

Supplementary information for:

On the mechanism for the highly sensitive response of cellulose nanofiber hydrogels to the presence of ionic solutes

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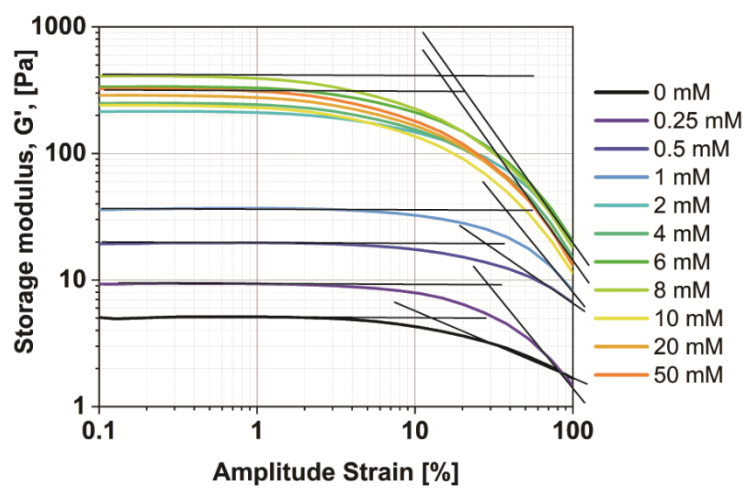
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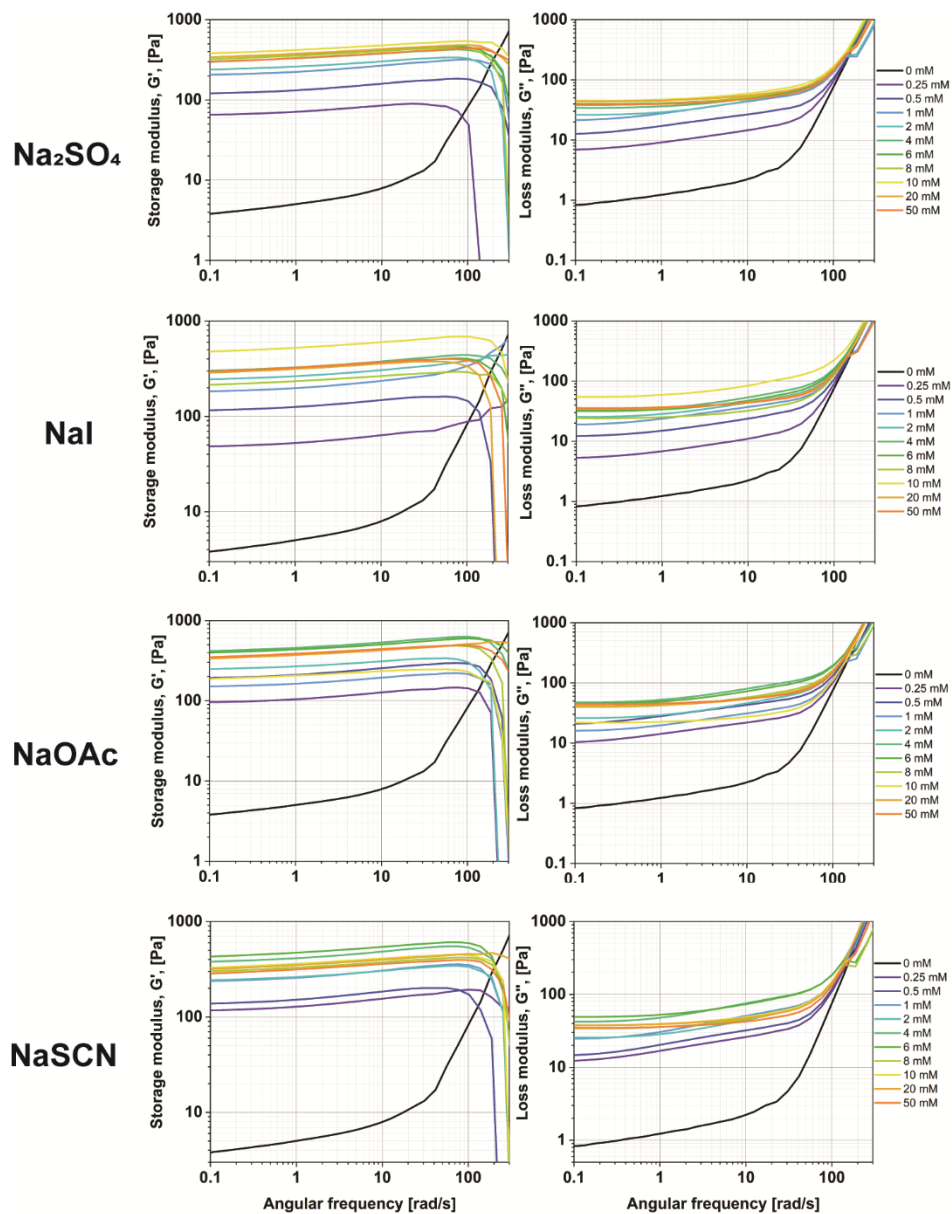
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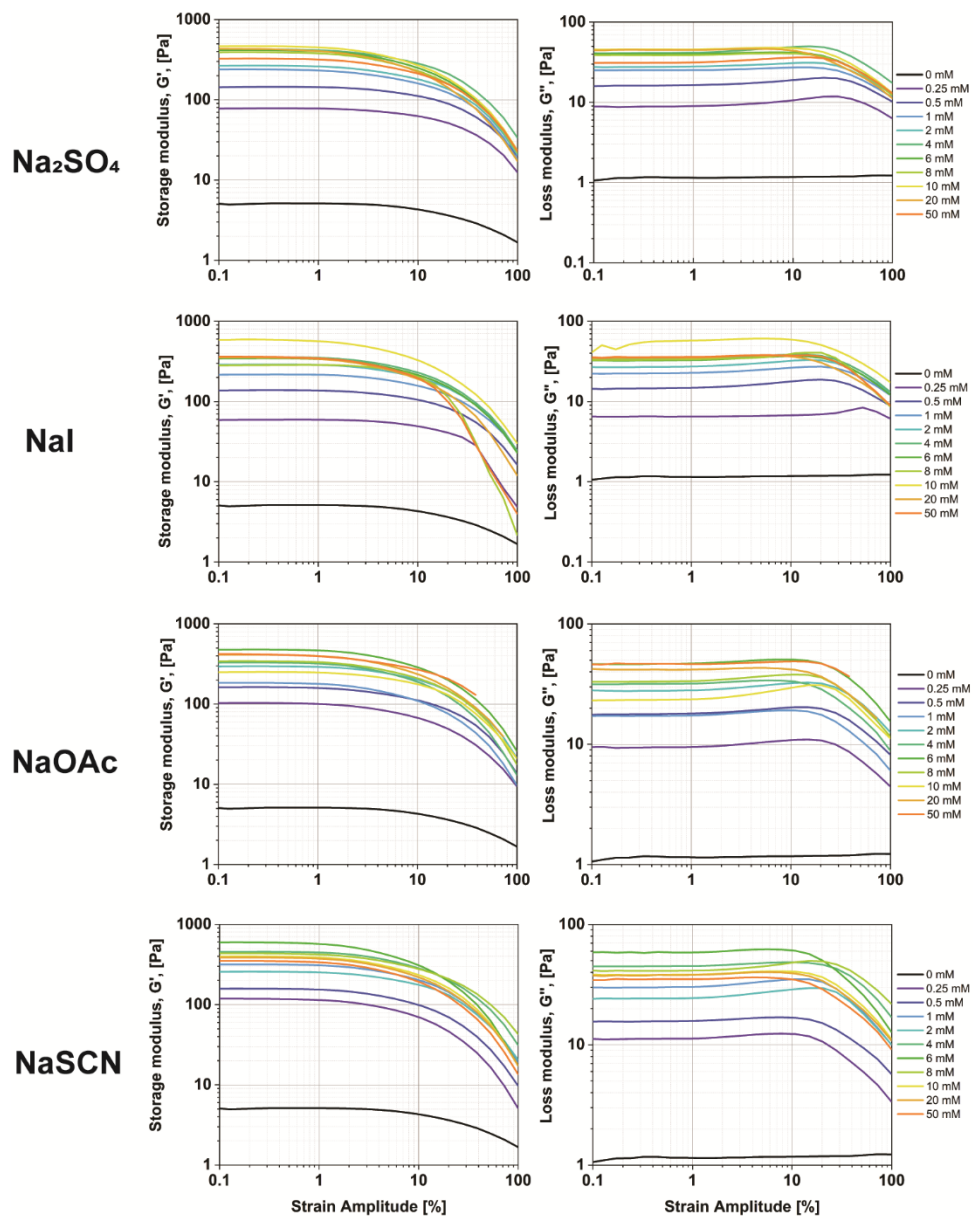
Supplementary data



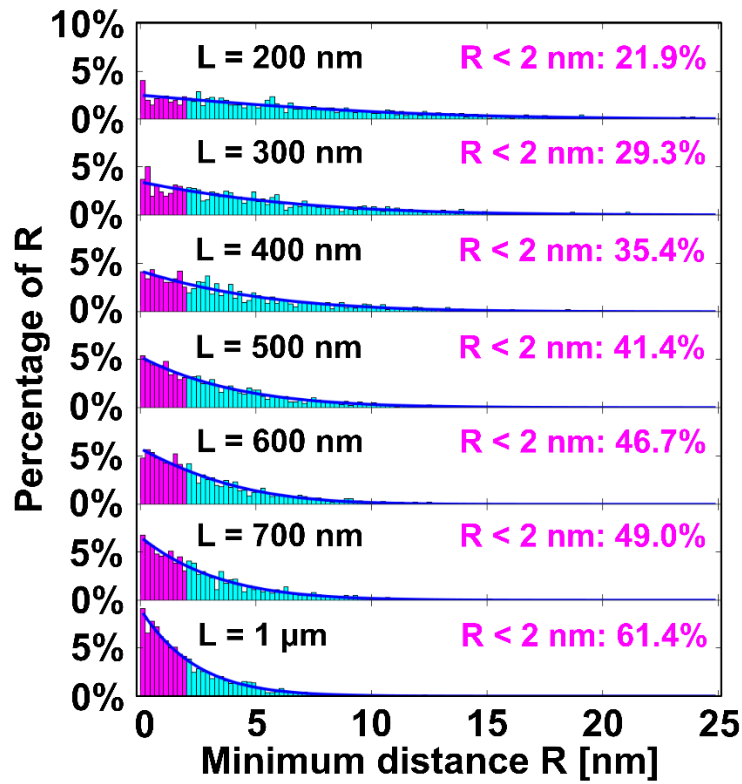
SD Figure 1. Storage modulus, G' , of CNF with increasing NaCl concentration showing the yield point (crosspoint of the two black lines in each curve). Yield points are shown for 0, 0.25, 0.5, 1, 8, and 50 mM NaCl.



SD Figure 2. Frequency data for CNF with added Na₂SO₄, NaI, NaOAc, and NaSCN.



SD Figure 3. Amplitude strain data for CNF with added Na_2SO_4 , NaI , NaOAc , and NaSCN .



SD Figure 4. Full data set for the estimate of minimum distance R distribution for cellulose fibrils approximated as randomly distributed cylinders 4 nm in their diameter and varying length L at 0.6 % (w/v) concentration. In main manuscript Figure 7, only the R distributions of fibril lengths of 200 nm, 600 nm and 1 μ m are presented. Here, also the data for intermediate lengths is provided. The magenta region and percentage indicate the fraction of fibrils within 2 nm distance from each other. The solid line presents a Gaussian fit to the distribution. Scheme showing the parameters used in the calculations is available in main manuscript Figure 7.