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.

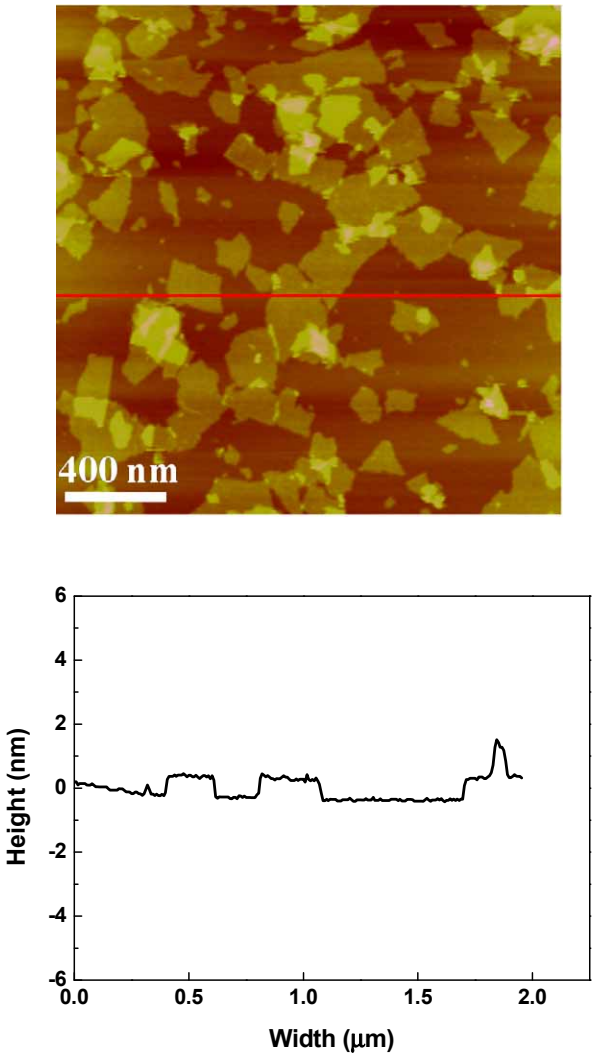

Figure S1

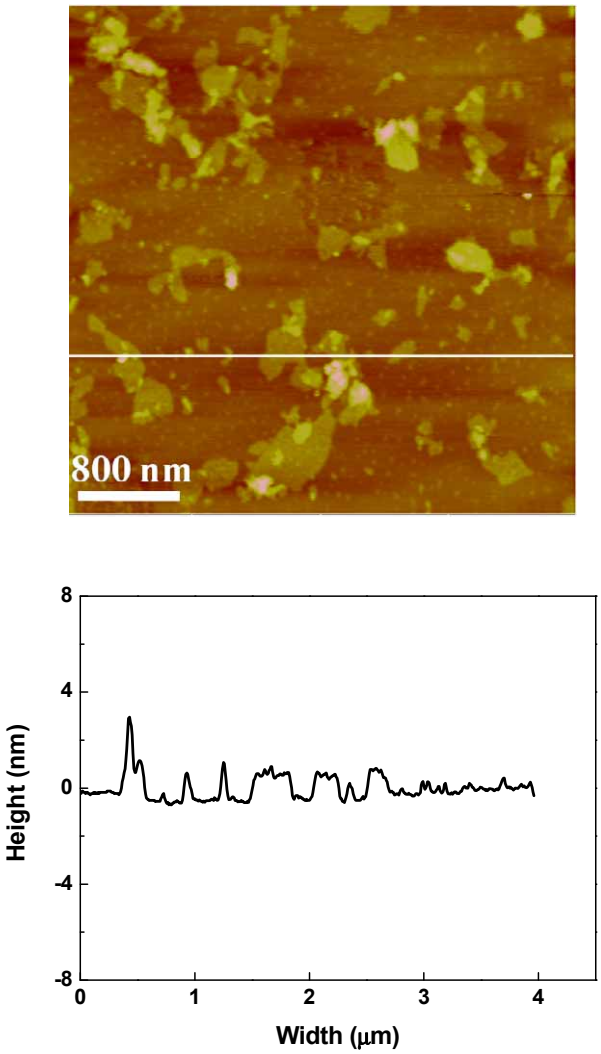

Figure S2

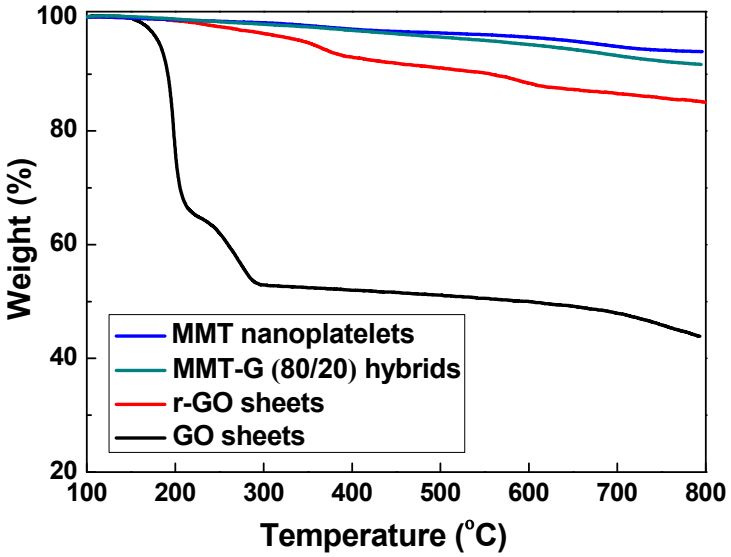

Figure S3

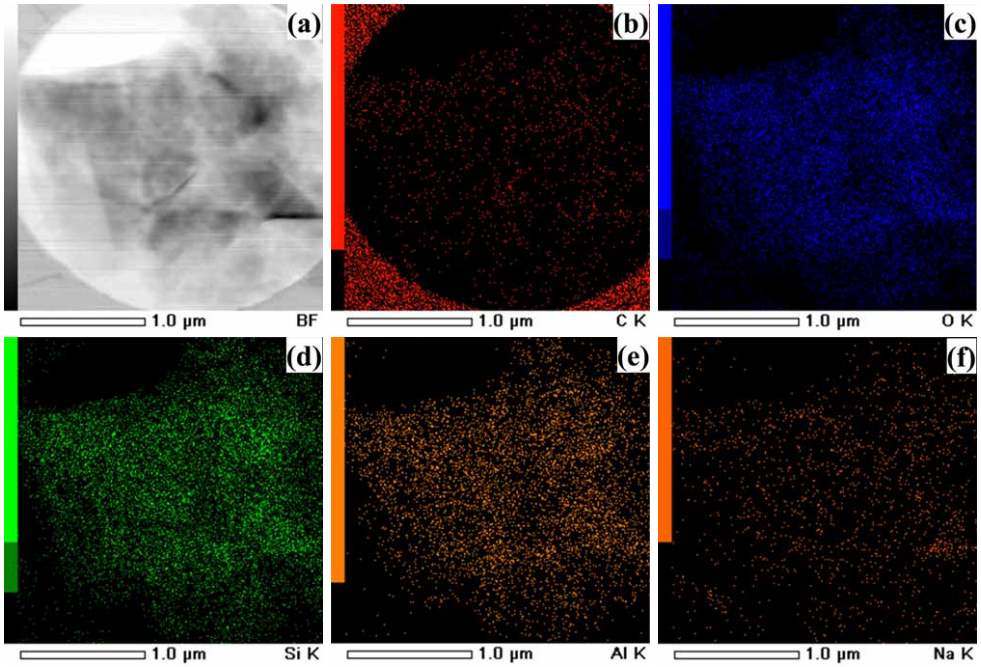

Figure S4

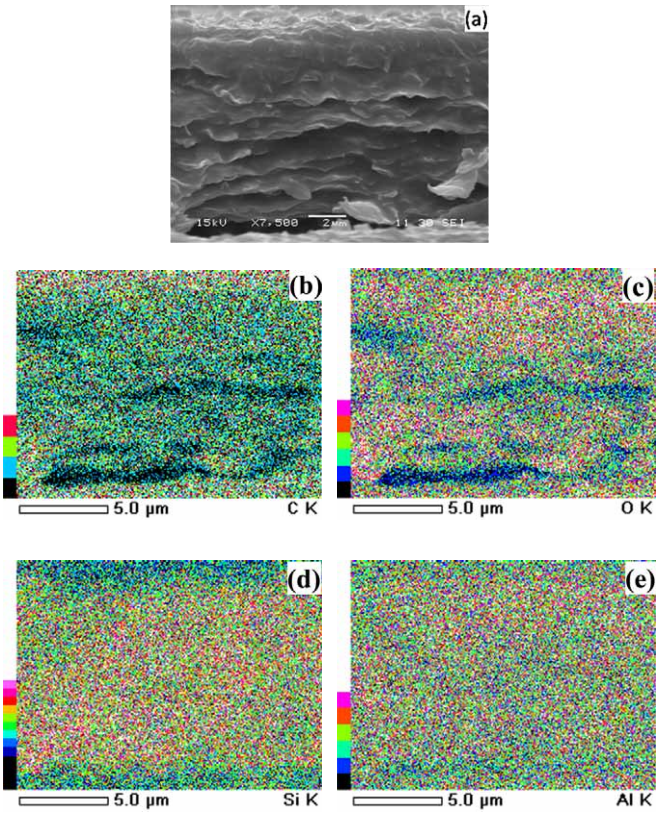

Figure S5