

Composite nanoplatelets combining soft-magnetic iron-oxide with hard-magnetic barium hexaferrite
(Supporting Information #3)

Supporting Information # 3: Synthesis of the composite nanoparticles under too high supersaturation

The synthesis of the composite nanoparticles based on coating the hexaferrite core nanoparticles with a spinel-ferrite shell under a too high supersaturation resulted in the partially homogeneous nucleation of the precipitating iron species and the formation of separate, spinel-ferrite nanoparticles. Because the supersaturation was still relatively low, the homogeneously-nucleated nanoparticles grew in a well-defined octahedral shape and were resolved from the formed composite nanoparticles (Figure S3).

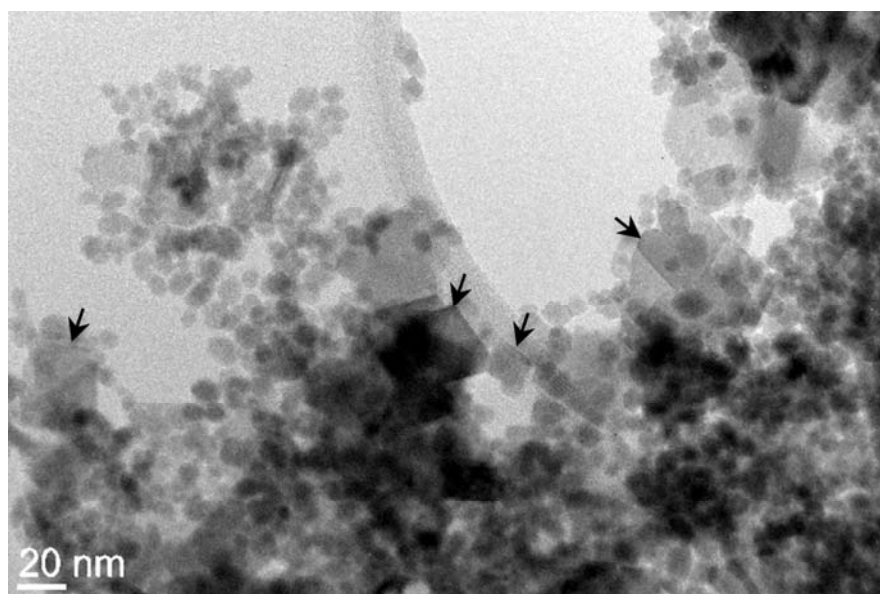


Figure S3: TEM image of the homogeneously-nucleated spinel-ferrite nanoparticles formed due to a too high supersaturation of the precipitating iron species during the synthesis of the composite nanoparticles. The spinel-ferrite nanoparticles are marked with arrows.