

Supporting Information

Alginate nanofibrous mats with adjustable degradation rate for regenerative medicine

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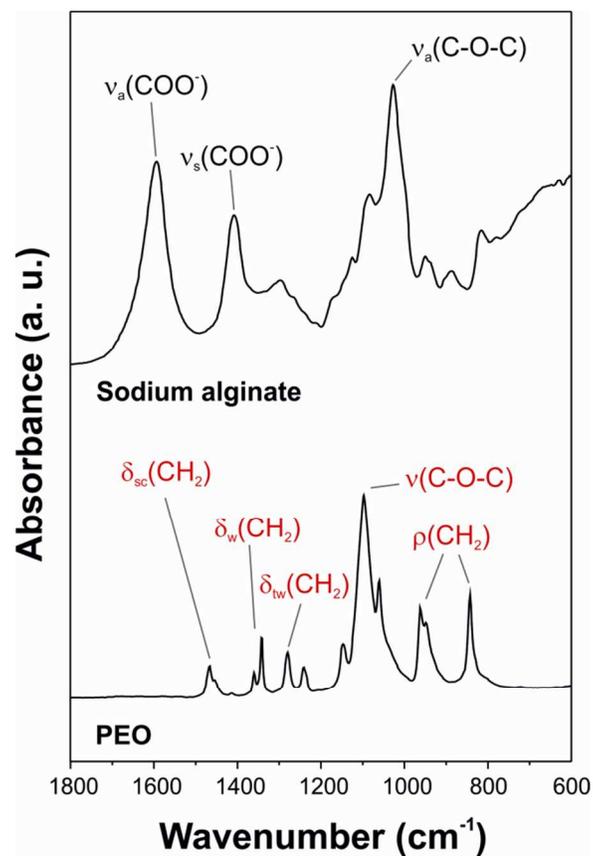


Figure S1. ATR-FTIR spectra of SA and PEO pure components in the 1800-600 cm^{-1} region.

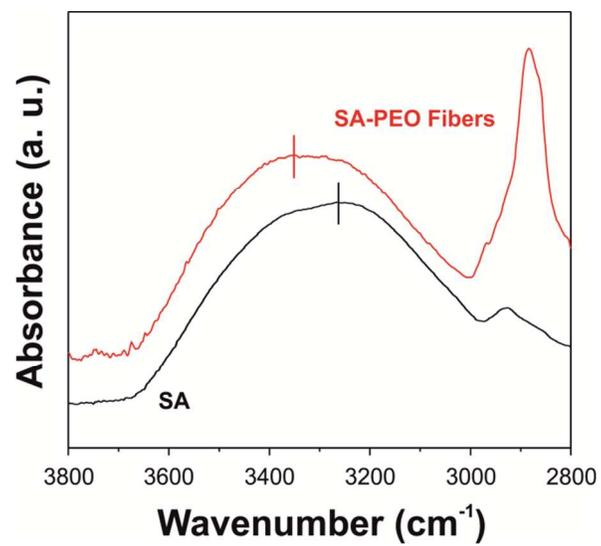


Figure S2. ATR-FTIR spectra of SA (black line) and SA-PEO (red line) fibers in the 3800-2800 cm⁻¹ region.

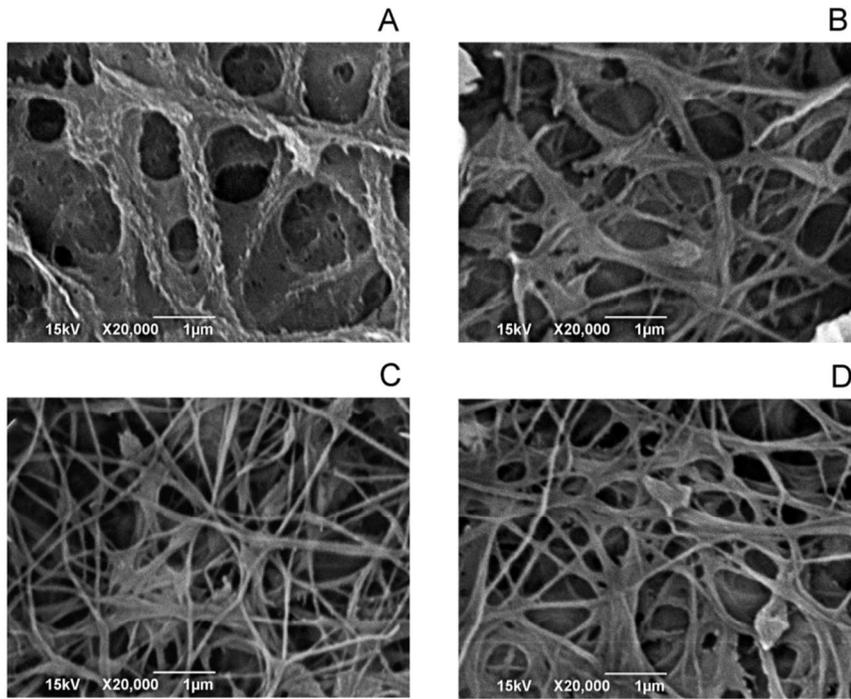


Figure S3. SEM images of the nanofibers treated with TFA for (A) 3 h, (B) 6 h, (C) 12 h, and (D) 24 h, and after 7 days of incubation in aqueous medium.

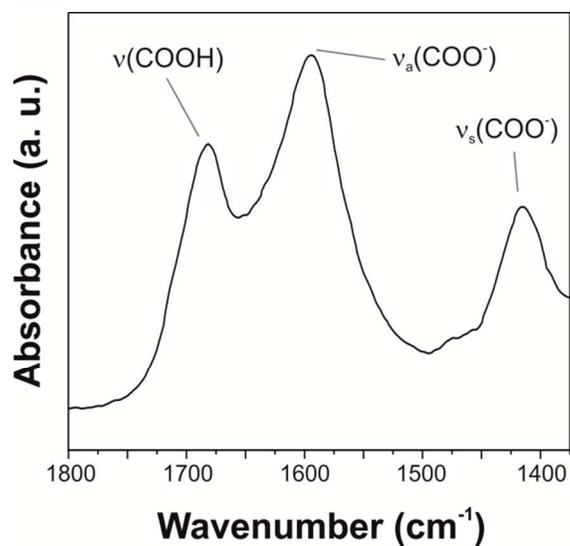


Figure S4. ATR-FTIR spectrum of the treated fibers after immersion in NaOH (0.1 M) in the 1800-1350 cm^{-1} region. The three peaks were assigned to COOH...OH stretching (1683 cm^{-1}) and asymmetrical and symmetrical COO^- stretching modes (1595 and 1414 cm^{-1} , respectively) functional groups.

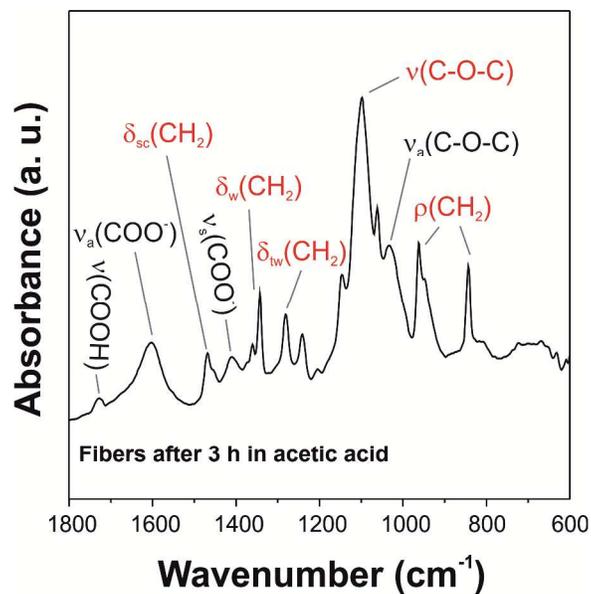


Figure S5. ATR-FTIR spectrum of SA-PEO fibers after the acetic acid treatment (3 h). The assignment of bands ascribed to PEO is highlighted in red, while the corresponding one for SA is in black.

Table S1. Surface atomic composition of the produced alginate nanofibers, measured by XPS.

Atomic concentration [%]	As-prepared fibers	TFA-treated (24 h) fibers
C	69.0	59.0
O	30.3	41.0
Na	0.7	0
F	0	0