

Supplementary

Preparation of barium-hexaferrite/gold Janus nanoplatelets using the Pickering emulsion method

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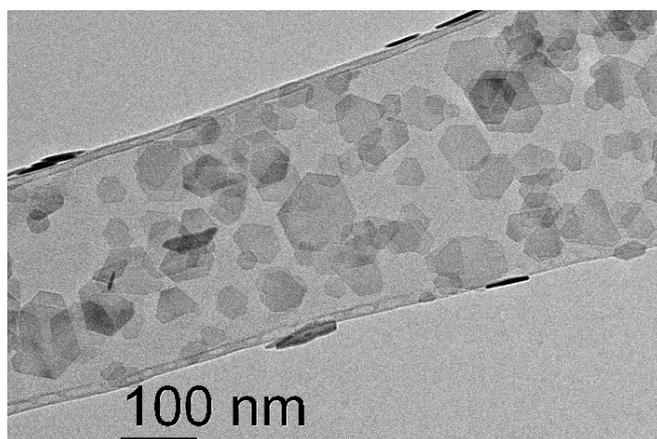


Figure S1. TEM image of BHF NPLs.

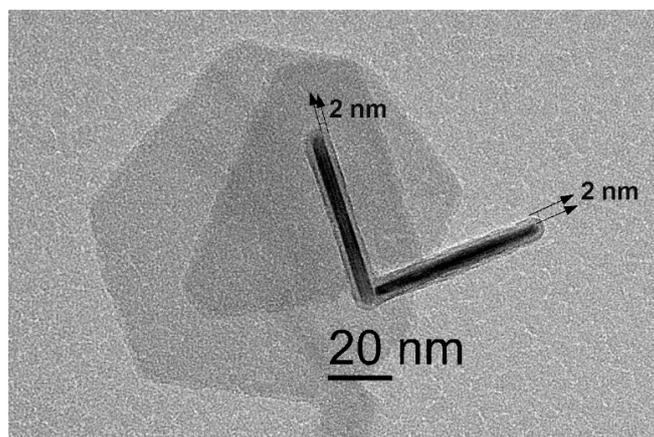


Figure S2. TEM image of NPLs-Si.

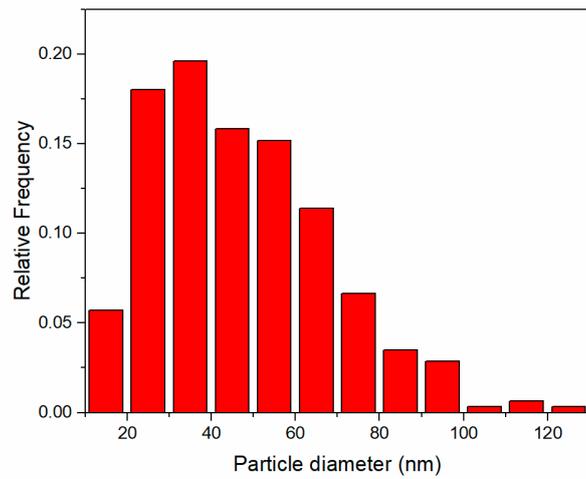


Figure S3. Particle size distribution of BHF NPLs (N total = 316, Particle size 47 ± 21 nm).

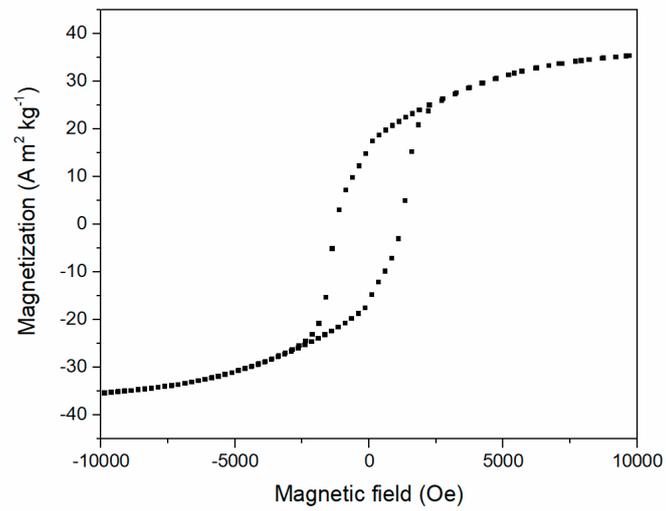


Figure S4. Magnetic hysteresis of BHF NPLs.

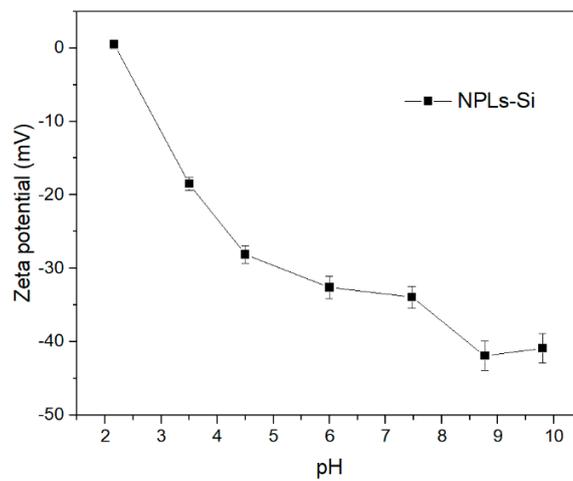


Figure S5. Zeta potential vs. pH of negatively charged NPLs-Si.

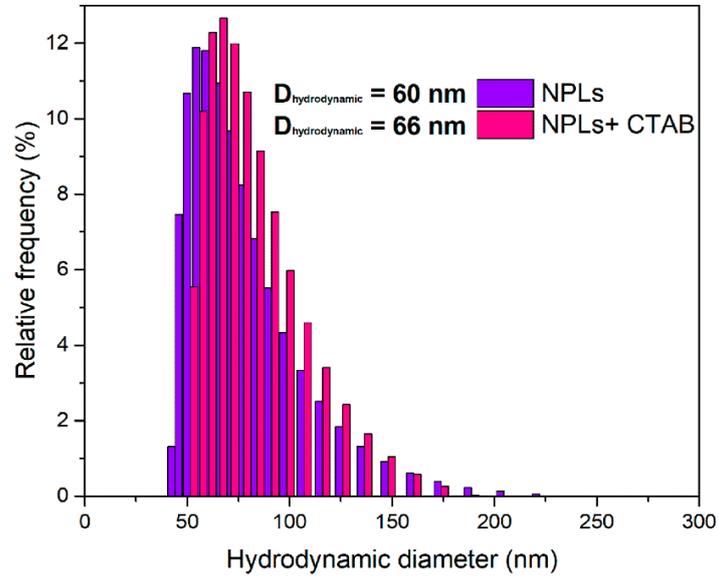


Figure S6. The number-weighted distributions of the hydrodynamic size of NPLs-Si in water (purple) and NPLs-Si in 10⁻⁴ % CTAB aqueous solution (as used in Sample 7) (pink).

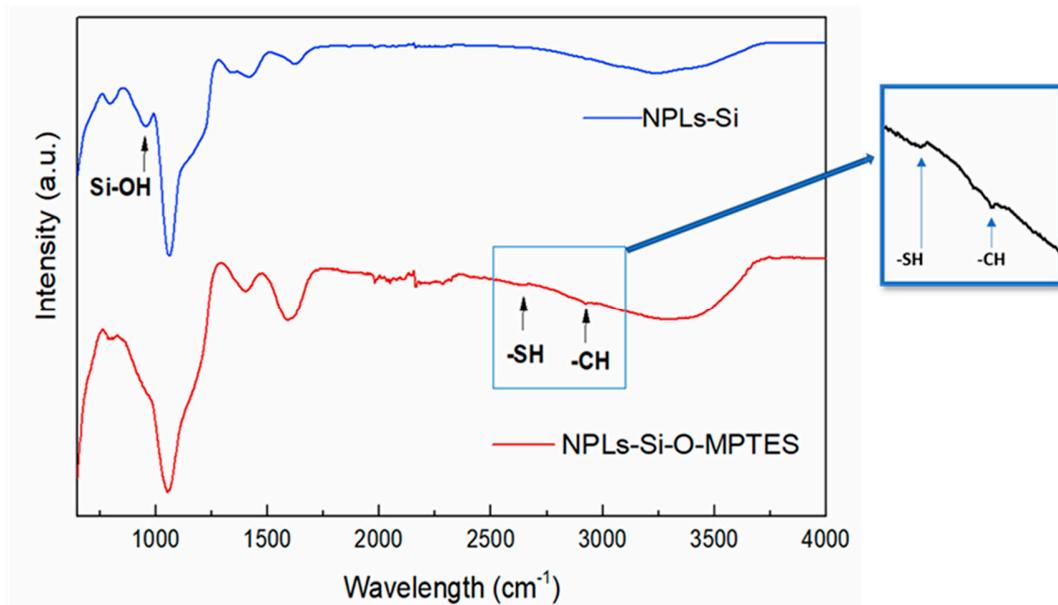


Figure S7. IR spectra of NPLS-Si and NPLS-Si coated with mercaptosilane.

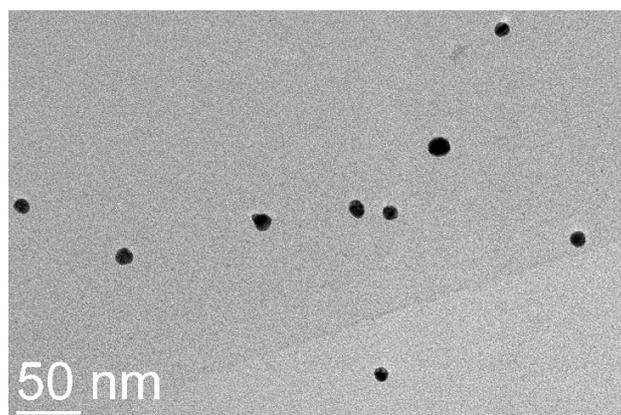


Figure S8. TEM image of gold nanospheres.

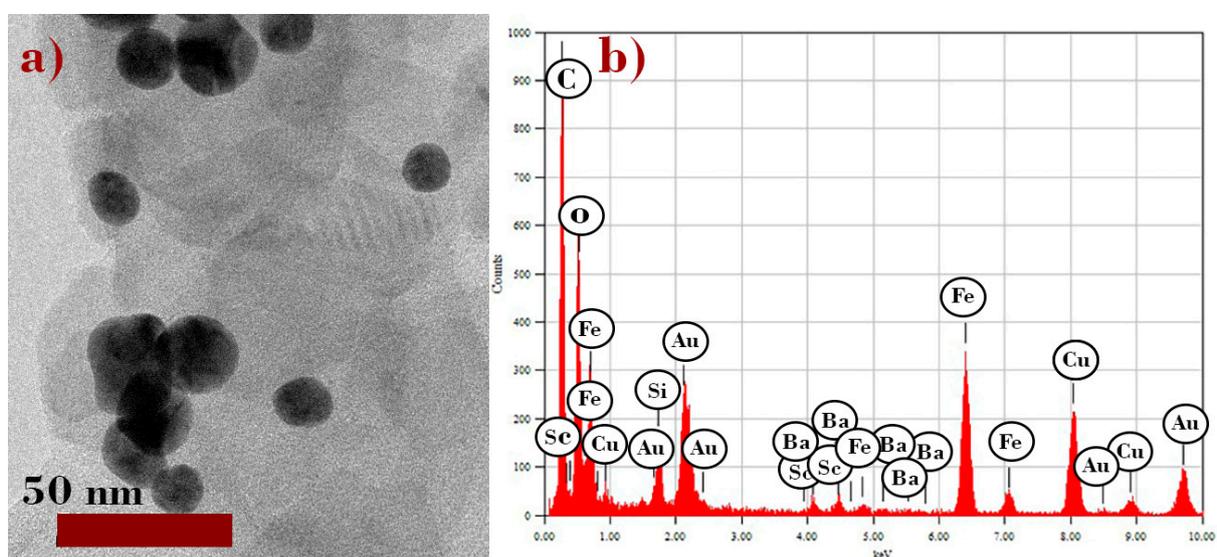


Figure S9. (a) TEM image of the Janus NPLs and (b) EDS analysis of area shown in (a). Cu and C in the EDXS spectrum originate from the sample support grid.