

## Electronic Supplementary information for

**Synthesis, characterization and evaluation of collagen scaffold crosslinked with functionalized silver nanoparticles for clinical wound healing applications: *in vitro* and *in vivo* studies**

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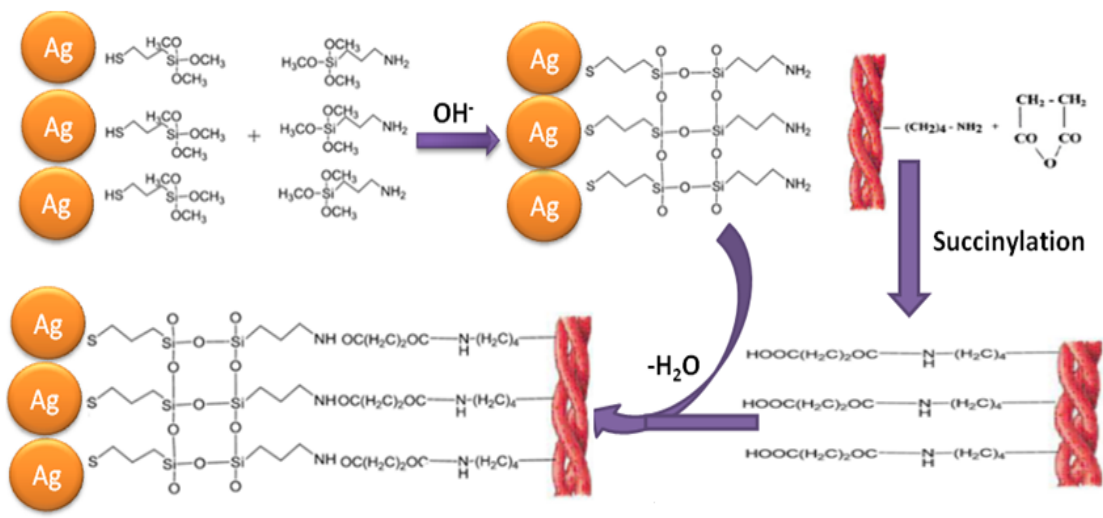
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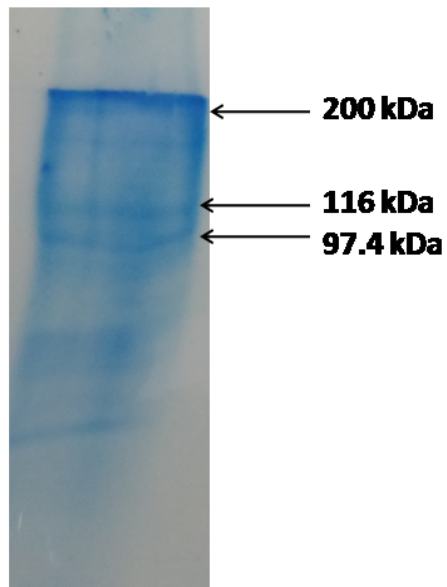
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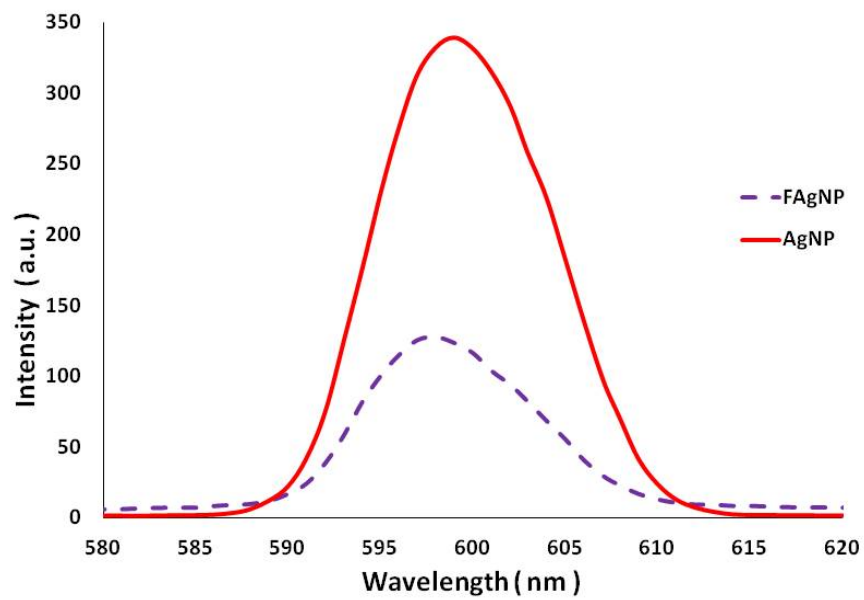
**Figure S1** Schematic representation of the synthesis, functionalization and crosslinking of silver nanoparticles with succinylated collagen.



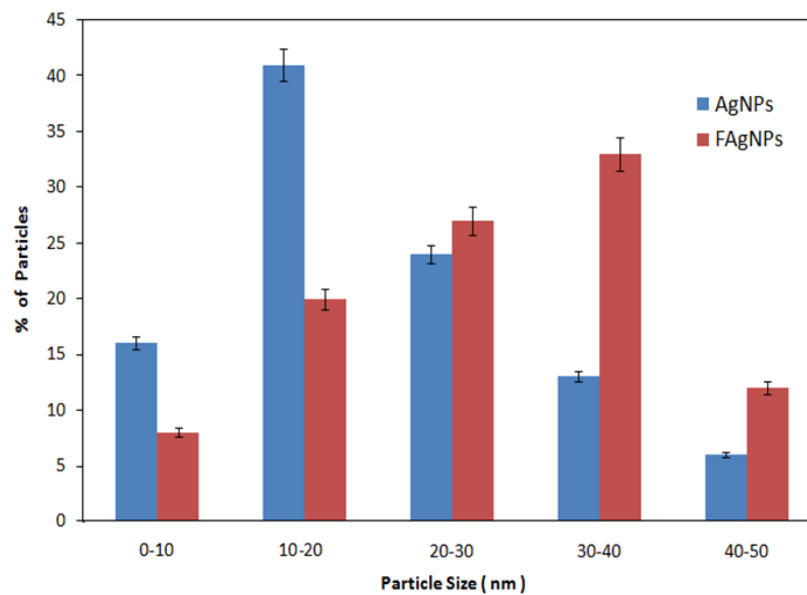
**Figure S2** SDS-PAGE of succinylated collagen (SC) solution.



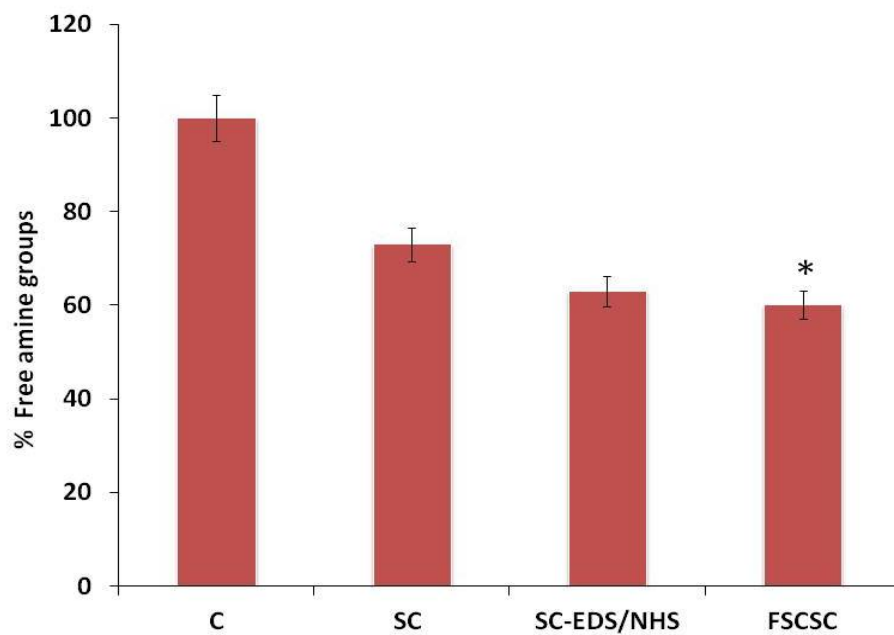
**Figure S3** Fluorescence spectra of a) bare and b) aminosilane functionalized silver nanoparticles.



**Figure S4** Particle size distribution of a) silver nanoparticles (AgNPs) and b) functionalized silver nanoparticles (FAGNPs), respectively.



**Figure S5** Percentage of amine content of the scaffolds produced in this study, in relation to non-cross-linked collagen scaffolds. Values are presented as mean  $\pm$  SD ( $n = 3$ ) ( $*p < 0.01$ )



**Figure S6** X-ray photoelectron spectroscopy (XPS) spectra of FSCSC scaffold.

