Supporting Information

Facile synthesis of carbon-$NiCoO_2$ composite microspheres with pitaya-type structure and their application in supercapacitors

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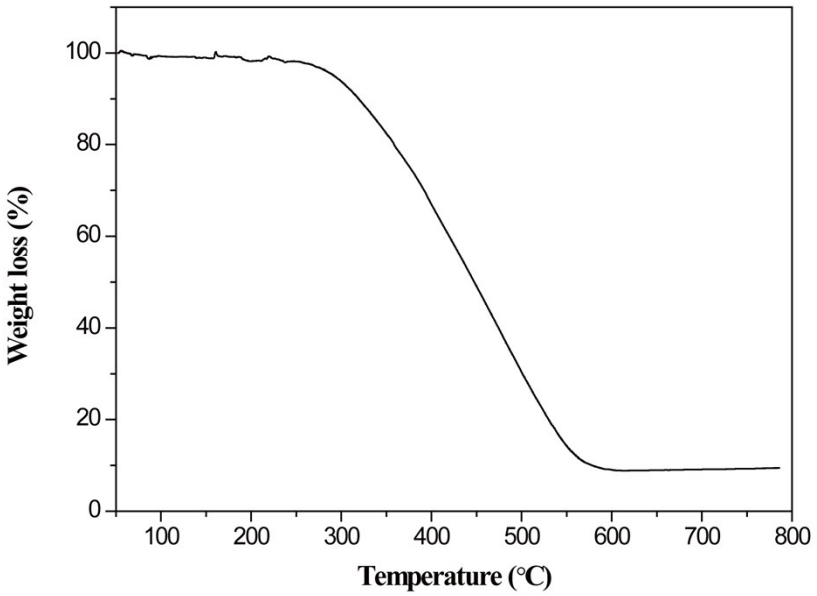

Fig. S1 TG curve of the as-prepared NiCo-precursor composites.

The TG curve (Fig. S1) showed that there were three distinct weight loss stages from room temperature to 800 °C. The first weight loss of ~10 % for the precursor below 250 °C may be attributed to the removal of adsorbed water as well as densification of composite spheres. The main weight loss of ~85% for the precursor happened between 250 and 600 °C corresponding to the oxidation of the carbon templates. Further increasing the temperature to 800 °C, no distinct weight loss was detected. Thus, the mass ratio of between the carbon template and $NiCoO_2$ was estimated to be 17:1. In the present work, a calcination temperature of 600 °C was used to partially remove the carbon template, similar to the previous reports.