



## Supporting Information

for *Macromol. Biosci.*, DOI: 10.1002/mabi.201800096

### Strontium-Substituted Hydroxyapatite-Gelatin Biomimetic Scaffolds Modulate Bone Cell Response

Silvia Panzavolta,\* Paola Torricelli, Sonia Casolari,  
Annapaola Parrilli, Milena Fini, and Adriana Bigi

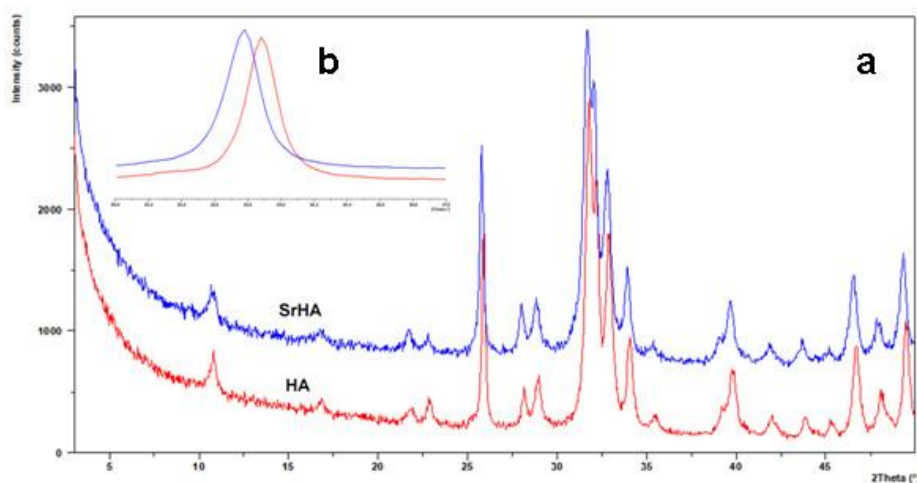
# Strontium-substituted hydroxyapatite-gelatin biomimetic scaffolds modulate bone cell response

Silvia Panzavolta<sup>1\*</sup>, Paola Torricelli<sup>2</sup>, Sonia Casolari<sup>1</sup>, Annapaola Parrilli<sup>2</sup>, Milena Fini<sup>2</sup>, Adriana Bigi<sup>1</sup>

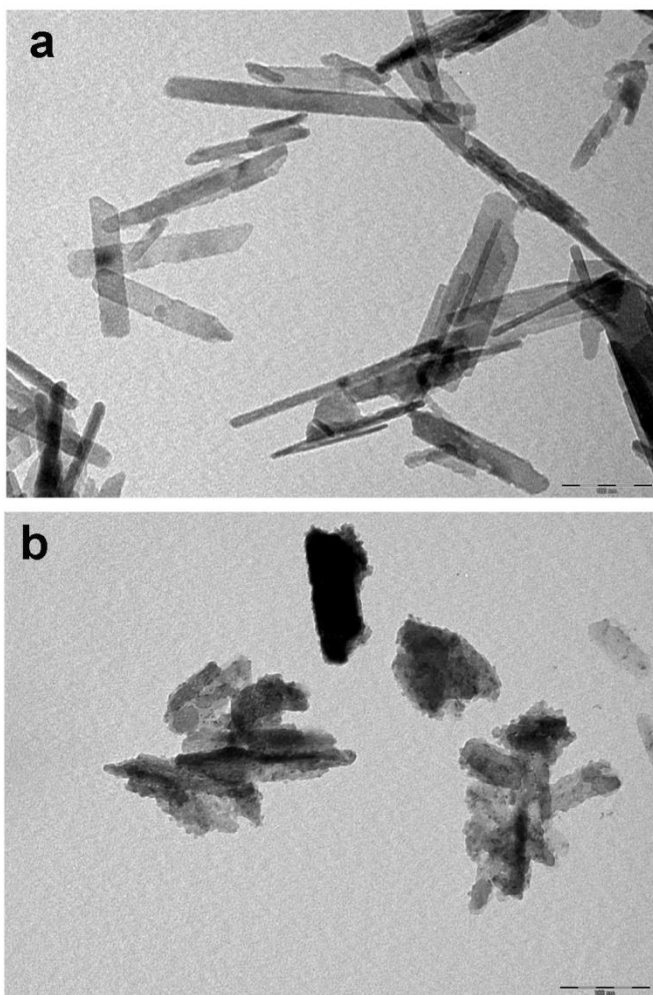
<sup>1</sup>*Department of Chemistry “G. Ciamician”, via Selmi 2 40126 University of Bologna, Italy*

<sup>2</sup>*Laboratory of Preclinical and Surgical Studies, IRCCS Rizzoli Orthopaedic Institute, via di Barbiano 1/10 40136 Bologna, Italy*

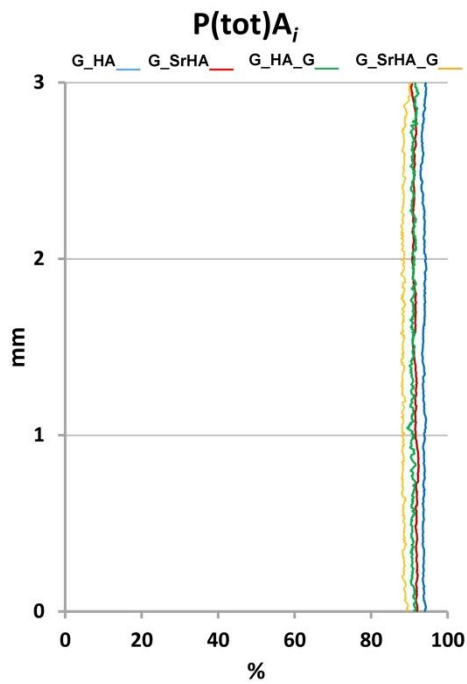
\* Corresponding author: Phone: +39 051 2099566; fax: +39 051 2099456; E-mail: [silvia.panzavolta@unibo.it](mailto:silvia.panzavolta@unibo.it)



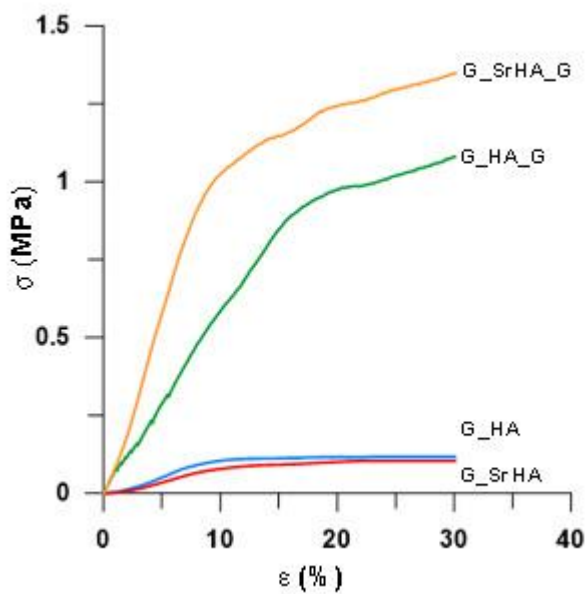
**Figure S1.** a) Powder X-rays diffraction patterns of HA and SrHA. The insert (b) reports an enlargement of of the  $2\theta$  range including the 002 reflection.



**Figure S2. TEM images of a) HA and b) SrHA nanocrystals. Bars = 100 nm.**



**Figure S3.** Total porosity distribution –  $P(\text{tot})A_i$  – of the scaffolds along the VOI height. The values are expressed as the total percentage of pores area detected in every  $\mu\text{CT}$  section of the VOI.



**Figure S4.** Typical stress-strain curves recorded on different scaffolds under compression.