Figure captions:

Figure S1. X-ray diffraction pattern of the as-prepared samples.

Figure S2. Raman spectrum of the as-prepared products at the range from 200 cm⁻¹ to

 1900 cm^{-1} .

Figure S3. FT-IR spectrum of the as-prepared products.

Figure S4. The hysteresis loop measured at room temperature (300 K) for these CNPs

in an applied magnetic field of up to 5000 Oe.



Fig S1.



Fig S2.



Fig S3



Fig S4