Investigating Cellulose Nanocrystal and Polyvinyl Alcohol Composite Film in Moisture Sensing Application

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Supplementary Information

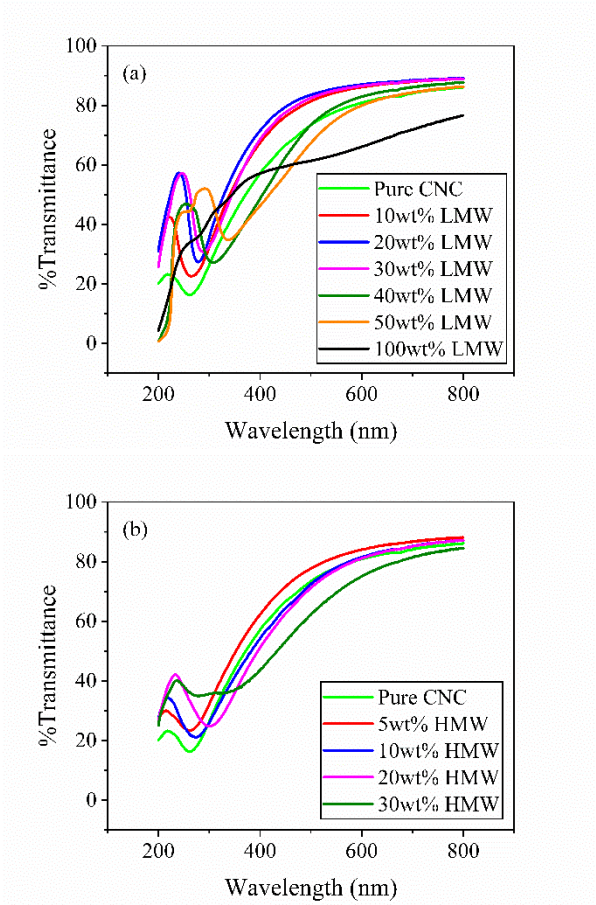


Figure S1. Effect of LMW and HMW on the transmittance spectra at 50% RH

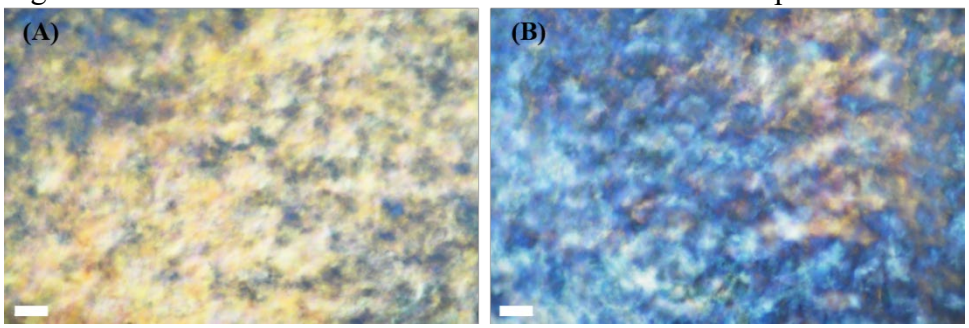


Figure S2. Cross-polarized image of CNC-80 wt% LLMW PVA (A) at 0º to the polarizer (B) at 45º to the polarizer; scale bar: 50 µm

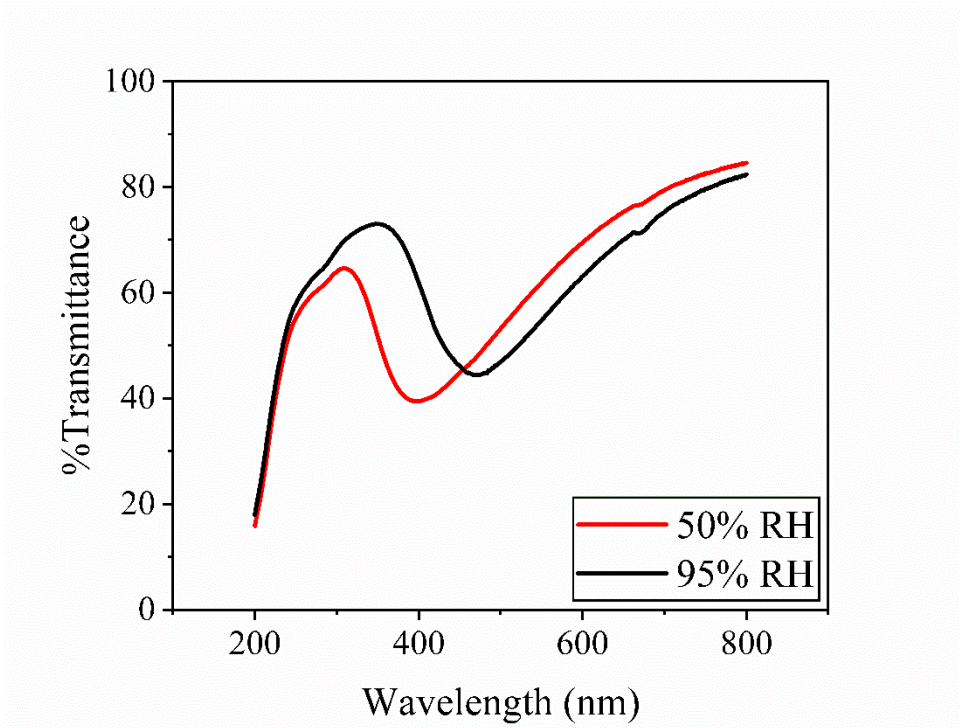


Figure S3. Transmission spectra of thermally crosslinked CNC-80%LLMW film at 50% RH and 95% RH

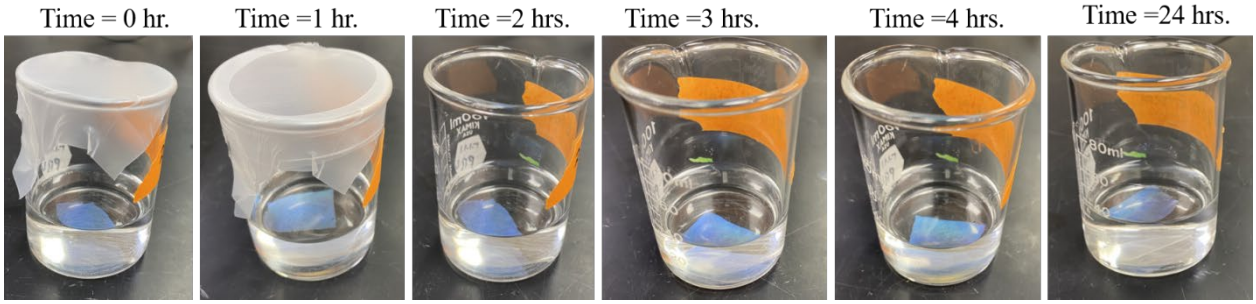


Figure S4. The Pure CNC-40 wt%LLMW PVA –composite film stability in pure ethanol (200 proof) with varied time

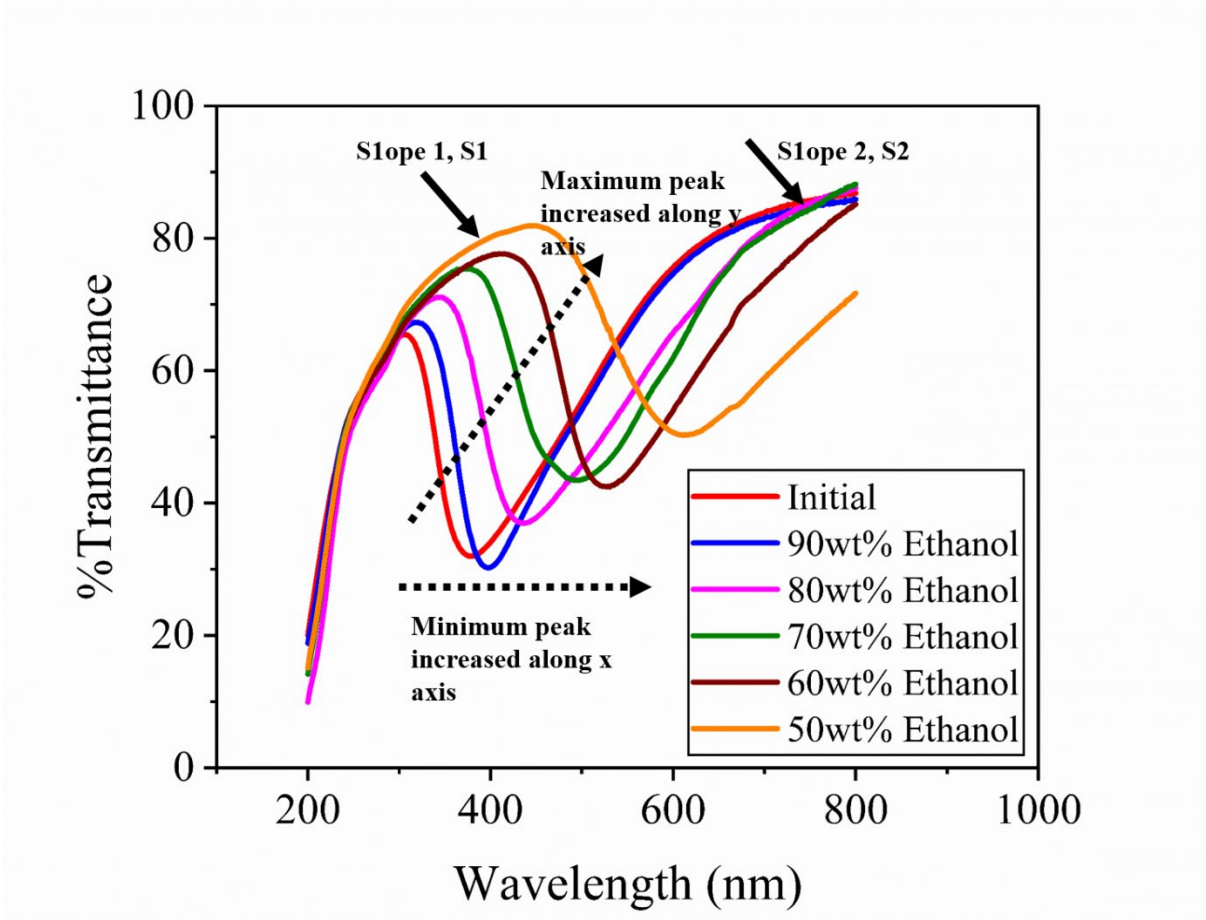


Figure S5. Three different ways to identify change in transmittance profile for various ethanol-water solution