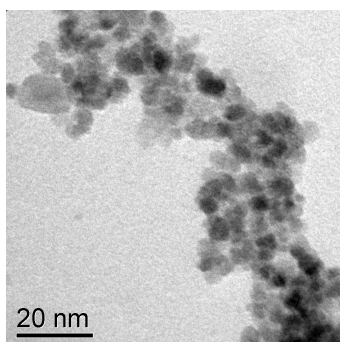


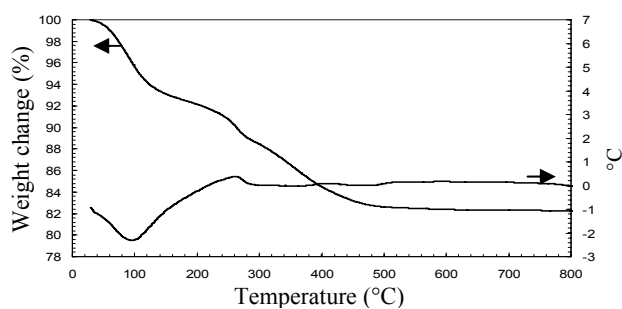
SUPPLEMENTARY INFORMATION

Figure TEM image for the calcined sample- S1 (at 350 °C for 1 h)



The TEM measurements were done using microscope (FEI, TECNAI G<sup>2</sup>20, TWIN) operating at 200 kV and equipped with a GATAN CCD camera. The samples were first dispersed in ethanol and subsequently drop of it was put on a copper grid. The TEM image indicate the formation of aggregates upon heat treatment and exhibited marginal increase in average size i.e.  $4.0 \pm 0.8$  nm than that of as-synthesized sample ( $2.8 \pm 0.3$ ).

Figure. Thermogravimetric and DTA curve for as-synthesized S1 sample



The thermogravimetric measurements done using Mettler thermogravimetric analyser exhibit two major weight loss. The first weight loss of 8.25 % at temperature ranging from 25 to 200 °C is mainly due to the removal of physisorbed moisture. Whereas, the second gradual weight loss appears due to occluded moisture, as the nanocrystals of sample S1 were not stable and formed aggregates.