

Supporting information

Superabsorbent 3D scaffold based on electrospun nanofibers for cartilage tissue engineering

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1. 3D scaffolds treated with different temperature

Uncrosslinked scaffolds were heated at 120 °C for 2 h (120 °C 2 h), 160 °C for 2 h (160 °C 2 h), and 190 °C for 2 h (190 °C 2 h) in air, respectively. Then these scaffolds were put in water, the optical photographs of different scaffolds were showed in Figure S1.

2. The biodegradability of scaffolds

To characterize the biodegradability property of scaffold in vitro, 50 ~ 60 mg uncrosslinked sample, 3DS-1, and 3DS-2 (n = 3) were separately placed in phosphate buffered solution (PBS, pH = 7.4), which were incubated in a thermostatted shaker at 37 °C and the shaking speed was 100 rpm. At the scheduled time (1, 2, 4, 6, and 8 weeks), the percentage of mass remaining was tested from the dry weight before and after degradation.

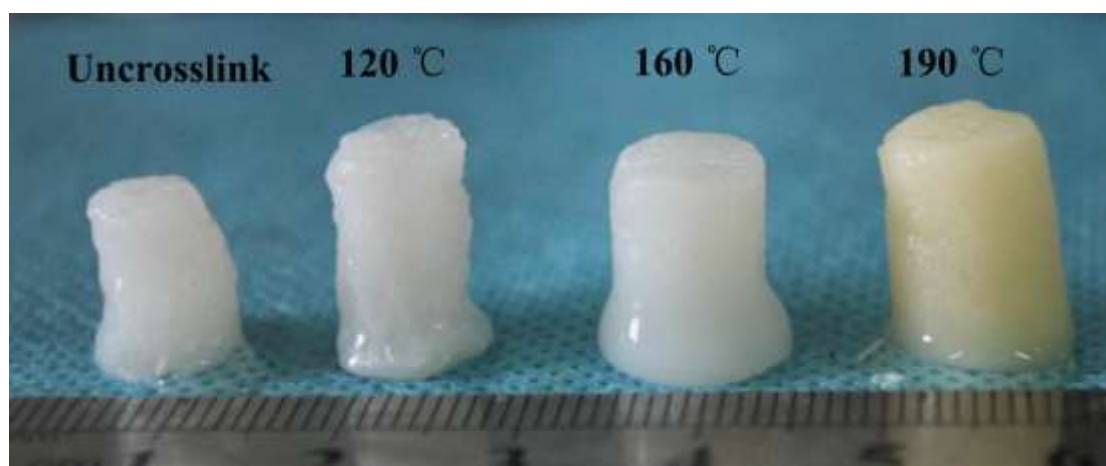


Figure S1. Optical photographs of uncrosslinked scaffold, 120 °C treated scaffold, 160 °C treated scaffold, and 190 °C treated scaffold. All scaffolds were in wet state.

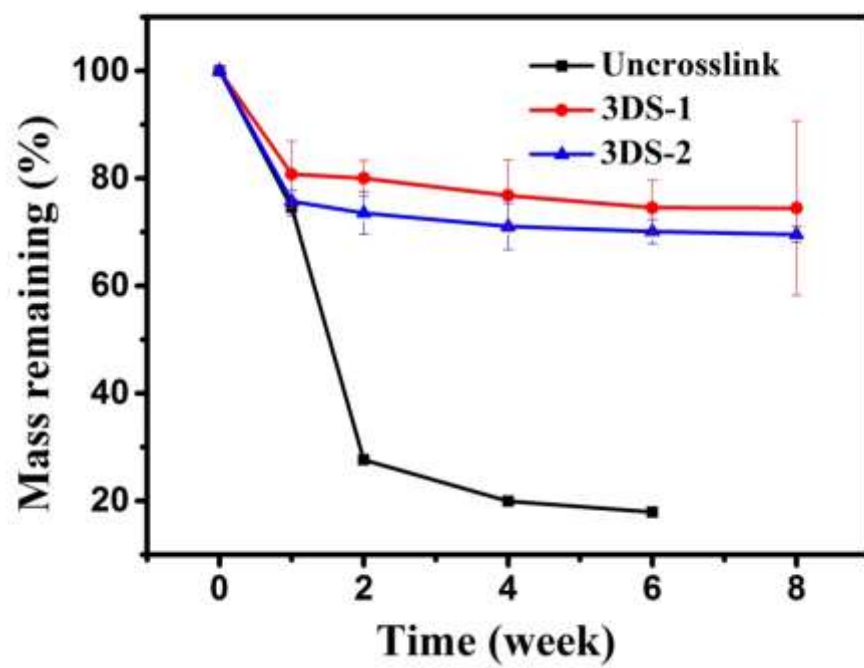


Figure S2. The degradation behavior of uncrosslinked scaffold, 3DS-1 and 3DS-2 in vitro.