

## Supplementary Materials

# Tailored CNTs Buckypaper Membranes for the Removal of Humic Acid and Separation of Oil-in-Water Emulsions

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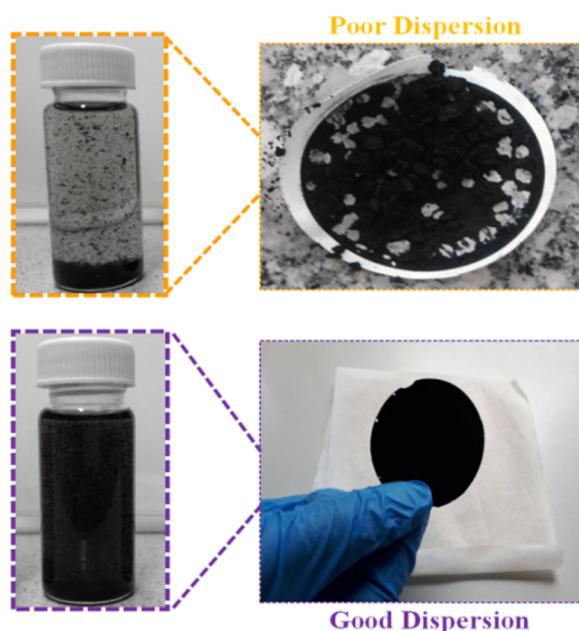
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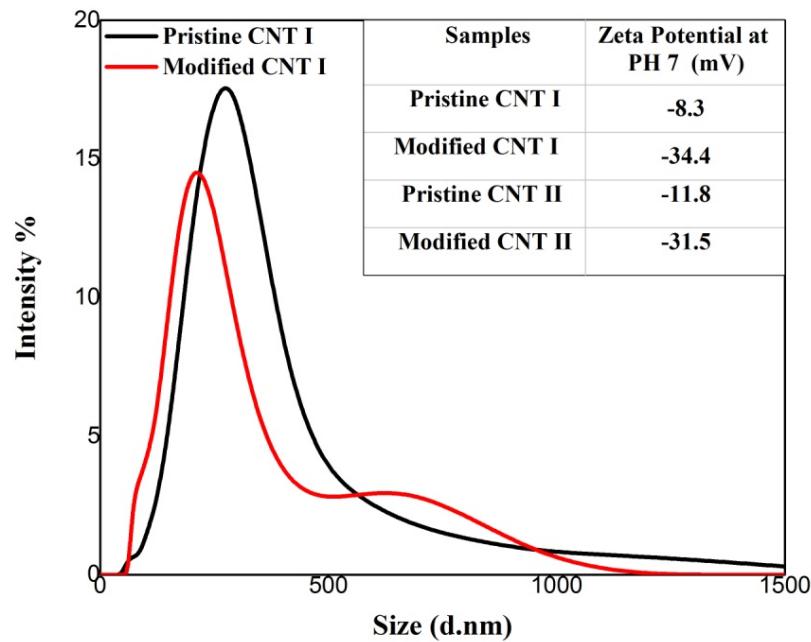
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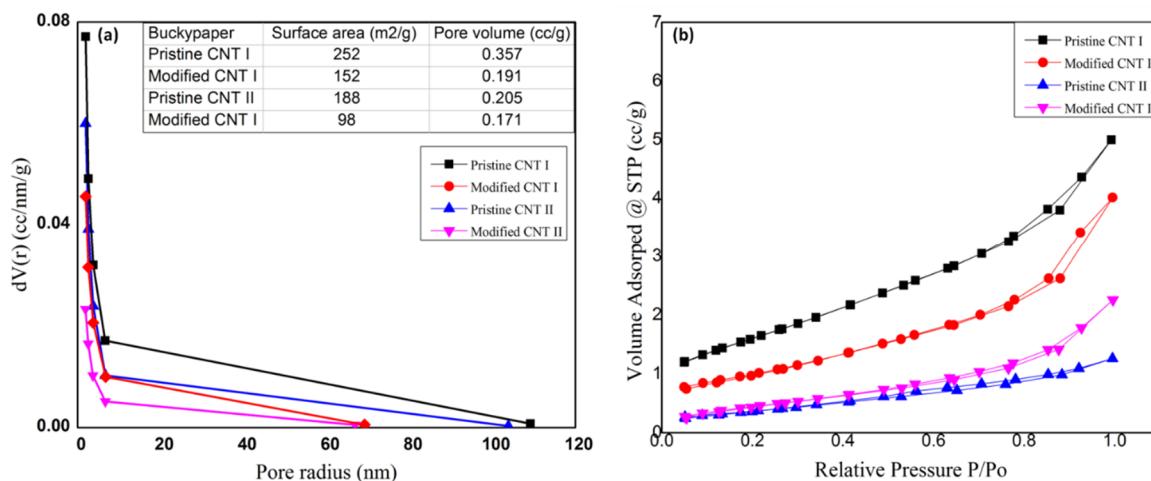
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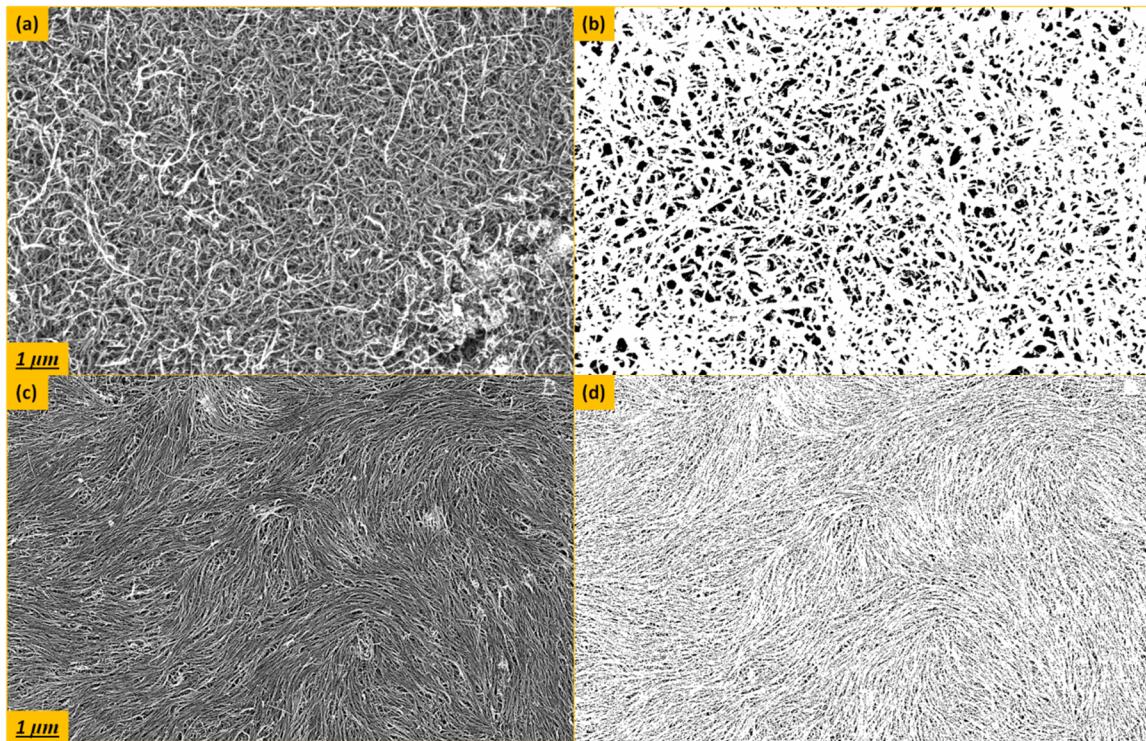
**Figure S1.** The effect of dispersion stability on buckypaper formation.



**Figure S2.** The particle size of pristine and surface modified CNTs dispersions in NMP and aqueous solvent without dilution, inserted with the zeta potential of CNTs dispersions at PH 7.



**Figure S3.** (a) BJH pore size distribution inserted with buckypapers membranes surface area and pore volume, (b) The N<sub>2</sub> adsorption-desorption isotherm of buckypapers.



**Figure S4.** SEM images combined with threshold segmentation images for pristine (a,b), and surface modified (c,d) CNT-II, respectively.