Supporting Information

Programmed Exfoliation of Hierarchical Graphene Nanosheets Mediated by Dynamic Self-Assembly of Supramolecular Polymers

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Fig. S1: Transmittance spectrum of an ODCB solution of A-PPG (at a concentration of 10 mg/mL) at 25 °C.
Fig. S2: TEM images of pristine A-PPG polymer. Samples were prepared by drop-casting followed by staining with ruthenium tetroxide (RuO$_4$).
Fig. S3: Transmittance spectra of the 1/10 EG/A-PPG composites in ODCB at 25 °C after various periods of time.
Fig. S4: $^1$H NMR spectra for A-PPG in 1,2-dichlorobenzene-$d_4$ (ODCB-$d_4$) at various temperatures.
Fig. S5: Enlarged view of the 25–30° regions of WAXD patterns for pristine A-PPG, pristine graphite, EG and EG/A-PG composites.
**Fig. S6:** Raman spectra for the 1/8 and 1/10 EG/A-PG composites at 25 °C.
Fig. S7: Raman spectra of the 1/8 EG/A-PG composites prepared via the direct mixing method and second exfoliation process, respectively. Both spectra were obtained at 25 °C.
Fig. S8: SEM images of (a, b) natural graphite, (c, d) EG and (e, f) 1/8 EG/A-PG composite.