crystals

MDPI

Supplementary Materials

Degradation-Induced Actuation in Oxidation-Responsive Liquid Crystal Elastomers

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Figure S1. Uniaxial strip after being in an oxidative media for 5 days.

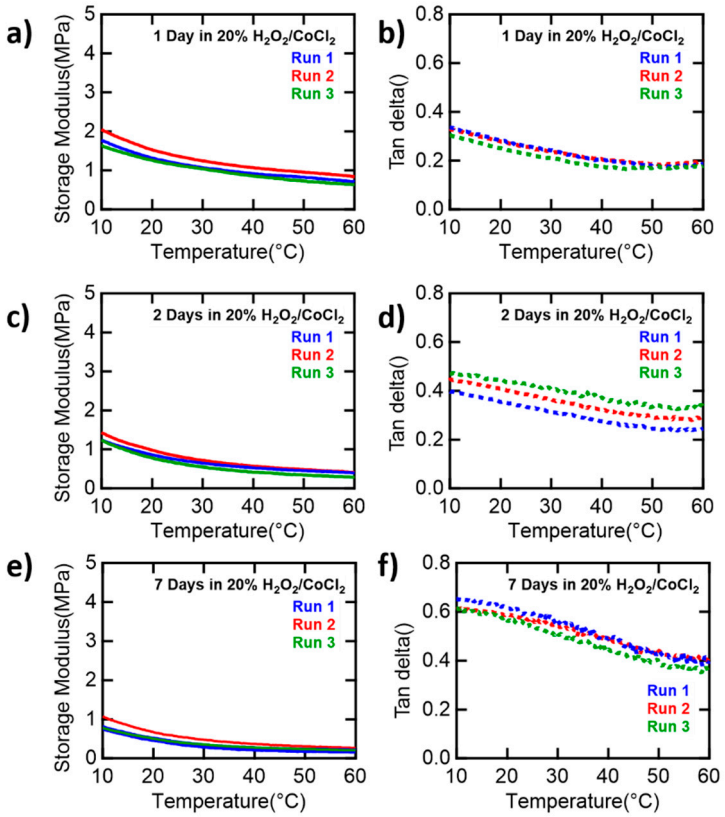

Figure S2. Dynamic mechanical analysis (DMA) replicates for samples after degradation in 20% H_2O_2 for 1, 2, and 7 day(s) (n = 3).

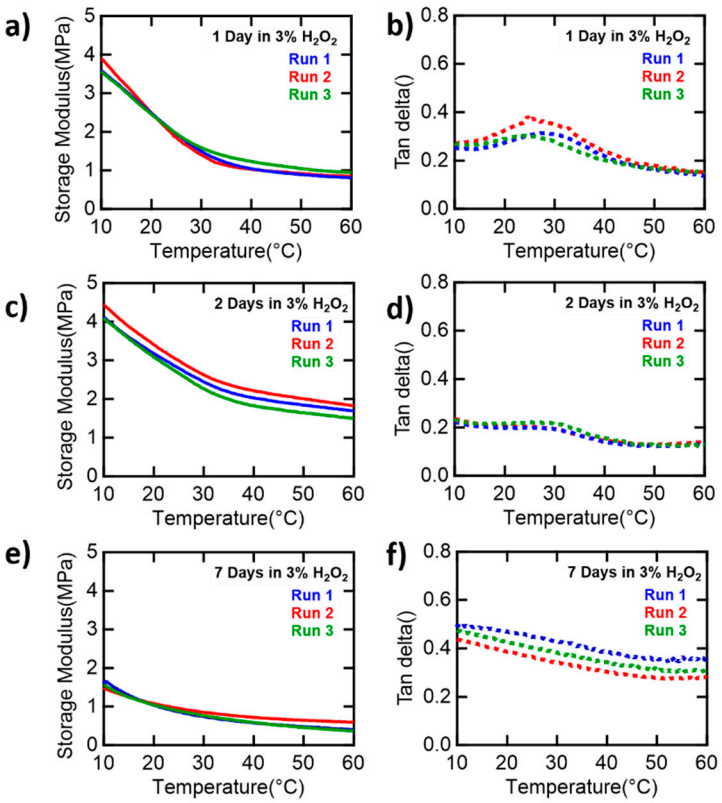

Figure S3. DMA replicates for samples after degradation in 3% H_2O_2 for 1, 2, and 7 day(s) (n = 3).

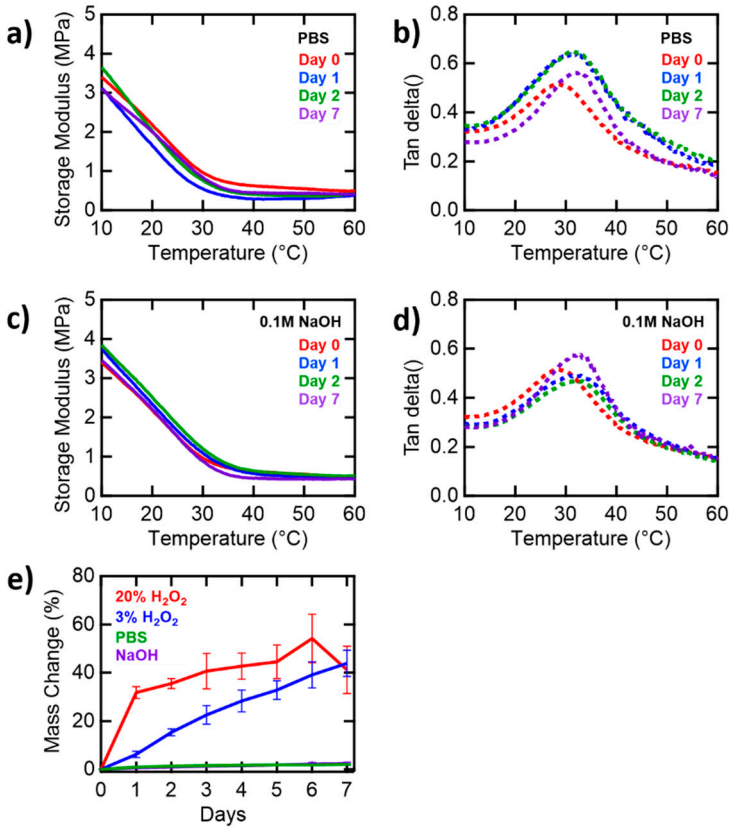

Figure S4. Effects of degradation on the viscoelastic properties of LCEs in control and hydrolytic solutions. **(a)** Storage Modulus (E′) as a function of temperature for films exposed to PBS for 0, 1, 2 and 7 days. **(b)** Respective curve of tan delta as a function of temperature. **(c)** Storage Modulus (E′) as a function of temperature for films exposed to NaOH solution for 0, 1, 2 and 7 days. **(d)** Respective curve of tan delta as a function of temperature. **(e)** Mass Change (%) vs. Time (Days) plotted to evaluate mass changes in specimens 1-mm thick.