

Supporting information for

Finest nanocomposite films from carbon nanotubes-loaded poly(methyl methacrylate) nanoparticles obtained by Ouzo effect

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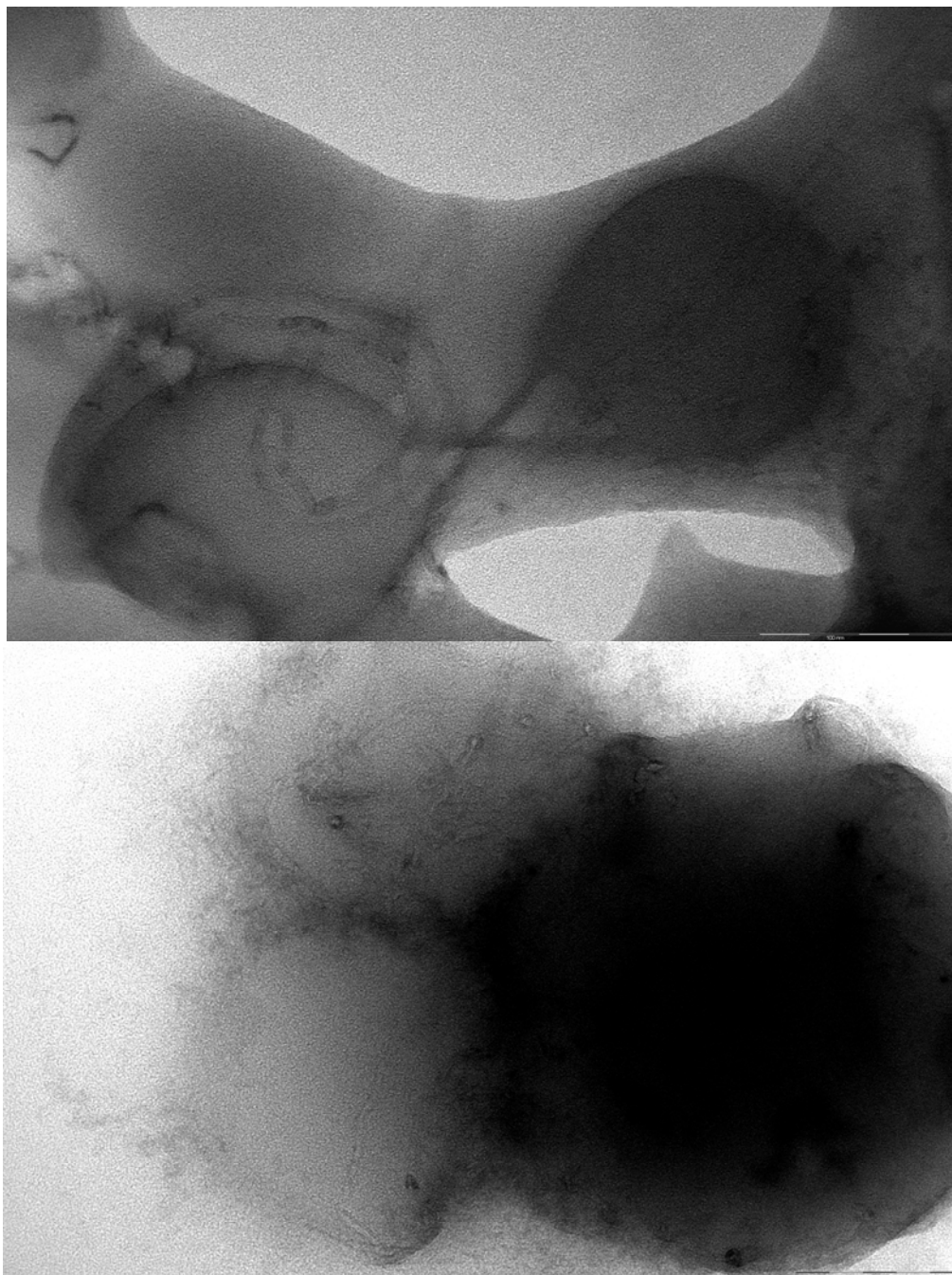


Figure S1: Nanoparticles loaded with few carbon nanotubes in the same particle (typically less than 5). The ratio CNTs:PMMA was set at 1 wt% (top) and 5 wt% (bottom). The scale holds for 200 nm.

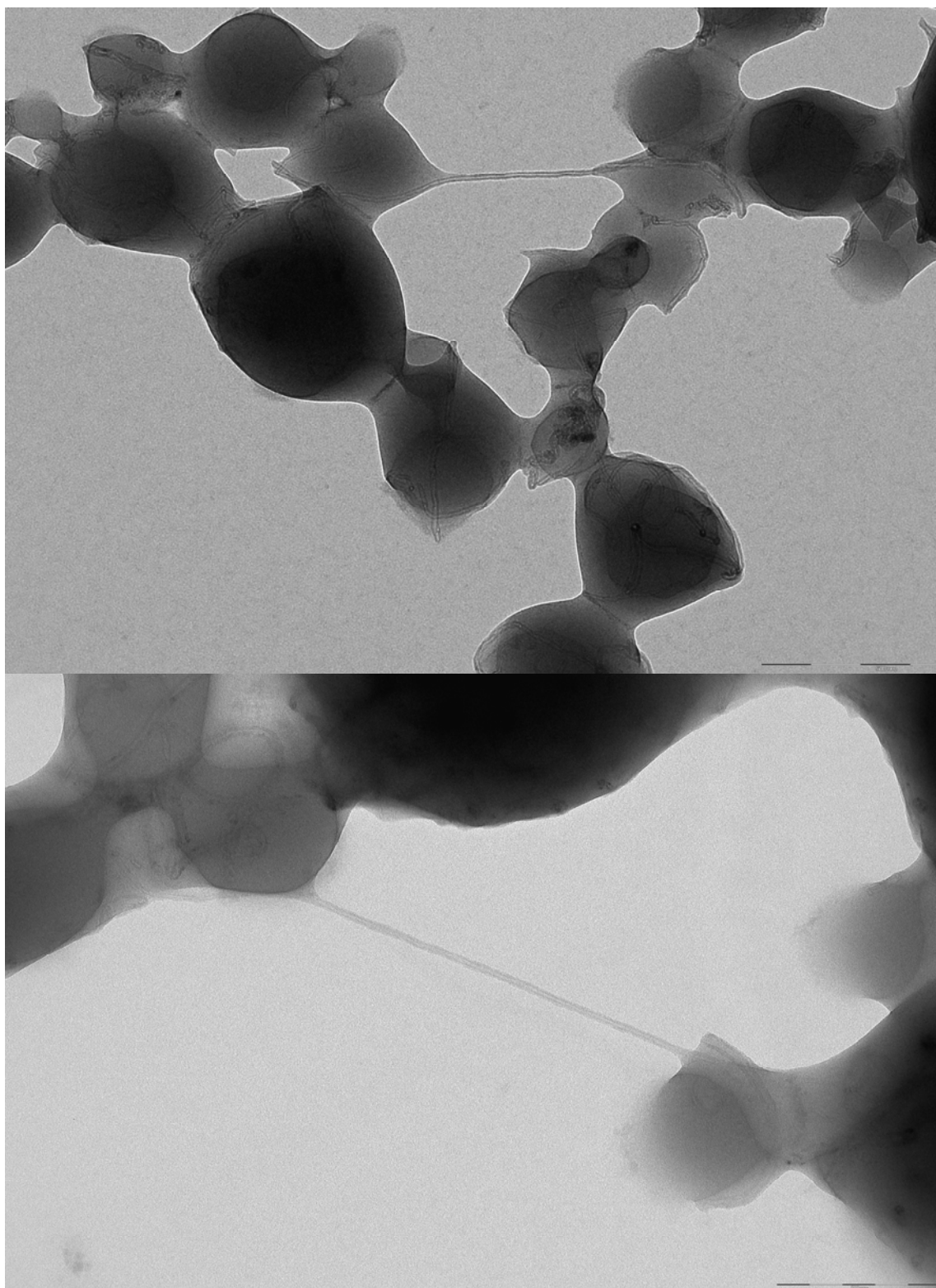


Figure S2: Examples of TEM photos showing long CNTs entrapped within fewer nanoparticles. CNTs:PMMA loading Top: 2wt% CNTs:PMMA loading, bottom: 5wt% (see Table 1 in the main text for details). Scale bar: 200 nm.

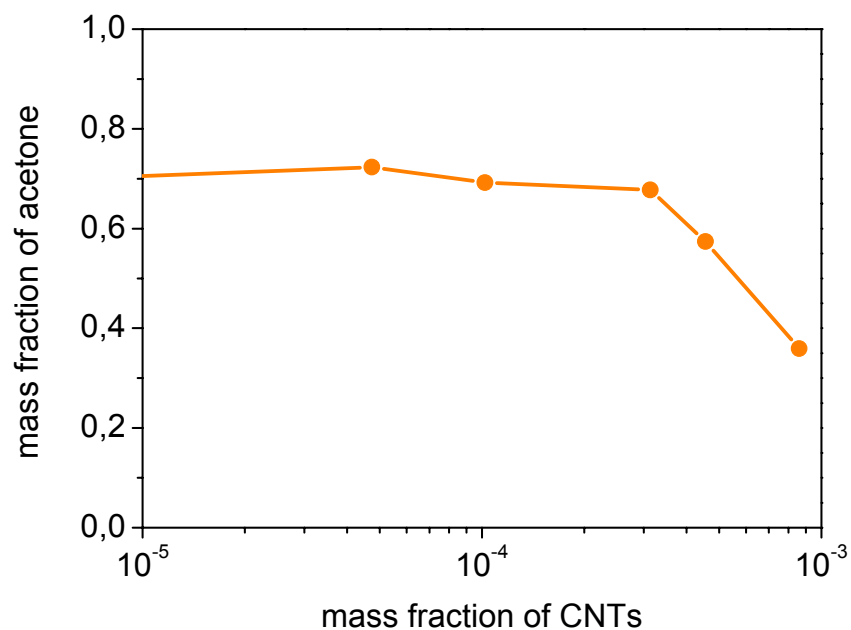


Figure S3: Same plot as Figure 1b in the main text, but with NaDDBS as the surfactant of the CNTs dispersion.

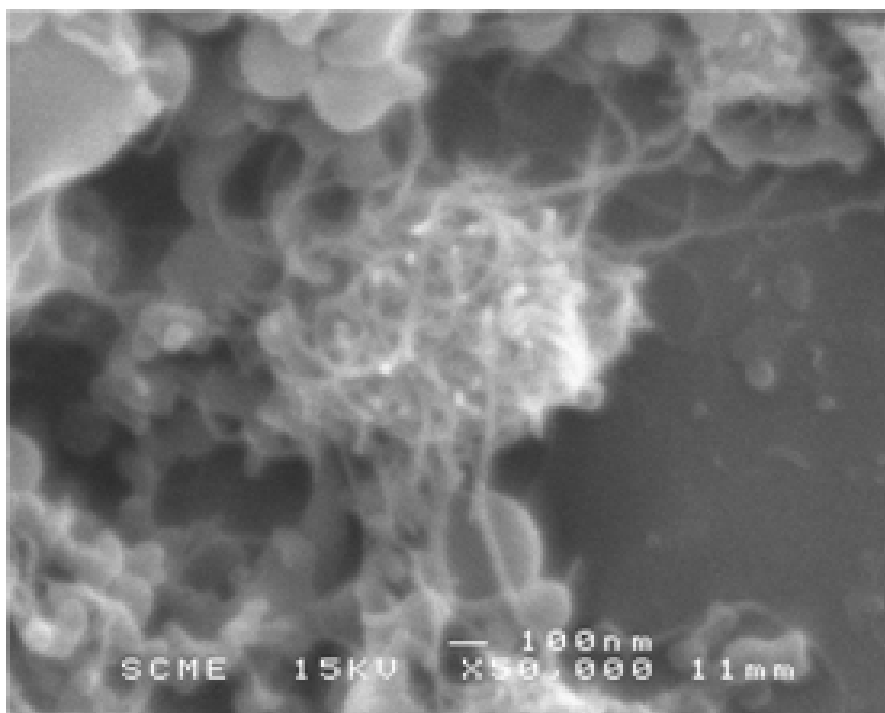


Figure S4: Bundles of nanotubes which were not destroyed while preparing the CNTs dispersion in presence of NaDDBS. These small aggregates were seen in the original dispersion or here after nanoprecipitation (see very small particles on the bottom left handside).

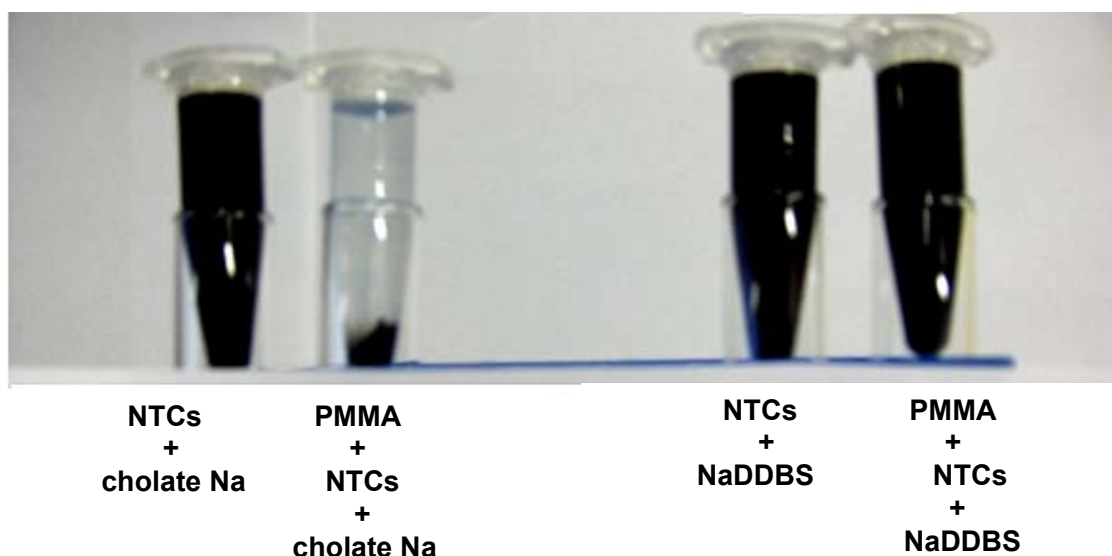


Figure S5: Efficiency of CNTs trapping by PMMA as observed by simple centrifugation experiments. Whereas the cholate sodium based sample was totally entrapped in the particles (on the left), the naDDBS-based sample was in some part still dispersed in the aqueous phase.

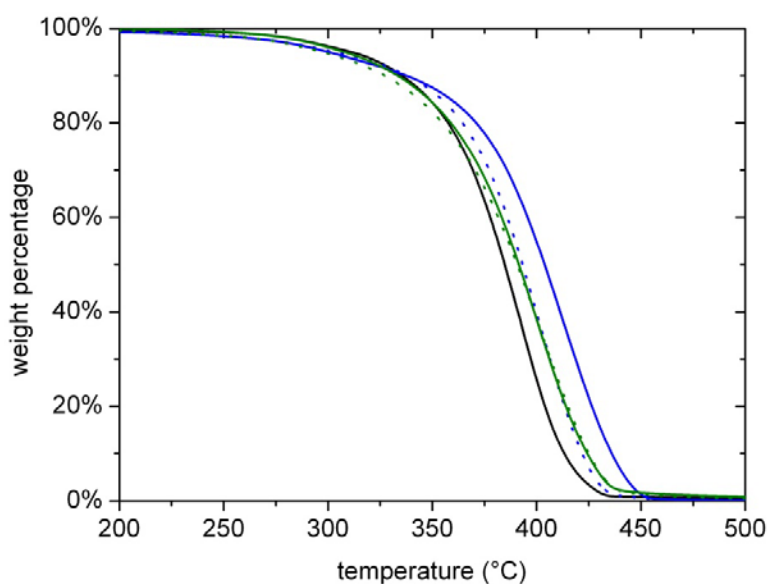


Figure S6. Normalized PMMA decomposition curves obtained by TGA representing PMMA weight percentage versus temperature for PMMA nanoparticles (black line), PMMA-CNT nanocomposites (color solid lines) and for mixtures of PMMA nanoparticles (prepared beforehand by simple PMMA nanoprecipitation) and dispersed CNTs (dotted lines). Sodium cholate based samples are in blue, those stabilized from NaDDBS in green.