Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

TiO_2–SiO_2 Janus Particles with highly enhanced photocatalytic activity

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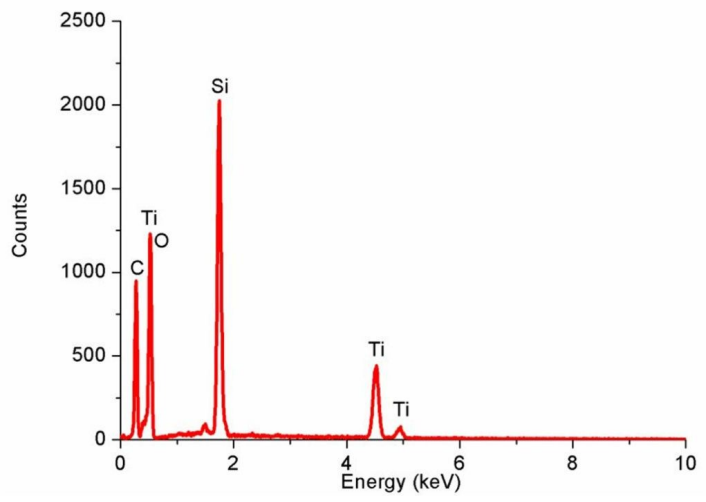


Figure S1. EDX analysis of SiO_2–TiO_2 core-shell particles.

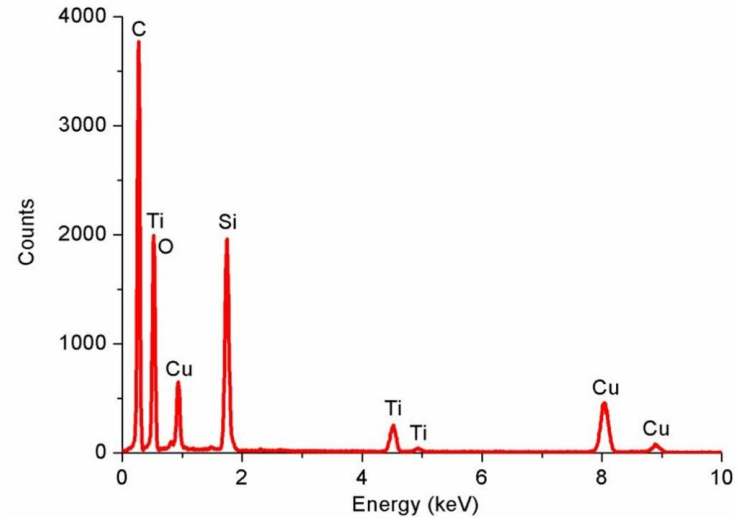


Figure S2. EDX analysis of TiO_2–SiO_2 Janus particles.

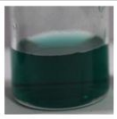
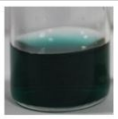
Samples	t=0 h	t=1 h	t=2 h	t=4.5 h
Control SG dye				
P25 TiO_2				
ST-CS@450				
Janus@ 450				
Janus@ 750				

Figure S3. Images of Solophenyl green dye solutions containing different TiO_2 nanoparticles with varying duration of UV exposure.

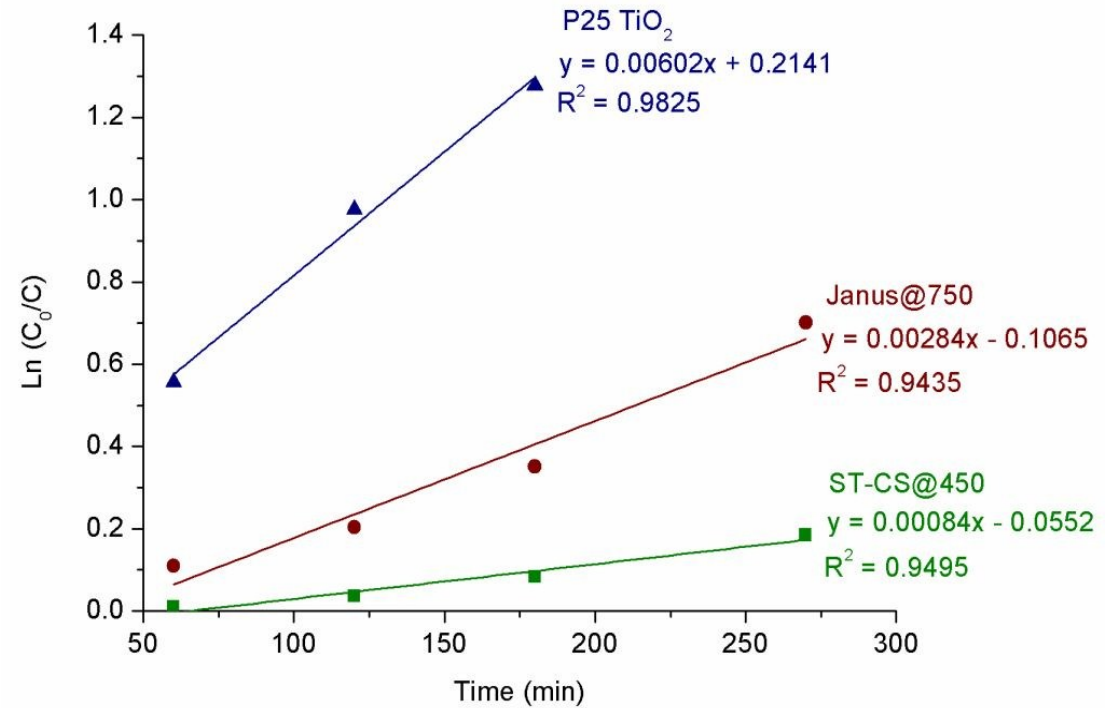


Figure S4. The kinetic curves for degradation of Solophenyl green dye using P25 TiO_2, ST-CS@450 and Janus@750 at the TiO_2 concentration of 50 mg/L.

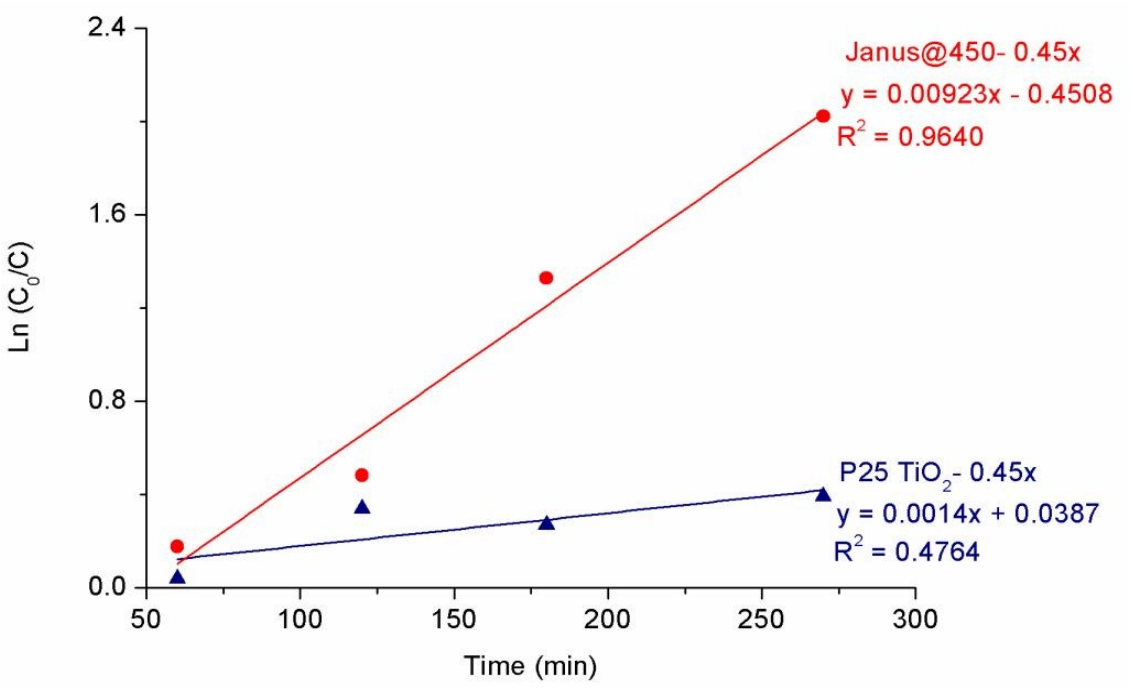


Figure S5. The kinetic curves for degradation of Solophenyl green dye using P25 TiO_2 and Janus@450 at TiO_2 concentration of 22.5 mg/L (0.45 times).