



Scheme 1. Procedure for enhancing the inter-CNF interactions. (a) Schematic of the CNF dispersion forming a nematic liquid-crystalline phase, including its appearance and birefringence image. (b) Conversion to sample *i*. Schematic of the assembled state of the CNFs in sample *i*, appearance, and cross-sectional SEM images. (c) Conversion to sample *ii*. Schematic and appearance. (d) Conversion to sample *iii*. (e) Conversion to sample *iv*. Schematic and cross-sectional SEM images.