

**Optimizing synthesis of SnO₂/TiO₂/RGO nanocomposites with excellent visible
light photocatalytic and antibacterial activities**

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Supporting Informations

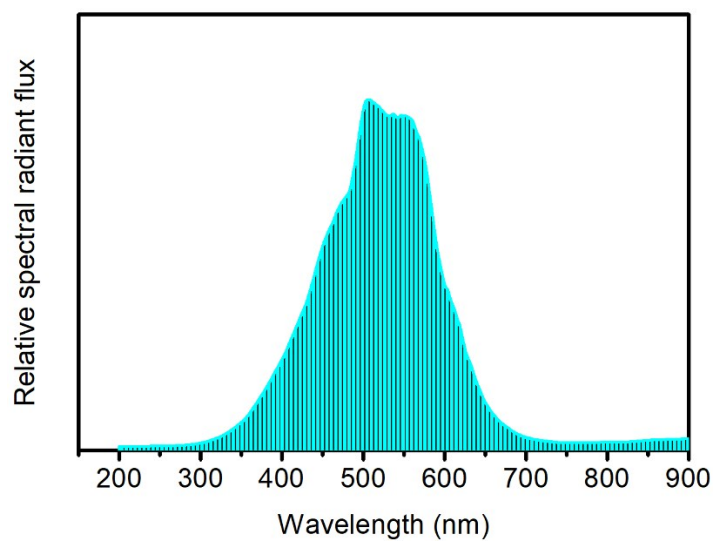


Fig. S1 Emission spectrum of halogen tungsten lamp.

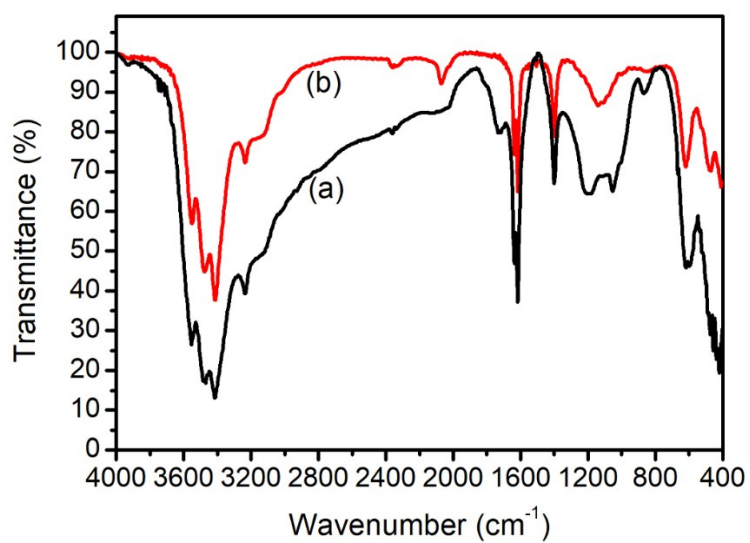


Fig. S2 FTIR spectra of (a) GO and (b) STG1.

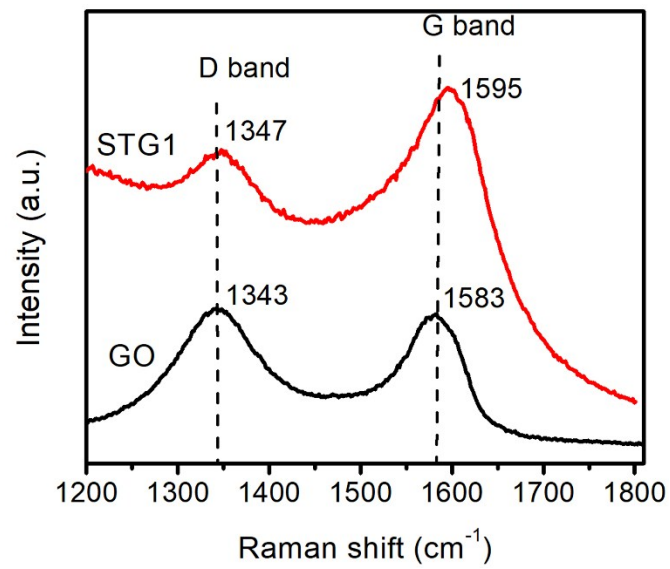


Fig. S3 Raman spectra of GO and STG1 samples.

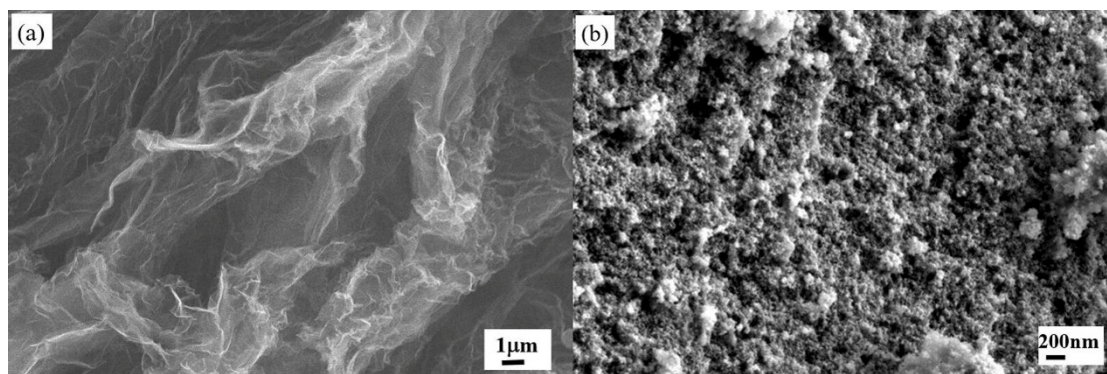


Fig. S4 SEM images of (a) rGO after solvothermal treatment, (b) as-prepared TiO₂.

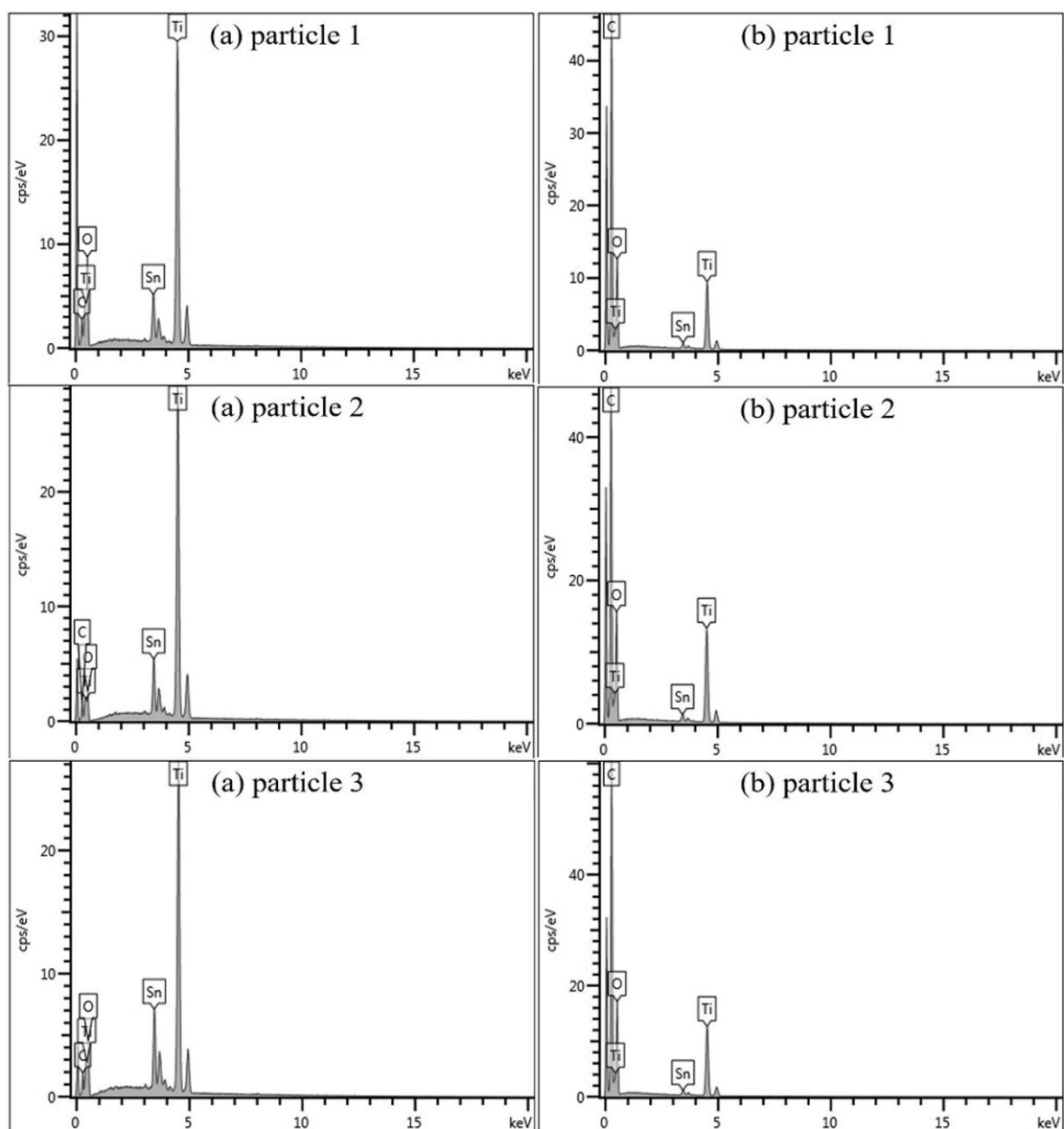


Fig. S5 EDS spectrums of different particles in (a) STG1 and (b) STG2.

Table S1 The elemental composition from EDS result.

STG1	Elements (at%)			
	Ti	Sn	O	Ti:Sn
Particle 1	22.01	2.27	61.21	9.70/1
Particle 2	39.53	4.19	41.79	9.43/1
Particle 3	29.98	3.61	52.62	8.30/1

Table S2 The elemental composition from EDS result.

STG2	Elements (at%)			
	Ti	Sn	O	Ti:Sn
Particle 1	3.05	0.16	29.45	19.06/1
Particle 2	3.79	0.19	32.54	19.95/1
Particle 3	3.13	0.15	30.29	20.87/1