Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

SUPPORTING INFORMATION

Magnetic chelating nanoprobes for enrichment and selective recovery of metalloproteases from human saliva

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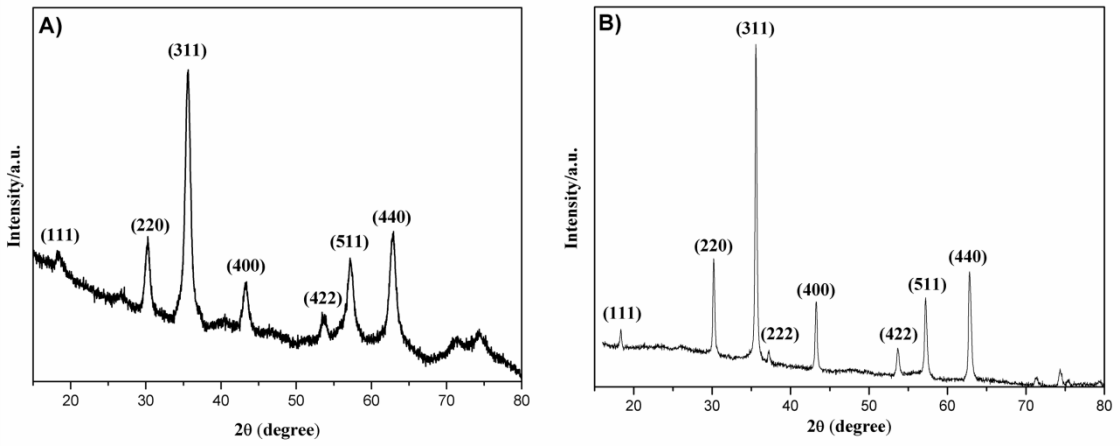

Figure S1 -A) X-ray diffraction pattern of 12 nm Fe_3O_4 nanoparticles. B) X-ray diffraction pattern of 50 nm Fe_3O_4 nanoparticles.

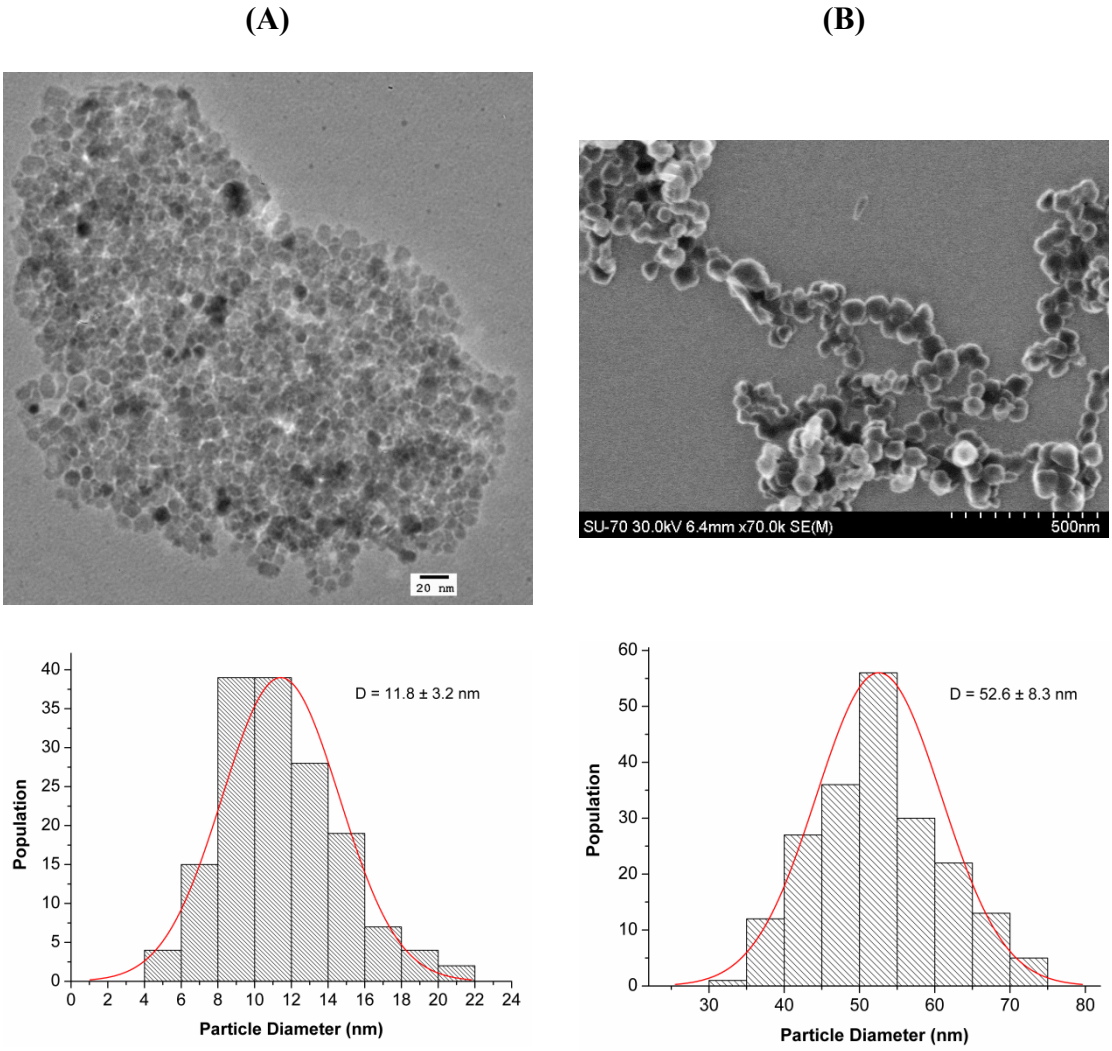

Figure S2 - Electron micrographs of (A) 12 nm Fe_3O_4 (TEM) and (B) 50 nm Fe_3O_4 nanoparticles (SEM) (top) and respective particle size histograms (bottom). The particle diameter was calculated as D = mean ± t s/$\sqrt{n}$, where t is t-score (95% confidence), s is the standard deviation and n the sample size.

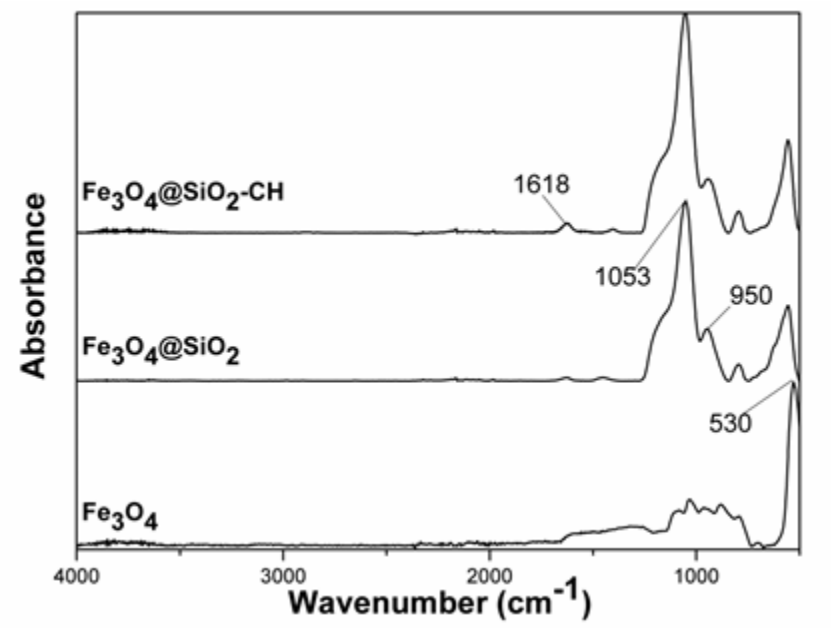

Figure S3 - ATR-FTIR spectra of 50 nm magnetic core NPs at distinct surface modification steps: Fe_3O_4, Fe_3O_4@SiO_2 and Fe_3O_4@SiO_2-CH functionalized at 70ºC with 500µL of acetic acid during 24 hours.

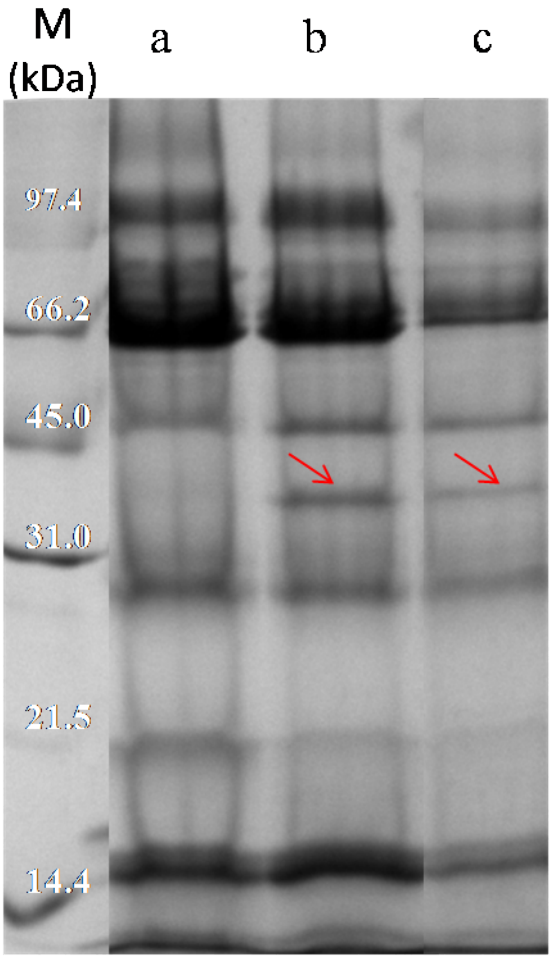

Figure S4 – SDS-PAGE (15%) gel obtained after the incubation of a) $50Fe_3O_4@SiO_2$-CH, b)$12Fe_3O_4@SiO_2$-CH and c) $12Fe_3O_4$ NPs with human saliva. (M- Marker)