

Significant improvement of the hydrogen storage capacity of reduced graphene oxide/TiO₂ nanocomposite by chemical bonding of Ti–O–C

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Exact concentration of TiO₂ particles in RGO-TiO₂ nanocomposites was measured by thermogravimetric analysis (TGA). TGA was carried out by heating up the nanocomposites at 10 K/min from room temperature to 1300 °C under air atmosphere followed by 3 hours of soaking step at this temperature. Concentration of TiO₂ in each sample was calculated from the difference between residual mass of specimens and RGO without deposition (reference sample) at the end of the measurement. TGA graph of all nanocomposites and reference was shown in Fig. S1.

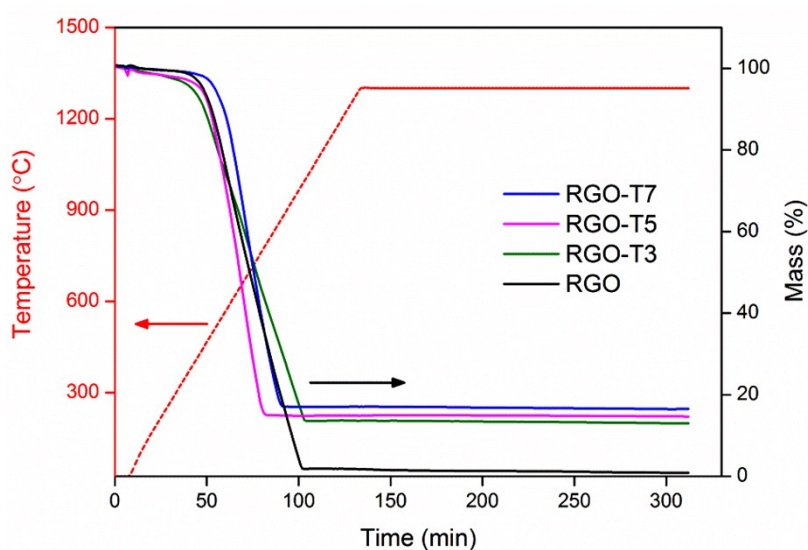


Fig. S1 TGA of RGO-T nanocomposites as a function of time and temperature