Electronic Supplementary Material (ESI) for Biomaterials Science.

Supporting Information:

3D printed heterogeneous hybrid hydrogel scaffolds for sequential tumor photothermo-chemo therapy and wound healing

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Table.S1. The gel-sol transform temperature of composite thermosensitive hydrogel

Gelatin(m/v)	GG(m/v)	gel-sol transform temperature (℃)
10%	0.1%	36
10%	0.2%	40
10%	0.3%	45
15%	0.1%	38
15%	0.2%	42
15%	0.3%	48

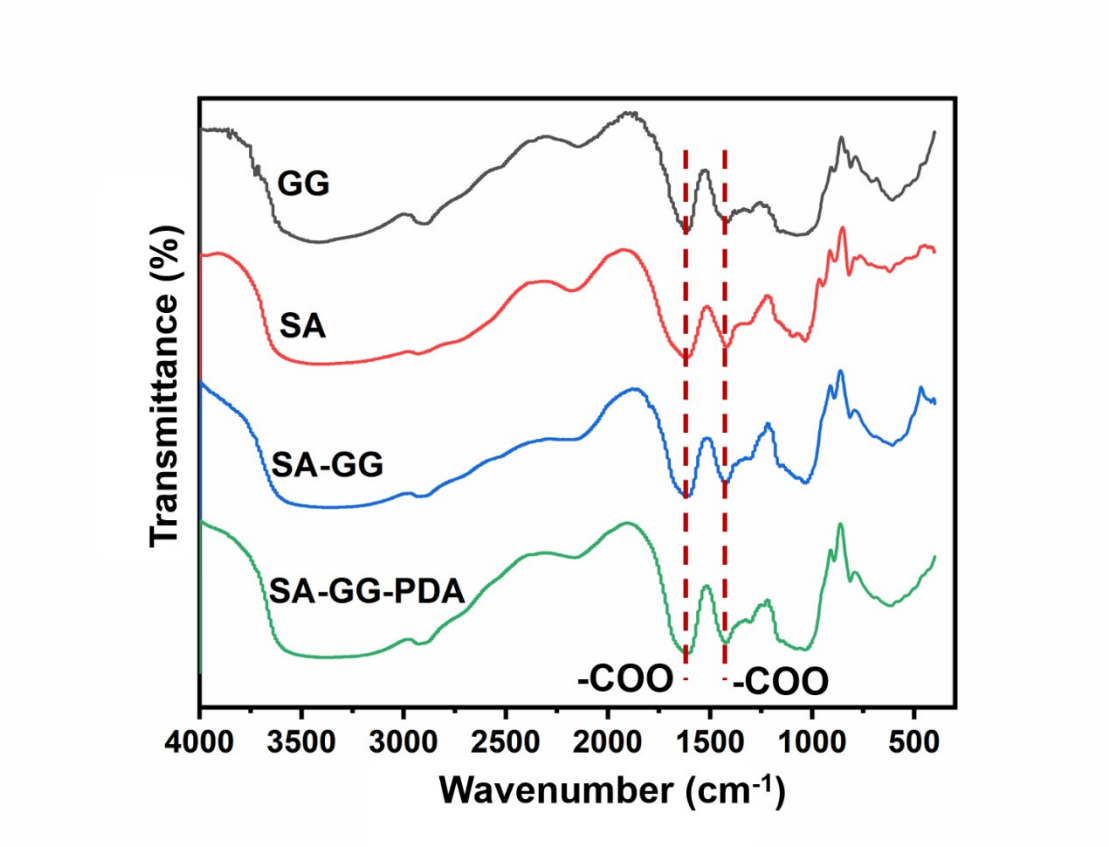
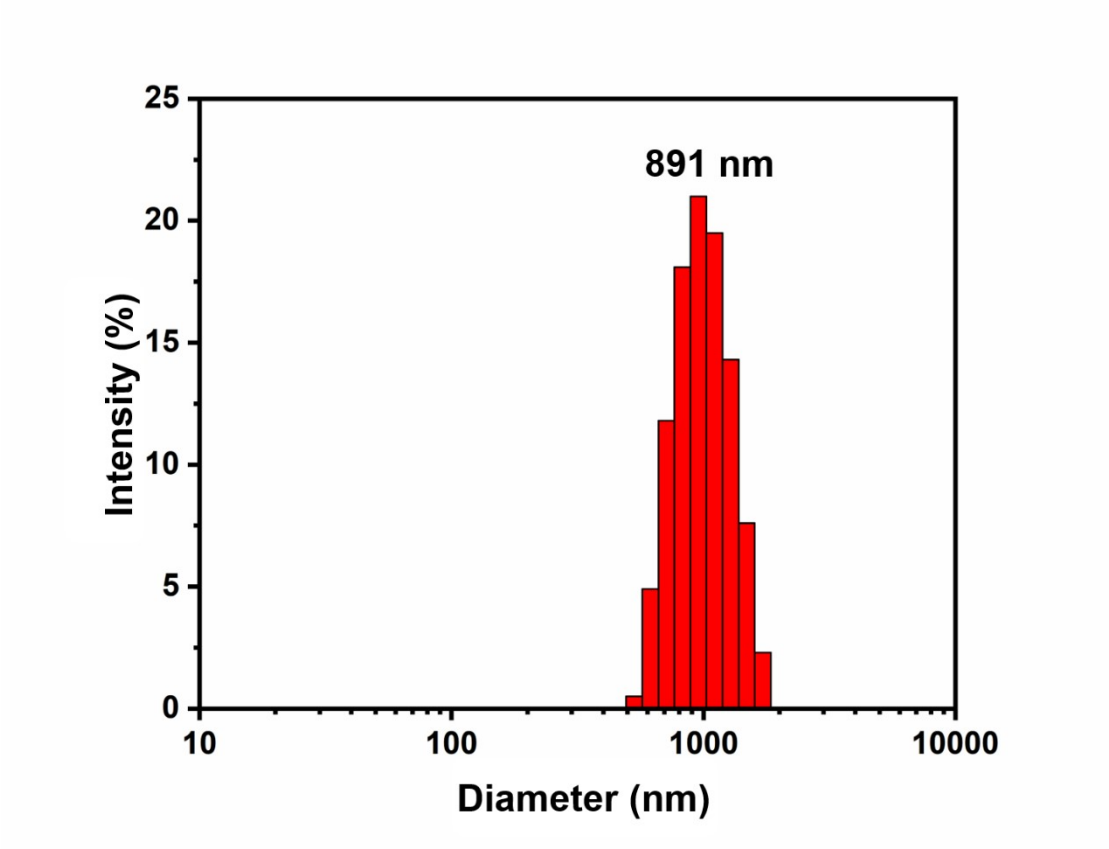
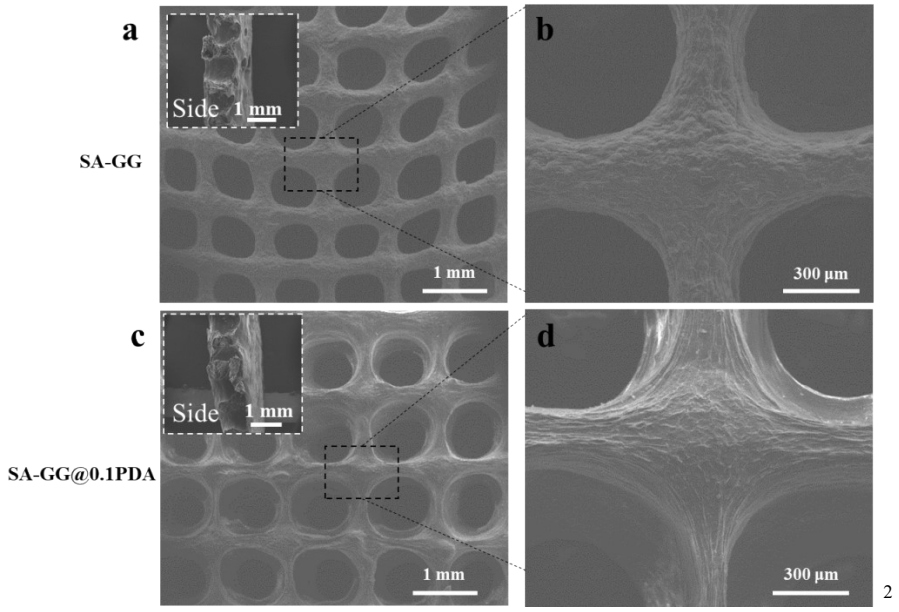


Figure.S1 The FTIR spectrum of GG, SA SA-GG and SA-GG@PDA powder showed that there was no interaction between the SA GG and PDA, but only a physical mixing process.



1

Figure.S2 The size distribution of PDA nanoparticles.



2

Figure.S3 The SEM results of the morphologies of the 3D printed SA-GG (a, b) and SA-GG@0.1PDA (c, d) scaffolds.

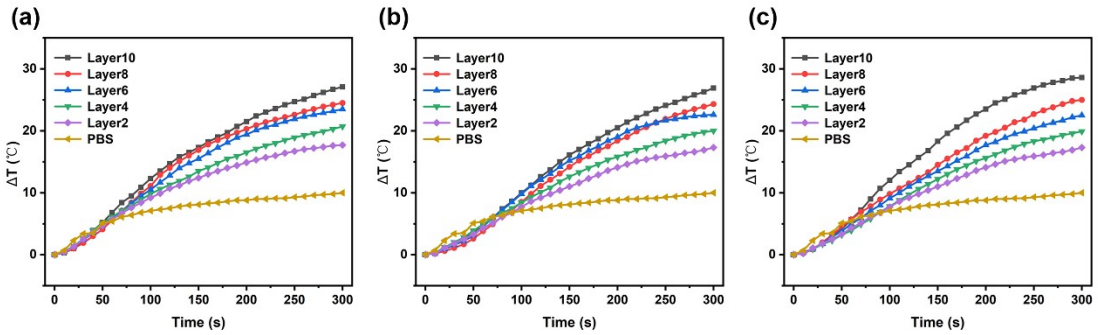


Figure.S4 The temperature curve of SA-GG@0.1PDA (a), SA-GG@0.3PDA (b), SA-GG@0.5PDA (c) hydrogel scaffolds, immersed in 300 μL of deionized water, under NIR irradiation at a power density of 1.5 W/cm^2, respectively (n = 1).

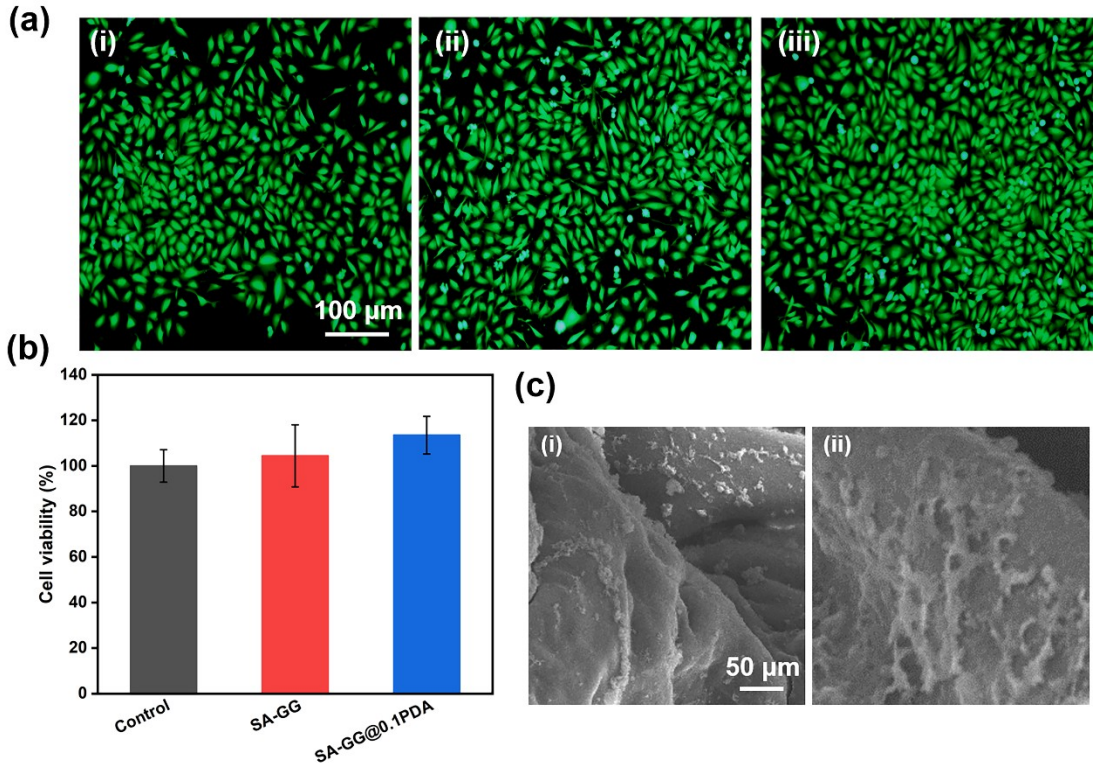


Figure.S5 (a) Live/dead assay of HUVECs incubation with (i) DMEM, (ii) SA-GG and (iii) SA-GG@PDA scaffolds. (b) The viability of HUVECs cells. (C) SEM images of HUVECs adhere on (i)SA-GG and (ii) SA-GG@PDA hydrogel scaffolds.

Video.S1

The printing process of the fabrication of large and complex 3D construct by using the SA-GG@0.1PDA bioink.