Supplementary Information for

Decisive role of electrostatic interaction on rheological evolution of graphene oxide under ultrasonic fragmentation

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This supplementary information contains the following sections:

Figures S1-S4

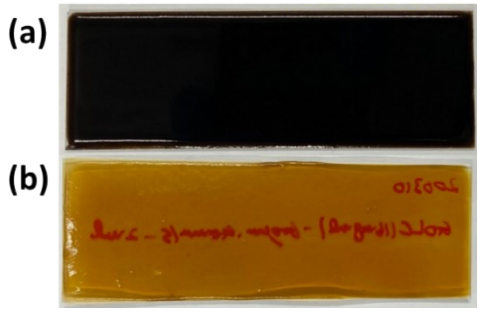

Fig. S1. Optical image of casted GO film with casting gap of 600μm. (a) LOGO (b) HOGO.

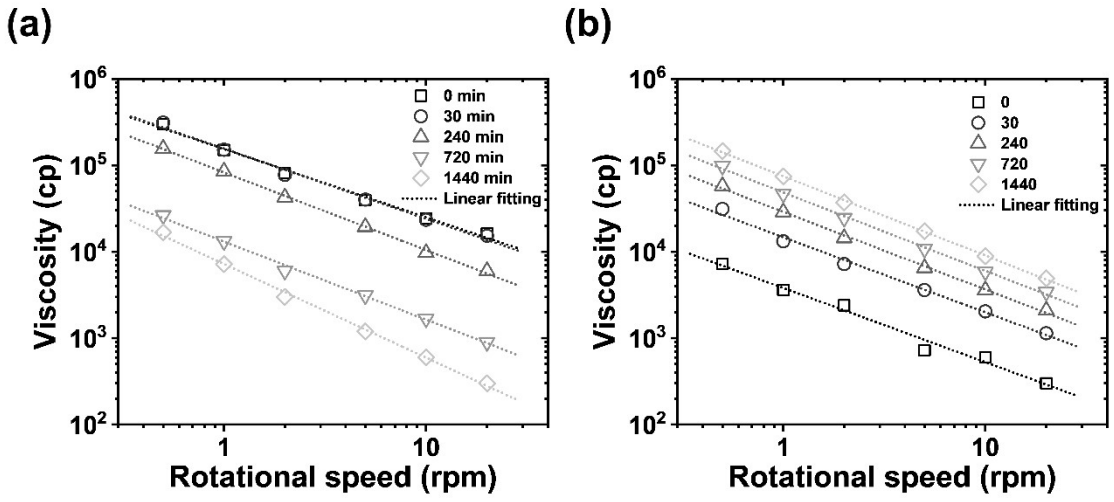

Fig. S2. Shear thinning effect of GO. (a)Viscosity of HOGO depending on rotational speed of spindle. (b)Viscosity of LOGO depending on rotational speed of spindle after different sonication time

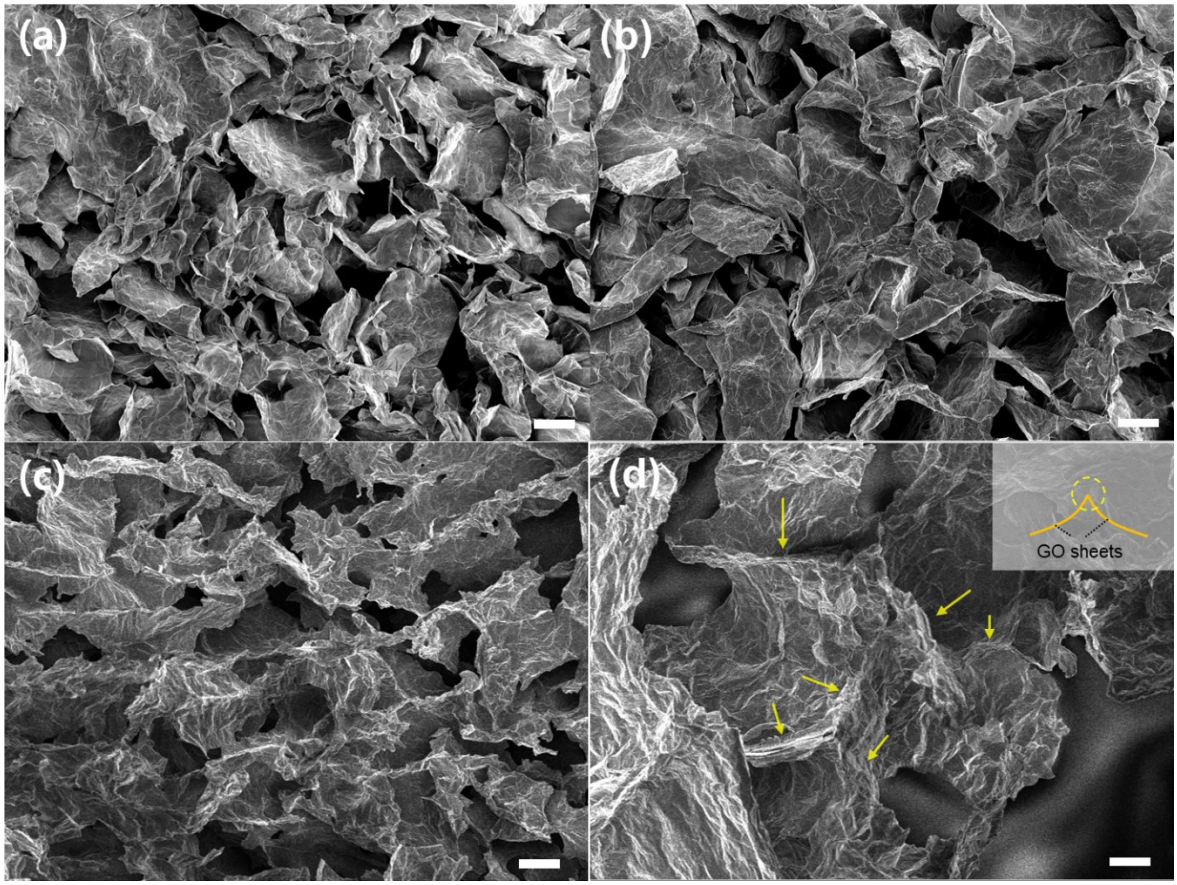

Fig. S3. Morphology of freeze-dried LOGO (a-b) before sonication and (c-d) after 120 min sonication measured by SEM. Scale bar: 20μm for (a), (c) and 10 μm for (b), (d).

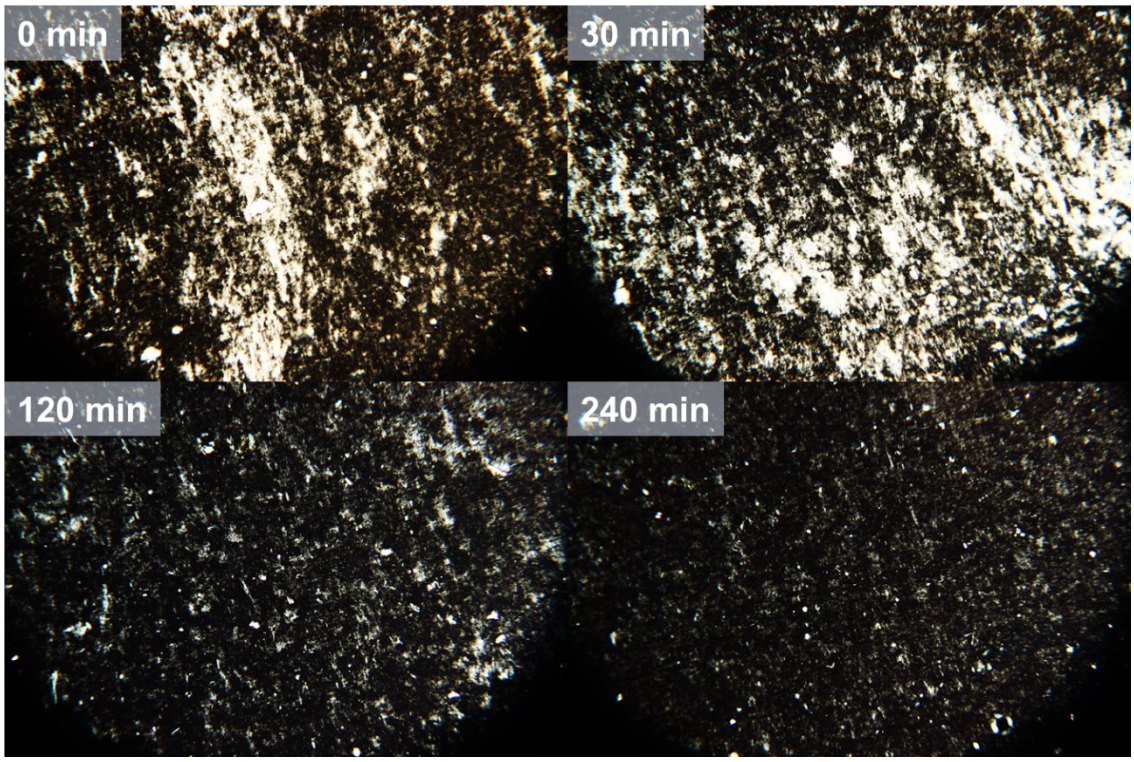

Fig. S4. Polarized optical microscope image of HOGO at different sonication time.