Electronic Supplementary Material (ESI) for CrystEngComm.

Electronic supplementary information

Synthesis of Size-Tuneable β-FeOOH Nanoellipsoids and Study of Their Morphological and Compositional Changes by Reduction

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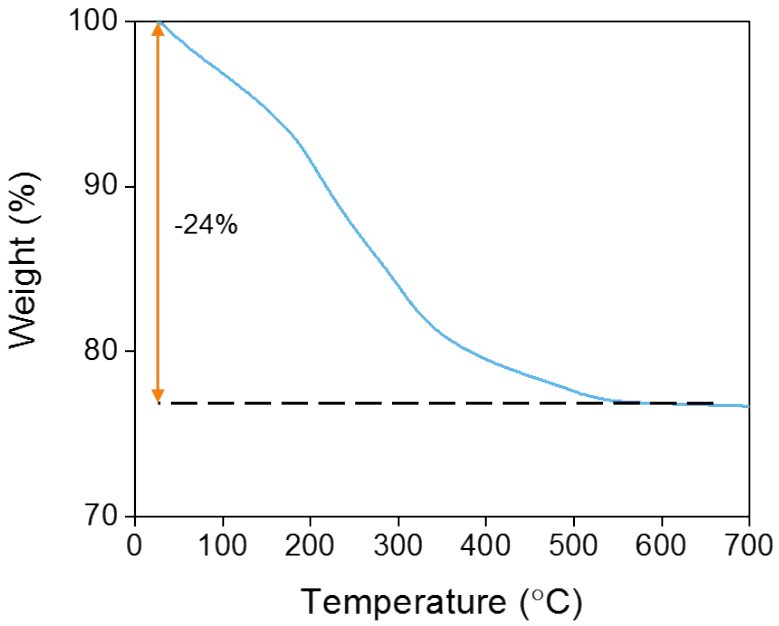


Figure S1. Thermogravimetric analysis of PEI coated β-FeOOH nanoparticles

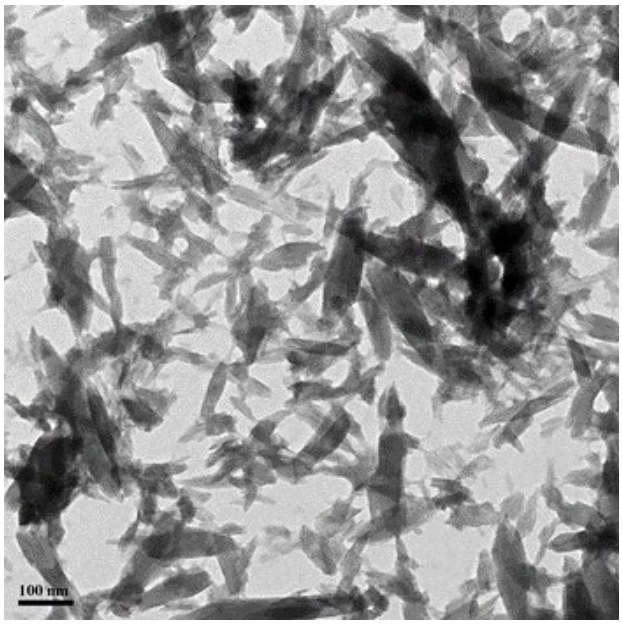


Figure S2. Synthesis of β-FeOOH in the absence of PEI at 80 °C for 2 h.

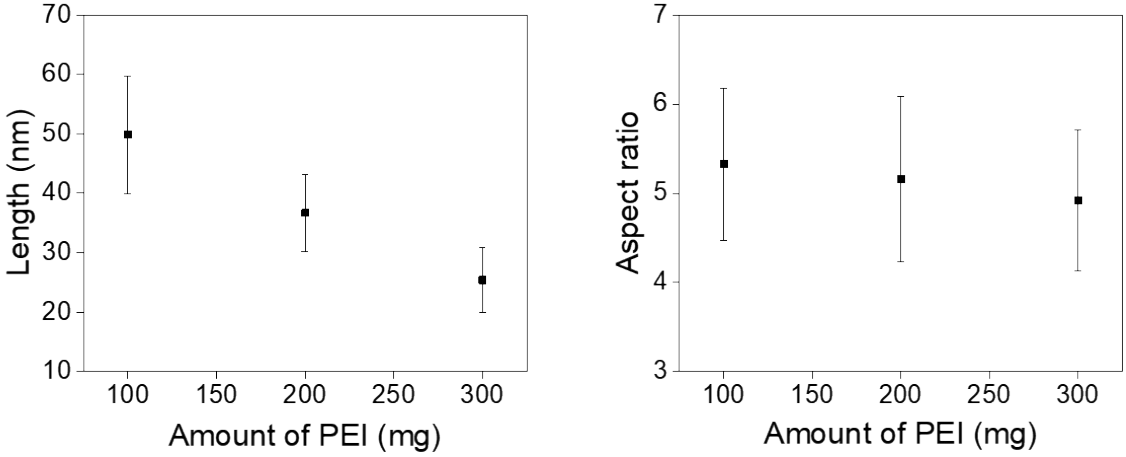


Figure S3. Length (left) and aspect ratio (right) changes of β-FeOOH nanoellipsoids with different amount of 750 kDa PEI.

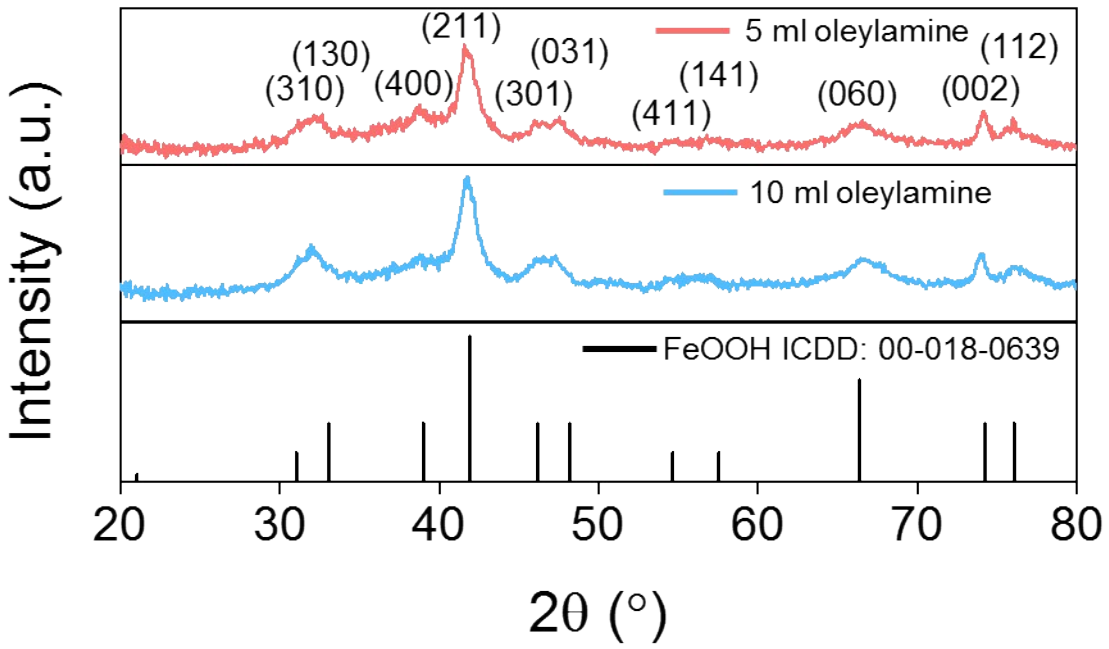


Figure S4. XRD patterns of oleylamine reduced β-FeOOH nanoellipsoids.

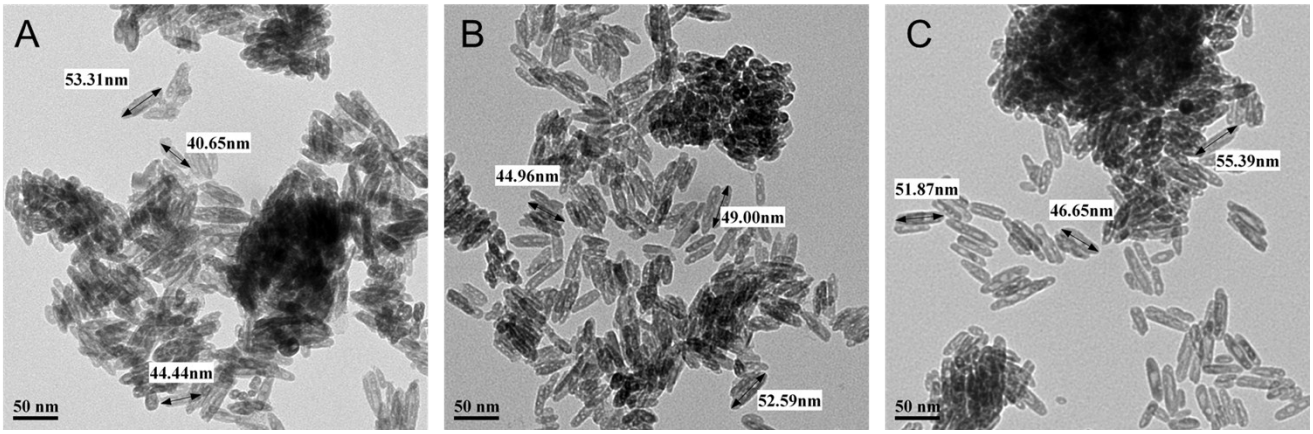
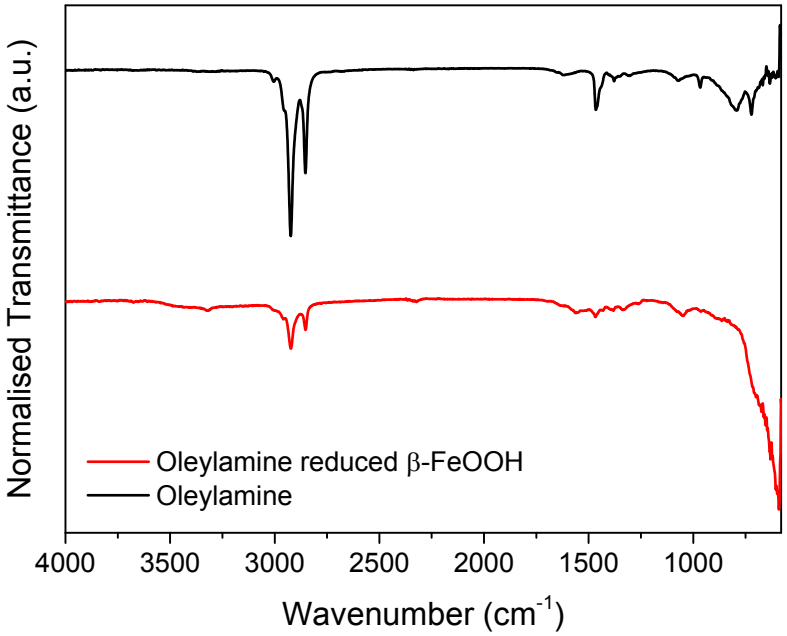


Figure S5. TEM images of β-FeOOH nanoellipsoids reduced by A) 5 ml, B) 10 ml and C) 15 ml oleylamine. Numbers are indicative of the lengths of the nanorods in each region in the TEM image at each condition.



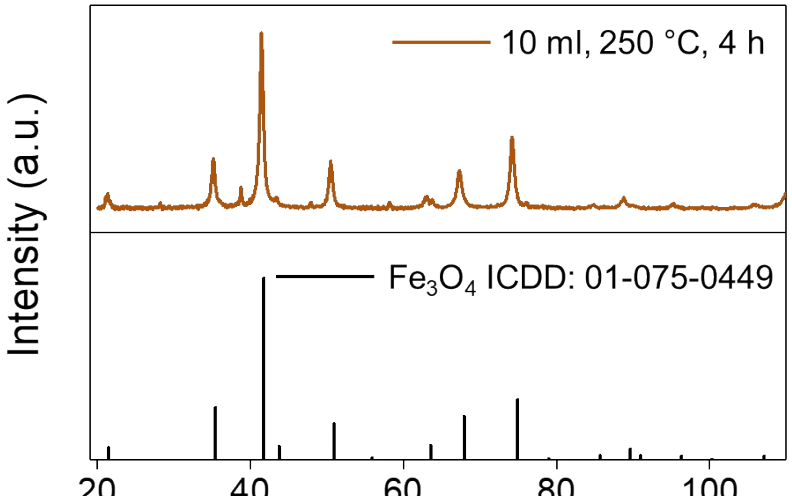


Figure S6. ATR-FTIR spectra of oleylamine and oleylamine reduced nanoparticles.

Figure S7. XRD pattern of β-FeOOH nanoellipsoids reduced with oleylamine at 250 °C for 4 h.

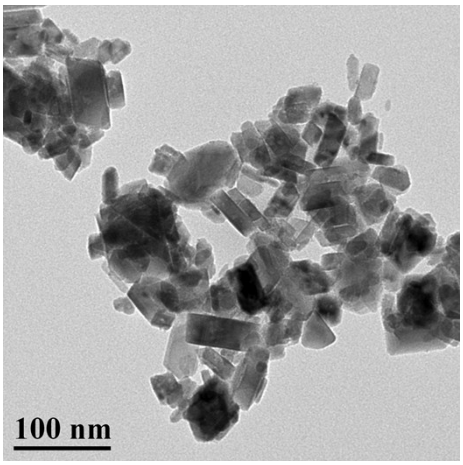


Figure S8. TEM image of nanoparticles reduced with oleylamine at 250 °C for 4 h.

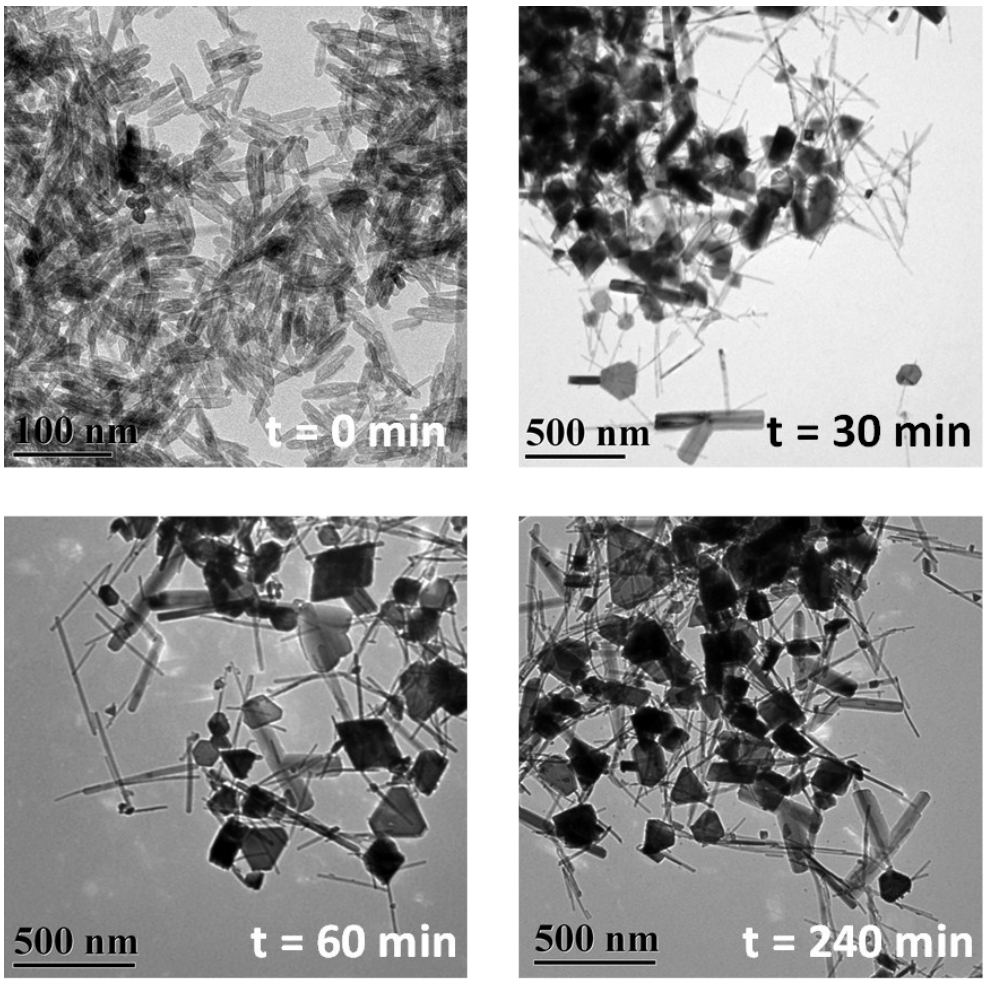


Figure S9. TEM images of hydrazine reduction at different reaction times.