Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

Highly Stretchable Cell-Cultured Hydrogel Sheet

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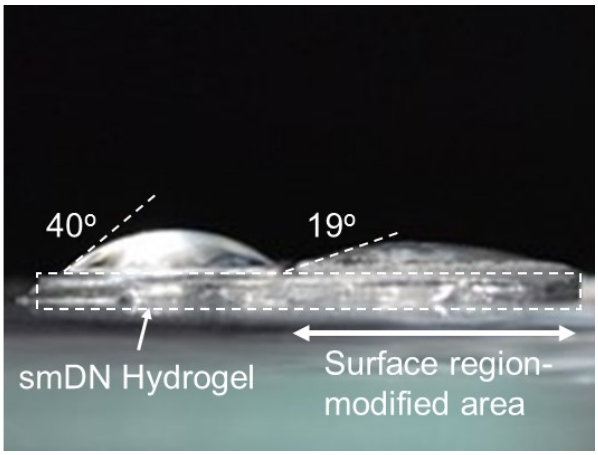
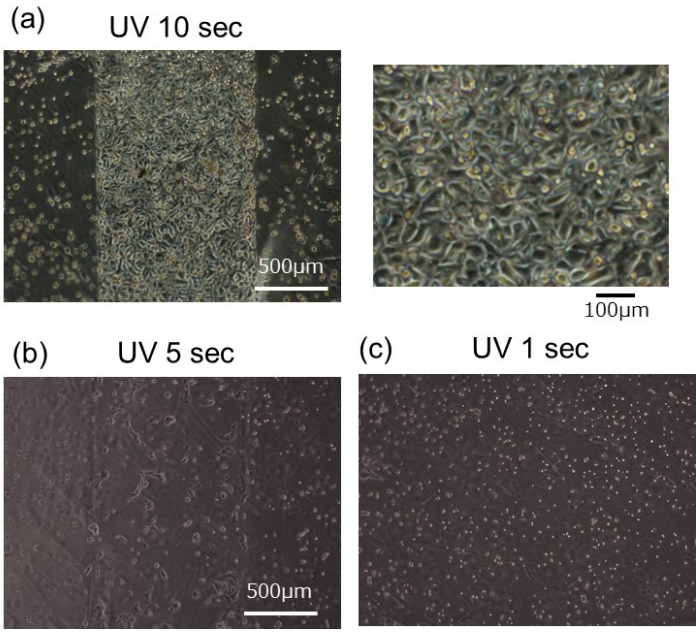
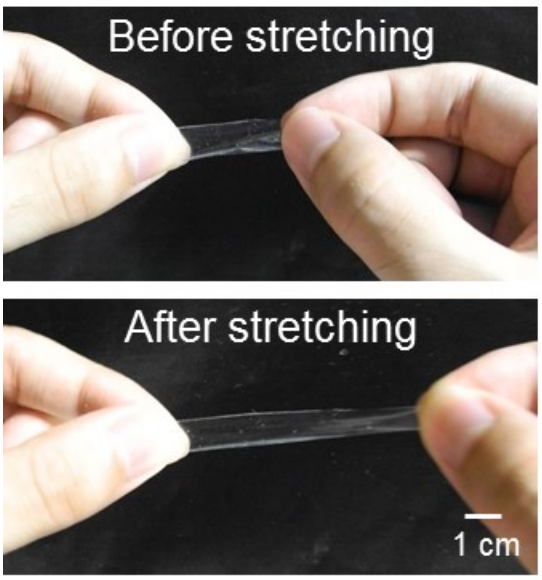


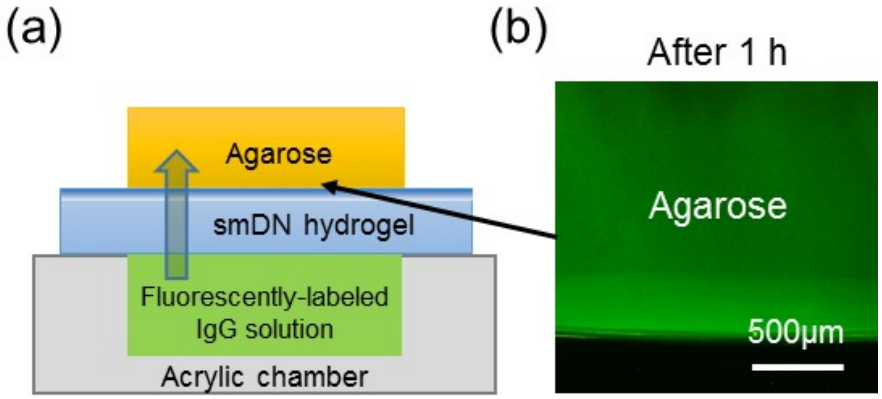
Supplementary Fig. S1 Photograph of water drioplets on the smDN hydrogel. Only the right half of the hydrogel was modified with the third PNaAMPS polymer through a photomask.



Supplementary Fig. S2 Phase contrast micrographs of keratinocytes cultured on the smDN hydrogel prepared by (a) 10, (b) 5, and (c) 1 s of UV (350 mW cm^{-2}) polymerization of the line pattern of third NaAMPS polymer through a photomask. The image on the right side of (a) is the magnified image of the left side. The magnified image suggested spreading morphology of the cells that adhere on the smDN hydrogel.



Supplementary Fig. S3 Photographs of the smDN hydrogels before and after stretching.



Supplementary Fig. S4 (a) Illustration of the setup for molecular permeability testing of the smDN hydrogel. (b) Fluorescence images of the cross section of the agarose absorption pad put on the smDN hydrogel after 1 h of permeability testing.