Supporting Information

A Direct Foaming Approach for Carbon Nanotube Aerogels with ultra Low Thermal Conductivity and High Mechanical Stability

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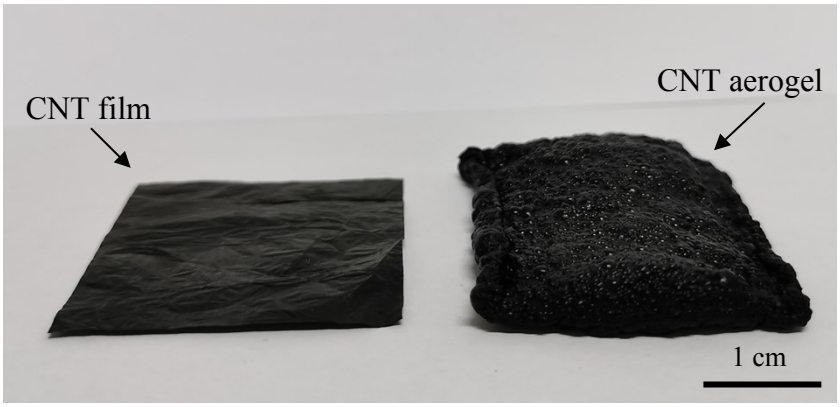

Figure S1. Optical images of a CNT film and aerogel

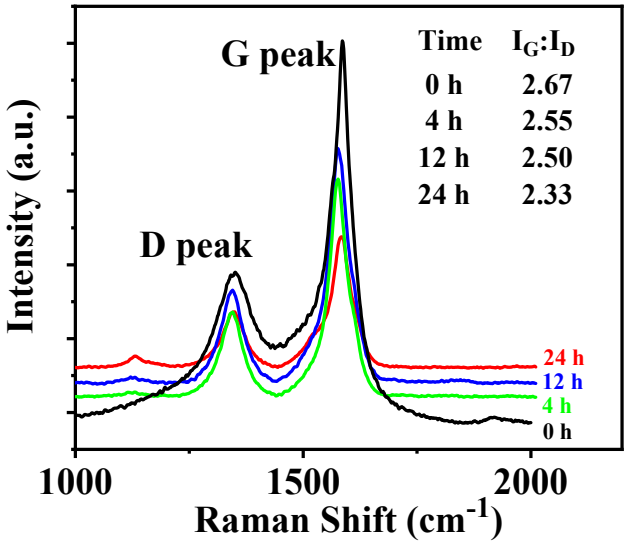

Figure S2. Raman spectra of the CNT samples formed at different soaking periods of time of 0, 4, 12, 24 h.

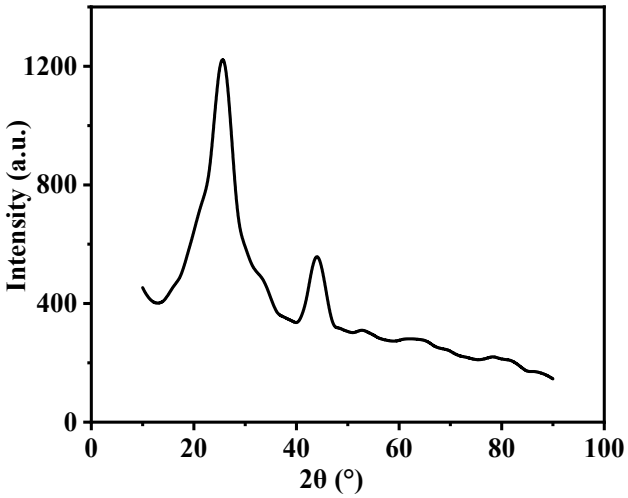

Figure S3. XRD spectrum of a CNT aerogel

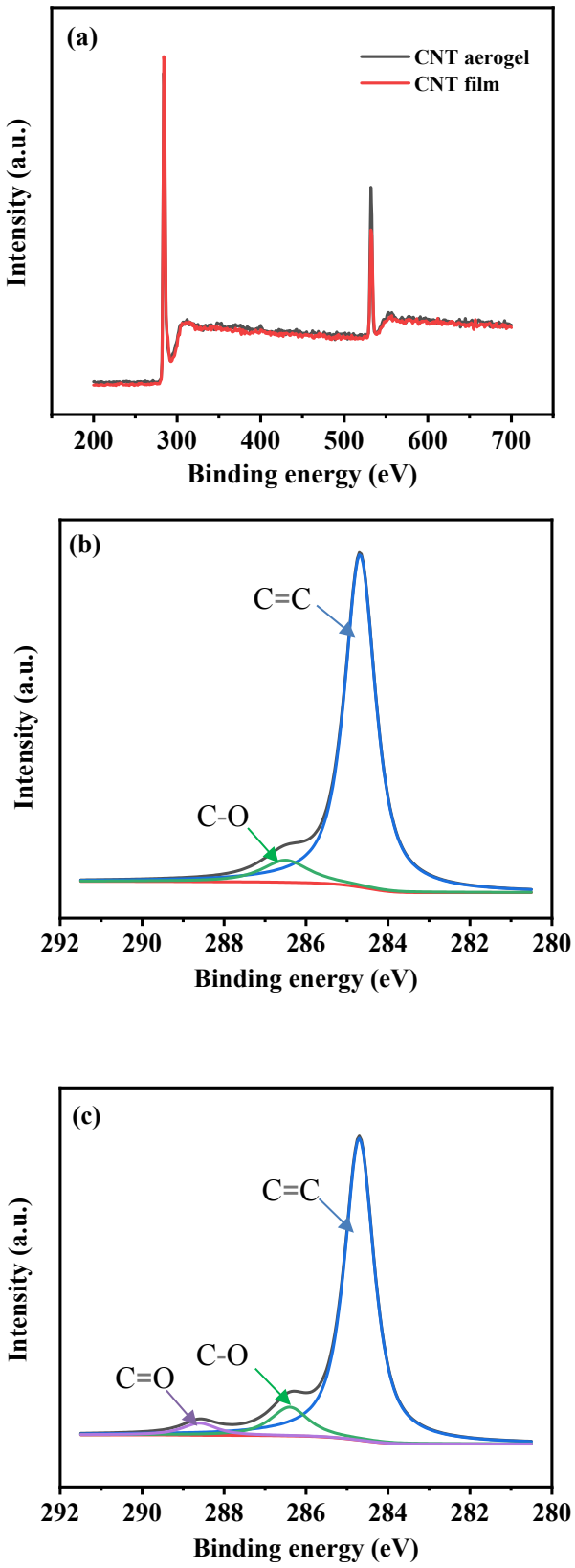

Figure S4. XPS spectra (a) and deconvolution of the C1s XPS for CNT film (b) and aerogel (c)

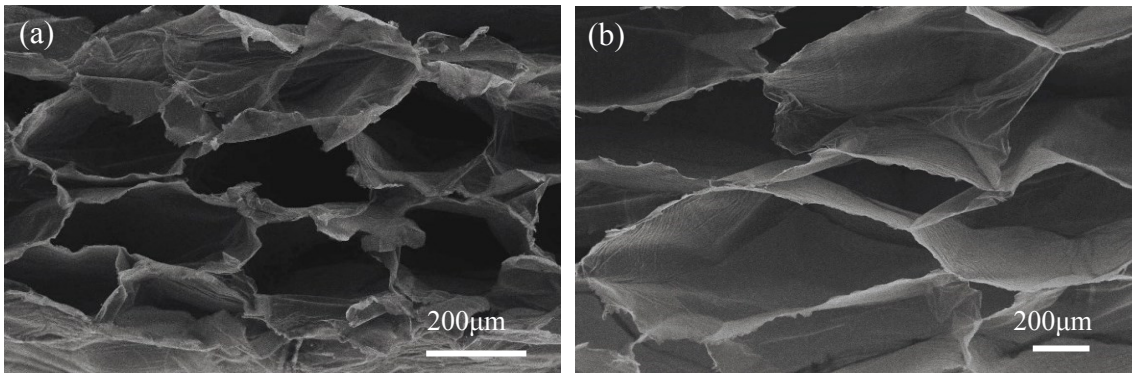

Figure S5. SEM images of the cross sections of the CNT samples formed at different soaking periods of time of 1 and 12 h

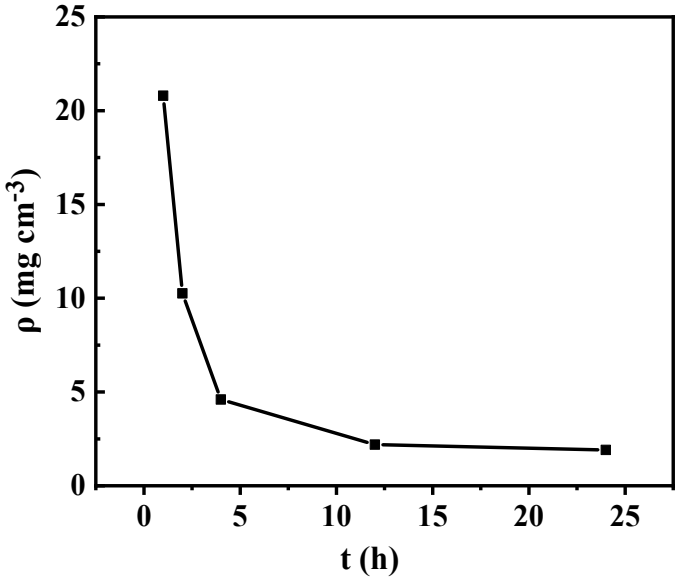

Figure S6. Variation of density ρ for CNT aerogel with time t used for direct soaking

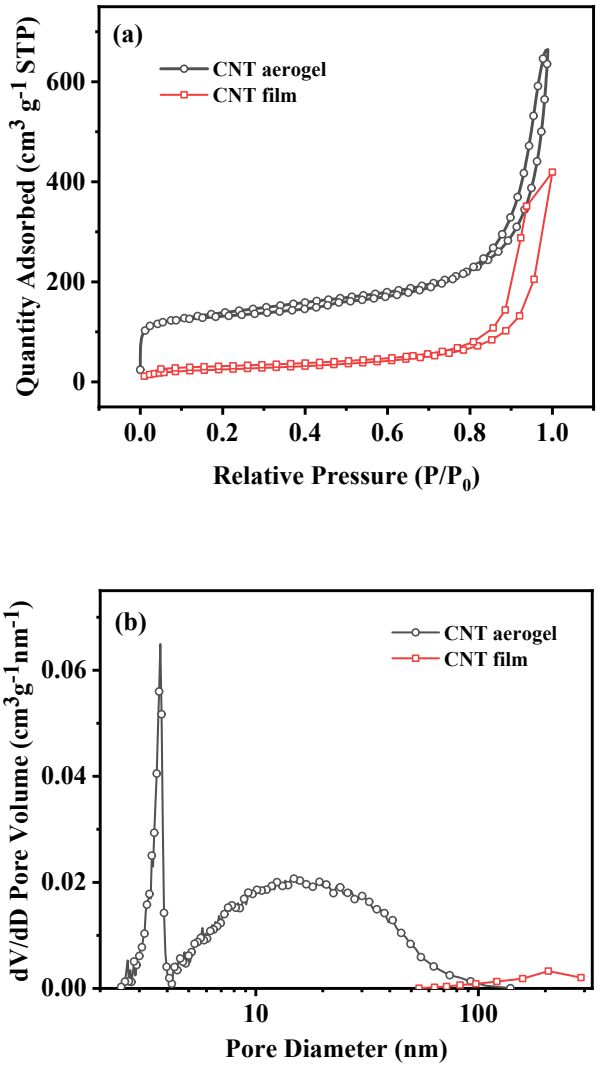

Figure S7. Pore size analysis. (a) Nitrogen sorption isotherms for a CNT film and aerogel; (b) Pore size distributions for a CNT film and aerogel

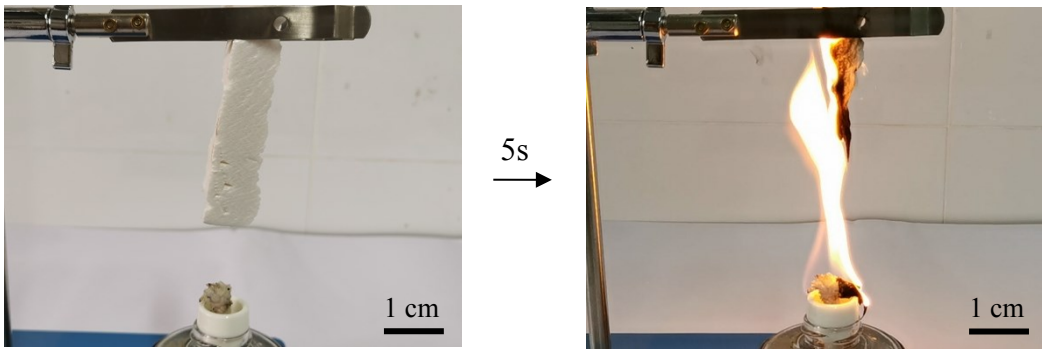

Figure S8. Burning test of a commercial XPS thermal shield in the flame of an alcohol lamp

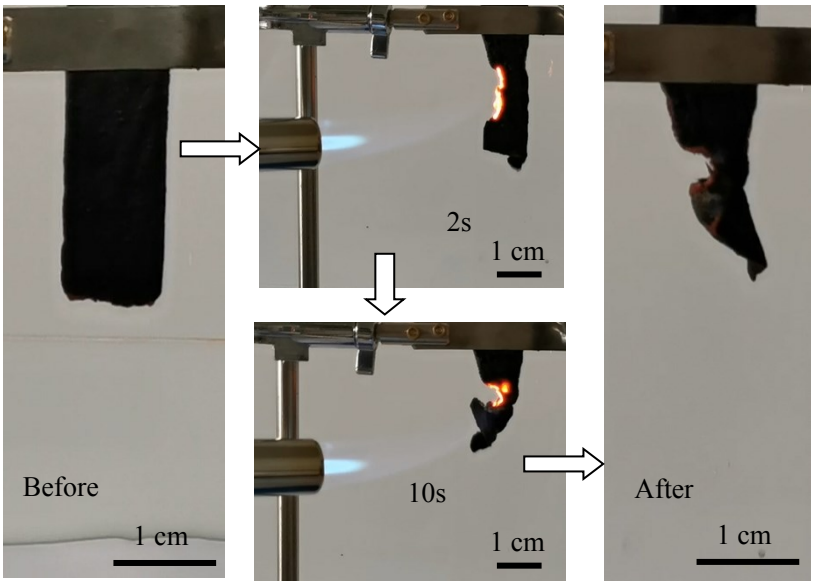

Figure S9. Burning test of a CNT aerogel in the flame of a butane blowtorch