

Electronic supplementary information (ESI) (Urrios, Parra-Cabrera, Bhattacharjee, Gonzalez-Suarez, *et al.*)

Table S1. List of 3D models used in this study.

Figure S1. 3D model and photographs of the cubes for PEG-DA + Irgacure-784.

Figure S2. 3D model and photographs of the cubes for PEG-DA + Irgacure-819.

Figure S3. PEG-DA Absorbance Curves.

Figure S4. Background Fluorescence.

Figure S5. Cyto-compatibility of dishes.

Table S1. List of 3D models used in this study

Name	Figure	Purpose	Source
Cube.stl	S1, S2	Initial characterization of photoinitiator concentrations and resolution	This study
Disk.stl	2	Transparency tests	This study
Petridish.stl	2, 3	Cell culture	This study
Channel.stl	2	Laminar flow device	This study
Multiexposure.stl	4	Z-resolution with different time exposures and light sources	This study

All objects were designed with Autodesk Inventor® and saved in their final form in STL format. We used Creative Workshop® software to slice the objects and convert them into an image sequence.

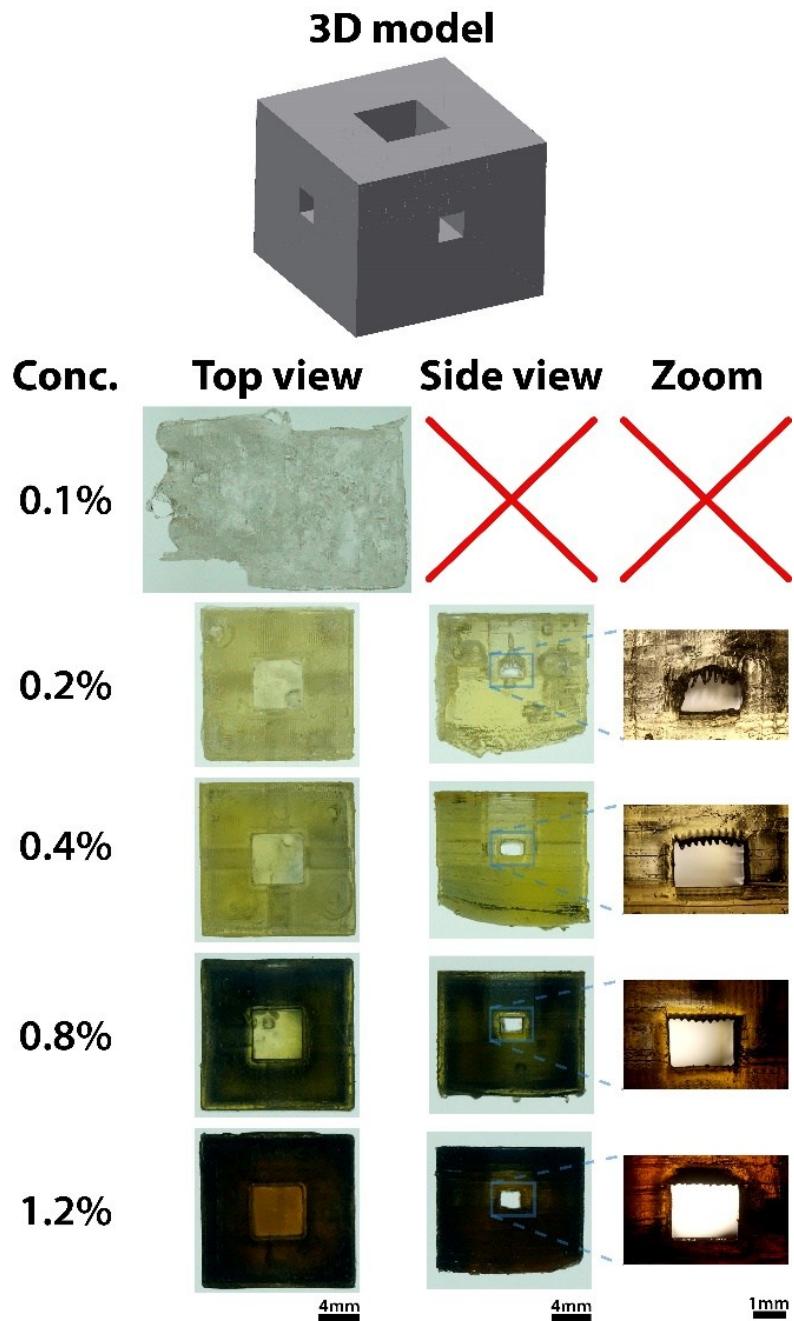


Figure S1. 3D model and photographs of the cubes for PEG-DA + Irgacure-784. The 0.1% wt/vol cube did not print. From 0.2 to 1.2% there is less over-curing but the prints get darker due to the increasing concentration of the photoinitiator. Scale bars are shown for each column.

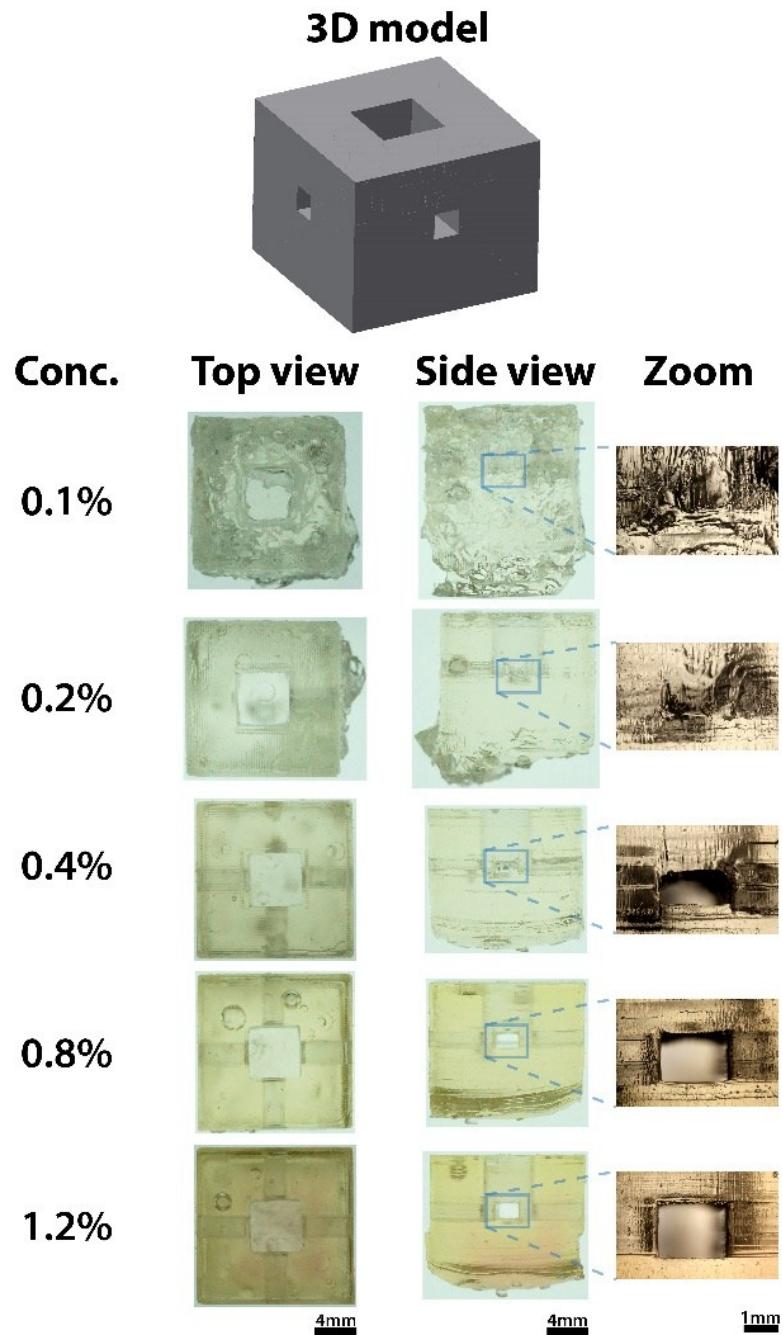


Figure S2. 3D model and photographs of the cubes for PEG-DA + Irgacure-819. As the concentration increases, the prints get more yellow, but an increase in resolution can be observed due to the increasing absorbance of the photoinitiator. Scale bars are shown for each column.

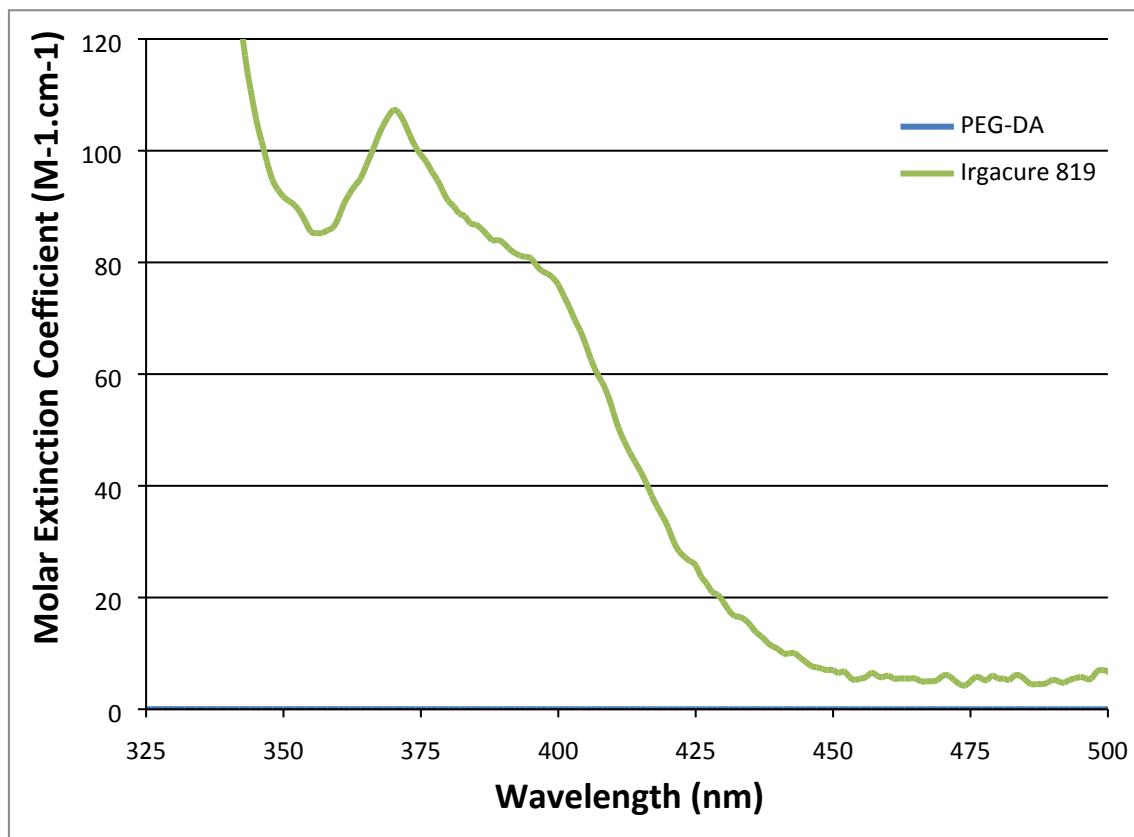


Figure S3. PEG-DA Absorbance Curves. Spectra of light absorbance (molar extinction coeff.) for resins composed of PEG-DA-250 + Irgacure-819 (green) compared to PEG-DA-250 alone (blue).

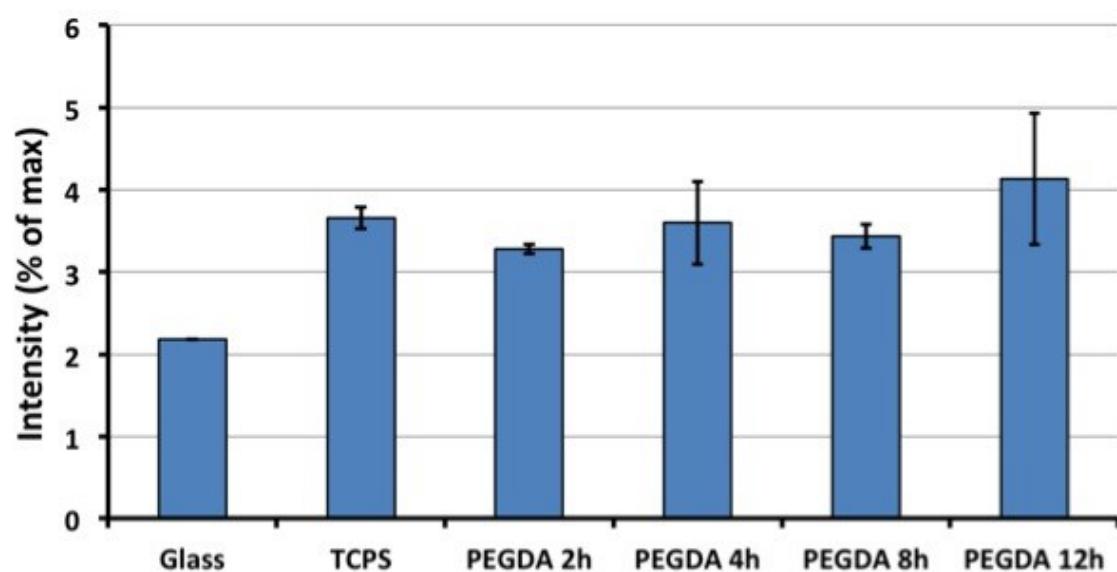


Figure S4. Background Fluorescence. Bar chart showing the average fluorescence (as a percentage of the detection maxima of the camera) of 3D-printed PEGDA dishes that have been UV post-cured for 2, 4, 8 and 12 hours. The fluorescence is compared with a glass coverslip and a tissue-culture polystyrene dish. The error bars are standard deviations (n=3).

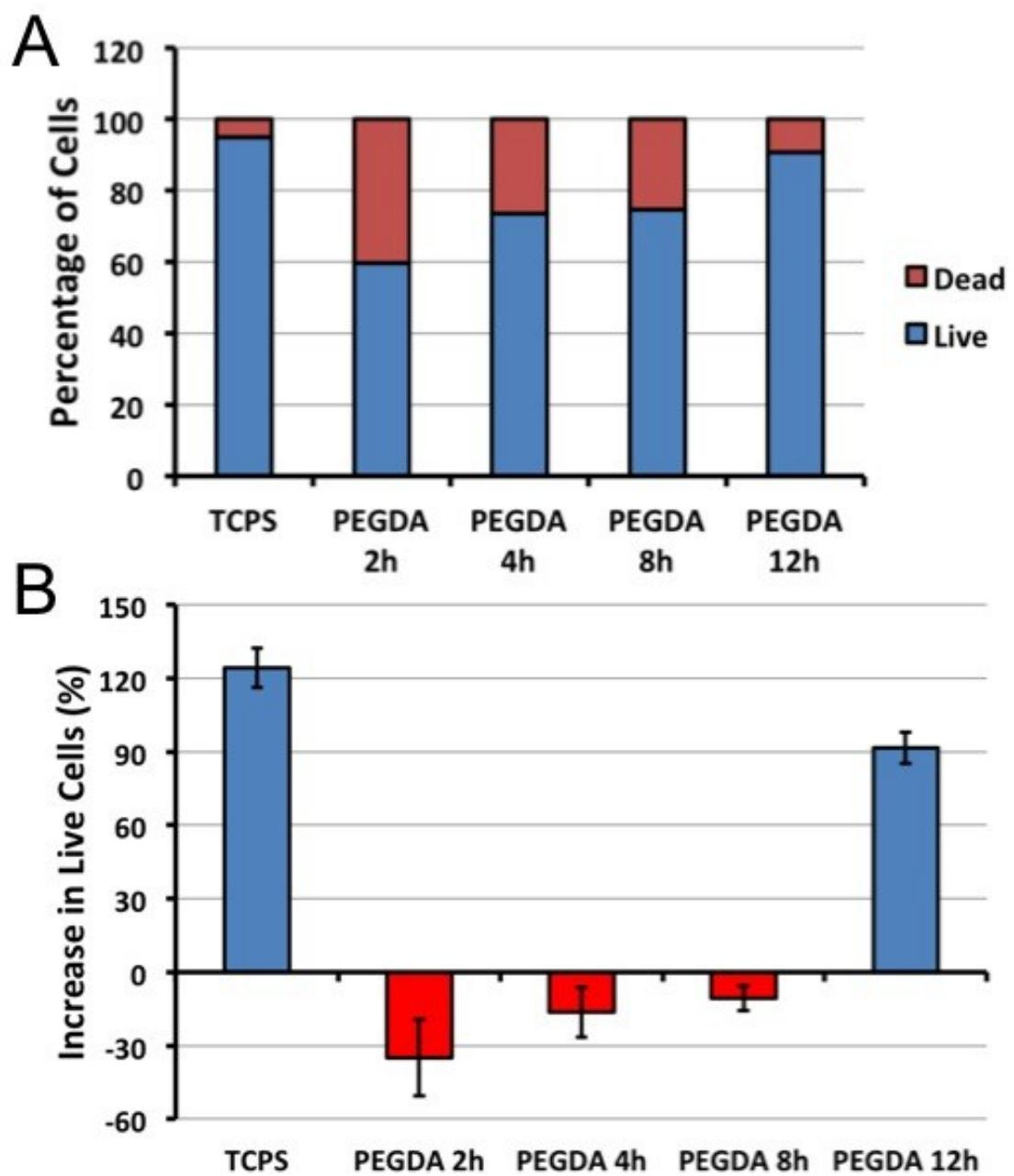


Figure S5. Cyto-compatibility of dishes. (A) Percentage of live and dead CHO-K1 cells 24 hours after culture in tissue-culture polystyrene and 3D-printed PEG-DA dishes that have been UV post-cured for 2, 4, 8 and 12 hours. The bar graphs show the averages (n=3). (B) Percentage increase in live CHO-K1 cells 24 hours after culture in tissue-culture polystyrene and 3D-printed PEG-DA dishes that have been UV post-cured for 2, 4, 8 and 12 hours. Error bars denote standard deviation (n = 3).