

## Supplementary Material (ESI) for Journal of Materials Chemistry

### Facile synthesis of well-dispersed graphene by $\gamma$ -ray induced reduction of graphene oxide

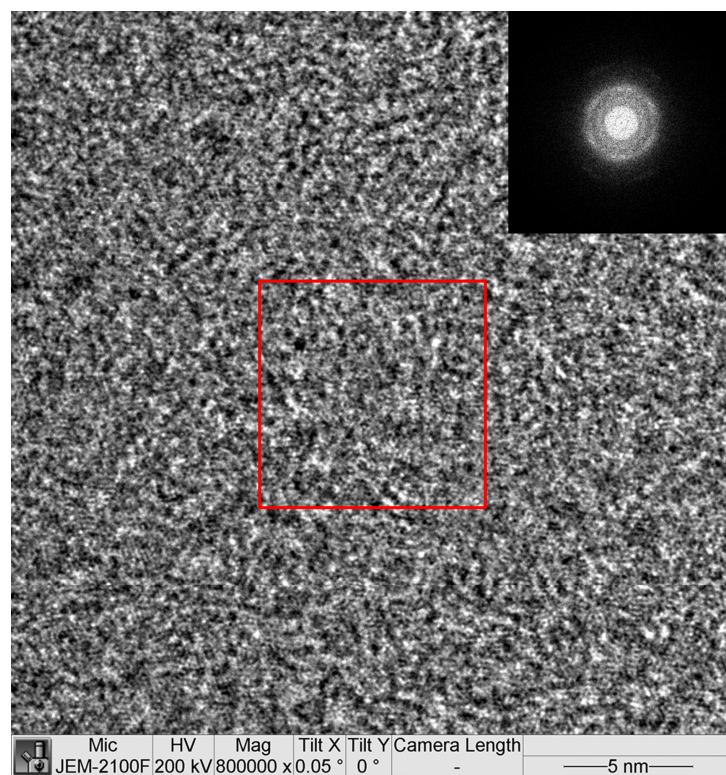
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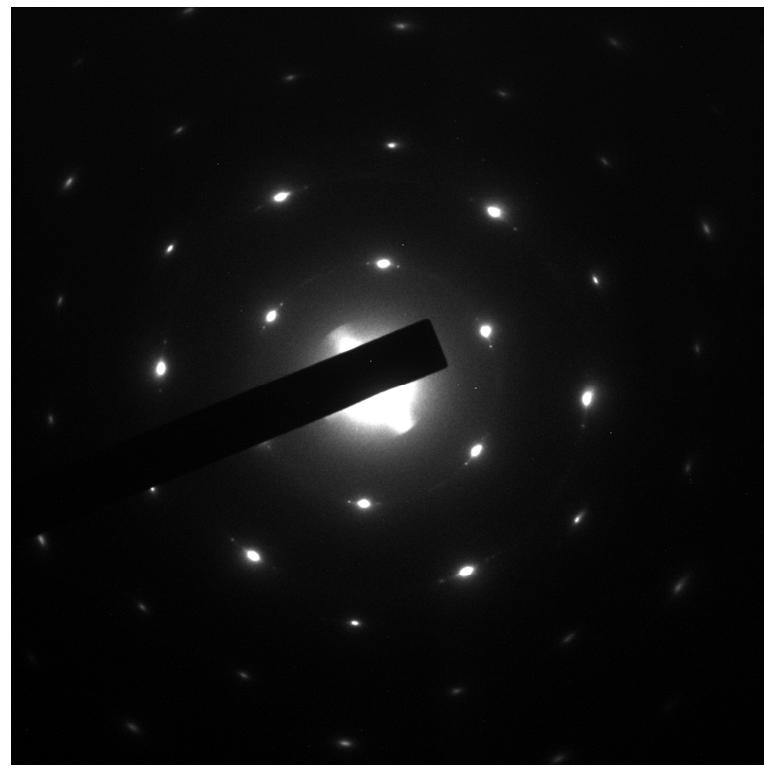
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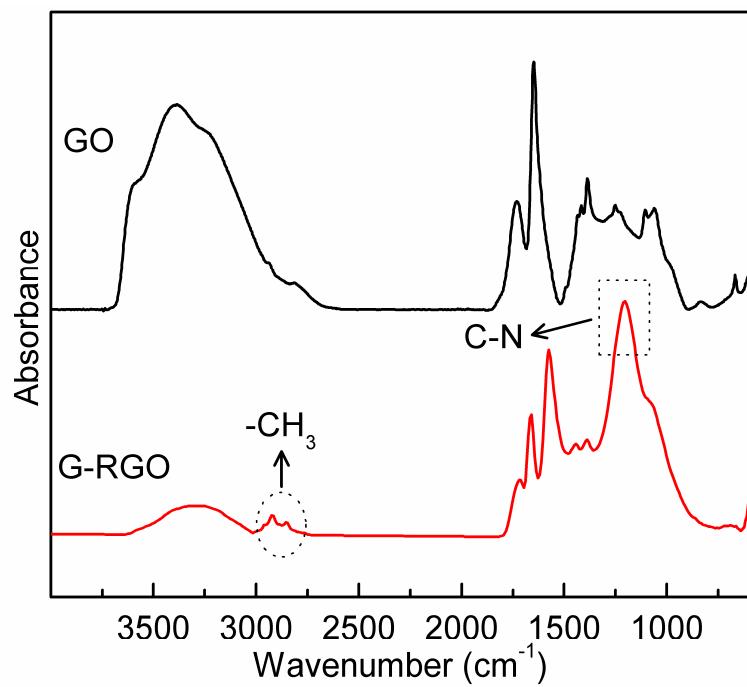
**Fig. S1** Typical optical images of GO and G-RGO.



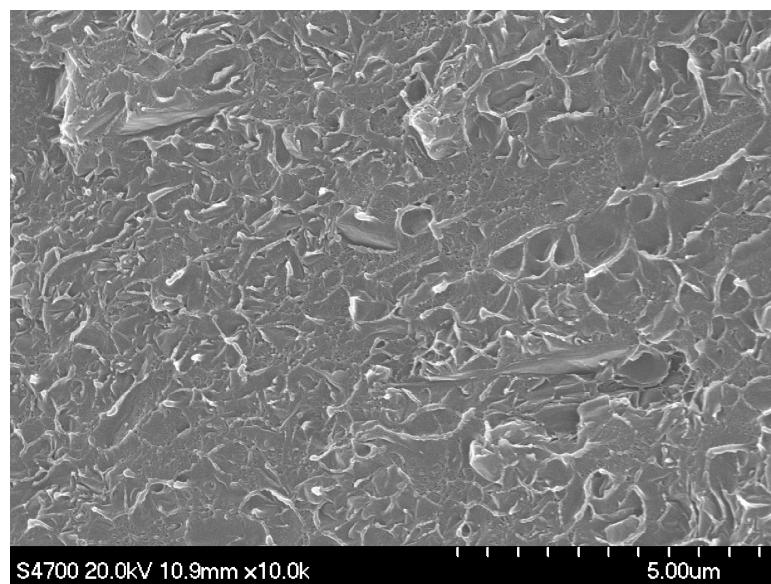
**Fig. S2** HRTEM image of GO. The inset is a FFT pattern of GO.



**Fig. S3** SAED pattern of G-RGO.



**Fig. S4** Micro-FTIR spectra of GO and G-RGO.



**Fig. S5** SEM microphotograph of PS nanocomposite with 2 wt% of G-RGO.