

Supporting Information

3D Printing of Mechanically Robust and Biocompatible Poly(ethylene glycol) Diacrylate/Nano-Hydroxyapatite Composites via Continuous Liquid Interface Production

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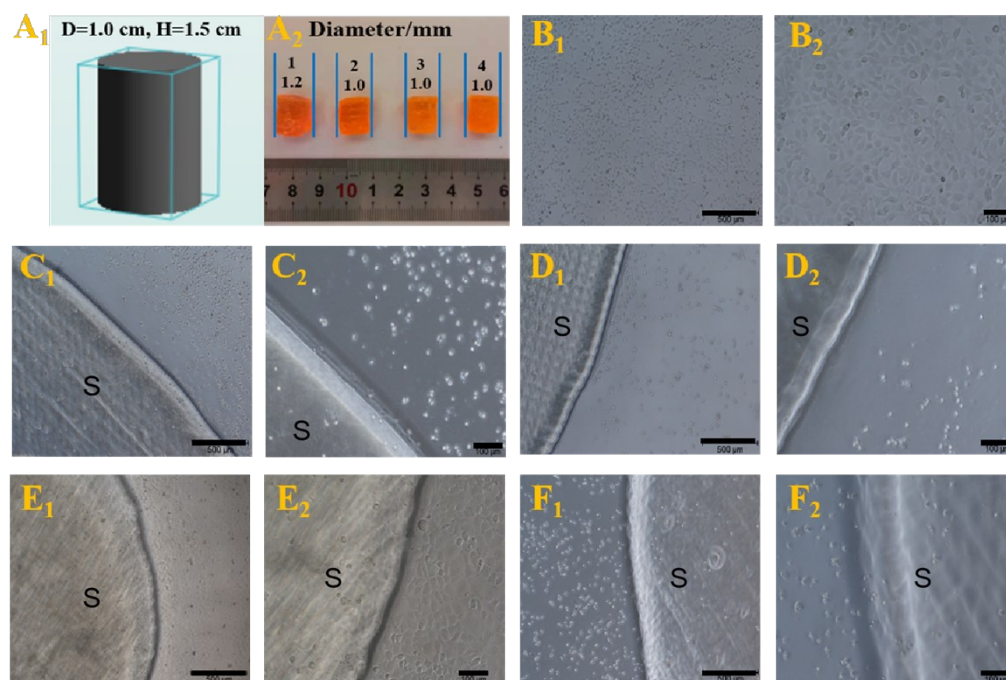


Fig. S1. (A₁) Model of the column with a diameter of 1 cm and a height of 1.5 cm and (A₂) the corresponding 3D prints with different Eosin Y loadings (samples 1-4 are printed with 0.02%, 0.01%, 0.007% and 0.005% Eosin Y in weight); (B₁-F₂) optical microscope images of cells cultured on different samples at different magnifications (S for the sample, B for the cell culture plate, C-F for the samples with 0.02%, 0.01%, 0.007% and 0.005% Eosin Y in weight, respectively).

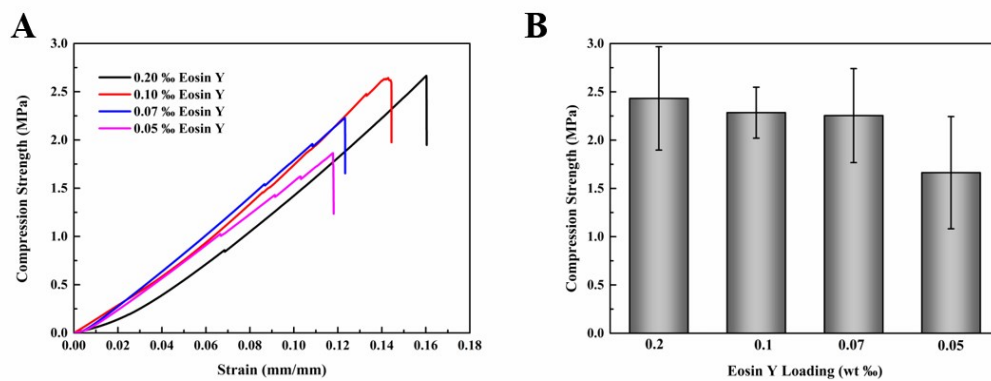


Fig. S2. (A) The compression stress-strain (σ - ϵ) curves for samples with different Eosin Y concentrations, (B) Compression modulus of CLIP-printed PEGDA samples as a function of Eosin Y loading.

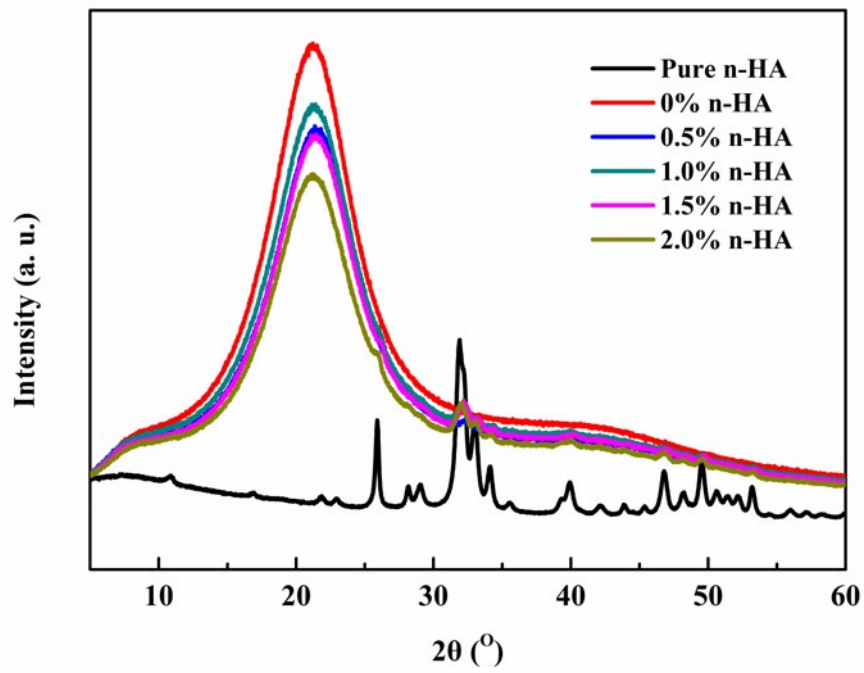


Fig. S3. The XRD patterns of pure n-HA and CLIP-printed PEGDA composites with different n-HA loadings (0%, 0.5%, 1.0%, 1.5% and 2.0% in weight).

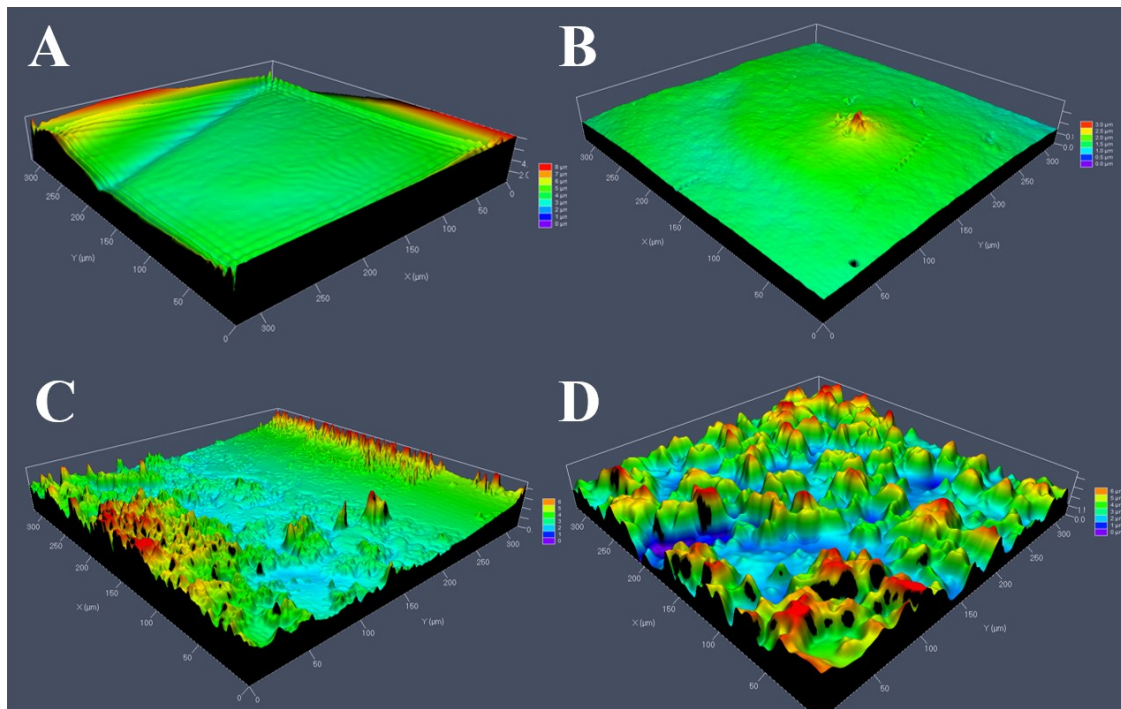


Fig. S4. The LSCM images of PEGDA composites with varying n-HA loadings (0.5 wt%, 1.0 wt%, 1.5 wt% and 2.0 wt %)

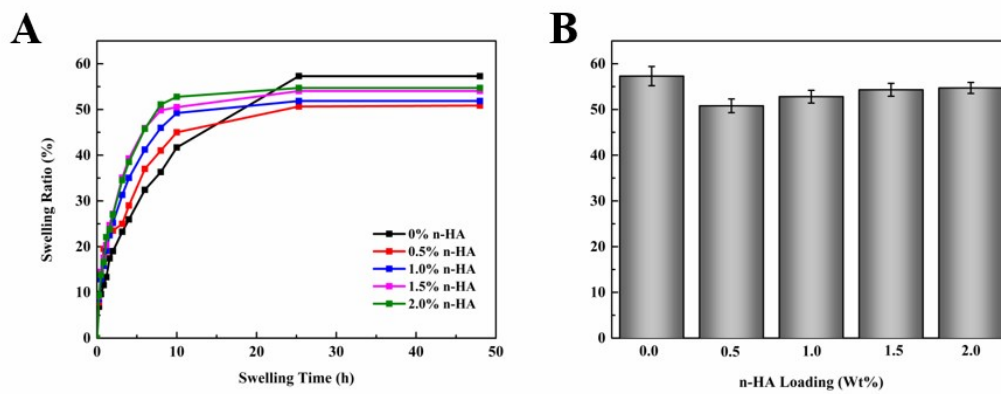


Fig. S5. (A) the swelling behaviors with time and (B) equilibrium swelling ratios of CLIP-printed PEGDA composites with different n-HA loadings (0%, 0.5%, 1.0%, 1.5% and 2.0% in weight).

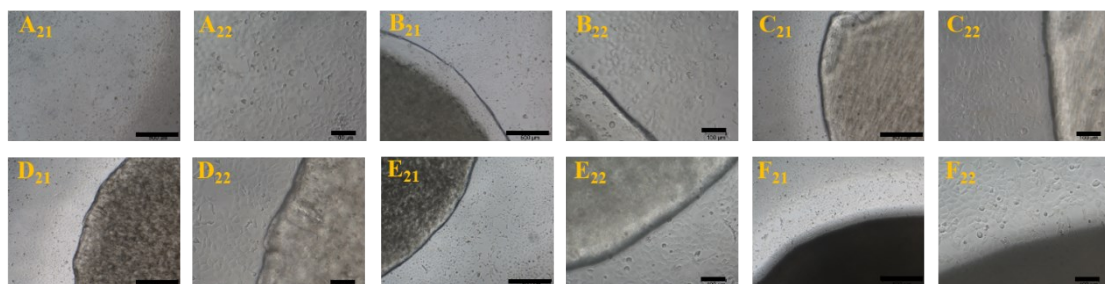


Fig. S6. 293 PTP line viability on the culture plate (A) and the CLIP-printed PEGDA composites (B-F) with different n-HA loadings (0%, 0.5%, 1.0%, 1.5% and 2.0% in weight) after 2 days culture. The scale bars are 500 and 100 μm , respectively.