Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

The influence of the sample dispersion on a solid surface in the thermal spin transition of $[Fe(pz)Pt(CN)_4]$ nanoparticles.

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Supplementary information

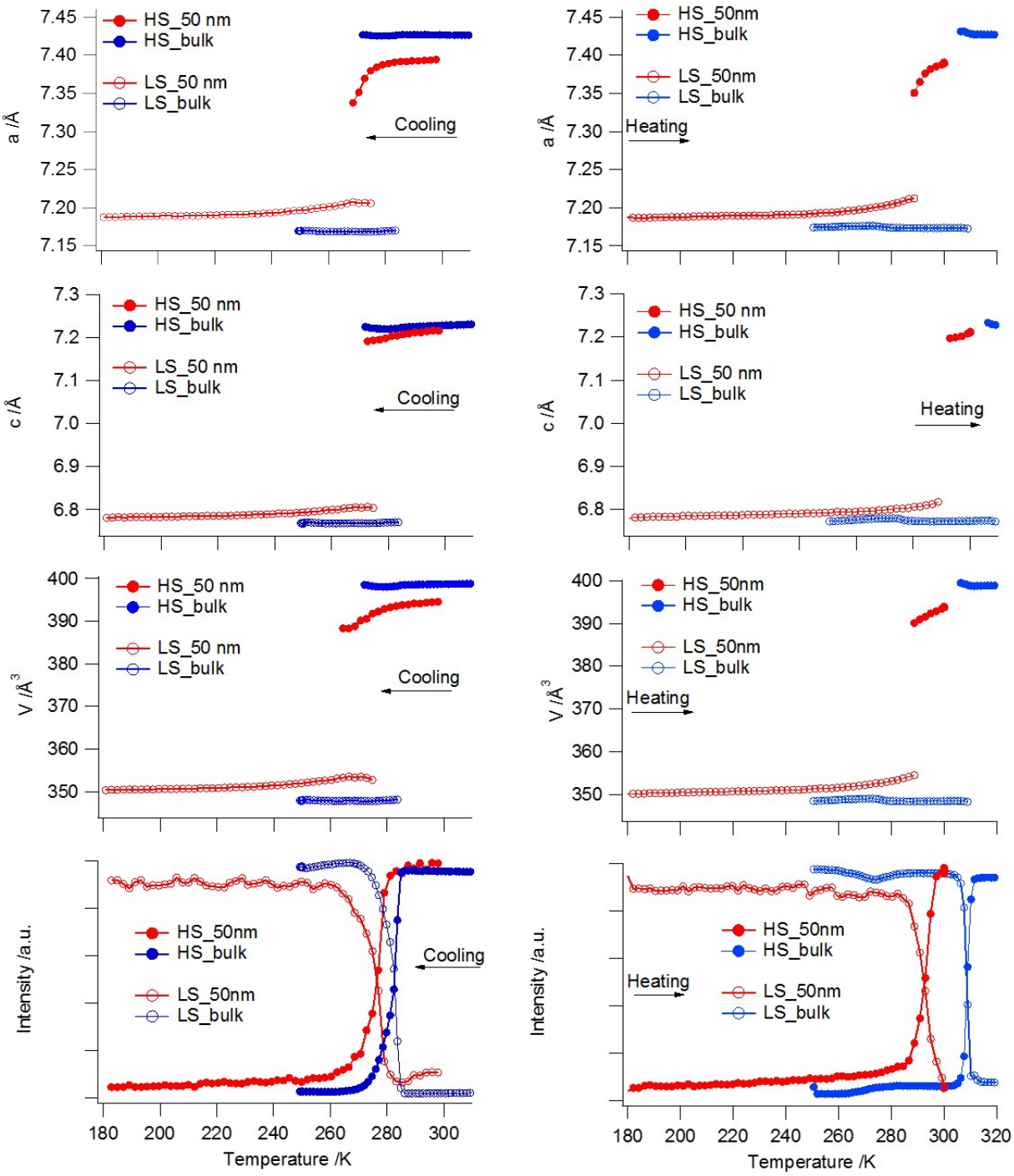

Figure S1. Evolution of the cell parameters and the integrated intensity of the (110) reflexion during the thermal transition extracted from a Pawley fit using a 2 phases model. Legend: 50 nm (red) and bulk (blue); HS phase (filled circles) and LS phase (empty circles).

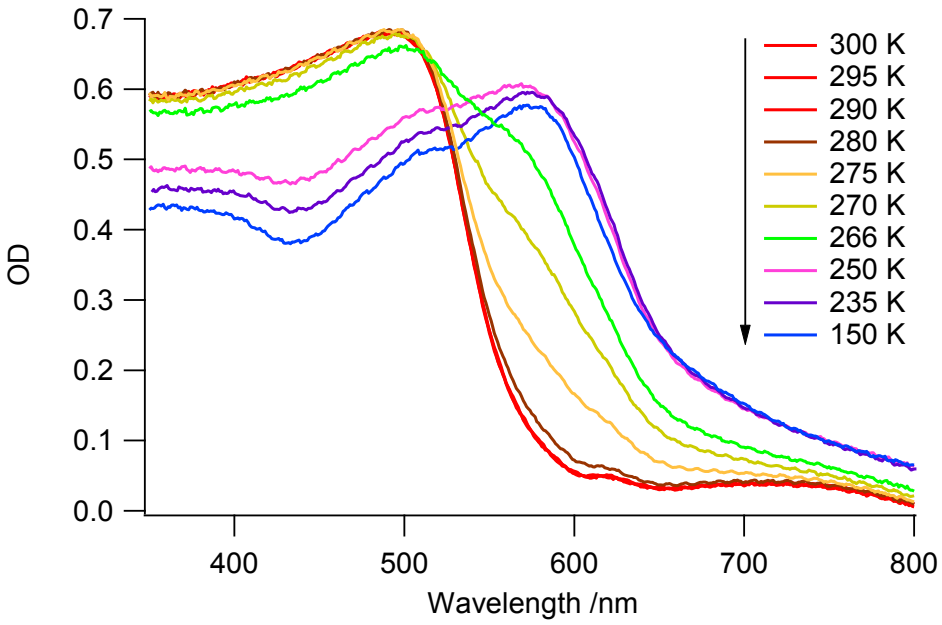

Figure S2. Evolution of the absorption spectra in the cooling mode at 1 K/min for the bulk [Fe(pz)Pt(CN)$_4$] all the samples dispersed homogeneously on a Sapphire slide of 0.2 mm thickness.

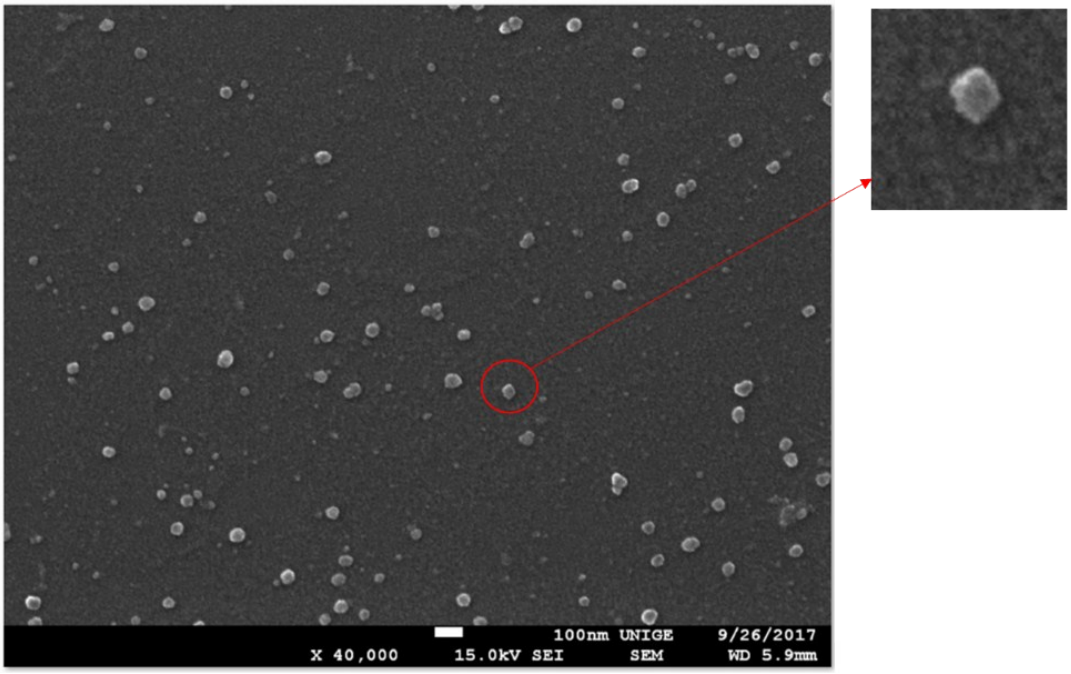

Figure S4. SEM image of the 50 nm particles dispersed on sapphire.

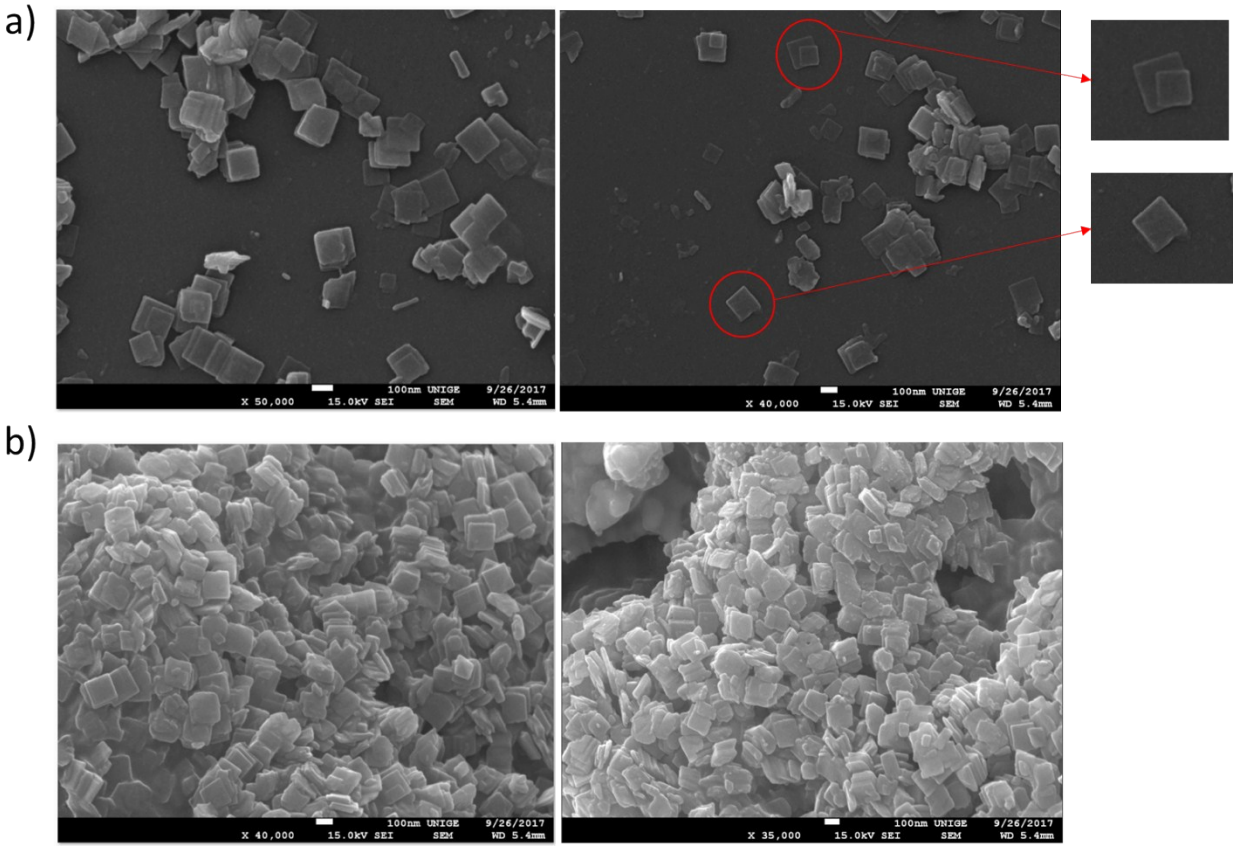

Figure S5. SEM image of 140 nm particles dispersed on sapphire a) in direct contact with the sapphire surface and b) on the upper layers of nanoparticles.

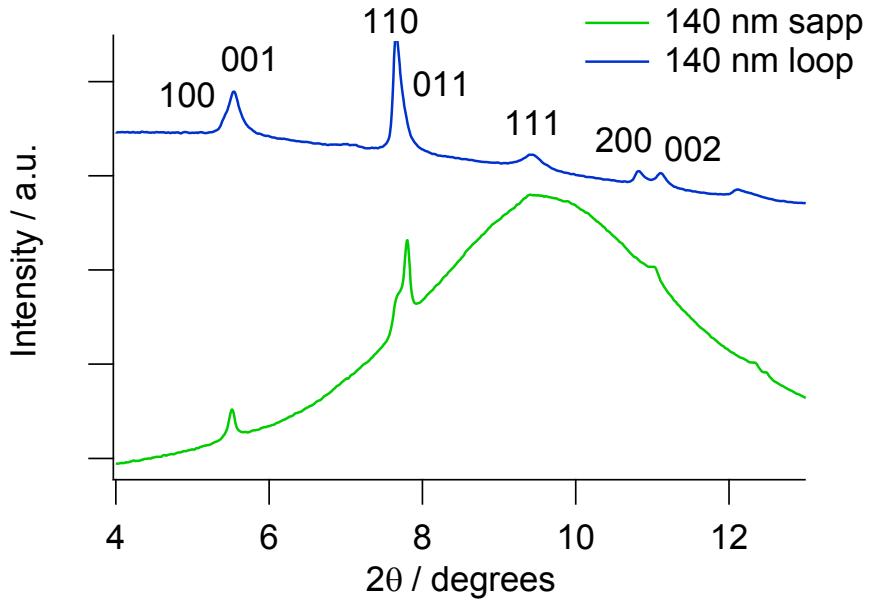

Figure S6. Comparison between the XRPD patterns of the 140 nm particles free and dispersed in sapphire.

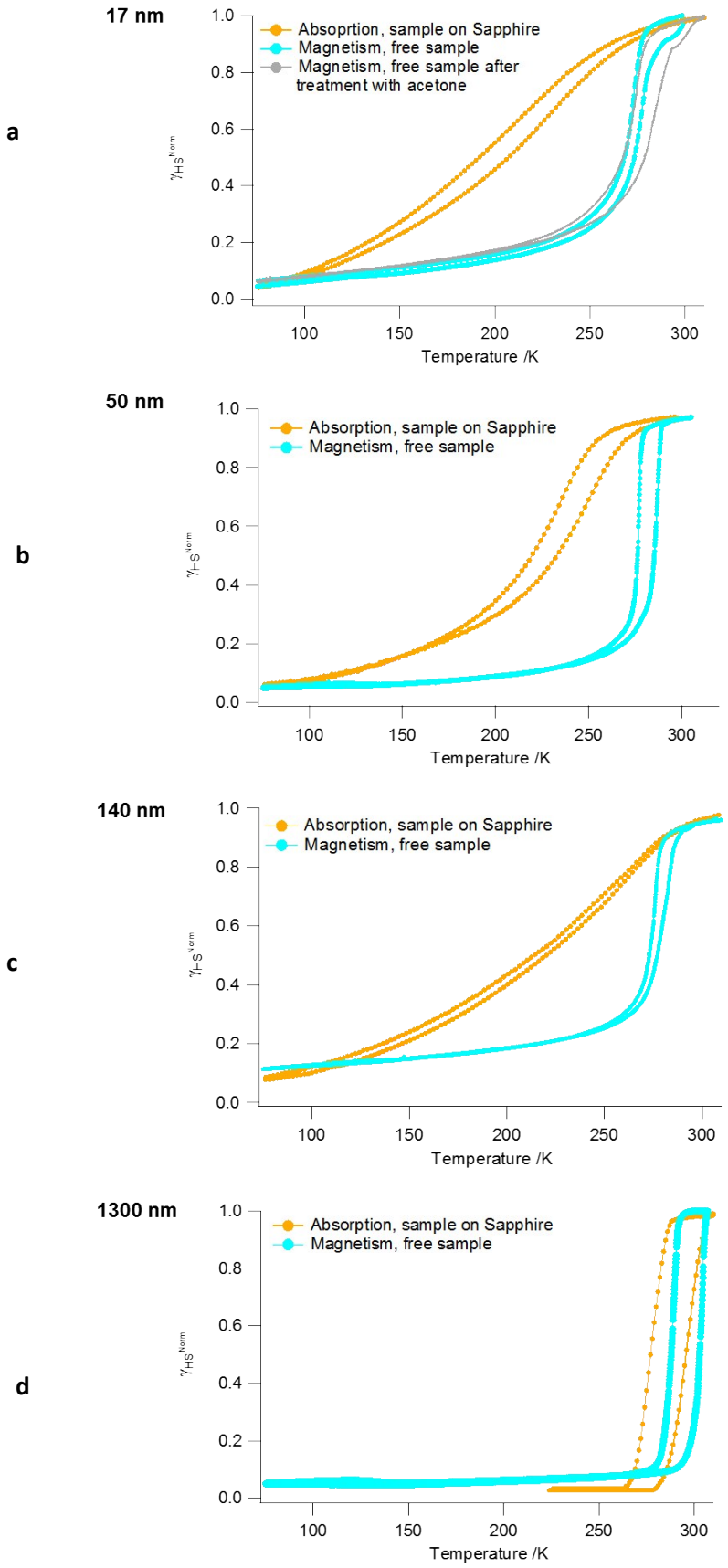

Figure S7. Thermal spin transition for [Fe(pz)Pt(CN)$_4$] samples of different sizes obtained by magnetism when they are free and optically when they are dispersed on sapphire. In the case of the 17 nm particles, the curve for the free sample before and after thermal treatment is included.

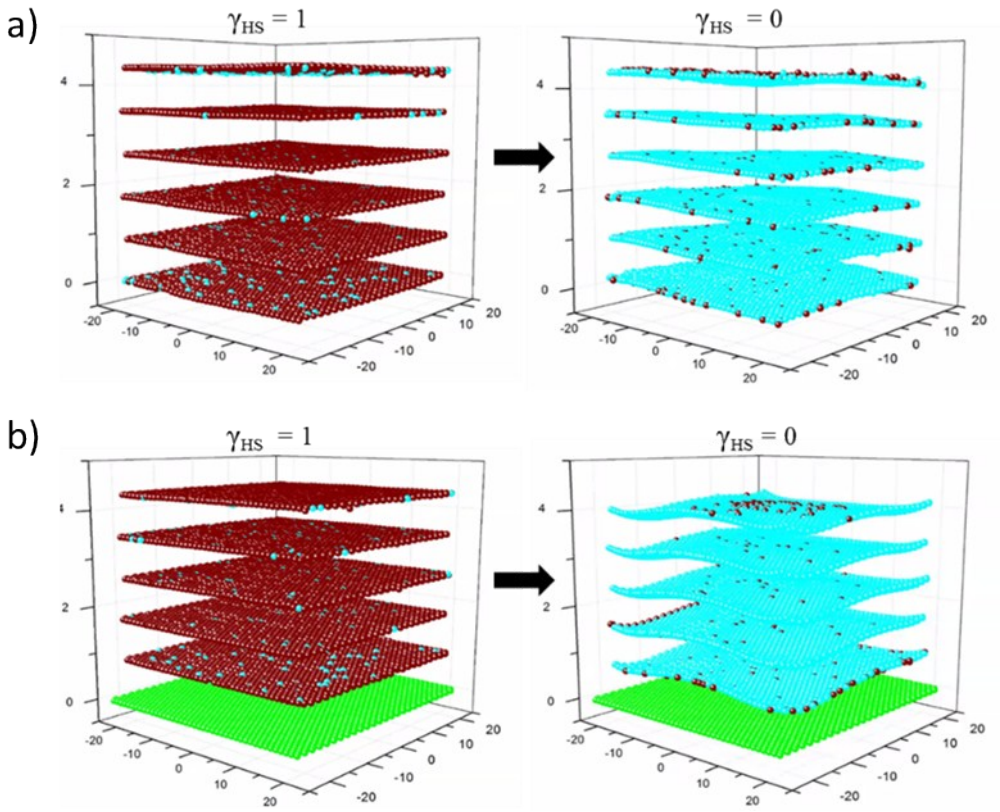

Figure S8. Snapshots of a) the 3D free boundary system and of b) the 3D system situated on a surface with ks = 0.05 during the HS→LS transition taken at $\gamma_{HS} = 1$ (left) and $\gamma_{HS} = 0$ (right).