Supporting Information

Synthesis of the Double-Shell Anatase-Rutile TiO_2 Hollow Spheres with the Enhanced Photocatalytic Activity

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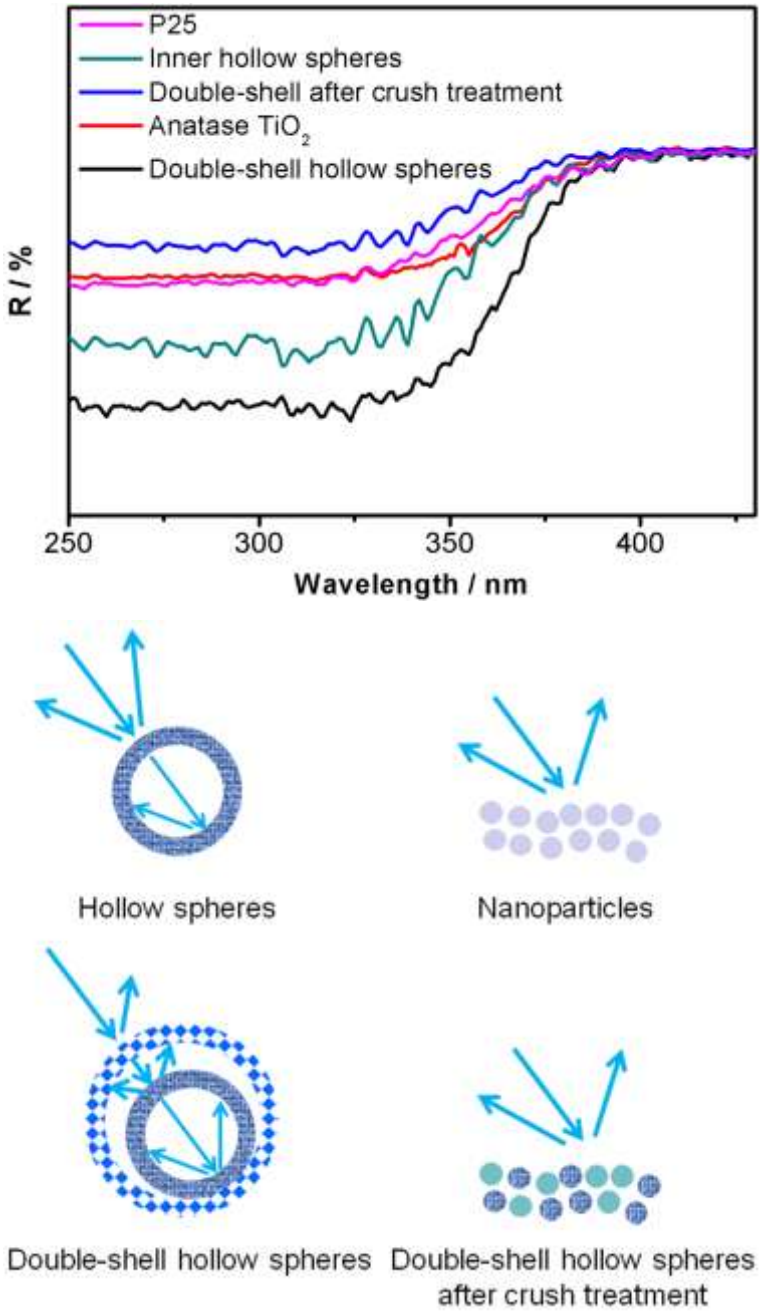

Fig. S1 UV-Vis diffuse reflection spectra of the double-shell TiO_2 hollow spheres and other TiO_2 samples (P25, anatase TiO_2 nanoparticles, hollow spheres and the crushed double-shell hollow spheres), and the schematic diagram of the light reflection and scattering in these samples.

Table S1. Physiochemical properties of different samples

Samples	Specific surface area[a] ($m^2\ g^{-1}$)	Average pore diameter[a] (nm)
Double-shell TiO_2 sphere	169	3.9(inner) 8.5(outer)
Inner hollow TiO_2	231	3.8
Outer hollow TiO_2	133	8.5
Commercial P25	59	—
Commercial anatase TiO_2	38	—

[a]Specific surface areas and average pore sizes of the samples are calculated by using the Brunauer-Emmett-Teller (BET) equation and the Barrett-Joyner-Halenda (BJH) method, respectively.