

# Supporting Information

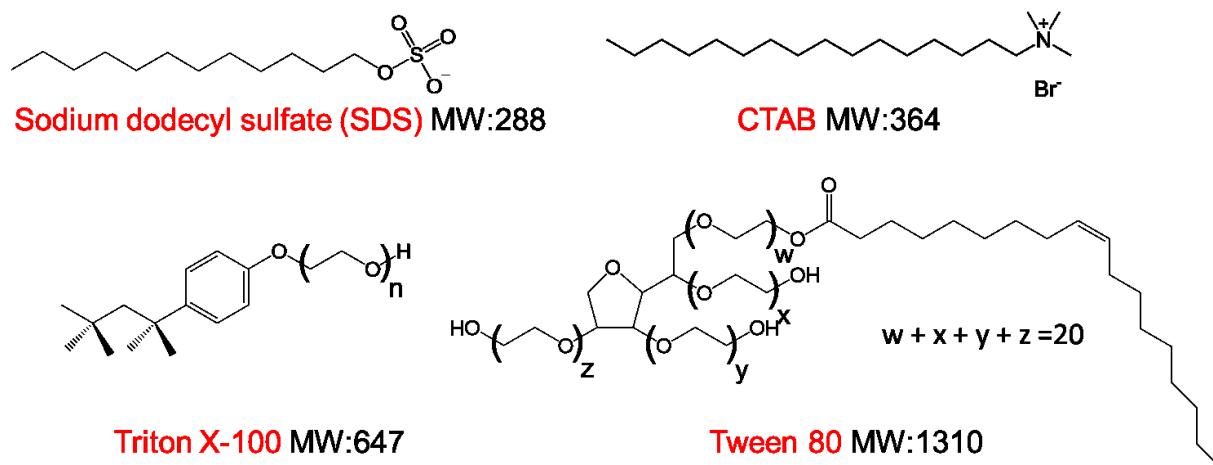
## **Stronger Adsorption of Phosphorothioate DNA Oligonucleotides on Graphene Oxide by van der Waals Forces**

Zhicheng Huang<sup>1</sup>, Yu Zhao<sup>1,2</sup>, Biwu Liu<sup>1</sup>, Shaokang Guan<sup>2</sup> and Juewen Liu<sup>1\*</sup>

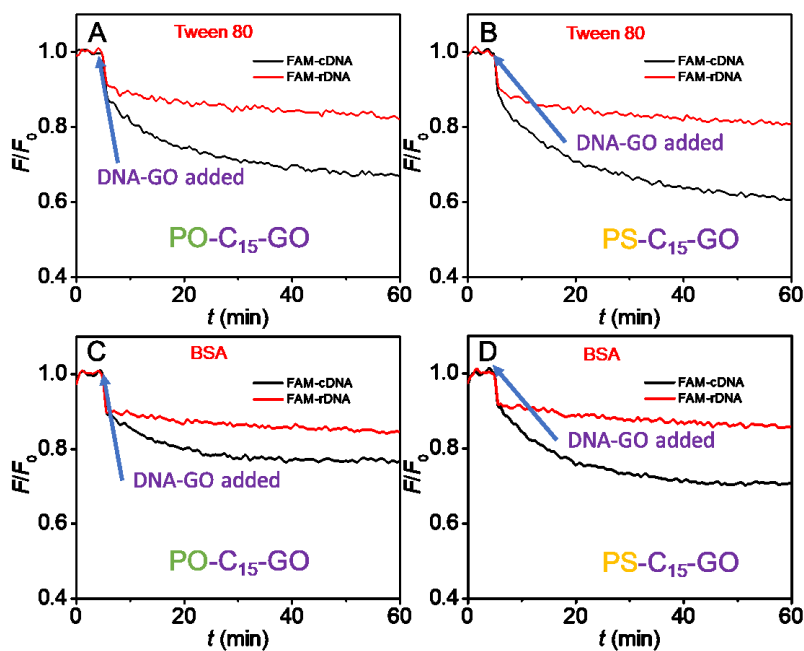
1. Department of Chemistry, Waterloo Institute for Nanotechnology, University of Waterloo,  
Waterloo, Ontario, N2L 3G1, Canada

2. School of Materials Science and Engineering, Zhengzhou University, Zhengzhou, 450001,  
China

Email: liujw@uwaterloo.ca



**Figure S1.** Molecular structures of three surfactants (SDS, CTAB, Triton X-100, and Tween 80).



**Figure S2.** Kinetics of specific hybridization by adding FAM-cDNA and non-specific adsorption by adding FAM-rDNA on PO-C<sub>15</sub>-12mer and PS-C<sub>15</sub>-12mer pre-modified GO with the existence of 0.5% Tween 80 (A&B) and 0.25 mg/mL BSA (C&D). The arrowheads point to the addition of the GO conjugates.