Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Aggregation Prevention: Reduction of Graphene Oxide in Mixed Medium of Alkylphenol Polyoxyethylene (7) Ether and 2-Methoxyethanol

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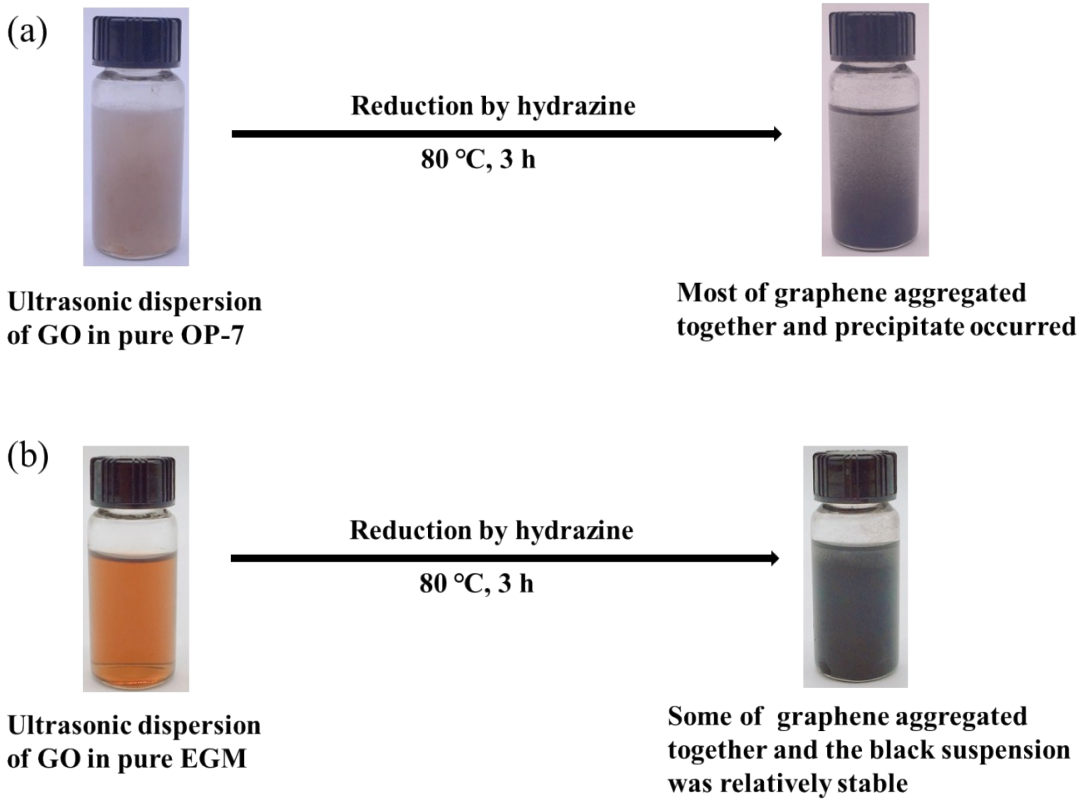
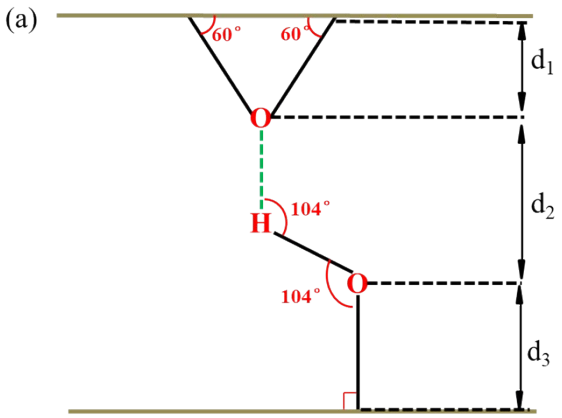
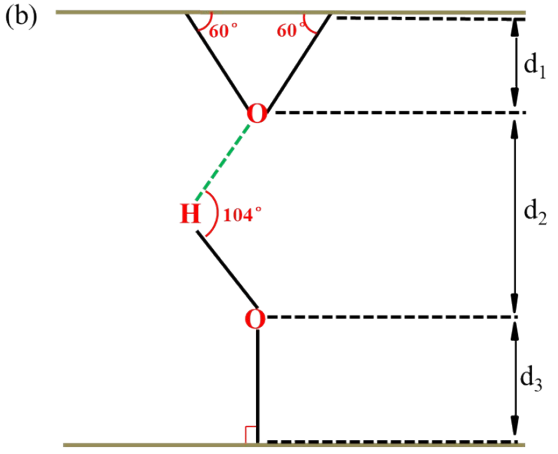


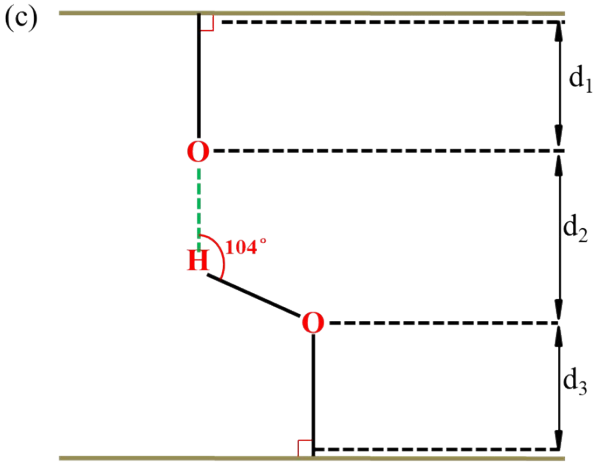
Fig S1. Reduction routes of GO in pure OP-7 (a) and in pure EGM (b).



$d=d_1+d_2+d_3=1.01\ Å+1.19\ Å+1.43\ Å=3.63\ Å$



$d=d_1+d_2+d_3=1.01\ Å+1.51\ Å+1.43\ Å=3.95\ Å$



$d=d_1+d_2+d_3=1.43\ Å+1.19\ Å+1.43\ Å=4.05\ Å$

Fig S2. (a), (b) and (c) schematics showing various configurations of hydrogen bonds in the graphene and calculates their layer spacing, respectively. The horizontal brown

lines denote the graphene, while hydrogen and oxygen atoms are shown as red H and red O, respectively.