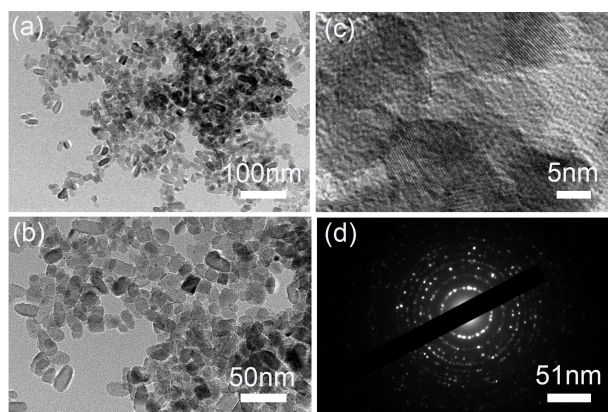


Fig. S1 The TEM images of pure TiO₂.

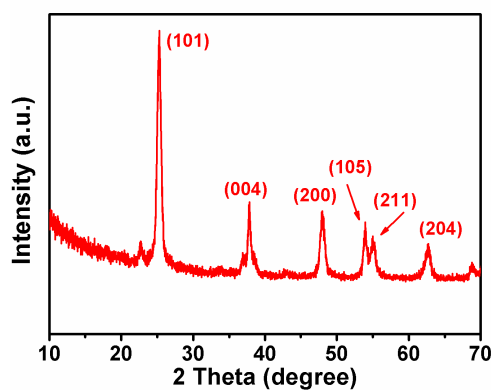


Fig. S2 The XRD patterns of pure TiO₂.

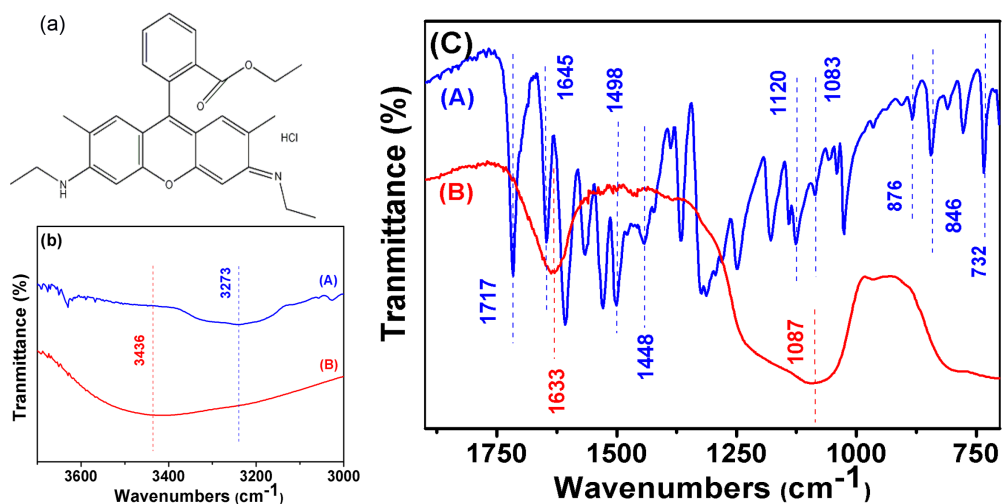


Fig. S3 (a) The constitutional formula of Rhodamine 6G; (b) and (c) The FT-IR spectra of Rhodamine 6G (curve (A)) and TiO₂/SNTs heterostructures after photocatalytic reaction (curve (B)).

Among them,

Rhodamine 6G: 3273 cm⁻¹ (-NH-), 1717 cm⁻¹ (-COO-), 1645 - 1498 cm⁻¹ (-C=N-),
1448 cm⁻¹ (-CH₃), 1120 - 1083 cm⁻¹ (C-O-C),
876 - 846 cm⁻¹ (1,2,4,5 - tetrasubstituted of benzene),
732 cm⁻¹ (1,2 - disubstituted of benzene).