

Supplementary Information for

Polymer brush-grafted nanoparticles preferentially interact with opsonins and albumin

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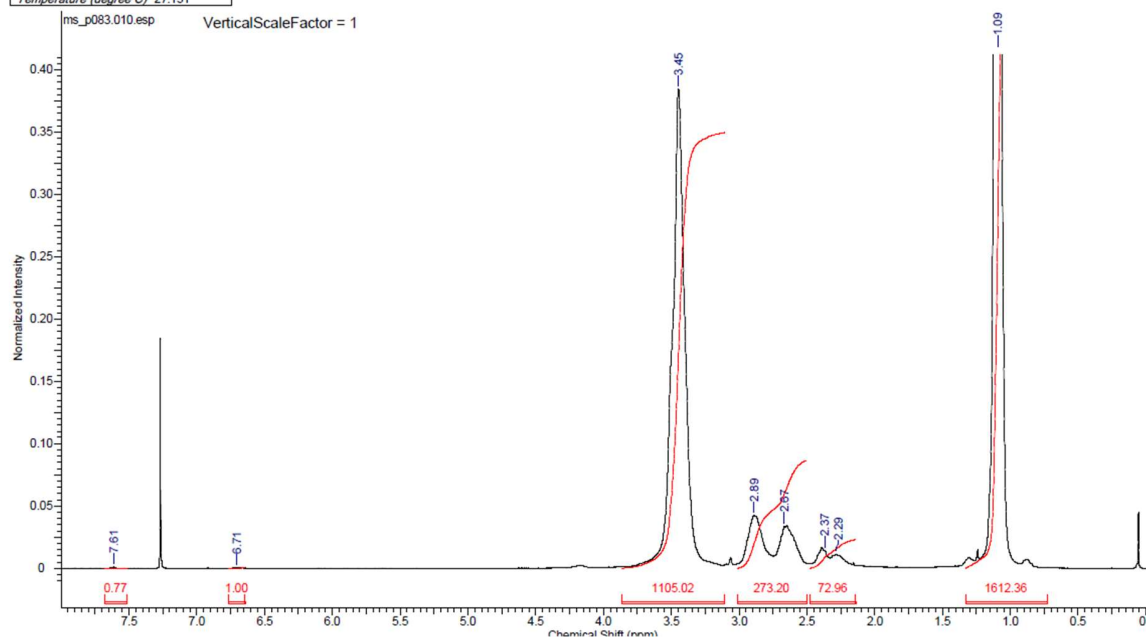
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KEYWORDS *core-shell nanoparticle, protein corona, protein adsorption, isothermal titration calorimetry, poly(2-ethyl-2-oxazoline), poly(2-alkyl-2-oxazoline).*

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Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	1345.5002	Spectrum Type	STANDARD
Temperature (degree C)	27.151			Sweep Width (Hz)	3605.66



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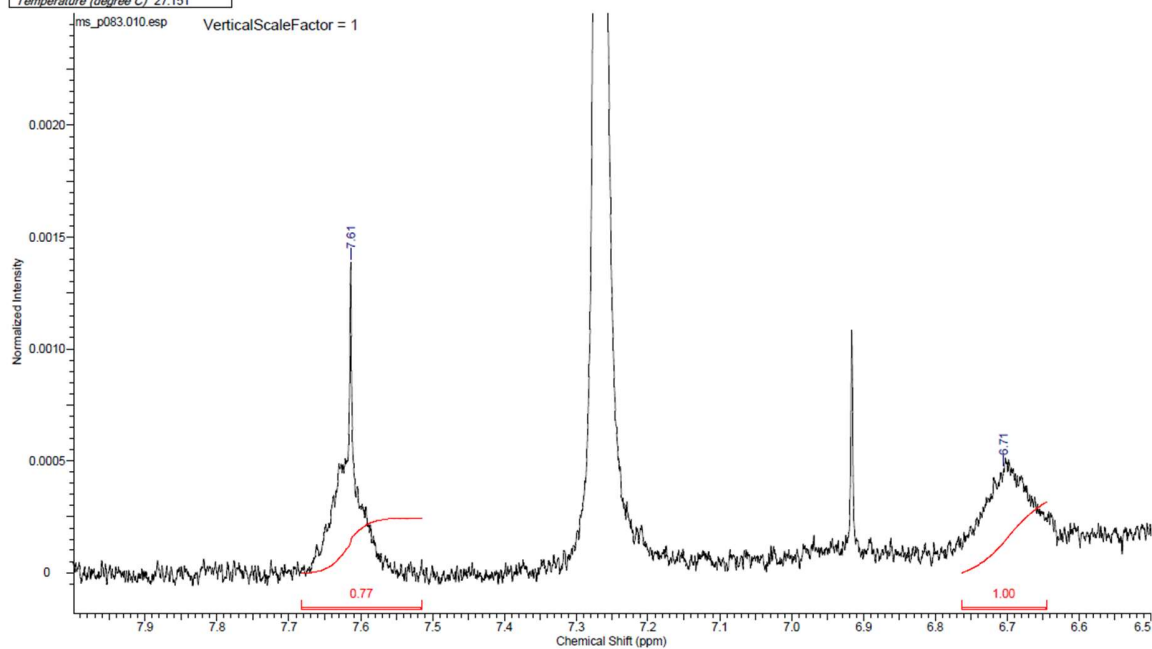
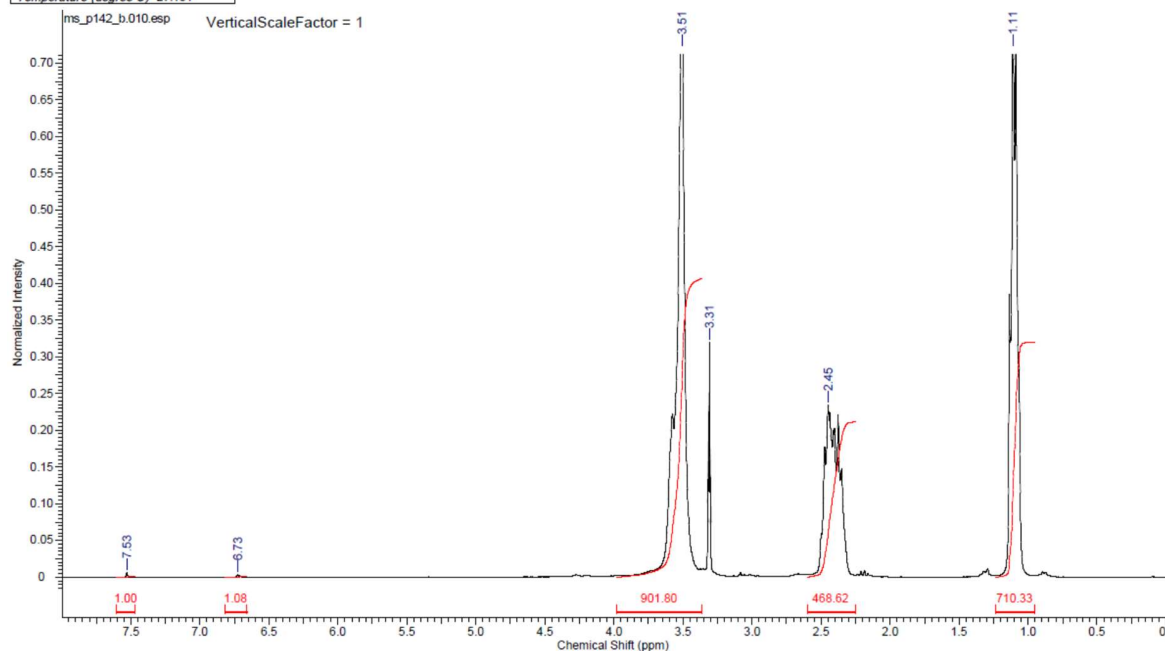


Figure S1. ¹H-NMR spectra of NDA-PetIOZ with a molecular weight of 18285 g/mol.

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Temperature (degree C)	27.151								



Acquisition Time (sec)	9.9265	Comment	MS P142-B	Date	21 Feb 2018 14:00:48				
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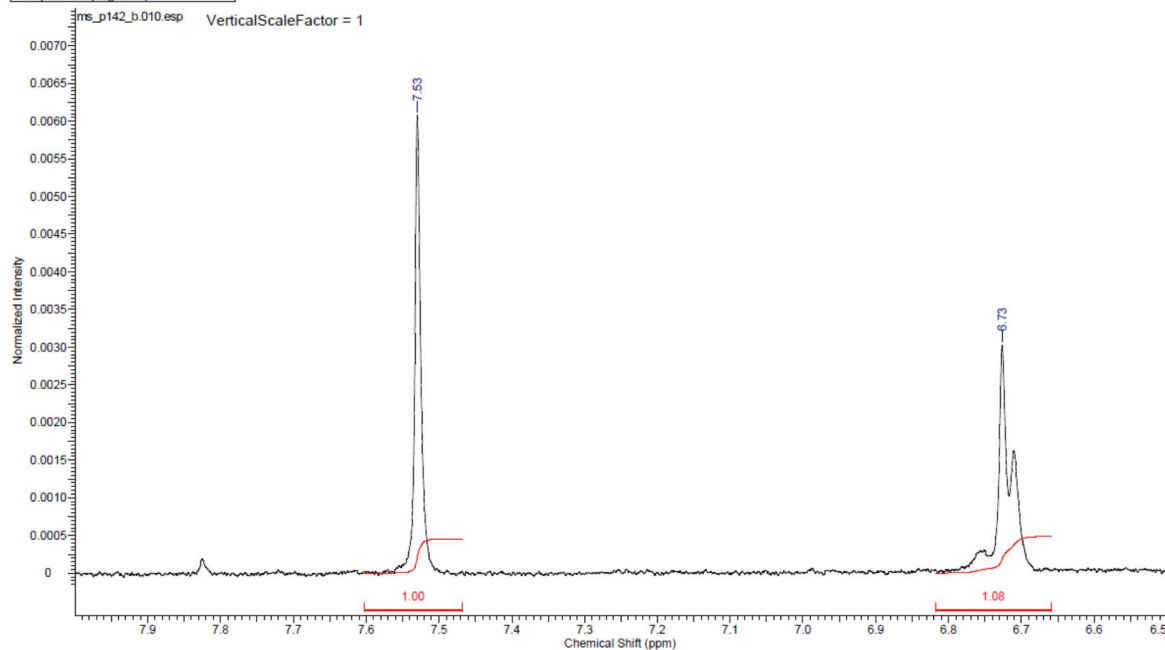


Figure S2. ¹H-NMR spectra of NDA-PEtOZ with a molecular weight of 22900 g/mol.

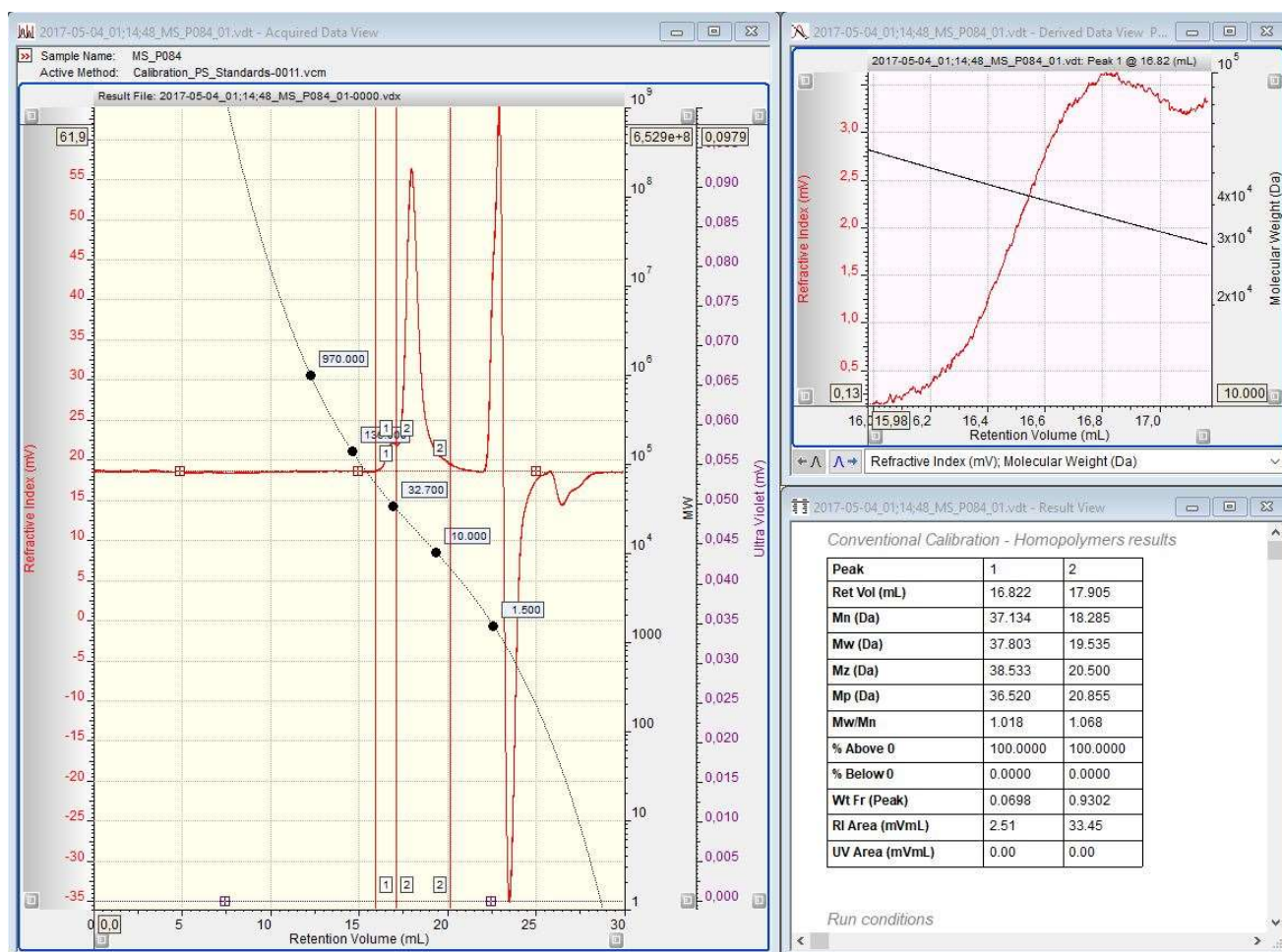


Figure S3. Example GPC of NDA-PAOZ for the grafting of the 8-nm cores (8nm-FeO-PAOZ).

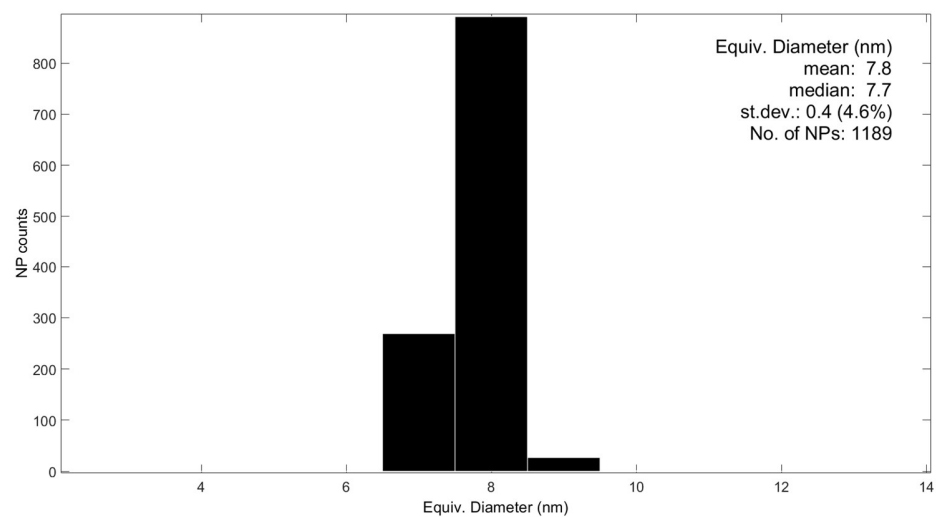


Figure S4. Size analysis with Pebbles software of oleic acid-coated 8nm-FeO NPs from TEM micrographs

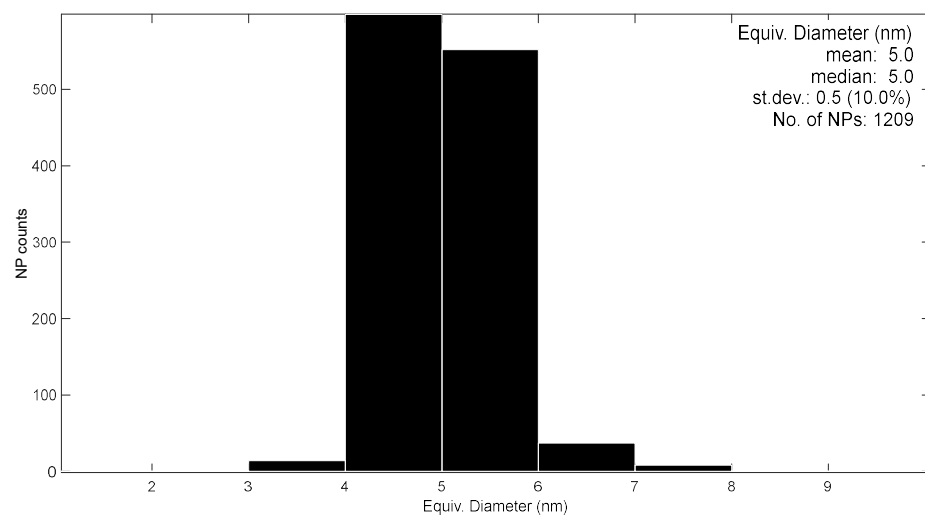


Figure S5. Size analysis with Pebbles software of oleic acid-coated 5nm-FeO NPs from TEM micrographs

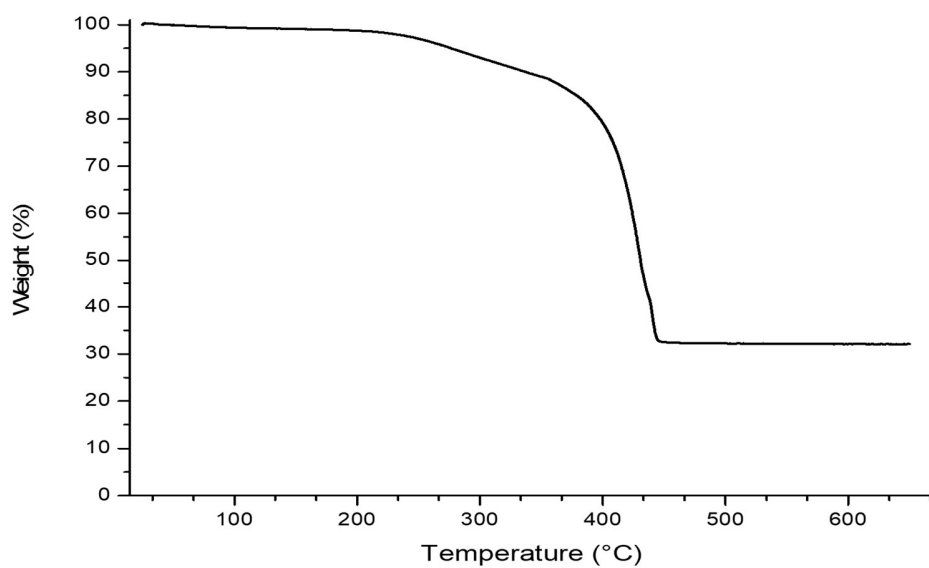


Figure S6. TGA thermograph of 8nm-FeO-PAOZ. Measured with a heating rate of 10 K/min in the range from 25 to 650°C.

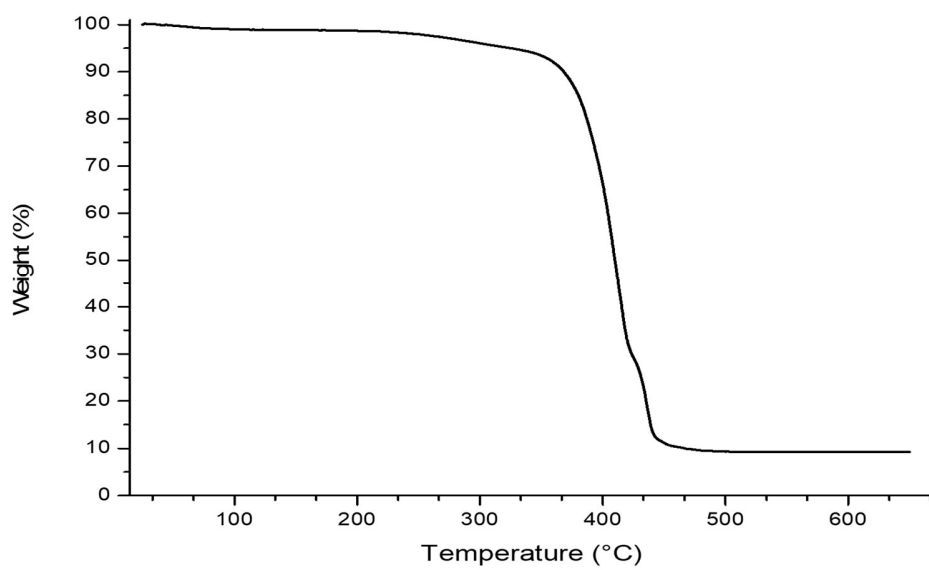


Figure S7. TGA thermograph of 5nm-FeO-PAOZ. Measured with a heating rate of 10 K/min in the range from 25 to 650°C.

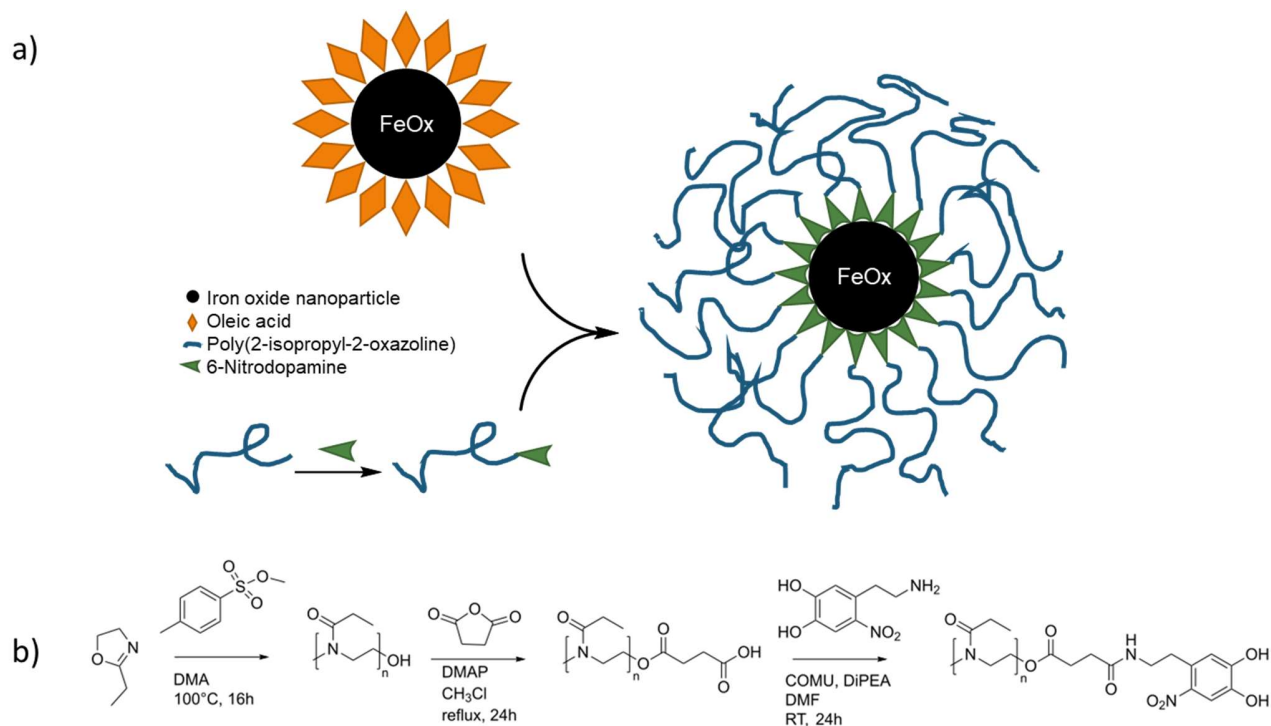


Figure S8. a) Schematic of the strategy applied to synthesized the PAOZ-grafted iron oxide nanoparticles. b) Schematics of the synthesis route for NDA-PAOZ.

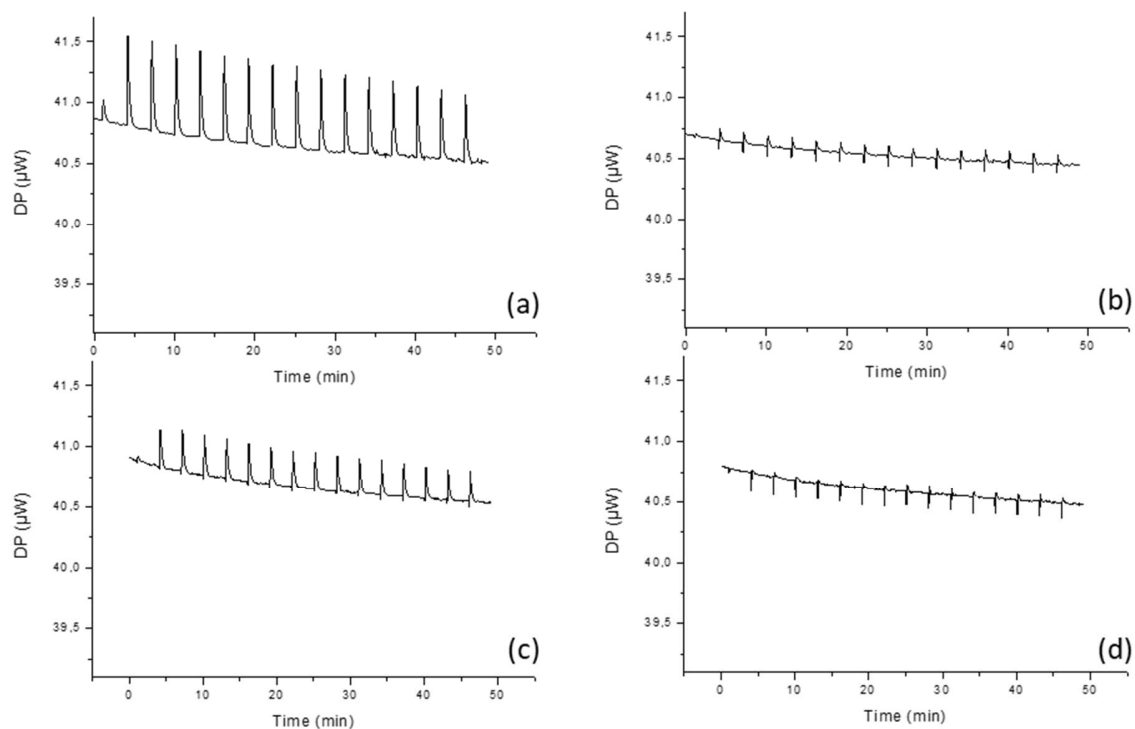


Fig.

Figure S9. ITC measurements of titration of serum proteins to free 23 kg mol^{-1} linear PAOZ in 10 mM HEPES-BS buffer. (a) Differential power per injection of transferrin. (b) Differential power per injection of lysozyme (c) Differential power per injection of HSA. (d) Differential power per injection of IgG.

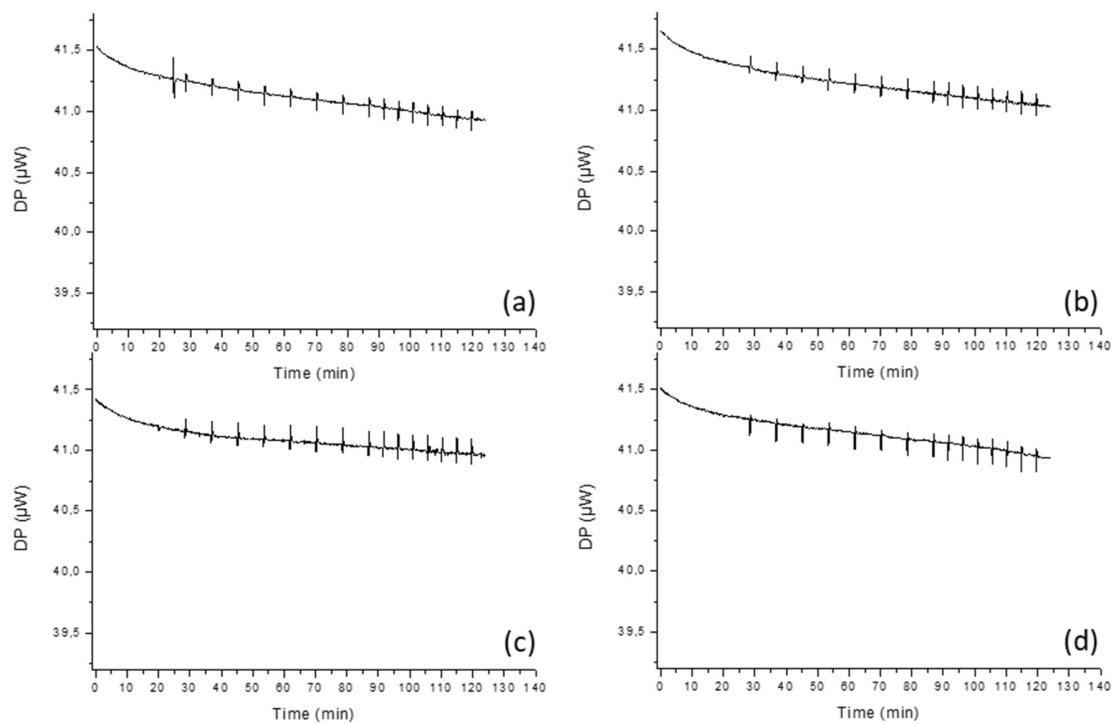


Figure S10. ITC measurements of titration of serum proteins to free 19 kg mol^{-1} linear PAOZ in 10mM HEPES-BS buffer. (a) Differential power per injection of transferrin. (b) Differential power per injection of lysozyme (c) Differential power per injection of HSA. (d) Differential power per injection of IgG.

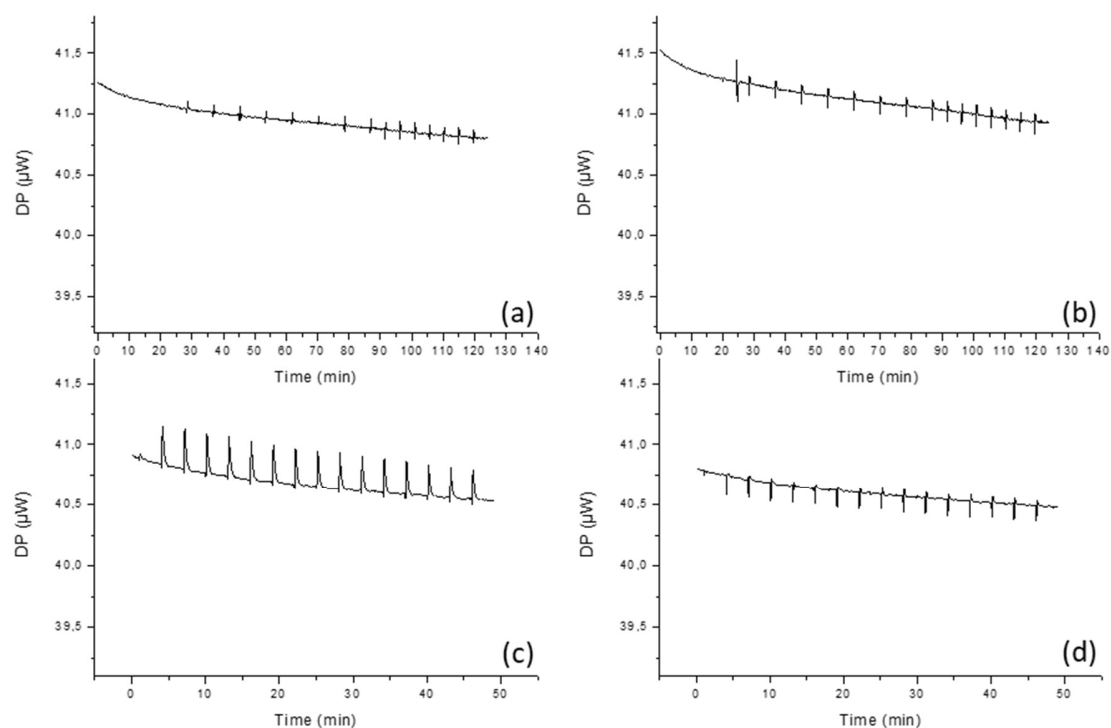


Figure S11. ITC measurements of the titration of serum proteins to 10 mM HEPES-BS Buffer. (a) Differential power per injection of transferrin to 10 mM HEPES-BS buffer. (b) Differential power per injection of lysozyme (c) Differential power per injection of HSA. (d) Differential power per injection of IgG.

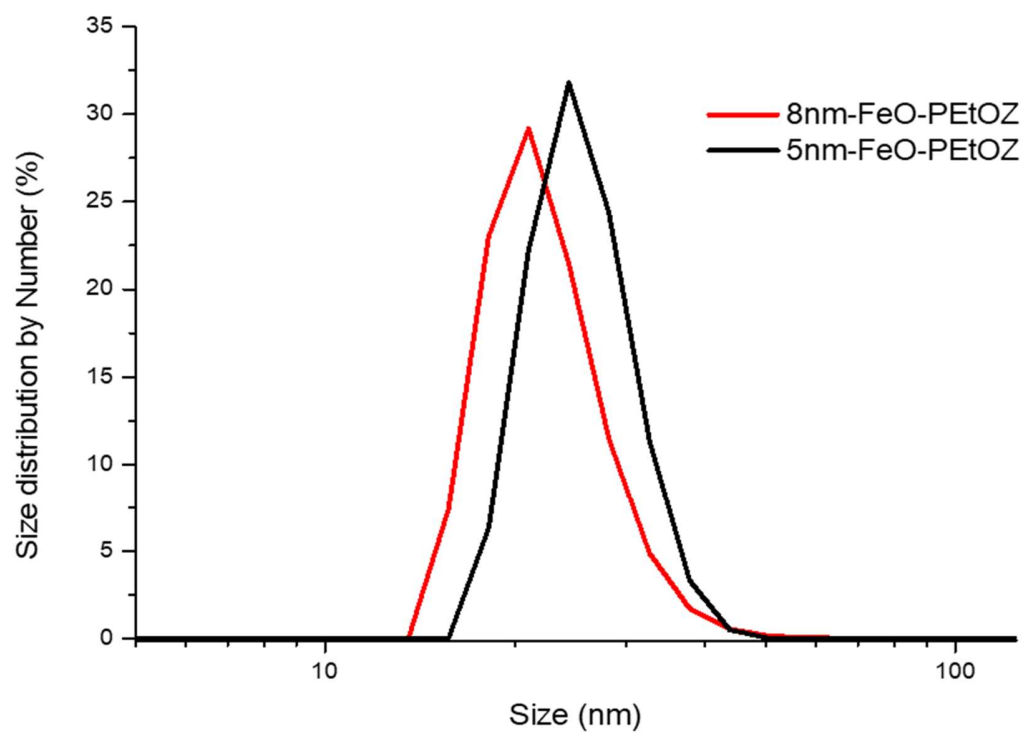


Figure S12. : Number-weighted D_H measured by DLS on 8nm-FeO-PAOZ (red) and 5nm-FeO-PAOZ (black) particles.

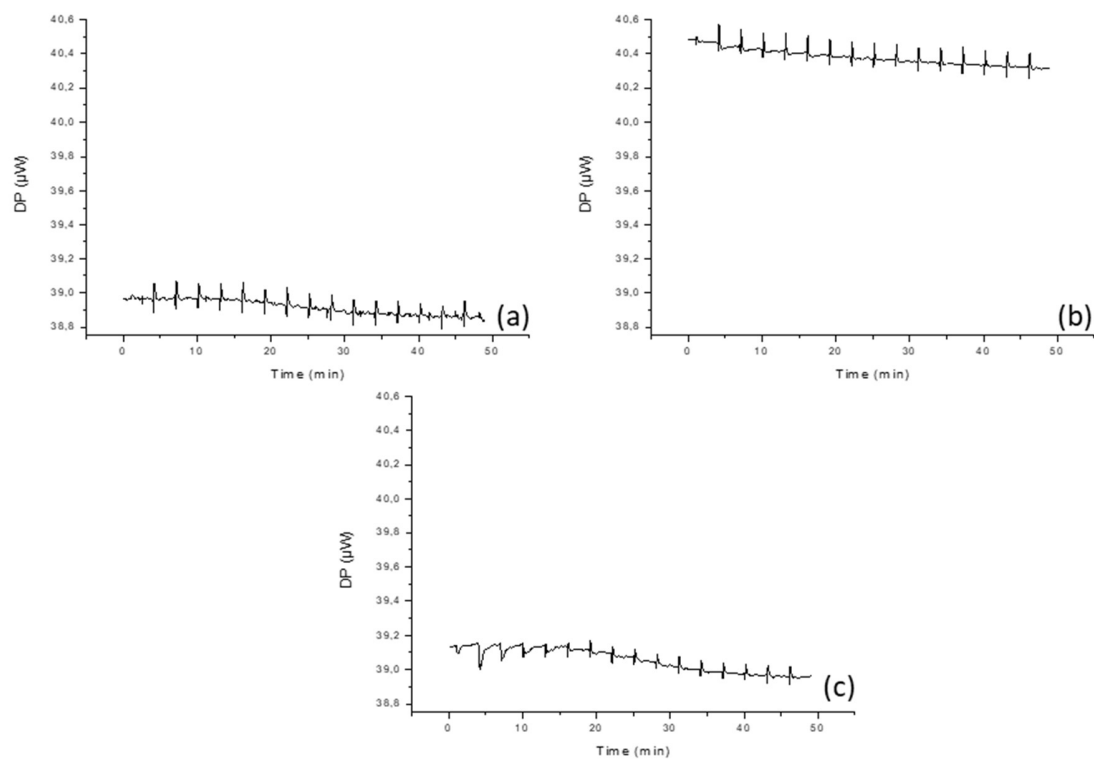


Figure S13. Differential power per injection of human lysozyme to (a) HEPES-BS (b) 8nm-FeO-PAOZ and (c) 5nm-FeO-PAOZ.