	%C	%N	%O	%Na	%S	%Cl	%Fe
CG	65.4	15.1	18.5	0.3	0.2	0.5	/
NPsCG	58.8	16.2	20.9	1.7	0.2	1.4	0.9

Table S1: Values obtained by XPS analysis

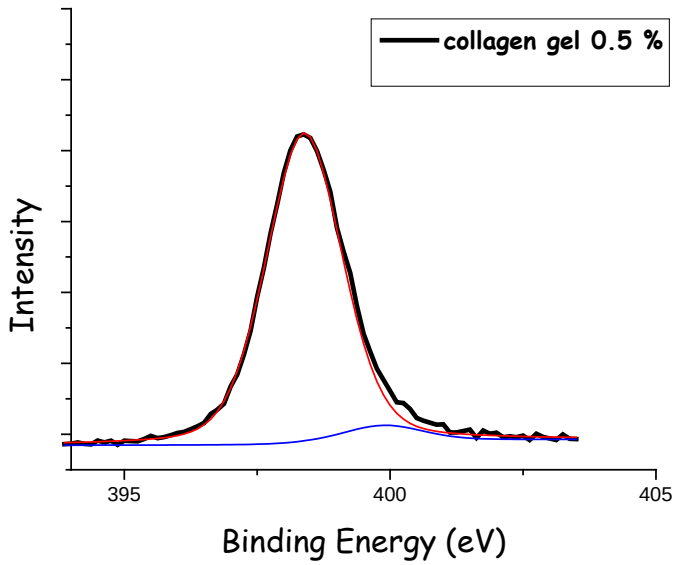

Figure S1. Deconvoluted high resolution N1s XPS spectrum of CG.

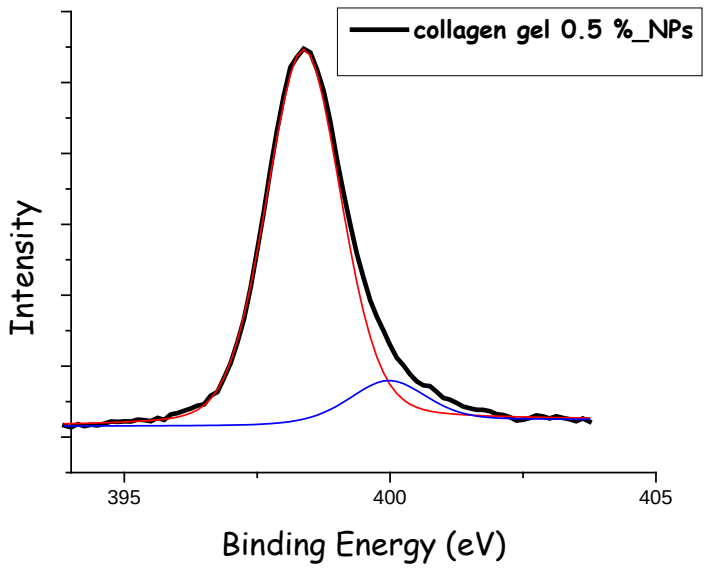

Figure S2. Deconvoluted high resolution N1s XPS spectrum of nanoparticles loaded CG.

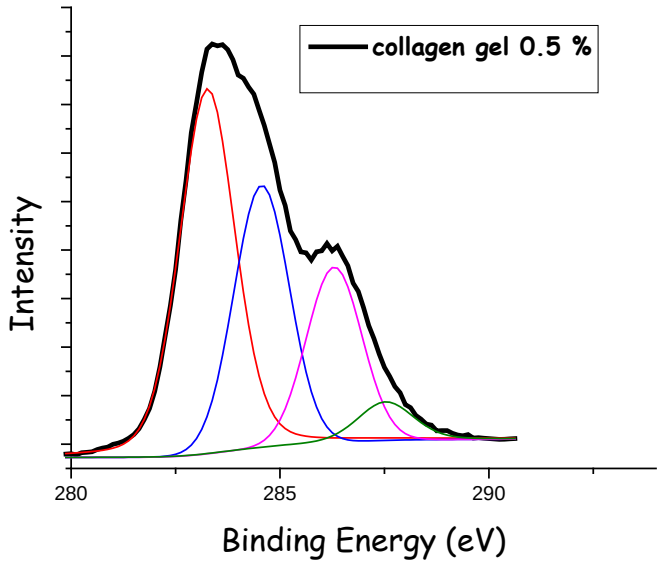

Figure S3. Deconvoluted high resolution C1s XPS spectrum of CG.

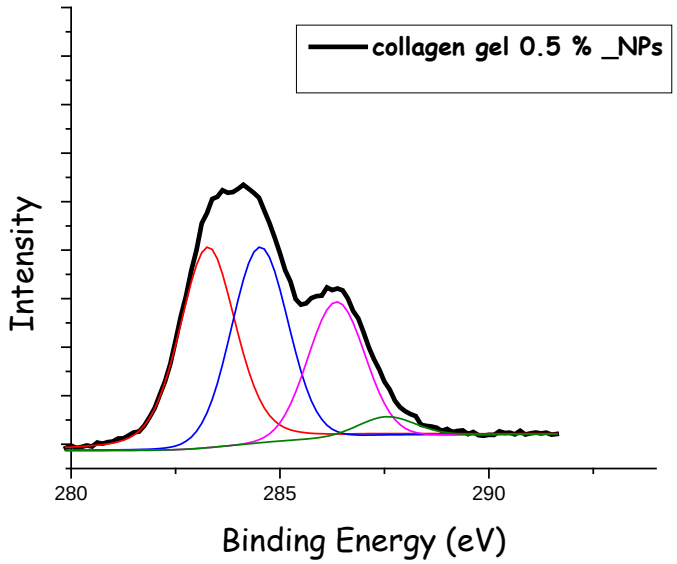

Figure S4. Deconvoluted high resolution C1s XPS spectrum of nanoparticles loaded CG.

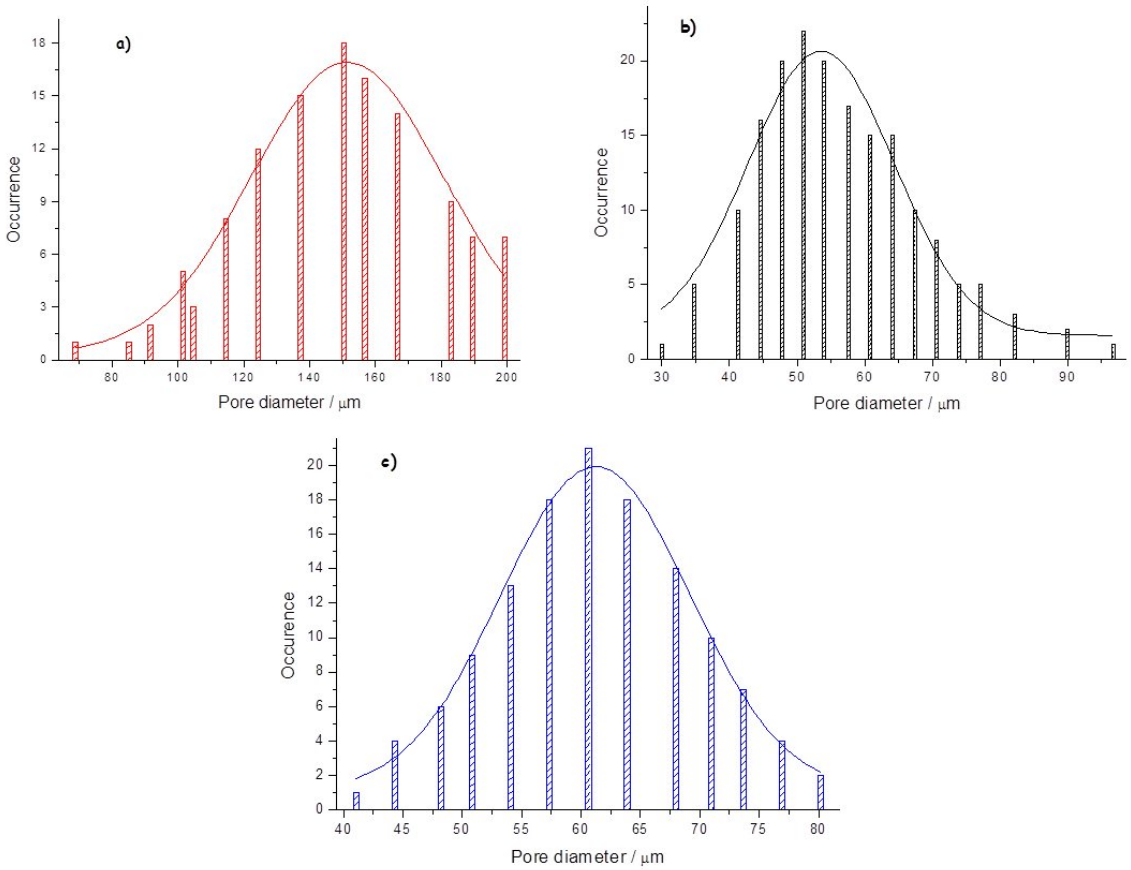

Figure S5. Pore diameter distribution for collagen matrices obtained without any crosslinker (box a), with paramagnetic nanoparticles (picture b) and with formaldehyde c). Collagen scaffold without any cross-linker shows an estimated average pore dimension of about 152 μm, when NPs are used to prepare the collagen scaffolds the pore dimension is reduced to about 53 μm. Formaldehyde crosslinker induce a formation of porous matrices with an average pore dimension of 61 μm.

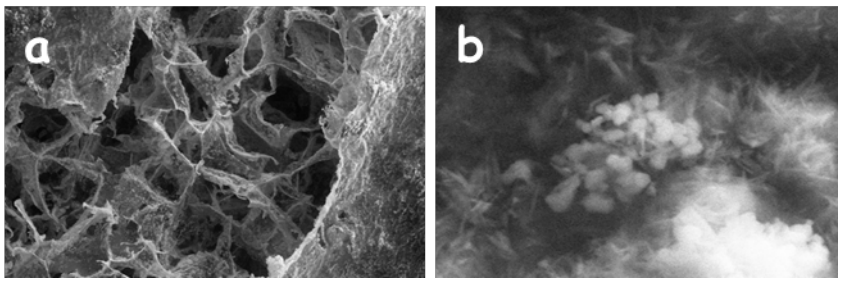

Figure S6. SEM pictures of collagen matrices obtained with paramagnetic nanoparticles. A magnification of 1000x (box a) and 10000x (box b) was used.

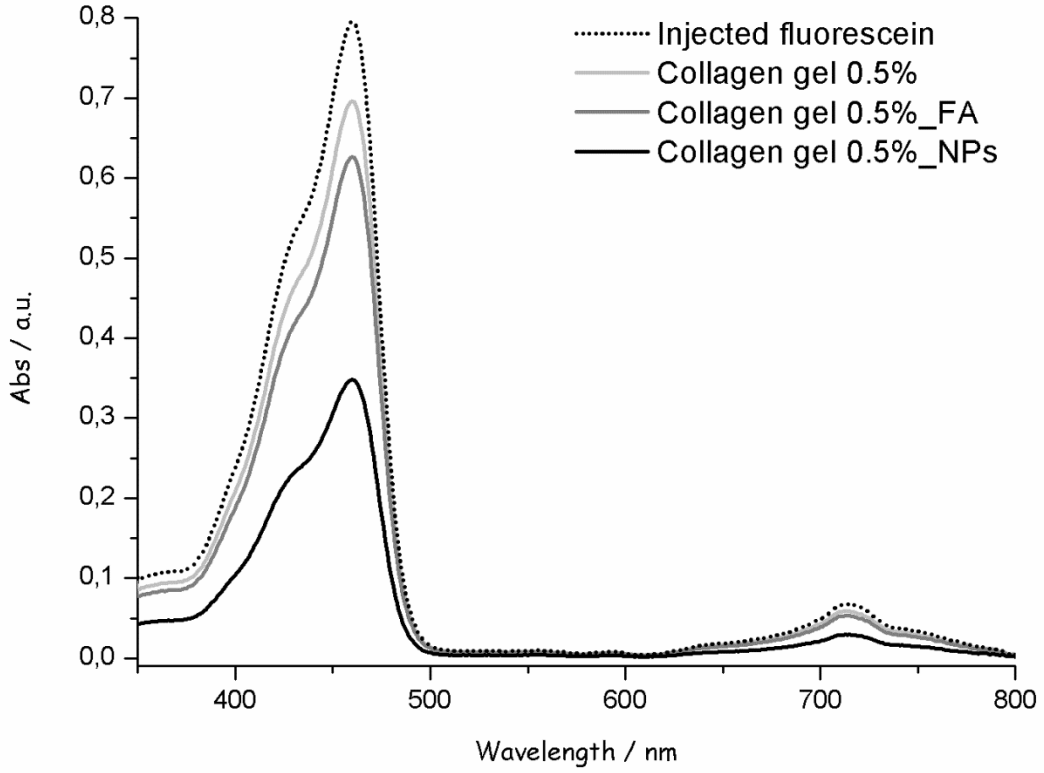

Figure S7. UV-vis absorption spectra of the fluorescein aqueous solution used to load scaffolds (opportunely diluted, dotted line) and the released fluorescein from CG (light gray line), FACG (gray line) and NPsCG (black line).

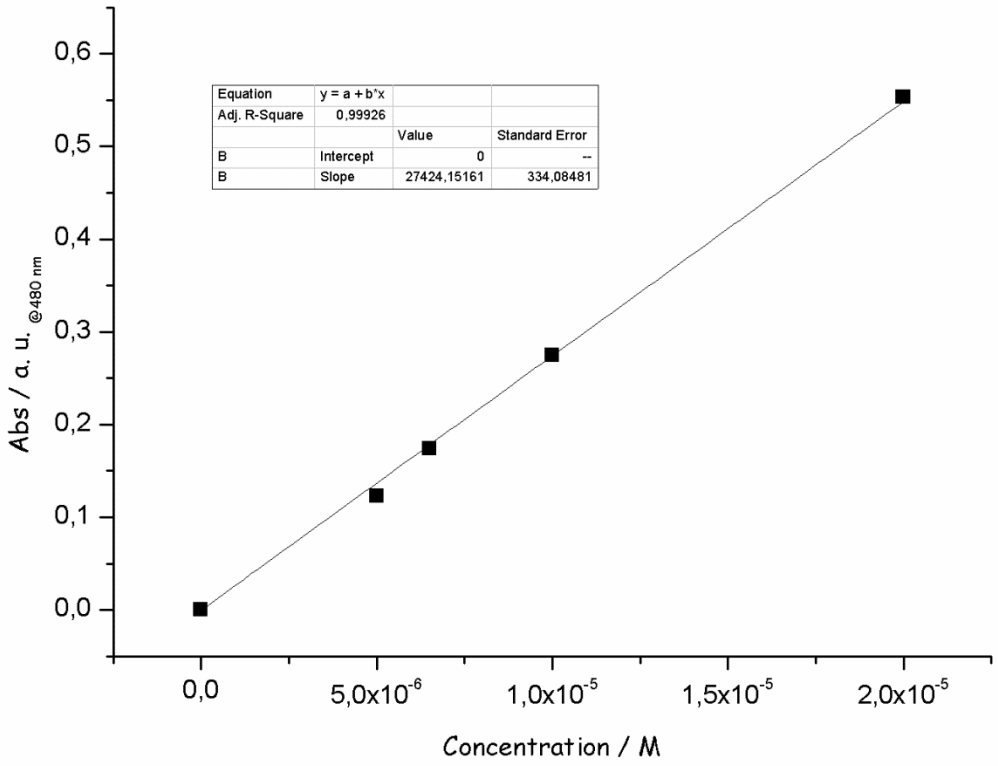

Figure S8. Fluorescein calibration curve in water.

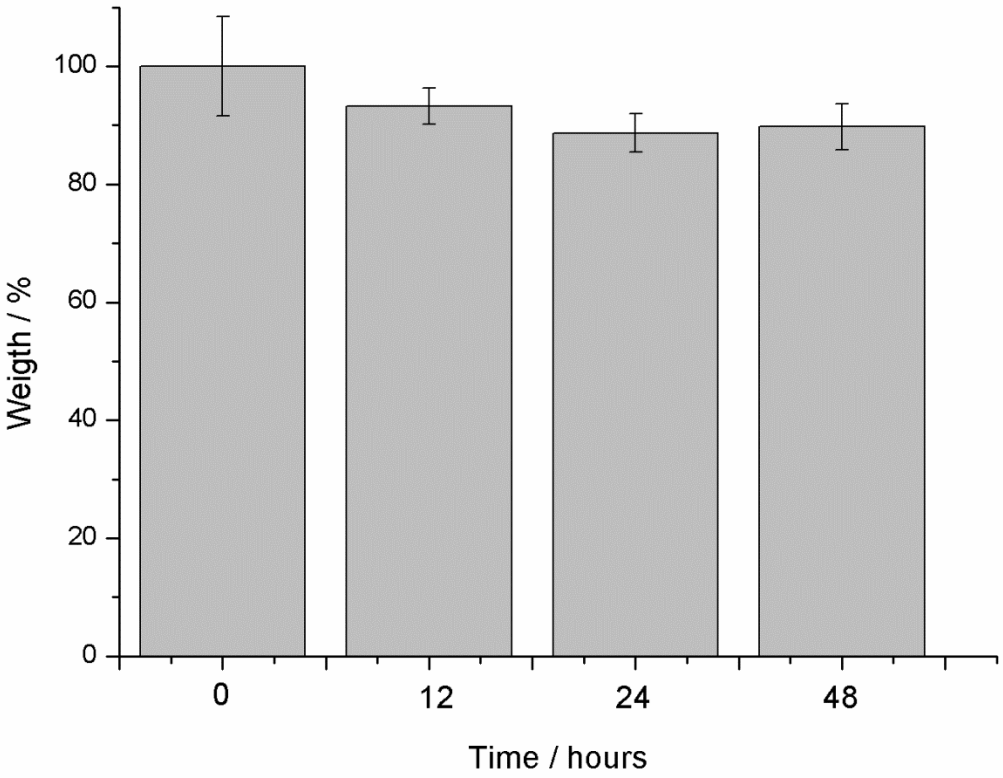

Figure S9. Dry mass change of NPsCG samples incubated in DMEM with 10% (v/v) FBS during the time.