Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2019

## Influence of Head Group on Dynamic in Surfactant Intercalated Graphite Oxide

Xiaoqian Ai<sup>a</sup>, Minmin Zhang<sup>a</sup>, Ye Yan<sup>a</sup>, Xiaoming Zhang<sup>a</sup>, Xiaoxiao

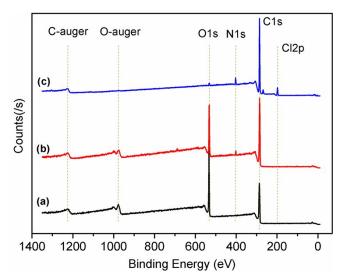
Cao<sup>a</sup>, Qiong Wang<sup>a</sup>, Ligang Ma<sup>b\*</sup>

<sup>a</sup>College of Physics and Electronic Engineering, Jiangsu Second Normal University,

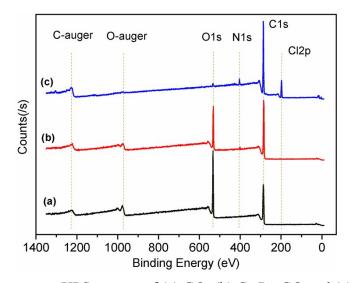
210013, China

<sup>b</sup>School of Electronic Engineering, Nanjing Xiaozhuang University, Nanjing 211171, Nanjing China

<sup>\*</sup>Corresponding author. *E-mail address*: maligang186@163.com (Ligang Ma)



**Figure S1.** Survey scans XPS spectra of (a) GO, (b) C<sub>16</sub>TMA-GO and (c) C<sub>16</sub>TMACl.



**Figure S2.** Survey scans XPS spectra of (a) GO, (b) C<sub>16</sub>Py-GO and (c) C<sub>16</sub>PyCl.

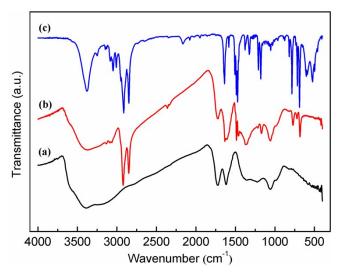


Figure S3. FTIR spectrum of (a) GO, (b)  $C_{16}$ Py-GO and (c)  $C_{16}$ PyCl.

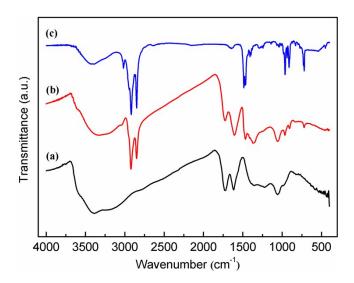


Figure S4. FTIR spectrum of (a) GO, (b)  $C_{16}TMA$ -GO and (c)  $C_{16}TMA$  Cl.