

Supporting Information

Multilayered TiO₂@SnO₂ hollow nanostructures: facile synthesis and enhanced photocatalytic performance

Jing Wang,^a Xiuying Wang,^{*a,b} Xiaoli Dong,^{*a} Xiufang Zhang,^a Hongchao Ma^a and Xu Fei^b

^a School of Light Industry and Chemical Engineering, Dalian Polytechnic University, #1 Qinggongyuan, Dalian 116034, P R China

^b Instrumental Analysis Center, Dalian Polytechnic University, #1 Qinggongyuan, Dalian 116034, P R China

* Corresponding author: Fax: +86 411 86323736

E-mail address: wang_xy@dlpu.edu.cn, dongxl@dlpu.edu.cn

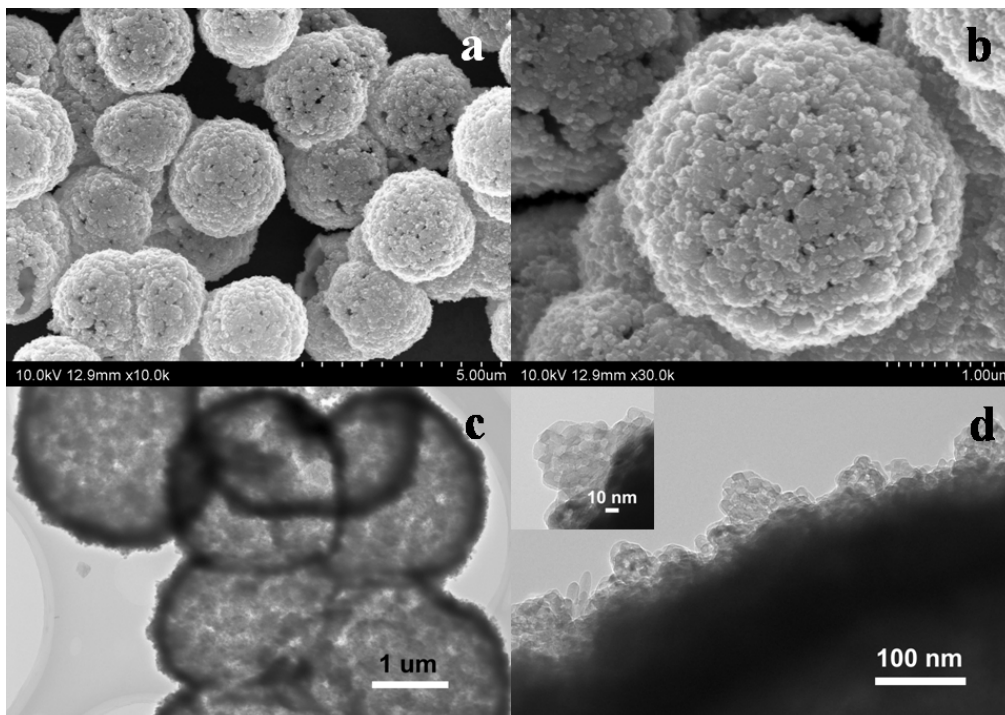


Fig. S1 (a, b) SEM and (c, d) TEM images of TiO₂-450.

Table S1 Specific surface area and pore volume of the materials.

Sample	Specific surface area (m ² ·g ⁻¹)	Pore volume (cm ³ g ⁻¹)
P25	42.8	0.161
TiO ₂ -450	81.223	0.123
S-450	70.867	0.189
S-550	59.261	0.184
S-650	44.107	0.179
S-750	30.796	0.170
S-850	10.722	0.096

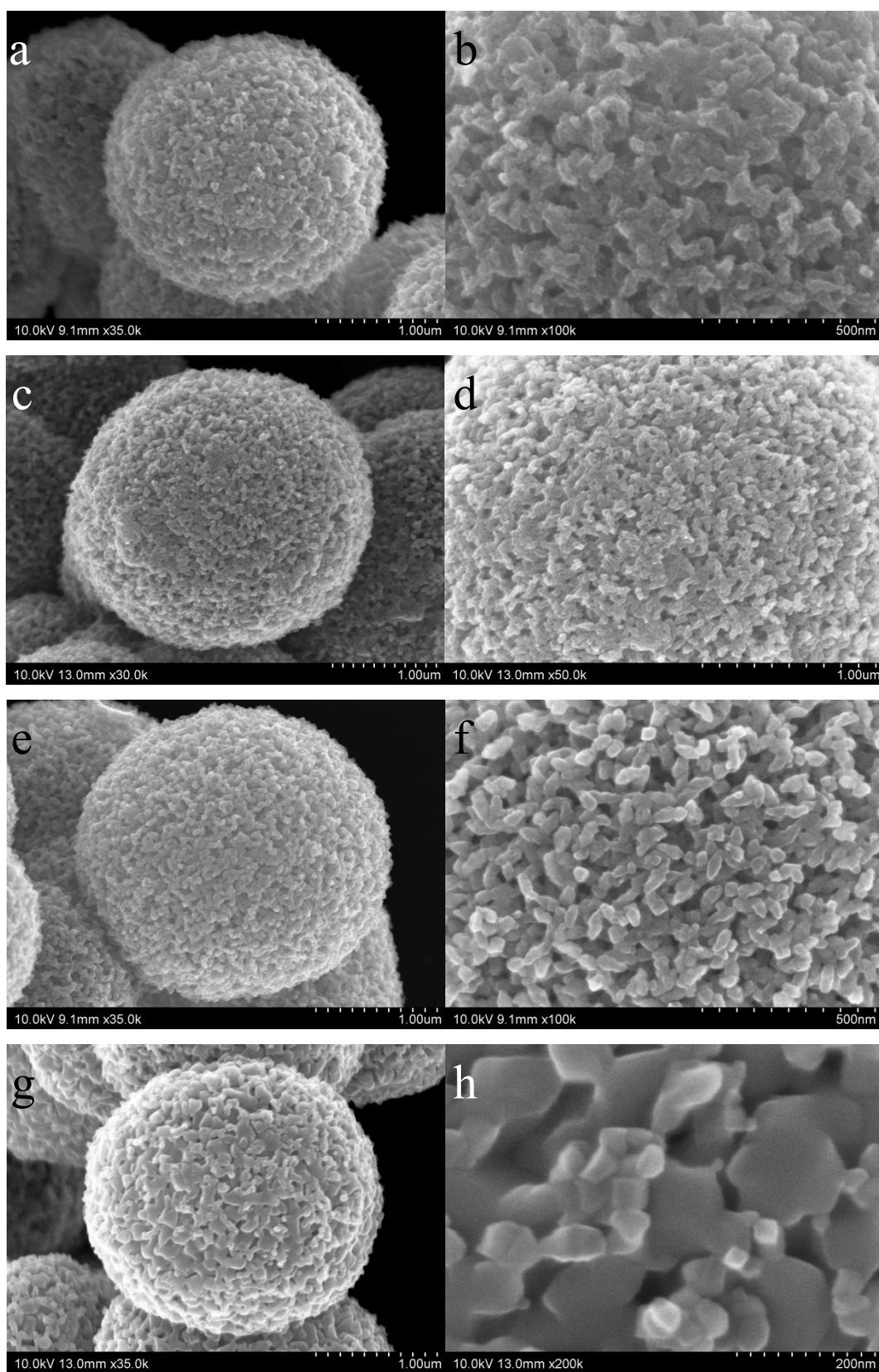


Fig. S2 SEM images of (a, b) S-550, (c, d) S-650, (e, f) S-750 and (g, h) S-850.

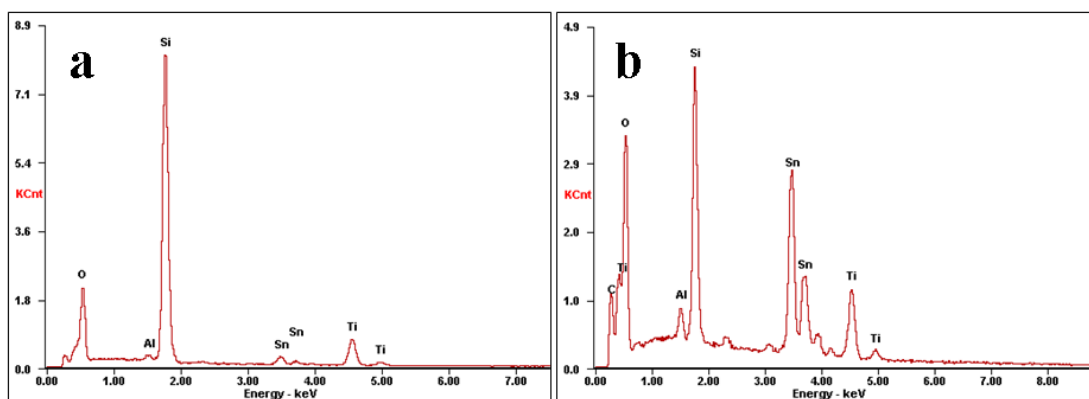


Fig. S3 EDS images of the (a) exterior shell and (b) interior shell of S-450. Al and Si signals resulted from the substrate.

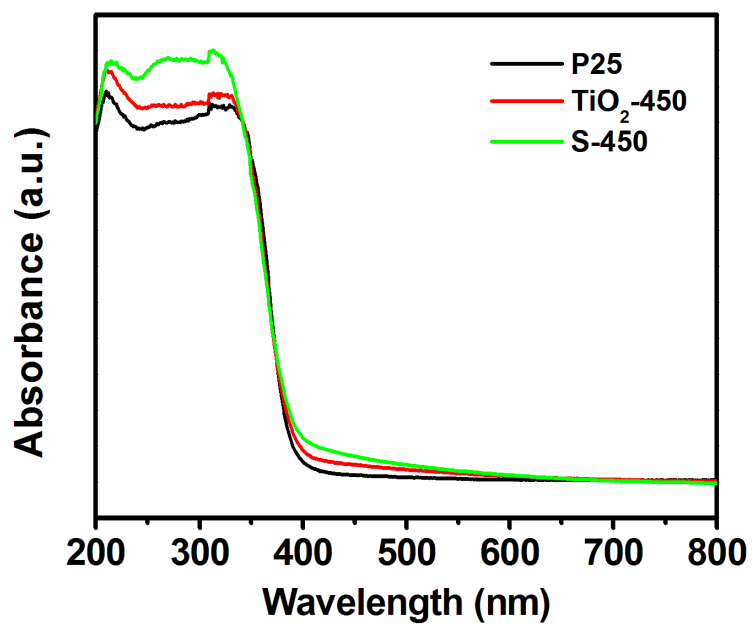


Fig. S4 UV-vis diffuse reflectance spectra of P25, TiO₂-450 and S-450.