

Fig. S-1. SEM micrograph of LiTFSI-free CNFs (the bar corresponds to 10 μm).

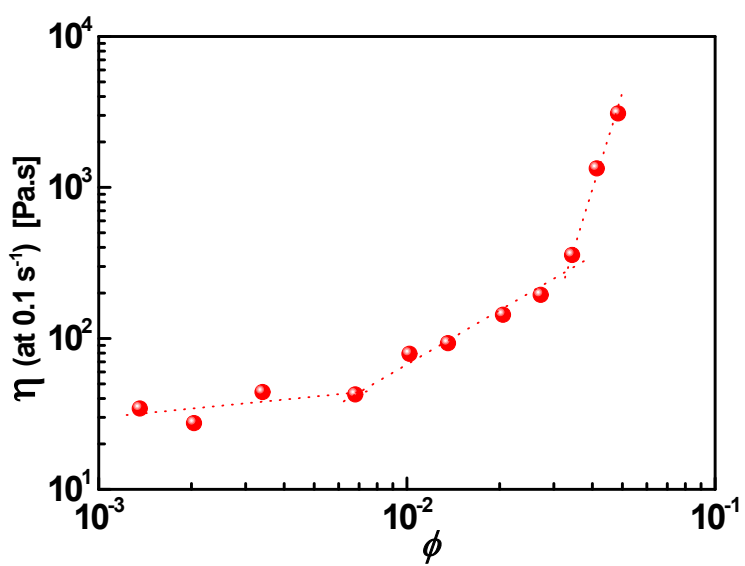


Fig. S-2. Variation of the steady viscosity (η) at 0.1 s^{-1} with the volume fraction of the CNFs.

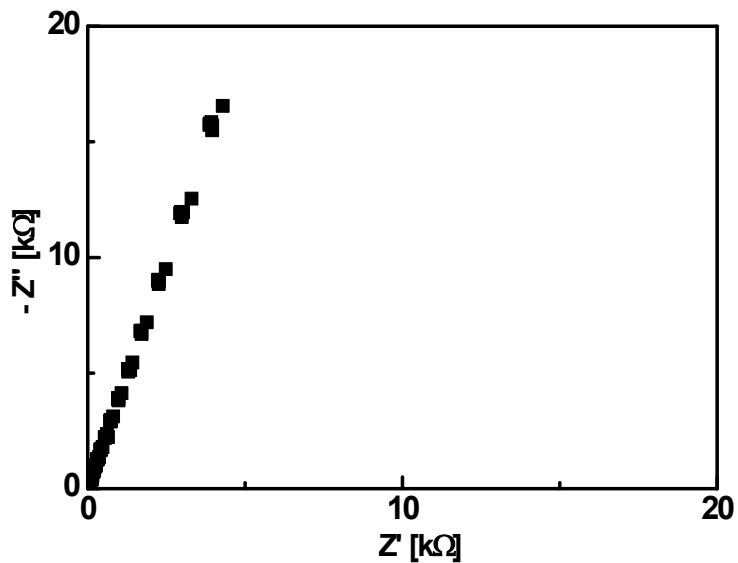


Fig. S-3. The effect of shear rate (from 0 s⁻¹ to 100 s⁻¹) on the electrical properties (represented by Nyquist plots) of CNF suspension at $\phi=0.00136$.

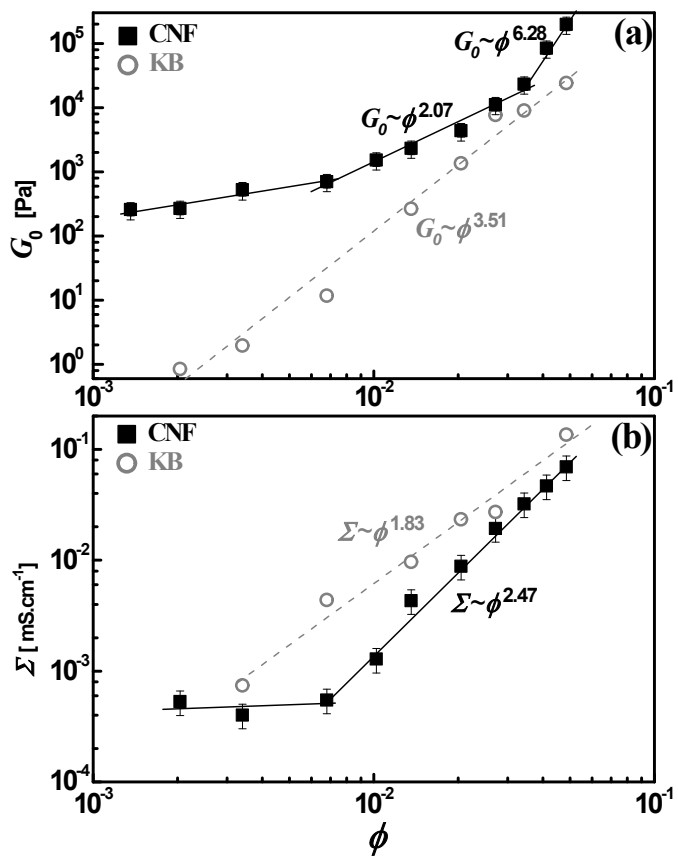


Fig. S-4. Comparison between the variation of (a) plateau modulus (G_0) and (b) electrical conductivity (Σ) of carbon black (Ketjenblack; KB) and carbon nanofiber (CNF) suspensions.

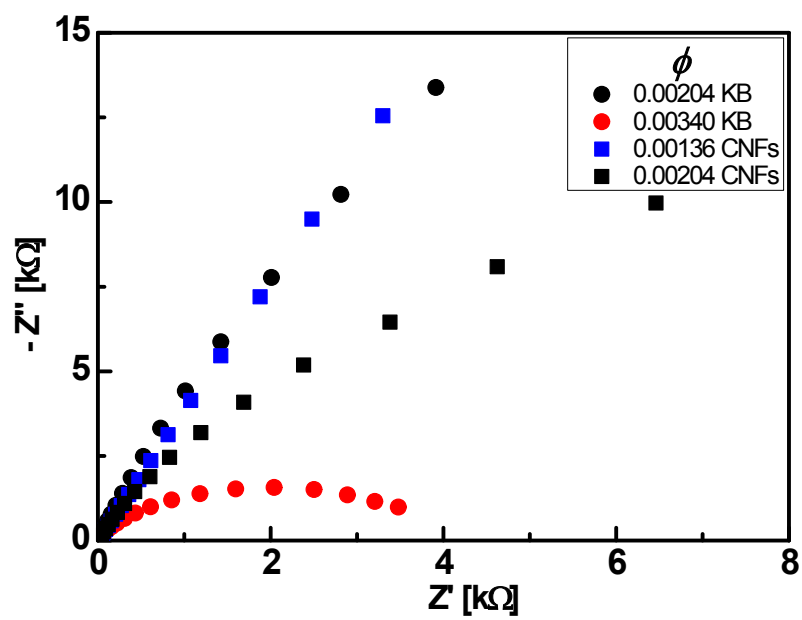


Fig. S-5. Comparison between the electrical behavior of CNFs and KB suspensions (represented by Nyquist plots) at low concentrations.