

Supporting Information (SI)

Rice Husk-Derived Cellulose Nanofibers: A Potential Sensor for Water-Soluble Gases

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Table S1. XRD data with samples corresponding to 2 theta values.

Sample	CrI (%)
Cellulose nanofibers-rice husk (CNF)	53.39
TEMPO-Oxidized nanocellulose with glycerol (TOCNF/G)	59.51
TEMPO-oxidized nanocellulose (TOCNF)	65.12

The crystallinity index (CrI) was determined based on the reflected intensity data using the following equation.

$$\text{CrI (\%)} = (I_{002} - I_{\text{am}}) / I_{002} \times 100$$

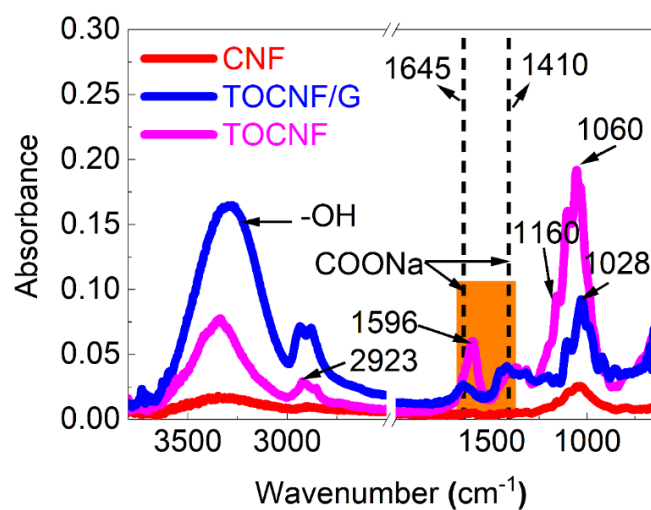


Figure S1. Comparative FTIR spectra of CNF, TEMPO-oxidized cellulose (TOCNF), and TOCNF with the addition of glycerol (TOCNF/G) in films. TOCNF/G has an intense peak around 3200-3300 cm^{-1} and is associated with -OH groups and a unique peak around 1645 and 1410 cm^{-1} ; these peaks are associated with sodium carboxylate groups of TOCNF and TOCNF/G.