

One-step functionalization of graphene with cyclopentadienyl capped macromolecules via Diels-Alder “click” chemistry

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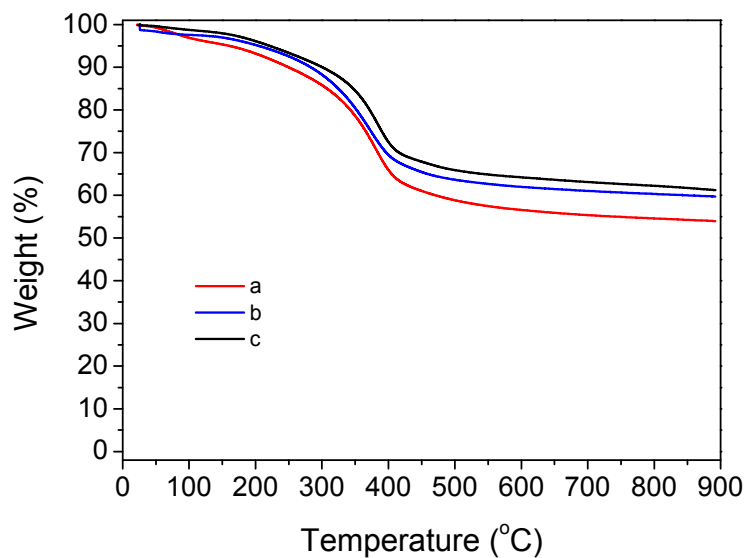


Fig. S1 TGA traces of (a) functionalized CRG 2, (c) functionalized CRG 3, (c) CRG functionalized with mPEG-Cp of M_n 2000 at 80 °C. Higher molecular weight mPEG-Cp led to lower grafting ratio.

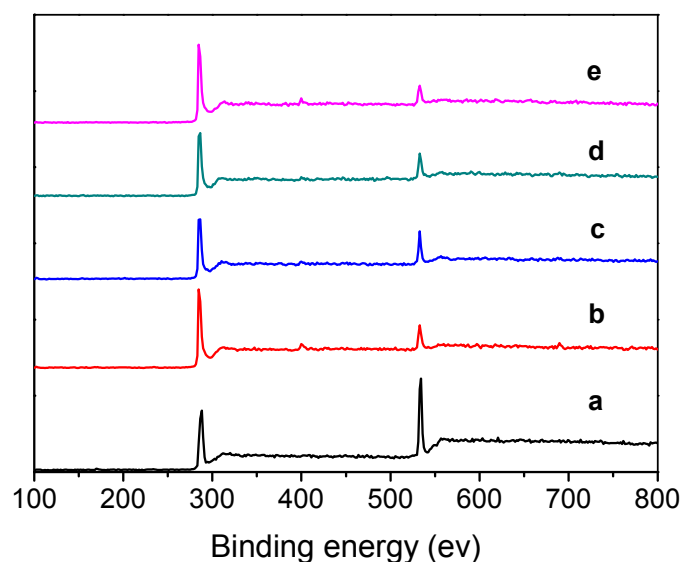


Fig. S2 XPS survey scan of (a) GO, (b) CRG 1, (c) functionalized CRG 2, (d) functionalized CRG 3, (e) control CRG 4.

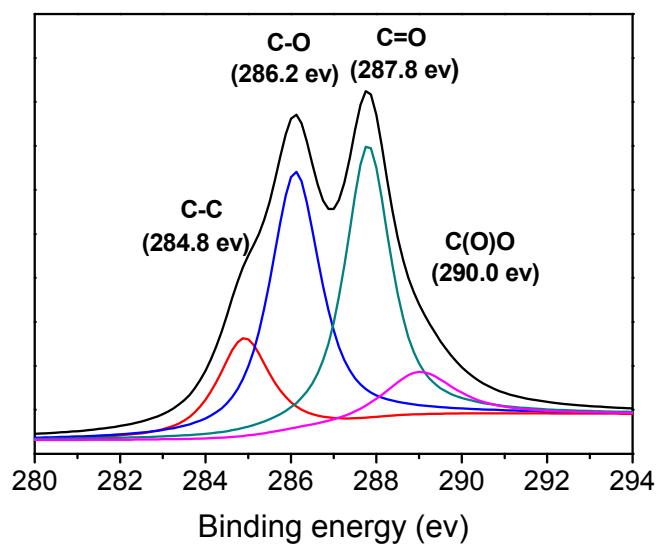


Fig. S3 XPS spectra of GO.

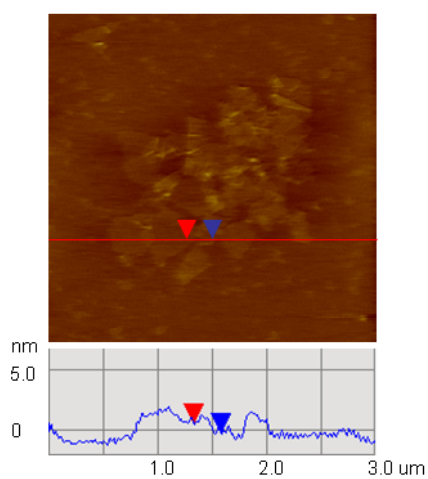


Fig. S4 AFM images of control CRG 4. This control CRG shows similar morphology and dimension to that of the original CRG, further indicating the successful functionalization of CRG with mPEG via DA reaction.