

## **Realizing cost-effective ZnO:Sr nanoparticles@graphene nanospreads for improved photocatalytic and antibacterial activities**

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## S1. Photolysis of MB

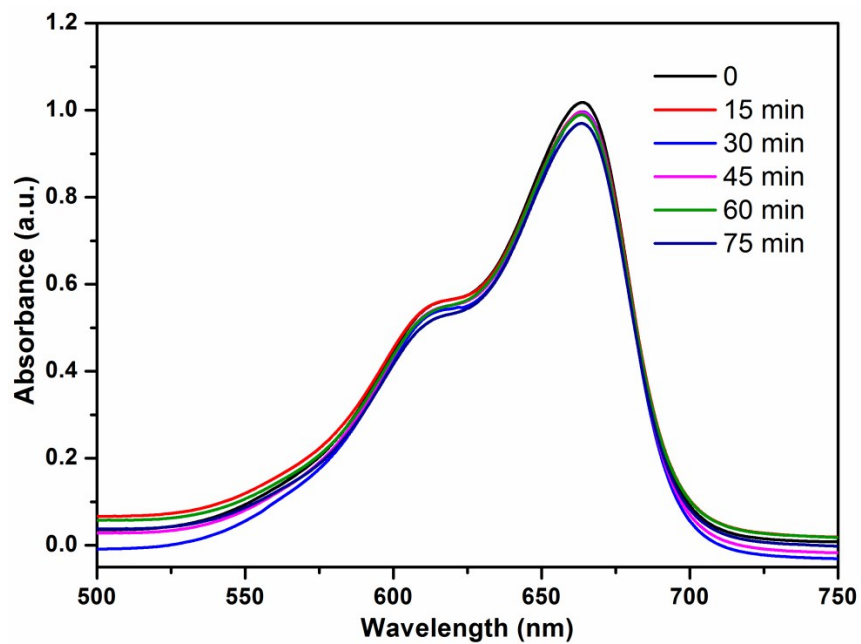


Fig. S1. Absorption spectra of MB solution under visible light irradiation.

Fig. S2. MB Photodegradation with graphene

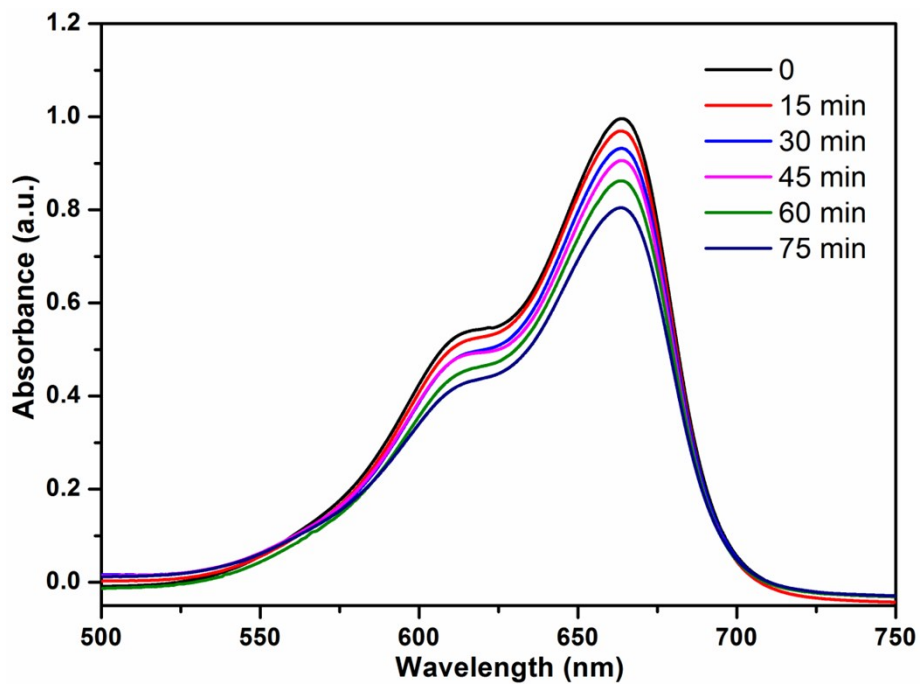


Fig. S2 (a). Absorption spectra of MB solution in the presence of graphene.

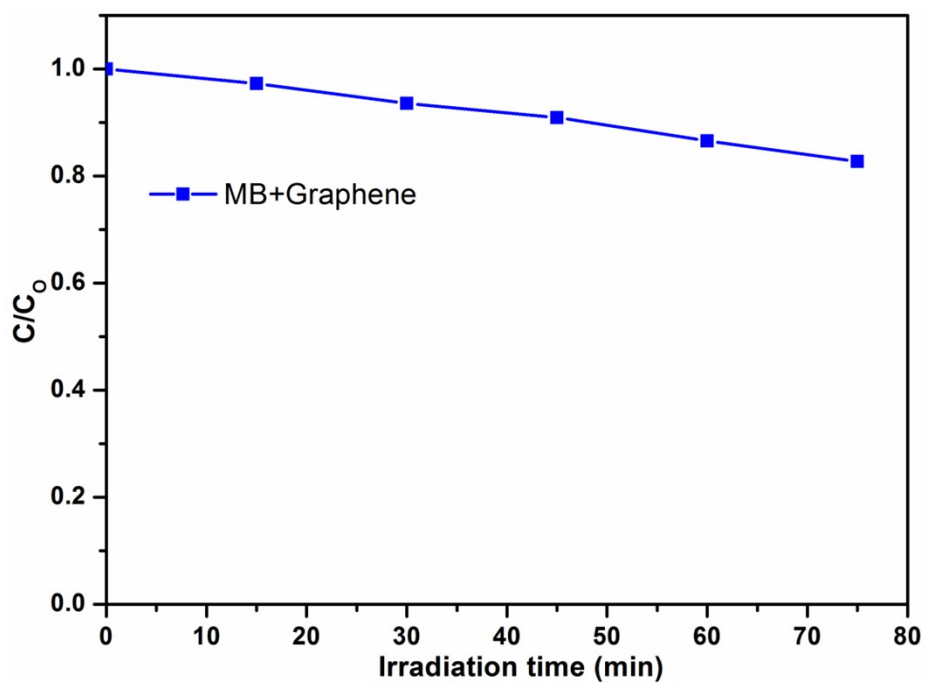


Fig. S2 (b). Photodegradation of MB in the presence of graphene.

### S3. Antibacterial studies

Bacteria	Zone of Inhibition (diameter in mm)				
	Control	S*	ZnO	ZnO:Sr	ZnO:Sr/G
<i>Bacillus subtilis</i>	-	19	16	16	17
<i>Staphylococcus aureus</i>	-	15	11	14	15
<i>Escherichia coli</i>	-	25	19	23	25
<i>Klebsiella pneumoniae</i>	-	17	17	25	26

\*Gentamicin

Table S1. Evaluation of disc diffusion assay values