



## Electronic Supplementary Information (ESI)

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### Silver nanoparticles functionalized with a fluorescent cyclic RGD peptide: a versatile integrin targeting platform for cells and bacteria

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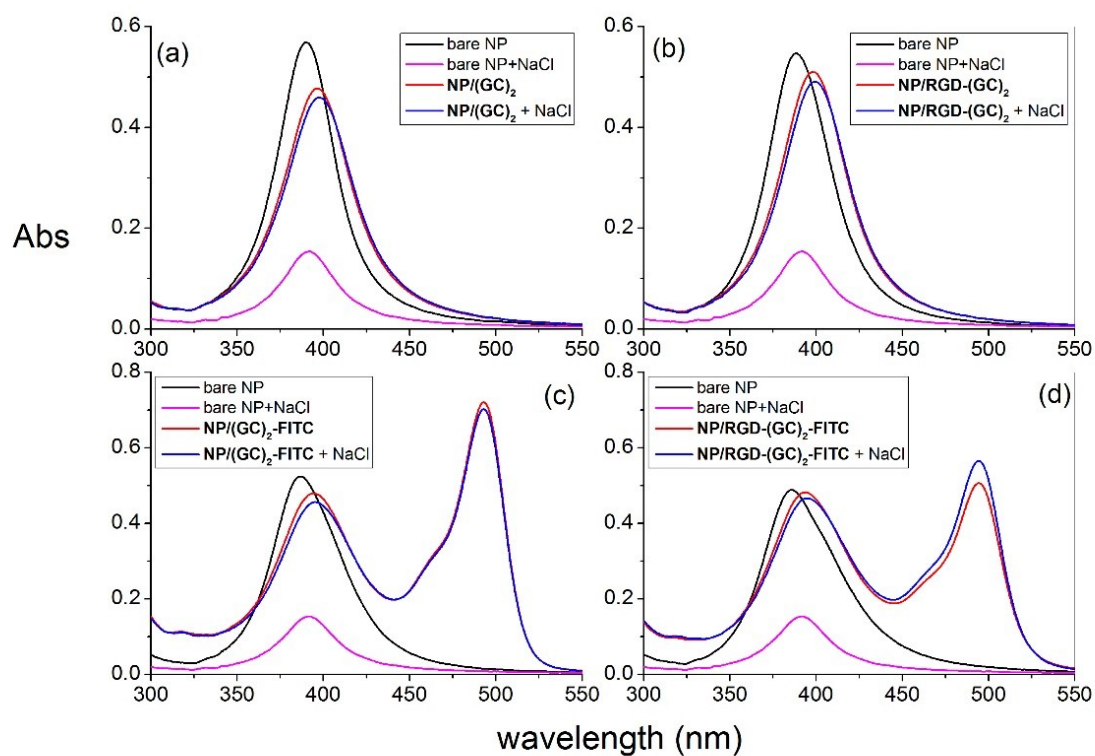
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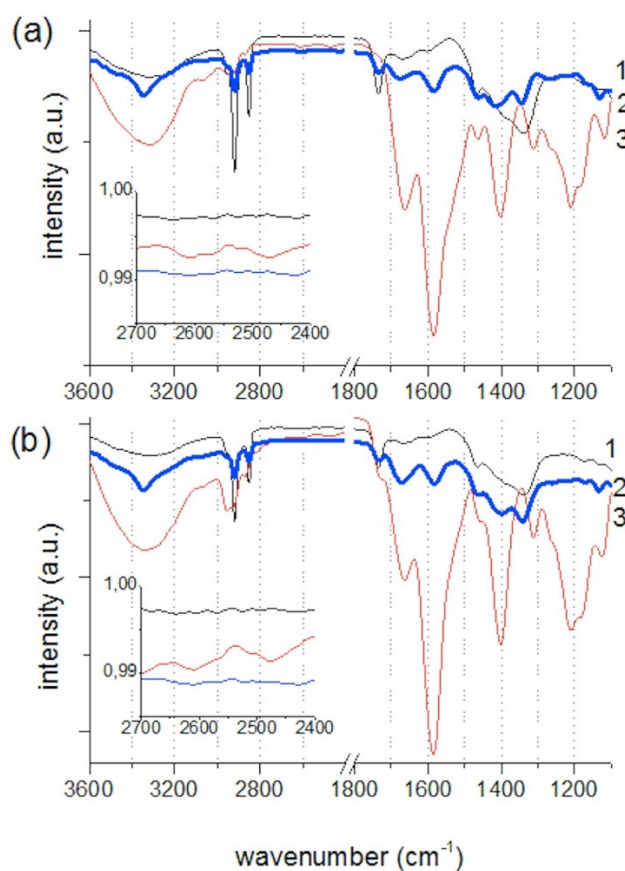
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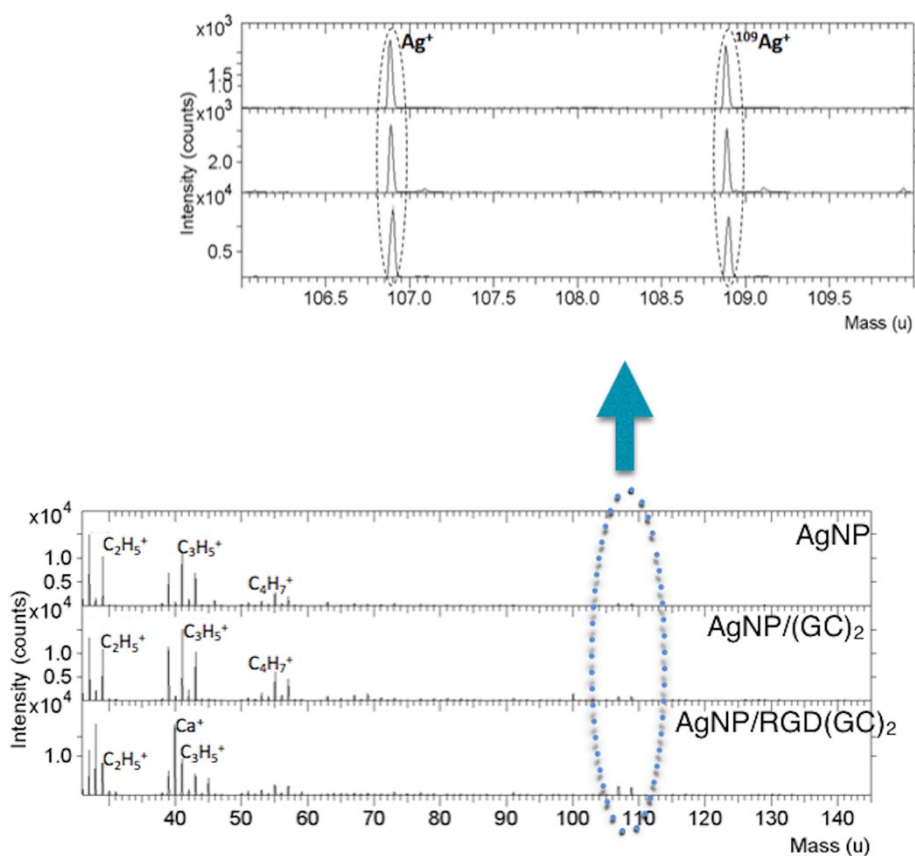
**Figure S1** - UV-visible spectra recorded by addition of NaCl (30 mM) to AgNPs ( $4.6 \times 10^8$  NP/mL) both before (bare NP) and after the peptide addition: (a)  $(GC)_2$  (12  $\mu$ M); (b) RGD $(GC)_2$  (12  $\mu$ M); (c) FITC- $(GC)_2$  (5  $\mu$ M); (d) FITC-RGD $(GC)_2$  (5  $\mu$ M).



**Figure S2** - Recorded FT-IR spectra of the bare silver colloidal particles (line 1), the unbound peptide (line 3) and the AgNP-peptide systems (line 2) for  $(GC)_2$  (a) and  $RGD(GC)_2$  (b), respectively. In the inset: the magnified 2700-2400  $cm^{-1}$  region.

**Table S1.** Surface atomic composition of bare and peptide-functionalized AgNPs

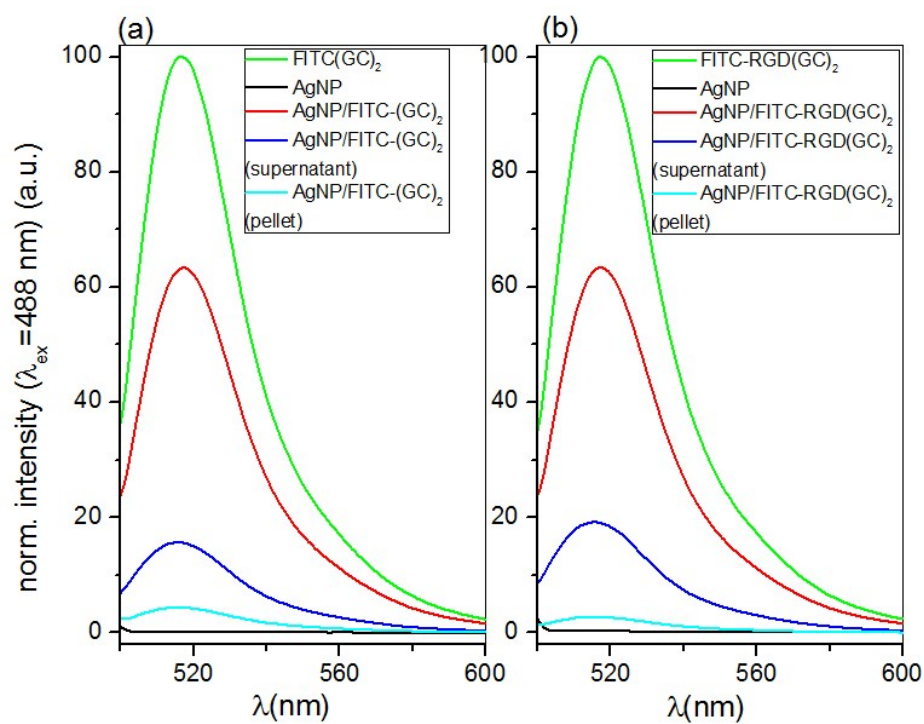
	C 1s (at. %)	N 1s (at. %)	O 1s (at. %)	S 2p (at. %)	Ag 3d (at. %)
Bare AgNP	74.2	-	23.2	-	2.6
FITC- $(GC)_2$ /AgNP	65.4	2.2	28.4	0.8	3.2
FITC- $RGD(GC)_2$ /AgNP	65.1	2.6	25.3	1.0	6.1



**Figure S3:** Positive ToF-SIMS spectra of AgNPs, AgNP/FITC-(GC)<sub>2</sub> and AgNP/FITC-RGD(GC)<sub>2</sub> (from the top to the bottom)

**Table S2-** Significant peaks (statistical weight >90% for PC1 and >50% for PC2) extracted from PCA analysis of the negative ToF-SIMS spectra of AgNP, AgNP/FITC-RGD(GC)<sub>2</sub> and AgNP/FITC-(GC)<sub>2</sub>.

Loadings PC1 < 0	Loadings PC1 > 0	Loadings PC2 < 0	Loadings PC2 > 0
CNO <sup>-</sup>	CH <sup>-</sup>	CHO <sub>2</sub> <sup>-</sup>	HS <sup>-</sup>
O <sub>2</sub> <sup>-</sup>		C <sub>2</sub> H <sup>-</sup>	SO <sup>-</sup>
AgCl <sub>2</sub> <sup>-</sup>			S <sup>-</sup>
CN <sup>-</sup>			C <sub>2</sub> H <sub>3</sub> O <sup>-</sup>
CH <sub>4</sub> <sup>-</sup>			



**Figure S4:** Fluorescence spectra (excitation wavelength = 488 nm) of FITC-(GC)<sub>2</sub> (a) and FITC-RGD(GC)<sub>2</sub> (b) both free and in the presence of AgNPs (before and after centrifugation).