

[Electronic Supplementary Information]

Grafting polycarbonate onto graphene nanosheets: synthesis and characterization of high performance polycarbonate-graphene nanocomposites for ESD/EMI applications

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Fig. S1 High resolution C1s XPS spectra of GO.

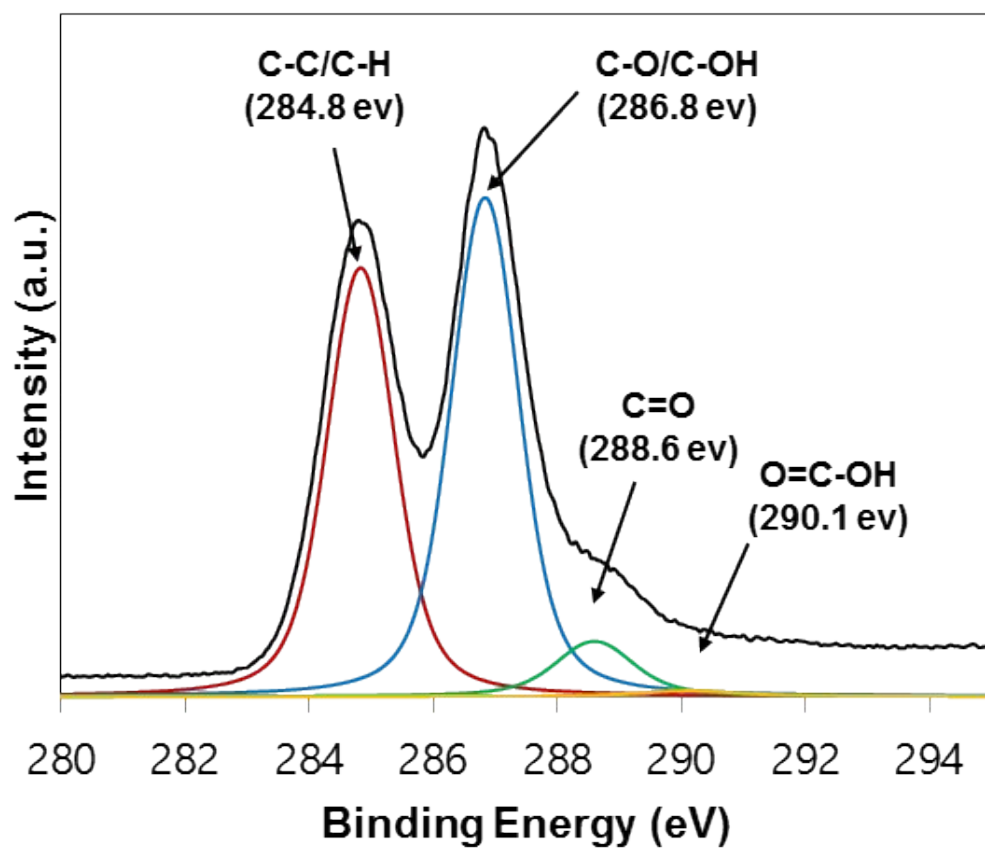


Fig. S2 Raman spectra of graphite

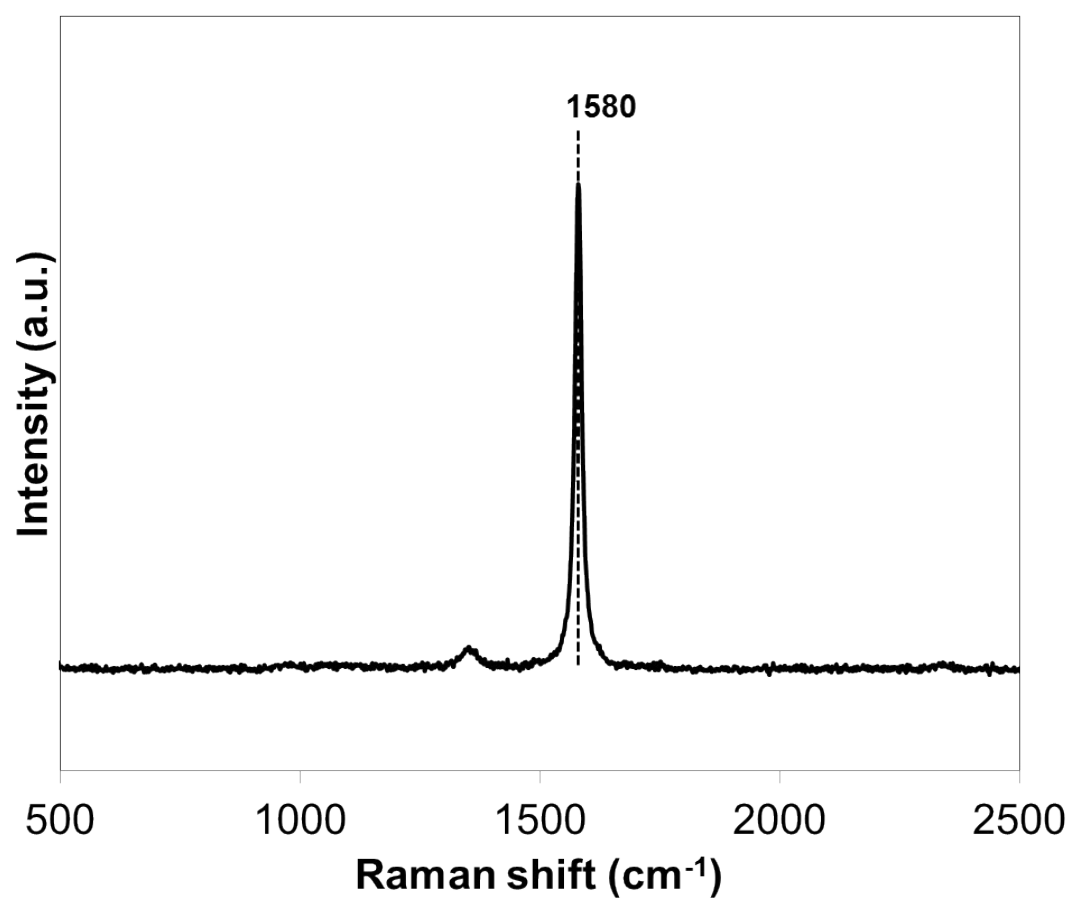


Fig. S3 Typical ^1H NMR spectra of (a) pristine PC and (b) PC-g-MGNS 0.5 wt %.

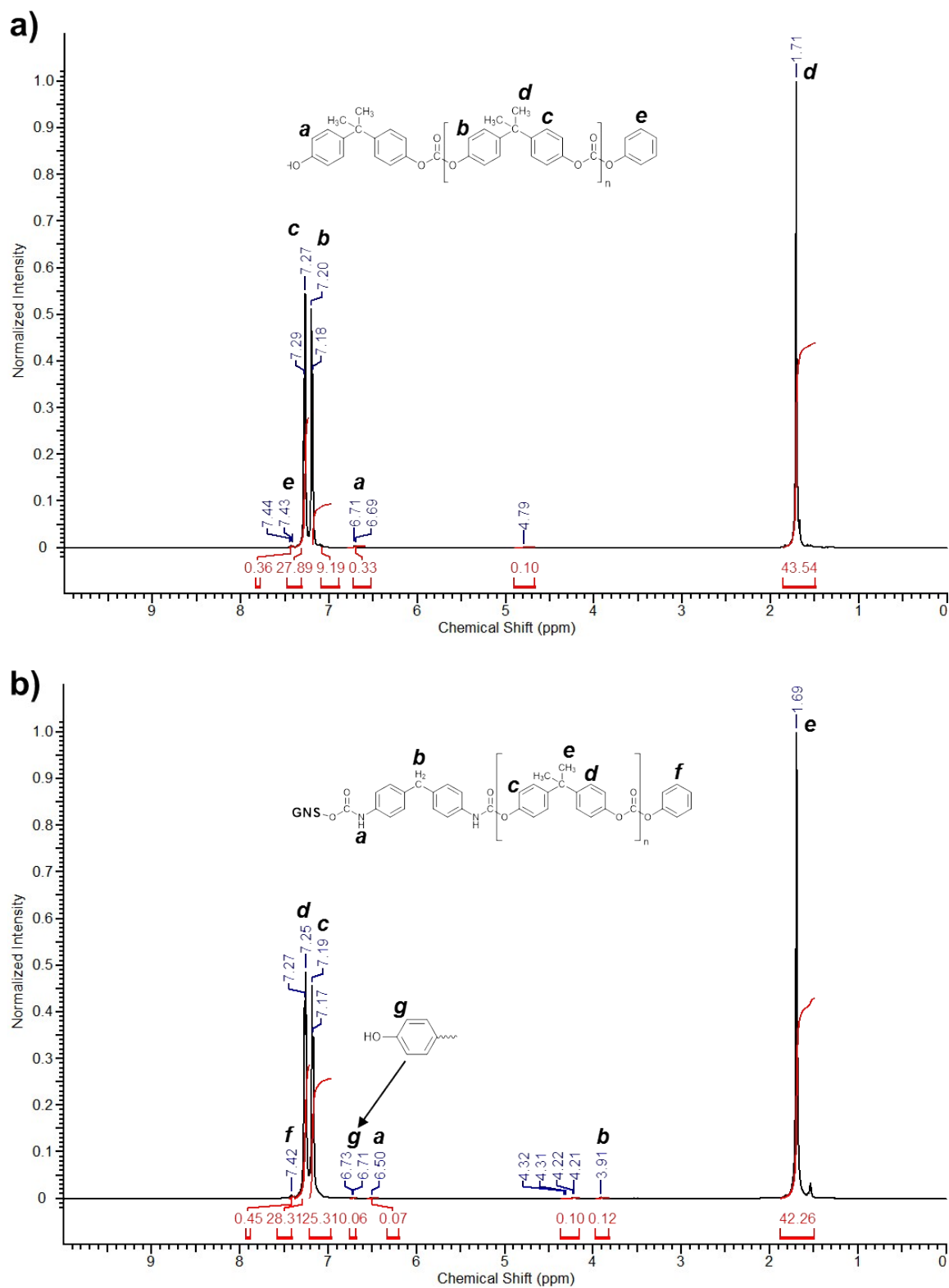


Fig. S4 Typical stress-strain curves of pristine PC and PC-g-MGNS nanocomposites with MGNS contents of 0.1 wt %, 0.5 wt %, 1.0 wt % and 3.0 wt %.

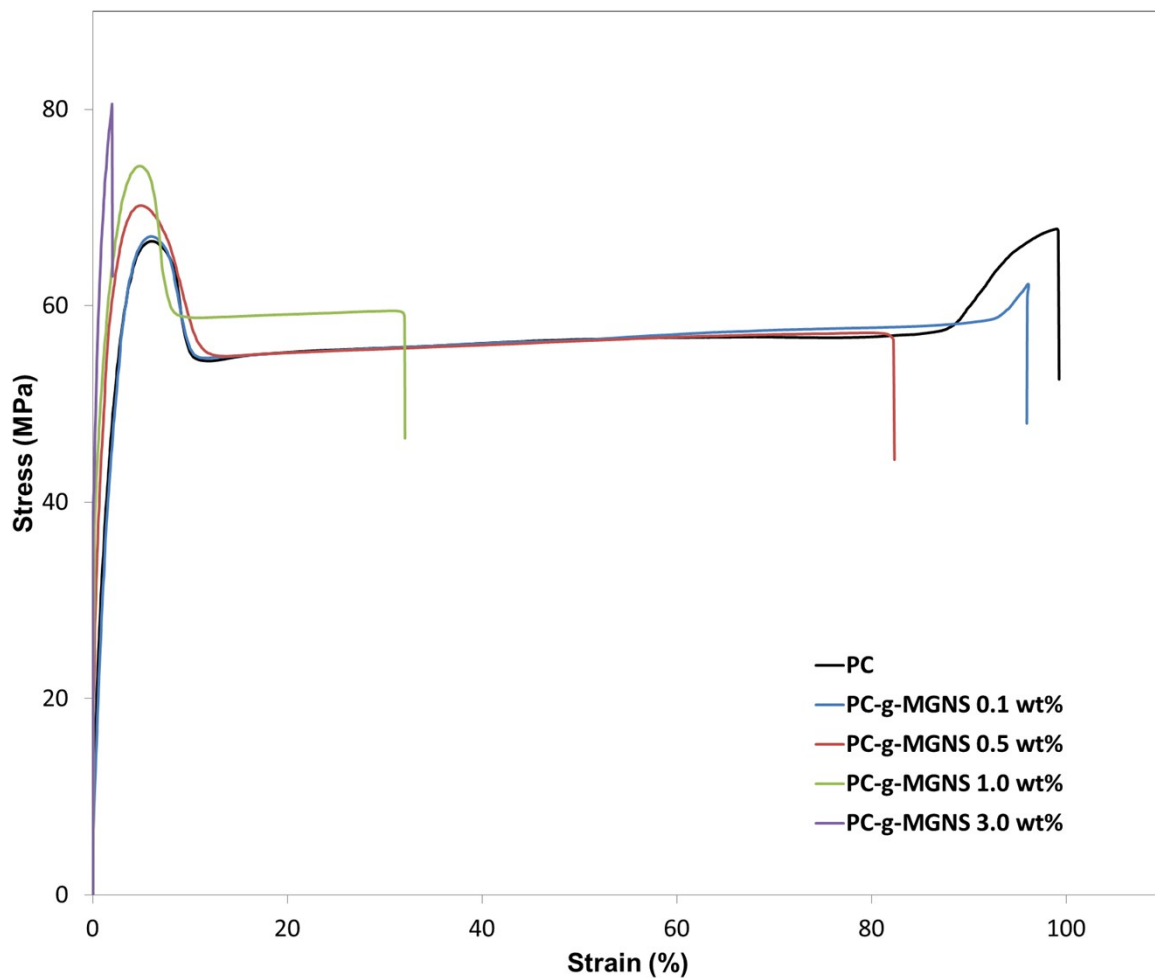


Fig. S5 DSC curves of pristine PC and PC-g-MGNS nanocomposites with MGNS contents of 0.1 wt %, 0.5 wt %, 1.0 wt % and 3.0 wt %.

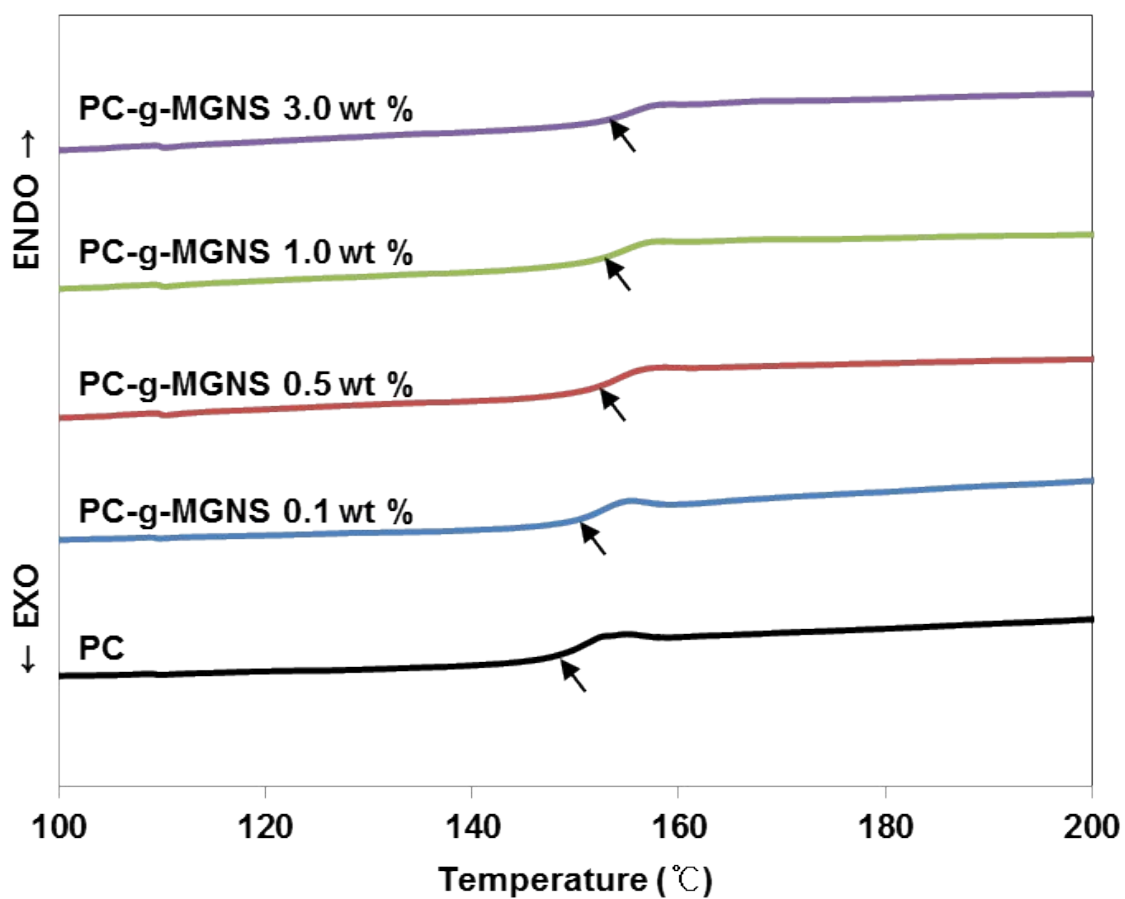


Table S1 Glass transition temperature (T_g) of pristine PC and s-PC/GNS and PC-g-MGNS nanocomposites measured by differential scanning calorimetry (DSC).

Filler content	T_g (°C)	
	s-PC/GNS	PC-g-MGNS
0 wt %	149.3	149.3
0.1 wt %	150.3	151.2
0.5 wt %	151.4	152.7
1.0 wt %	152.0	153.1
3.0 wt %	151.9	154.3