

Electronic Supplementary Information

Polymer/graphene oxide composite microcapsules with greatly improved barrier property

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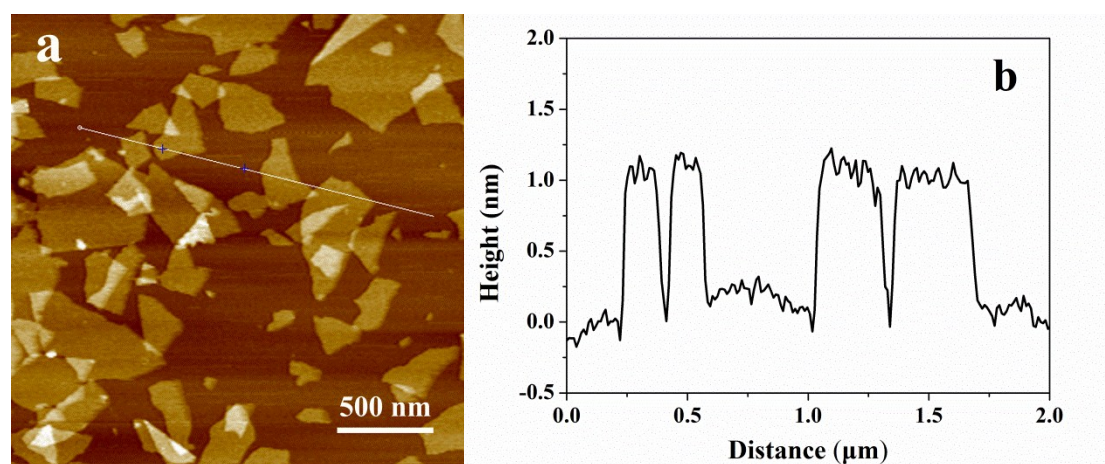


Fig. S1 (a) Tapping-mode AFM image and (b) height profile of GO.

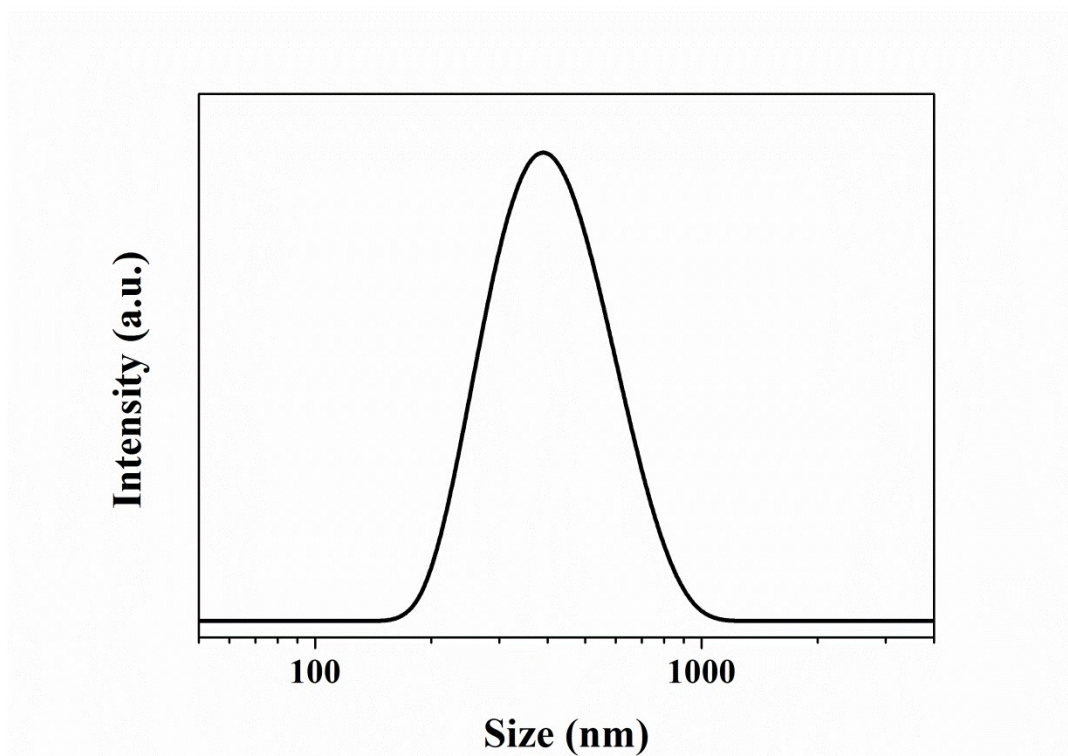


Fig. S2 Size distribution of GO nanosheets.

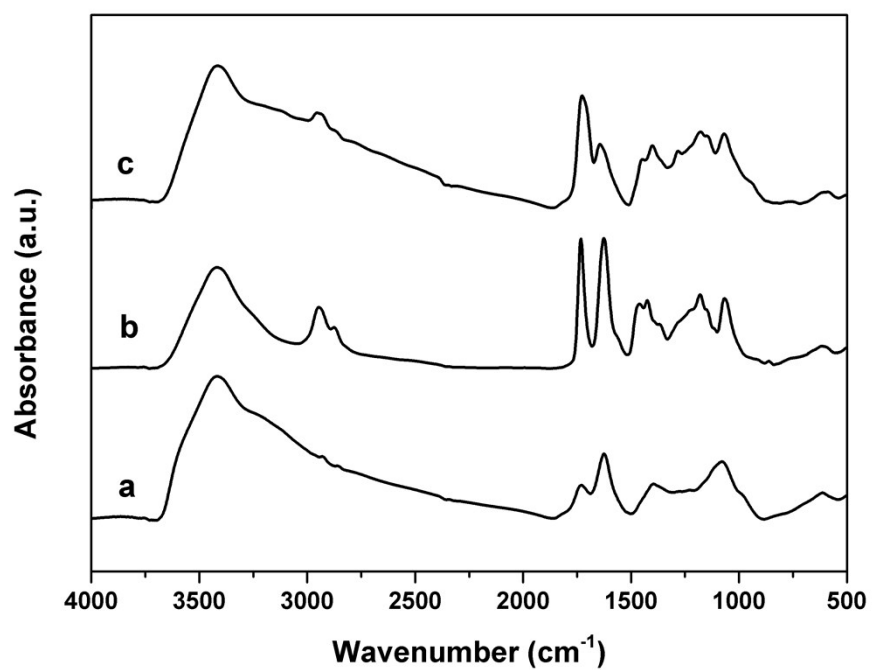


Fig. S3 FT-IR spectra of (a) GO, (b) the polycondensate and (c) GO modified by the polycondensate.

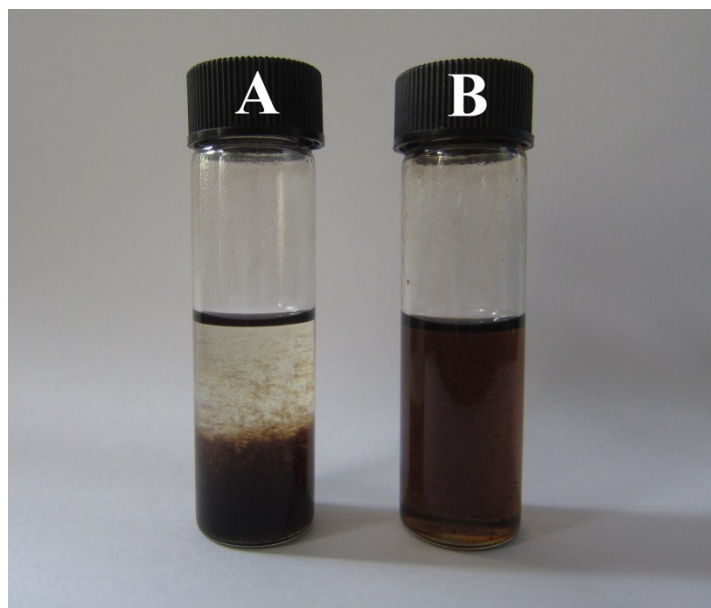


Fig. S4 Photographs of DTAC-modified GO dispersed in styrene with the solid content ratio of DTAC/GO at (A) 1/48 and (B) 1/16.

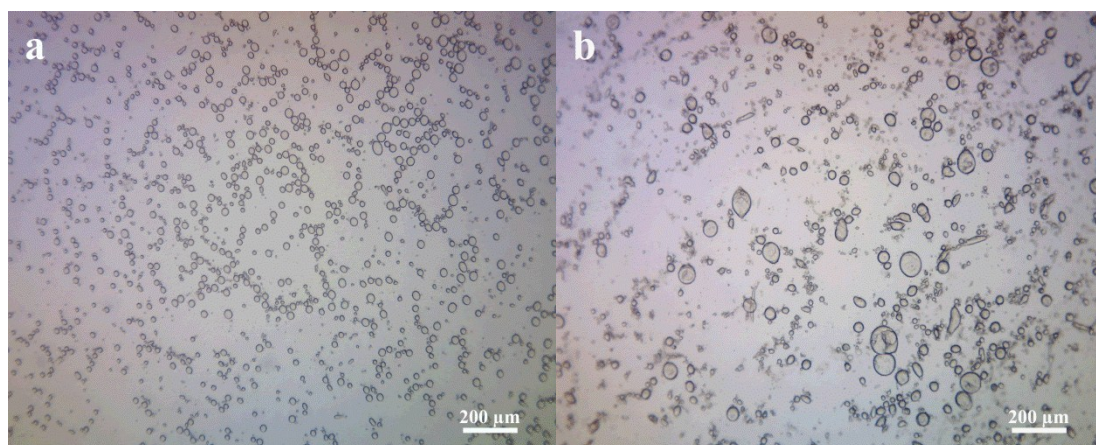


Fig. S5 Optical microscopy images of Pickering emulsions stabilized by DTAC-modified GO with the solid content ratio of DTAC/GO at (a) 1/48 and (b) 1/16.

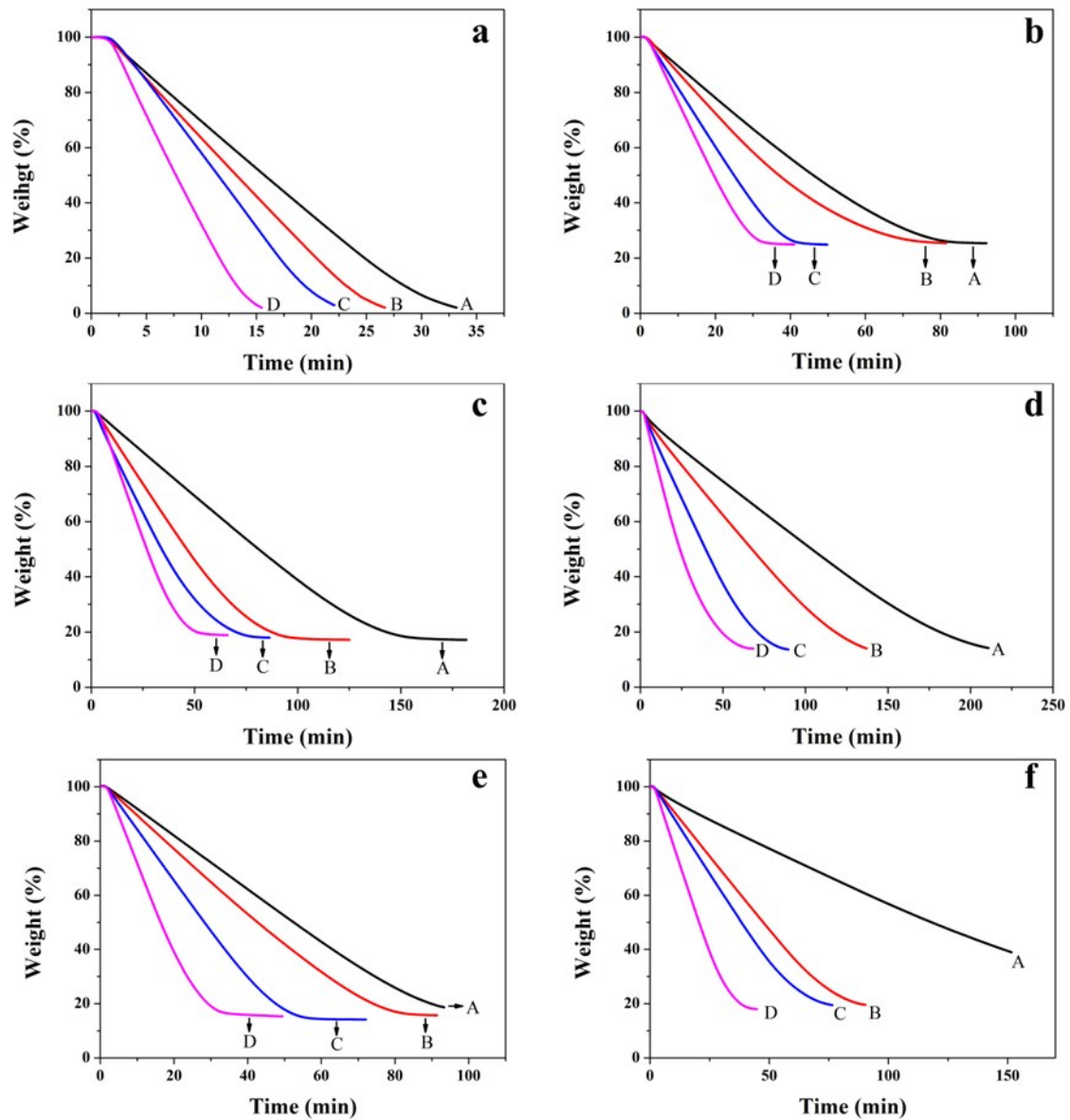


Fig. S6 Isothermal evaporation of (a) n-hexadecane, (b) Micro-hexadecane-polycondensate, (c) Micro-hexadecane-METAC, (d) Micro-hexadecane-DTAC, (e) Micro-hexadecane-DTAC-L and (f) Micro-hexadecane-DTAC-H at (A) 90, (B)100, (C)110 and (D) 120 °C.

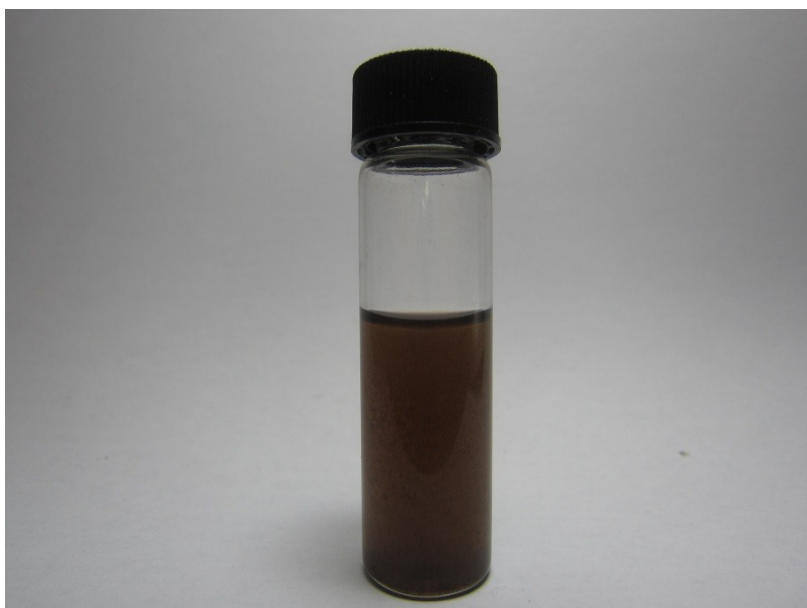


Fig. S7 Photograph of DTAC-modified GO dispersed in n-hexadecane.