

Supplementary Data

Regulation of osteogenesis and angiogenesis by cobalt, manganese and strontium doped apatitic materials for functional bone tissue regeneration.

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Table S1. Details of primers used for gene expression analysis.

Gene	Gene specification		Amplicon Length	Annealing Temperature
<i>GAPDH</i>	QuantiTect Primer Assay (Qiagen) Hs_GAPDH_1_SG		95 bp	55°C
<i>OSTERIX</i>	QuantiTect Primer Assay (Qiagen) Hs_SP7_1_SG		120 bp	55°C
<i>RUNX2</i>	QuantiTect Primer Assay (Qiagen) Hs_RUNX2_1_SG		101 bp	55°C
<i>ALPL</i>	QuantiTect Primer Assay (Qiagen) Hs_ALPL_1_SG		110 bp	55°C
<i>COL1A1</i>	QuantiTect Primer Assay (Qiagen) Hs_COL1A1_1_SG		118 bp	55°C
<i>BGLAP</i>	QuantiTect Primer Assay (Qiagen) Hs_BGLAP_1_SG		90 bp	55°C
<i>TNFRSF11B (OPG)</i>	QuantiTect Primer Assay (Qiagen) Hs_TNFRSF11B_1_SG		107 bp	55°C
<i>TNFSF11 (RANKL)</i>	QuantiTect Primer Assay (Qiagen) Hs_TNFSF11_1_SG		91 bp	55°C
<i>VWF</i>	Primer forward (5'-->3') GCTCATGCAACATCTCCTCTG	Primer Reverse (5'-->3') ACTCACACAAAGTCTTCTCACA	147 bp	60°C
<i>VEGF</i>	QuantiTect Primer Assay (Qiagen) Hs_VEGFA_6_SG		99 bp	55°C

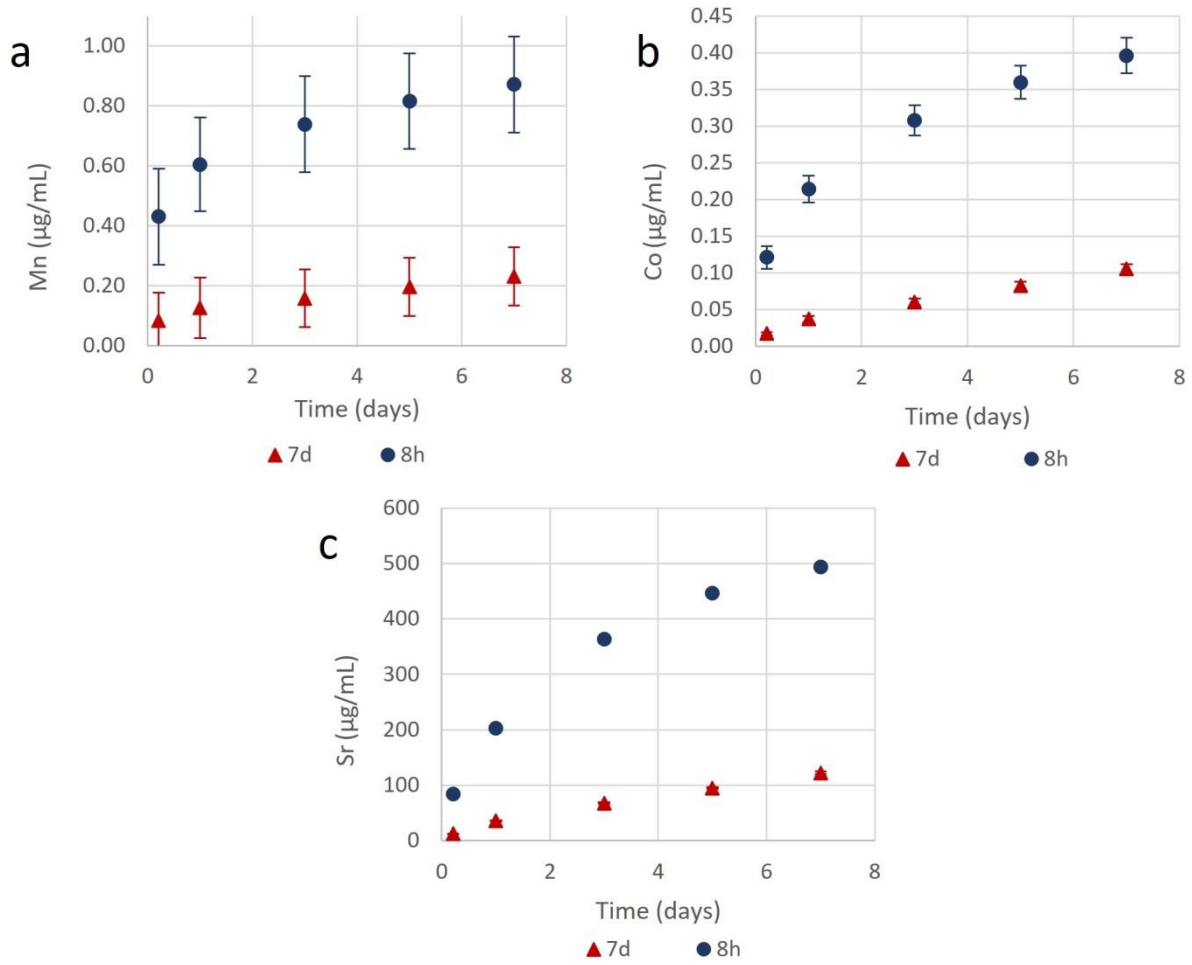


Figure S1 – Ion release in TRIS from materials hardened for 7 days and 8 hours: (a) c-Mn, (b) c-Co and (c) c-Sr.

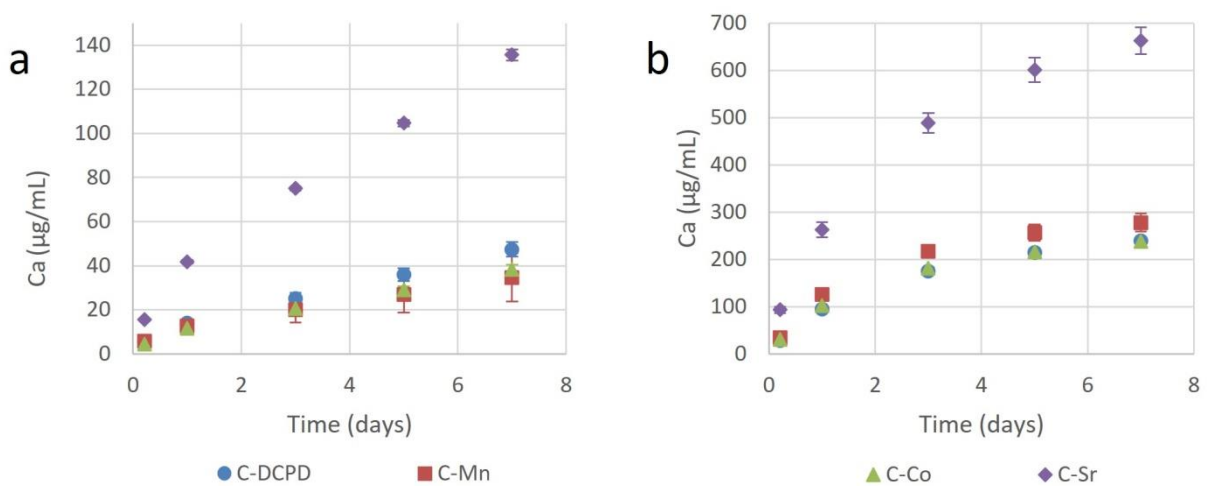


Figure S2 – Comparison of calcium release in TRIS from materials hardened for (a) 7 days and (b) 8 hours

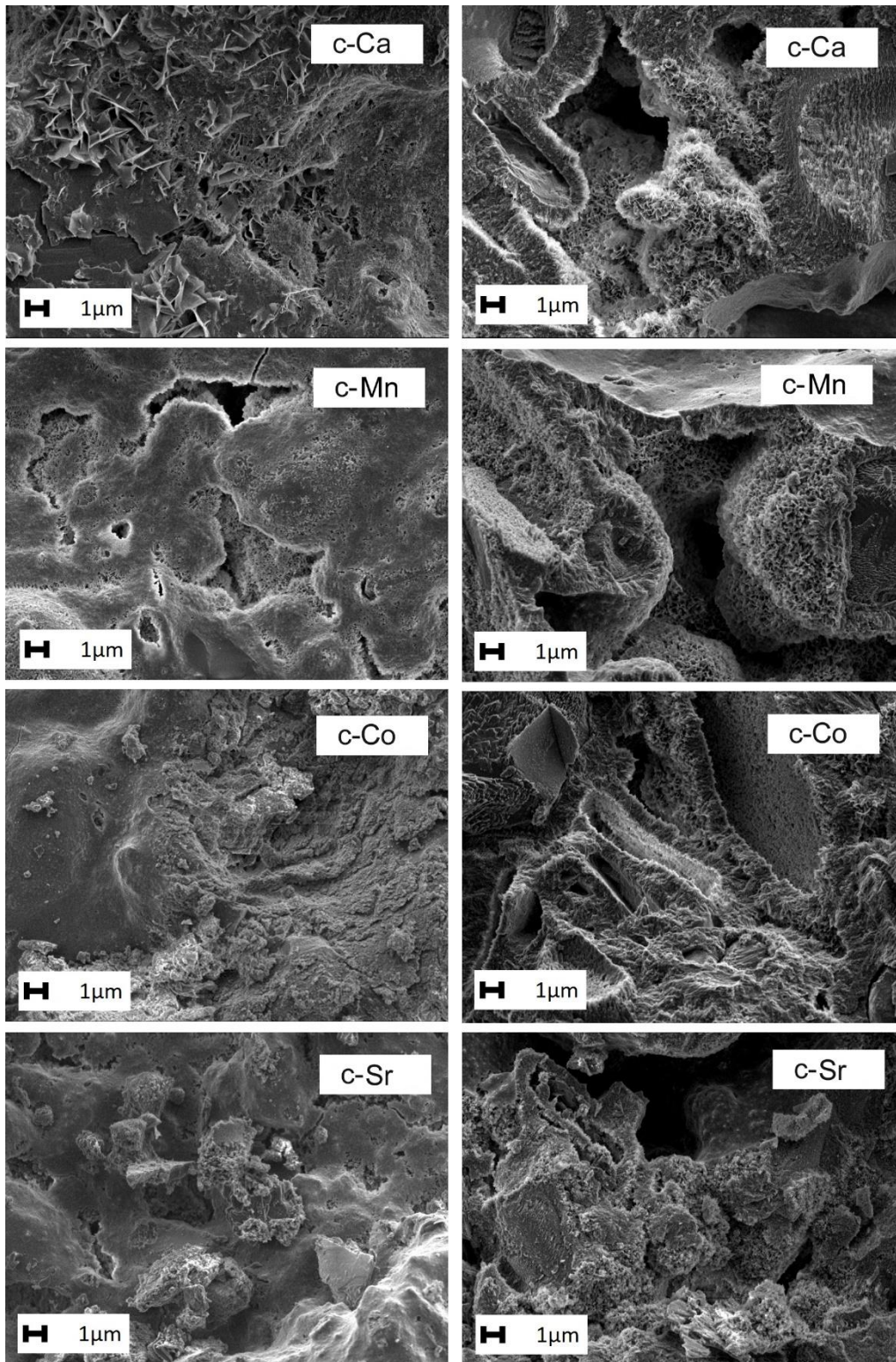


Figure S3 - SEM images of the surfaces and cross-sections of c-Ca, c-Mn, c-Co, c-Sr after 8h hardening. Surfaces images on the left, cross sections on the right.