Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Controlled Surface Functionality of Magnetic Nanoparticles by Layer-by-Layer Assembled Nano-Films

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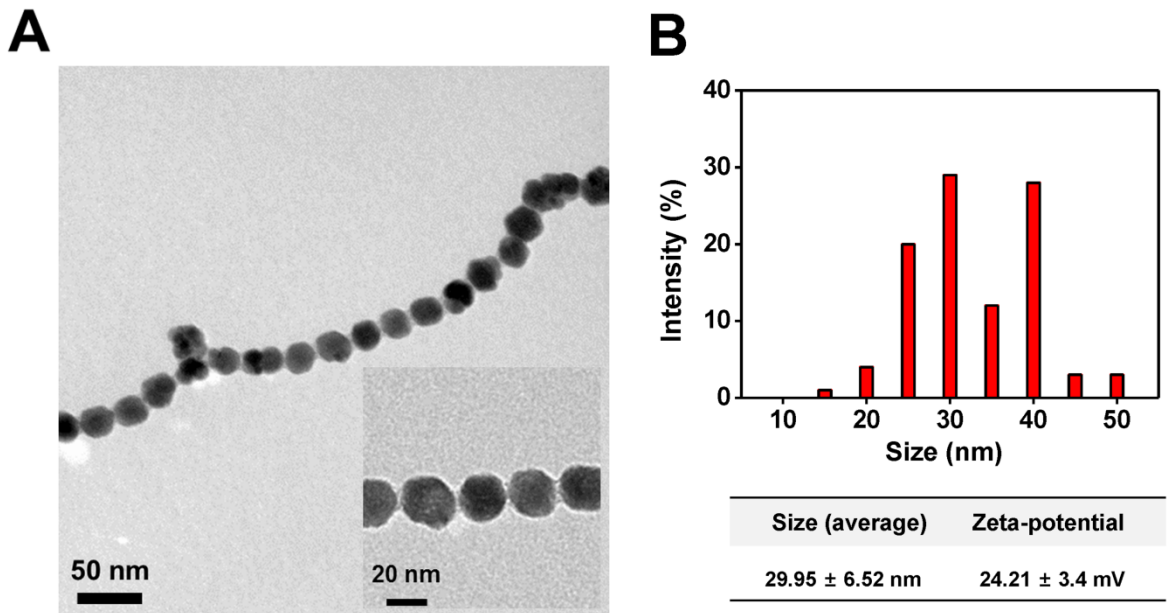

Size (average)	Zeta-potential
29.95 ± 6.52 nm	24.21 ± 3.4 mV

Figure S1. (A) EF-TEM images on MNPs. Inset image is highly magnified MNPs. (B) Top: Size distribution analysis on MNPs obtained from TEM results (n = 100). Bottom: Size average and zeta-potential results on MNPs. The size average was calculated from TEM measurement data.

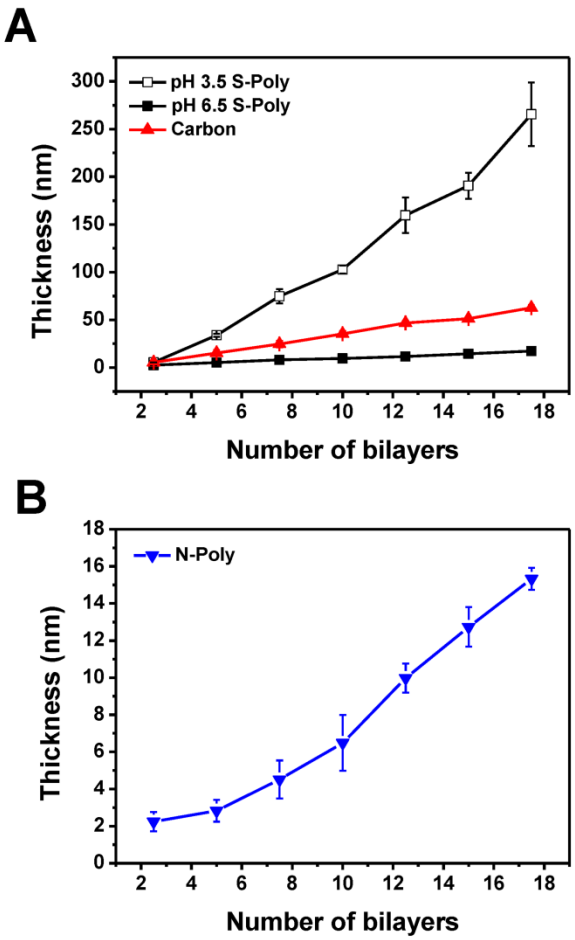

Figure S2. (A) Thickness curves on S-Poly and Carbon films onto flat substrate (silicon wafer) : pH 6.5 S-Poly film (■, black line), pH 3.5 S-Poly film (□, black dash line) and pH 3.5 Carbon film (▲, red line). (B) Thickness curve on N-Polys on wafers.

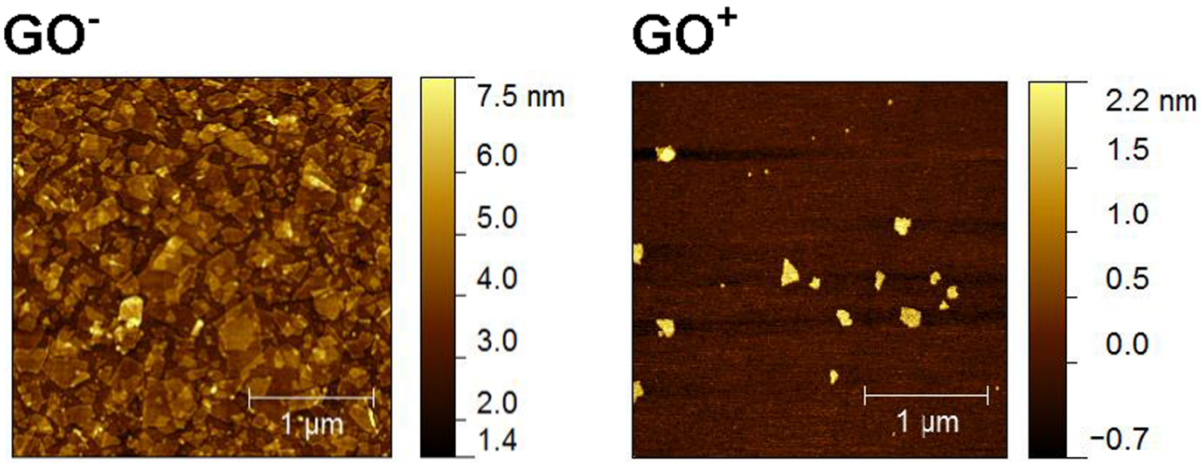

Figure S3. AFM images on GO^- and GO^+. The scale bar is 1 μm.

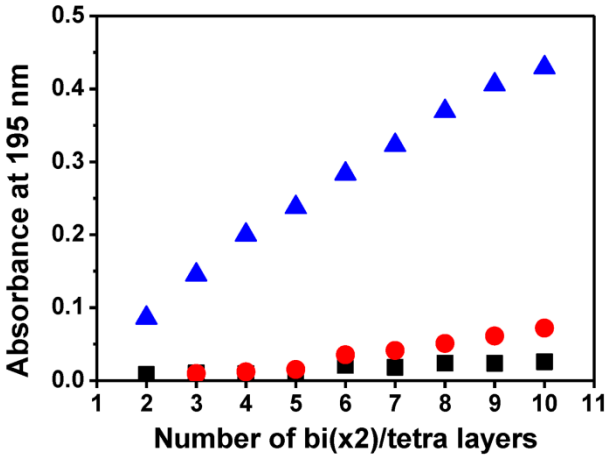

Figure S4. The absorbance at 195 nm via UV-visble measurement *verse* the number of bi/tetra layers of bFGF-loaded films on flat substrate: G1 (■, black; bilayer), G2 10 tetralayer (●, red; tetralayer) and G3 (▲, blue; tetralayer) films on quartz glass.

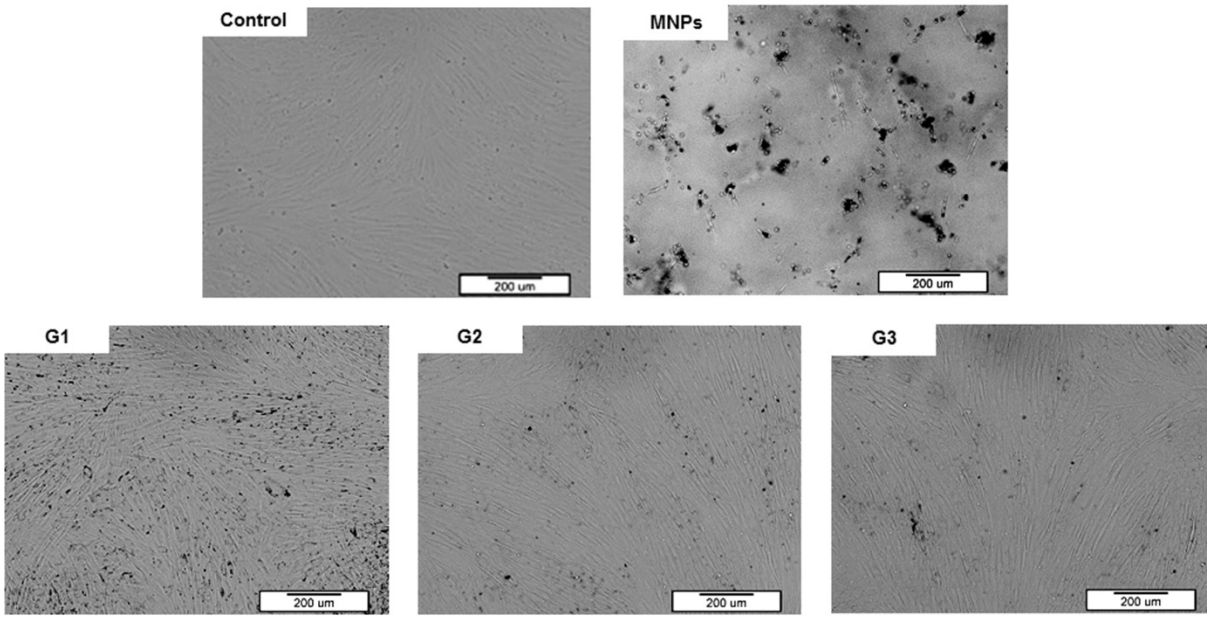

Figure S5. Microscope images of at the 6 day after treating MNPs and bFGF-loaded F-MNPs on hDF. The treated amounts of MNPs and bFGF-loaded F-MNPs were 200 μg/mL. The control is untreated bFGF group (negative control).