Aqueous stabilization of graphene sheets using exfoliated montmorillonite nanoplatelets for multifunctional free-standing hybrid films via vacuum-assisted self-assembly

Chao Zhang, a Weng Weei Tjiu, b Wei Fan, a Zhe Yang, a Shu Huang a and Tianxi Liu a*

Electronic Supplementary Information

Figure S1. The tapping-mode AFM image and the height profile of the exfoliated GO sheets deposited on a fresh mica substrate.

Figure S2. The tapping-mode AFM image and the height profile of the exfoliated MMT nanoplatelets deposited on a fresh mica substrate.

Figure S3. TGA curves of GO sheets, r-GO sheets, MMT nanoplatelets and MMT-G (80/20) hybrids.

Figure S4. (a) TEM bright field image, and (b-f) the corresponding EDX elemental mappings of C, O, Si, Al and Na, respectively.

Figure S5. (a) Cross-section SEM image of MMT-G hybrid film, and (b-e) the corresponding EDX elemental mappings of C, O, Si and Al, respectively.
Figure S1
Figure S2
Figure S3
Figure S4
Figure S5