Supporting Information

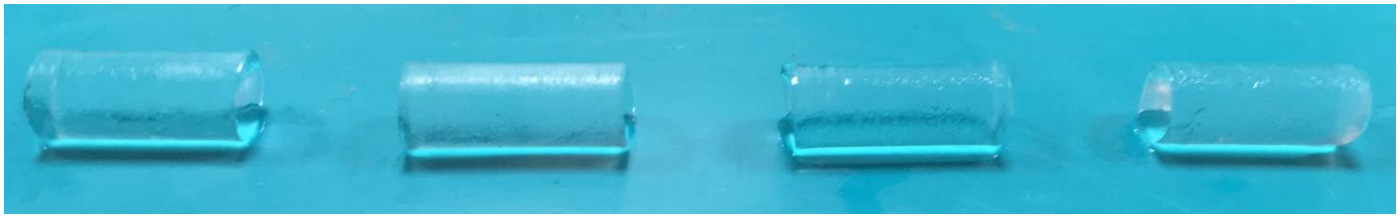

Fig. S1. Representative photographs of NC hydrogel samples. Laponite contents (from left to right) = 2.3, 3.8, 5.3, and 6.9 w/v%.

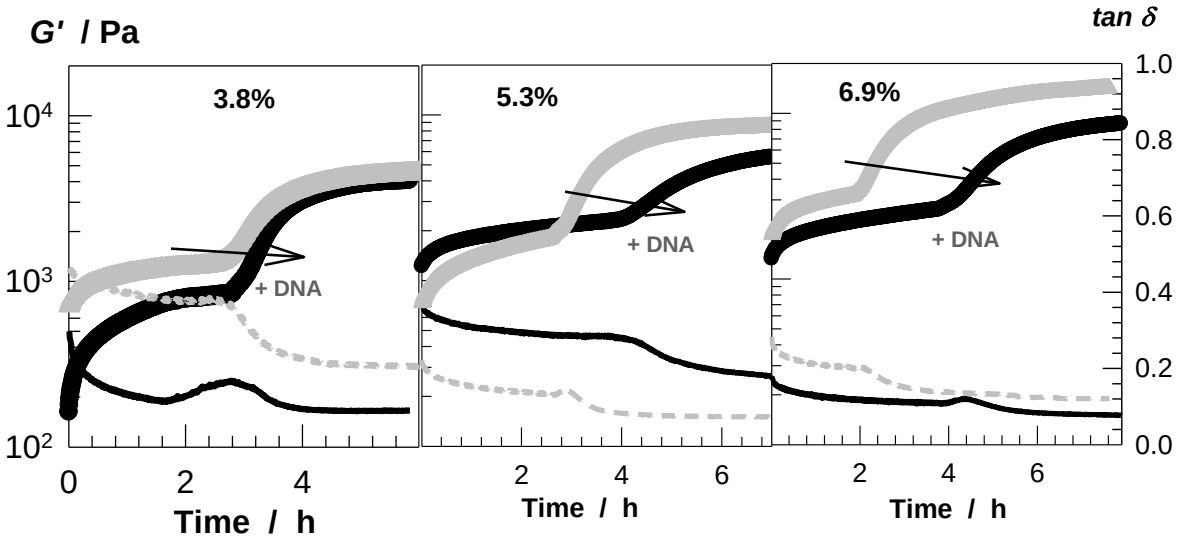

Fig. S2. Results of dynamic rheological tests during the formation of NC hydrogels at a frequency of 6.3 rad·s^{-1} and strain amplitude γ_0 of 0.01. Elastic modulus *G'* (filled symbols) and *tan* δ (lines) of the reaction system with (black) and without DNA (gray) shown as a function of the reaction time. NIPA = 1 M. DNA = 2 w/v%. Laponite contents are indicated.

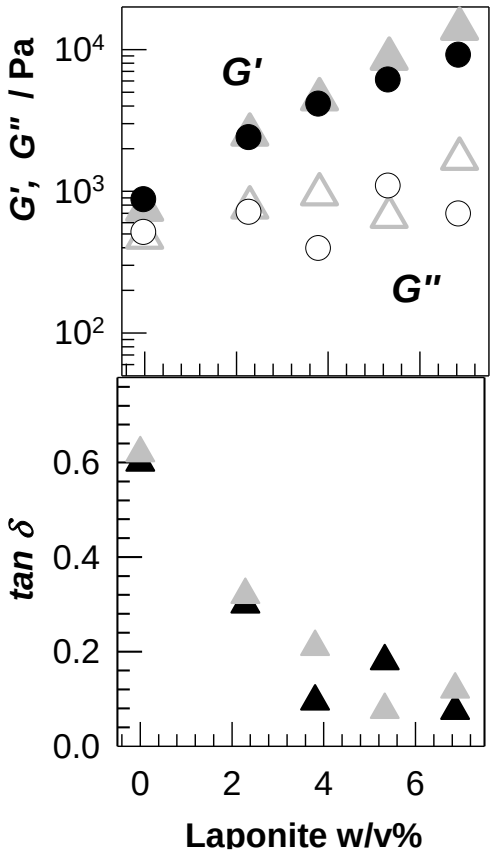

Fig. S3. *G'* (filled symbols), *G''* (open symbols) and *tan δ* of the reaction system with (black) and without DNA (gray) shown as a function of the Laponite content.

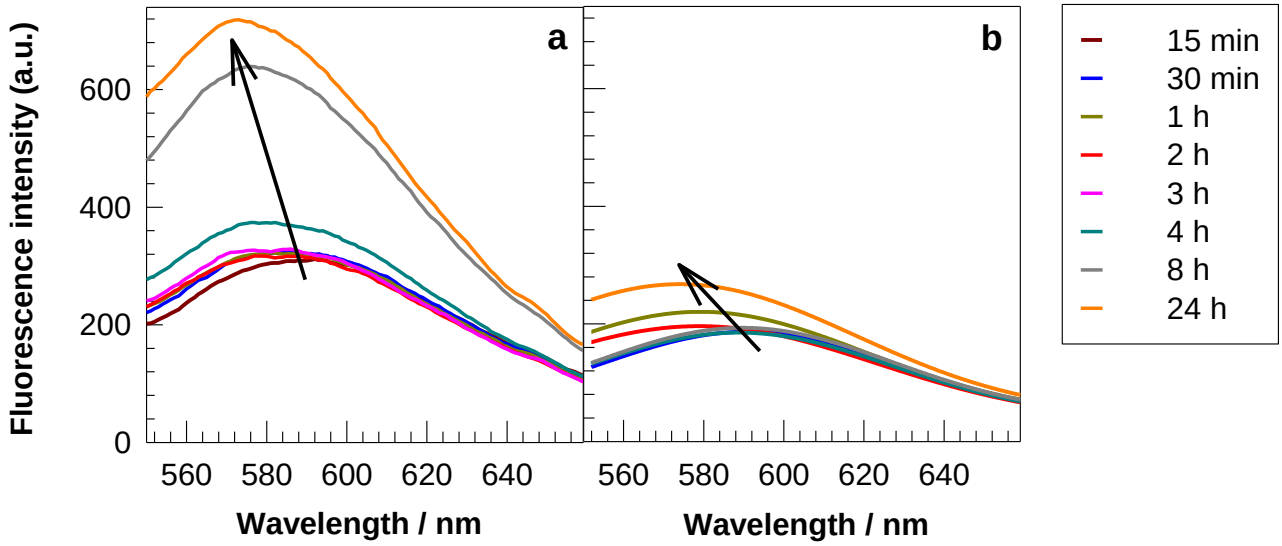

Fig. S4. Fluorescence spectra of 5 μM EtBr during the polymerization of NIPA (1 M) using KPS-TEMED redox initiator system in 3.8 w/v% Laponite dispersions without (a) and with 2 w/v% DNA (b). The reaction times are indicated.

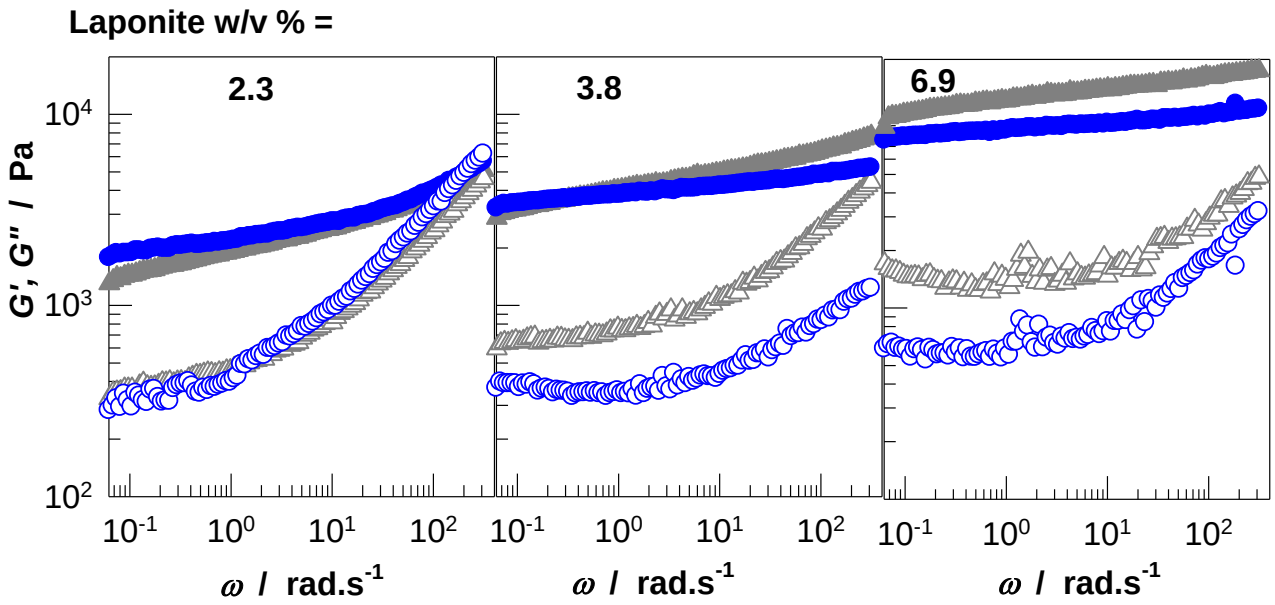

Fig. S5. Elastic moduli *G'* (filled symbols) and viscous moduli *G''* (open symbols) of NC hydrogels shown as a function of the frequency ω measured after 6h of reaction time. NC hydrogels with and without DNA are shown by blue circles and gray triangles, respectively. Laponite contents are indicated.

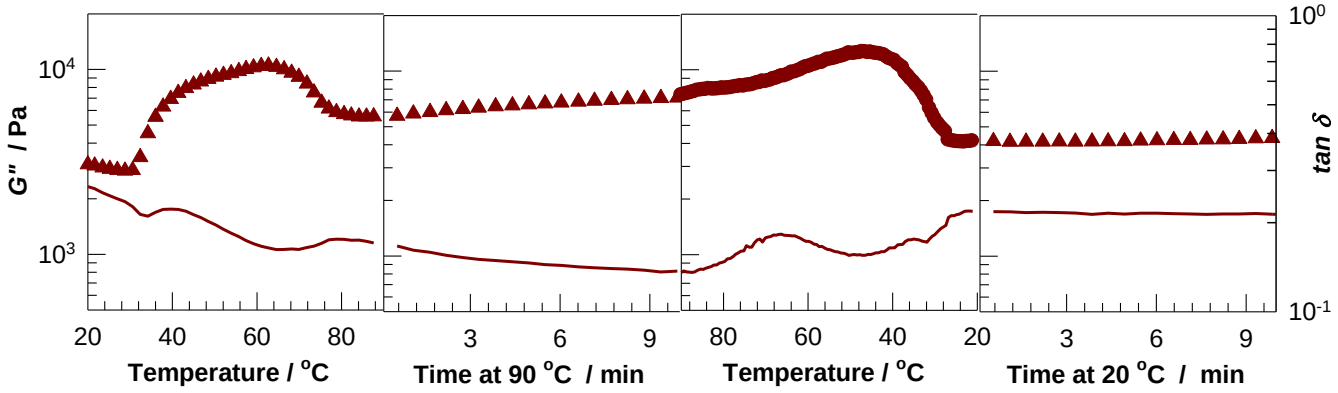

Fig. S6. *G'* (symbols) and *tan δ* (lines) of the hydrogels prepared in 3.8 w/v% Laponite without DNA during the heating - cooling cycle between 20 and 90°C. $\omega = 6{\cdot}3$ rad·s^{-1}. $\gamma_0 = 0.01$.