

Supporting Information

Biomimetic Anisotropic Poly(vinyl alcohol) Hydrogels with Significantly Enhanced Mechanical Properties by Freezing-thawing under Drawing

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Supporting Figure

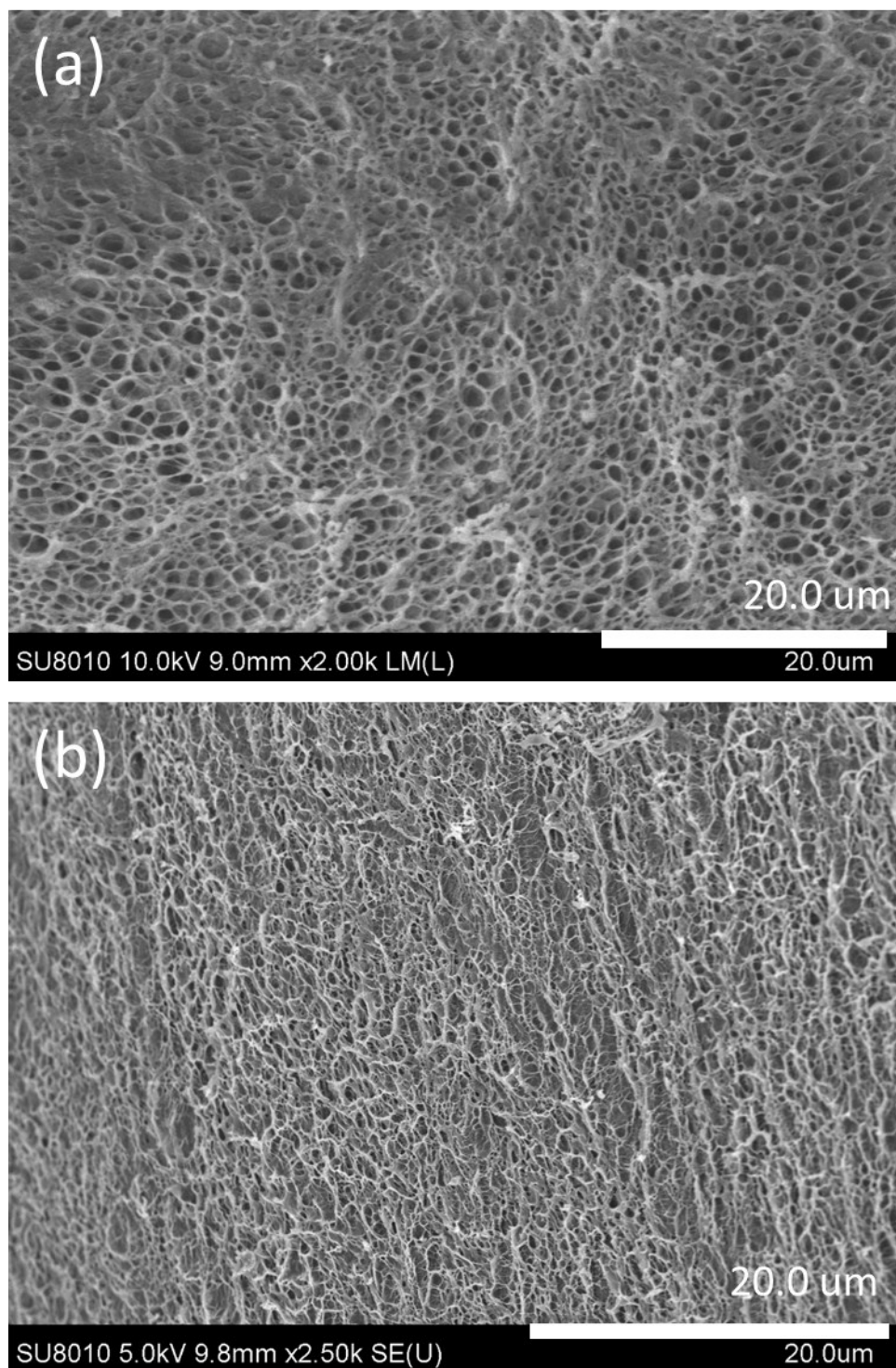


Figure S1. SEM micrographs of the N₃-PVA hydrogel.

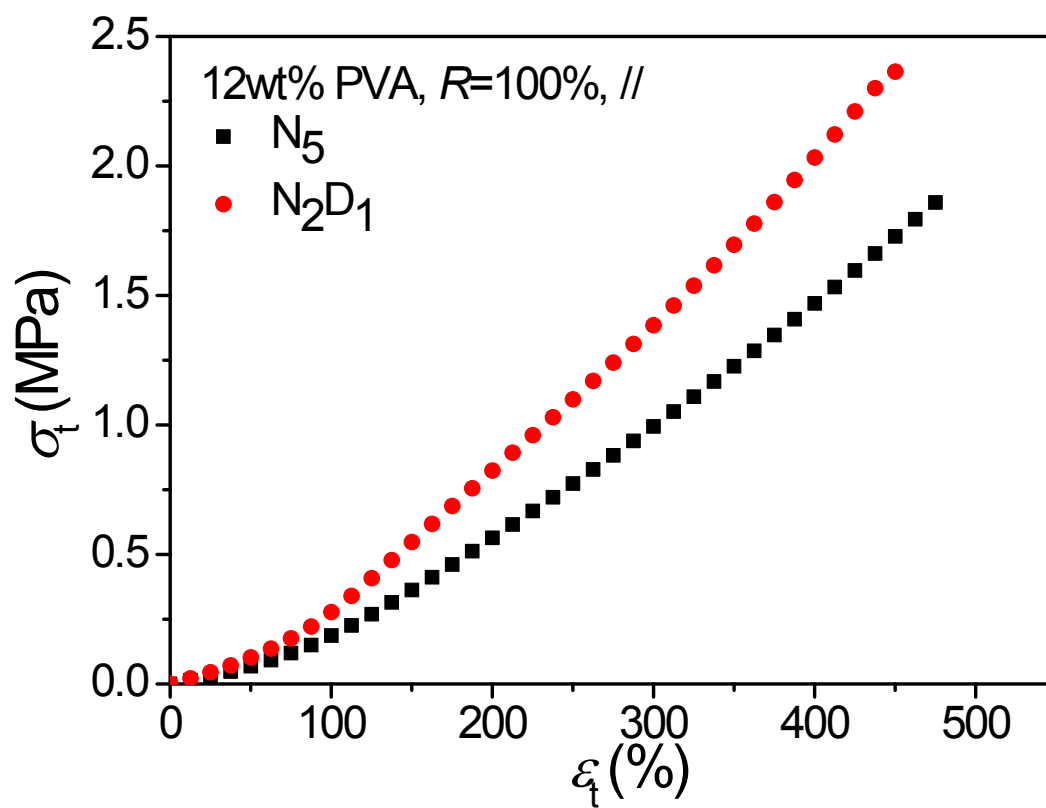


Figure S2. The typical tensile stress–strain (σ_t – ϵ_t) curves of N_5 -PVA and N_2D_1 -PVA (//) hydrogels.

Table S1. The original, elongated and retracted lengths of the N₂D₁-PVA hydrogel samples with different

R.

<i>R</i>	50%	100%	150%	200%
<i>L</i> ₀	6	6	6	6
<i>L</i>	9	12	15	18
<i>L</i> '	7.5	8.9	10	11.5
<i>R</i> '	25%	48%	67%	92%

R: Drawing ratio; *L*₀: initial length; *L*: elongated length; *L*': retracted length; *R*' = (*L*' - *L*₀) / *L*₀.

Supporting Video

Video S1. The video shows the difference in field of view between N₃-PVA hydrogel and N₂D₁-PVA

(//) hydrogel under the POM with rotating the stage.