

Supplementary Figure Captions

Fig. S1: Characterization of the progression of mineralization in I-DC gels. SEM micrographs of neat I-DC (A), I-DC SS40% (B), and I-DC 60% (C) gels, as-made (i), and at days 3 (ii), 7 (iii) and 14 (iv) in SBF. Particle deposition was detected on all I-DC SS gels from days 3 to 14 in SBF.

Fig. S2: Structural characterization of mineralized I-DC gels. ATR-FTIR spectra of neat I-DC, I-DC SS20%, I-DC SS 40% and I-DC 60% gels up to day 14 in SBF. There was an increase in the absorption bands associated with both phosphate and carbonate groups in I-DC SS40% gel as a function of time in SBF, respectively. There were no changes in the absorption bands of I-DC SS60% gels between days 7 and 14 in SBF.

Fig. S3: Structural analysis of acellular gels in osteogenic medium. ATR-FTIR spectra of acellular neat I-DC (left) and I-DC SS40% (right) gels, as made and at days 14 and 21 in osteogenic medium. There were no changes to the spectra as a function of time.