Chiral Spin Crossover Nanoparticles and Gels with Switchable Circular Dichroism

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SUPPLEMENTARY INFORMATION

Figure S1. TEM image of the nanoparticles 1 (TEM image #1) and the corresponding size distributions: longitudinal size is (80 ± 17) nm, transversal size is (34 ± 8) nm.
Figure S2. TEM image of the nanoparticles 1 (TEM image #2) and the corresponding size distributions: longitudinal size is $(76 \pm 23)$ nm, transversal size is $(33 \pm 10)$ nm.
Figure S3. DLS measurements on the colloidal solution of nanoparticles prepared with 4 times smaller concentrations of precursors (comparing to sample 1). Size distribution is given in the percent of nanoparticles (distribution by number) in 4 different measurements (298 K). Size of nanoparticles detected with DLS is 58 ± 20 nm.
**Figure S4.** PXRD from powder (left) and electron diffraction from an individual nanoparticle (right) of 1. Both measurements confirm an almost amorphous structure of nanoparticles.
Figure S5. Reproducibility of magnetic properties of 1 (sample is obtained in a repeated synthesis). $\chi_M T$ vs. $T$ dependence demonstrates a cooperative transition between diamagnetic and paramagnetic states of SCO nanoparticles.
Figure S6. A CD spectrum of [Fe(H$_2$O)$_6$](L-SCA)$_2$ in aqueous solution (c = 0.1 mmol/L). A CD band at 290 nm (positive) is detected.
Figure S7. TEM image of the gel 2.
Figure S8. TEM image of the gel 2.