

## Supplementary Materials

# Hydrogels from a Self-Assembling Tripeptide and Carbon Nanotubes (CNTs): Comparison between Single-Walled and Double-Walled CNTs

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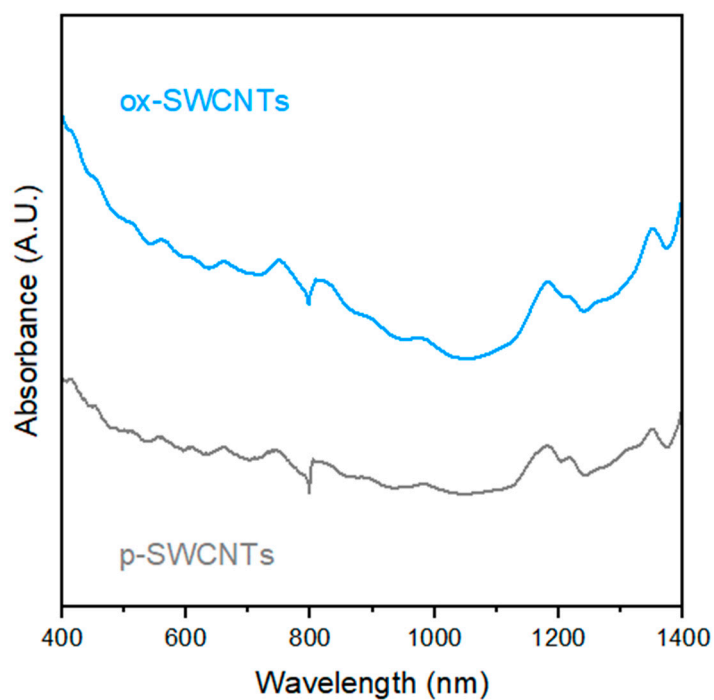
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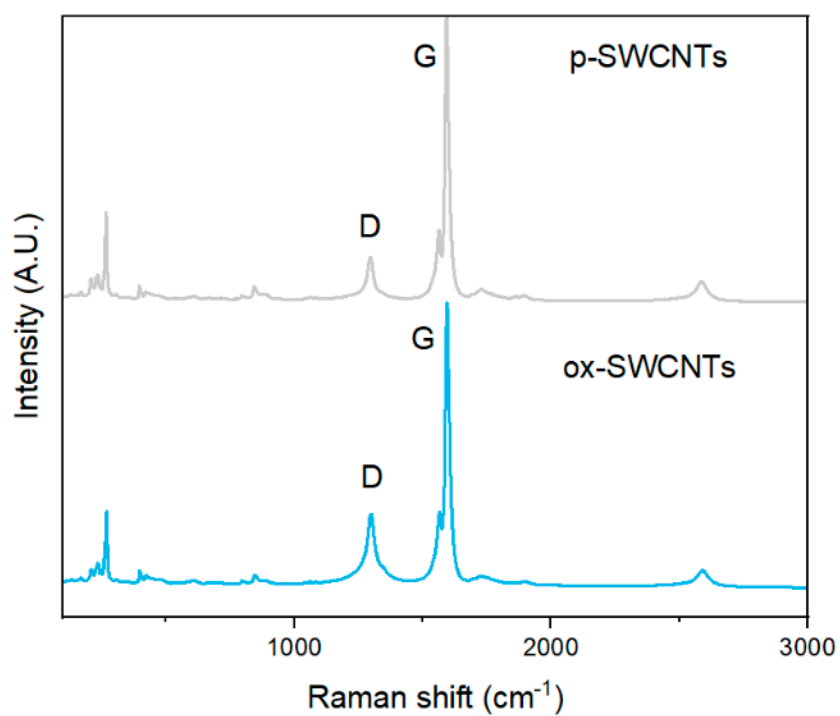
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## 1. Vis-NIR spectra of SWCNTs

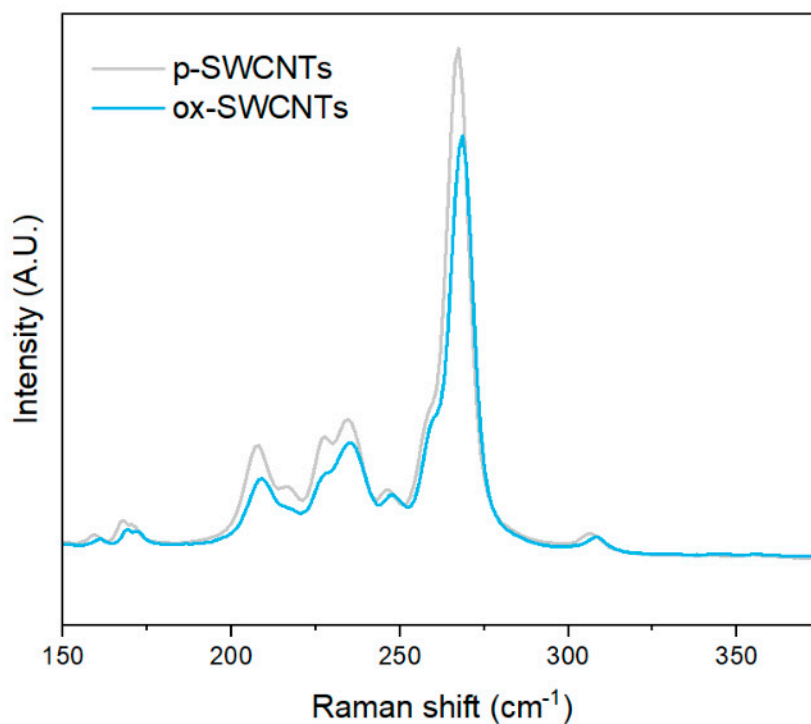


**Figure S1.** Vis-NIR absorbance spectra of pristine SWCNTs (p-SWCNTs, grey) and oxidized SWCNTs (ox-SWCNTs, light blue). No significant difference was found between the two samples.

## 2. Raman spectra of SWCNTs



**Figure S2.** Raman spectra of pristine (p-) SWCNTs (grey) and oxidized (ox-) SWCNTs (light blue).

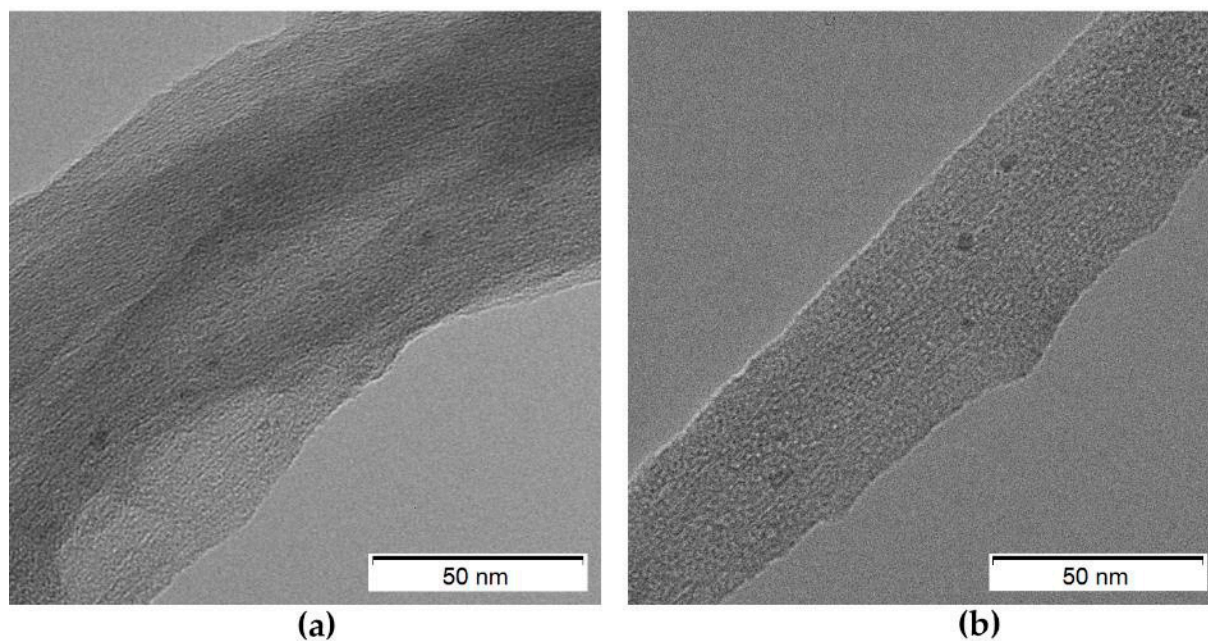


**Figure S3.** RBM region of Raman spectra of pristine (p-) SWCNTs (grey) and oxidized (ox-) SWCNTs (light blue).

**Table S1.** SWCNT diameters ( $d$ ) calculated from the RBM frequencies ( $\omega$ ), using the equation  $\omega_{\text{RBM}} = A/d + B$ , where  $A$  is associated with the vibrational force constant of the  $\text{sp}^2$  C–C bond, and  $B$  is related to environmental effects. For typical SWCNT bundles,  $A = 234 \text{ cm}^{-1}\cdot\text{nm}$  and  $B = 10 \text{ cm}^{-1}$  (see S. Costa et al., Materials Science-Poland 2008, 26, 433). The average calculated SWCNT diameter was  $1.0 \pm 0.1$  for both pristine and oxidized SWCNTs.

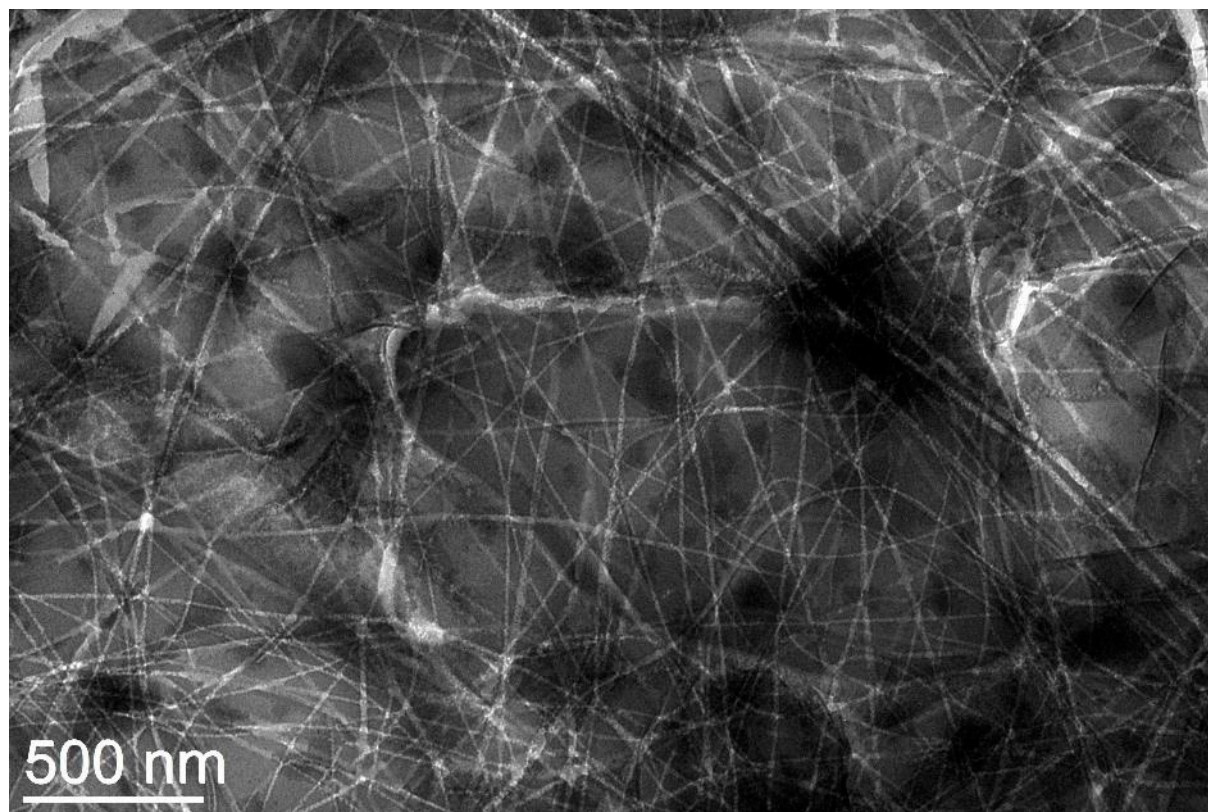
p-SWCNTs		ox-SWCNTs	
$\omega \text{ (cm}^{-1}\text{)}$	$d \text{ (nm)}$	$\omega \text{ (cm}^{-1}\text{)}$	$d \text{ (nm)}$
208	1.2	208	1.2
217, 228	1.1	226	1.1
235, 247	1.0	235, 248	1.0
267	0.9	269	0.9

### 3. TEM micrographs of SWCNTs

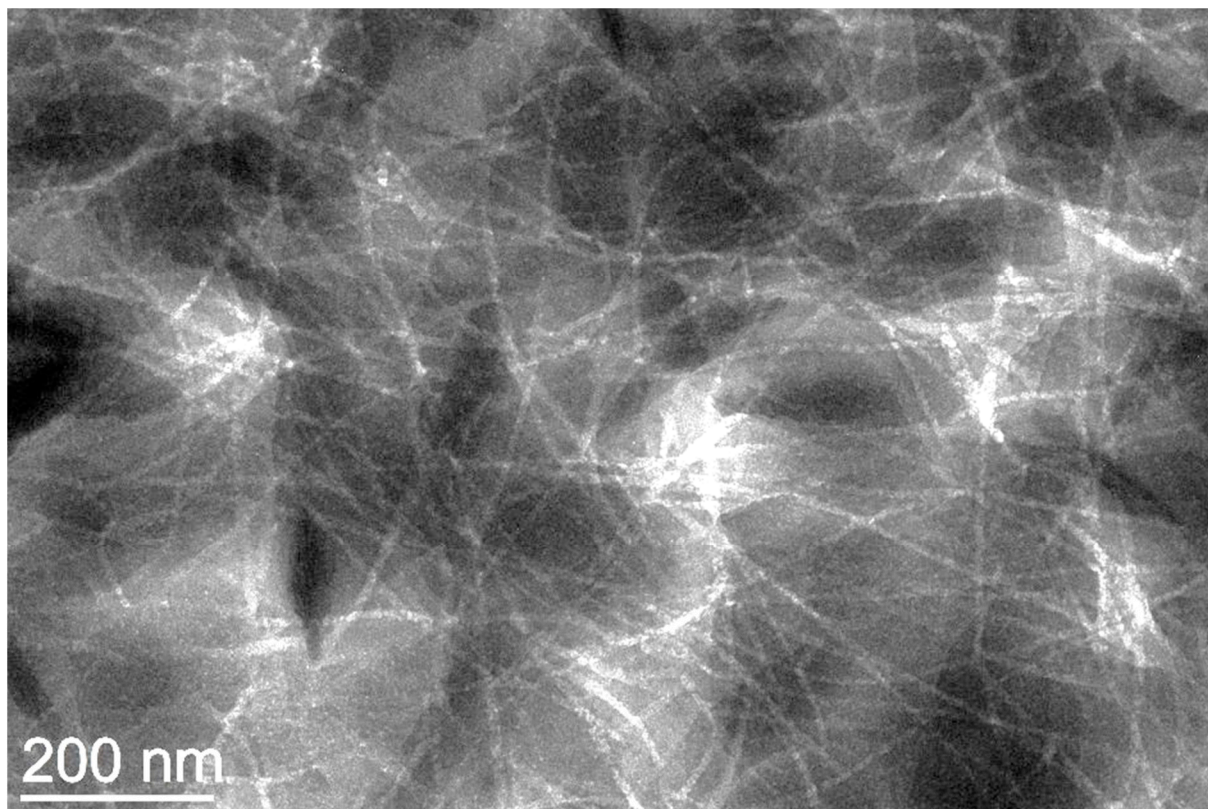


**Figure S4.** TEM micrographs of (a) pristine SWCNTs and (b) oxidized SWCNTs.

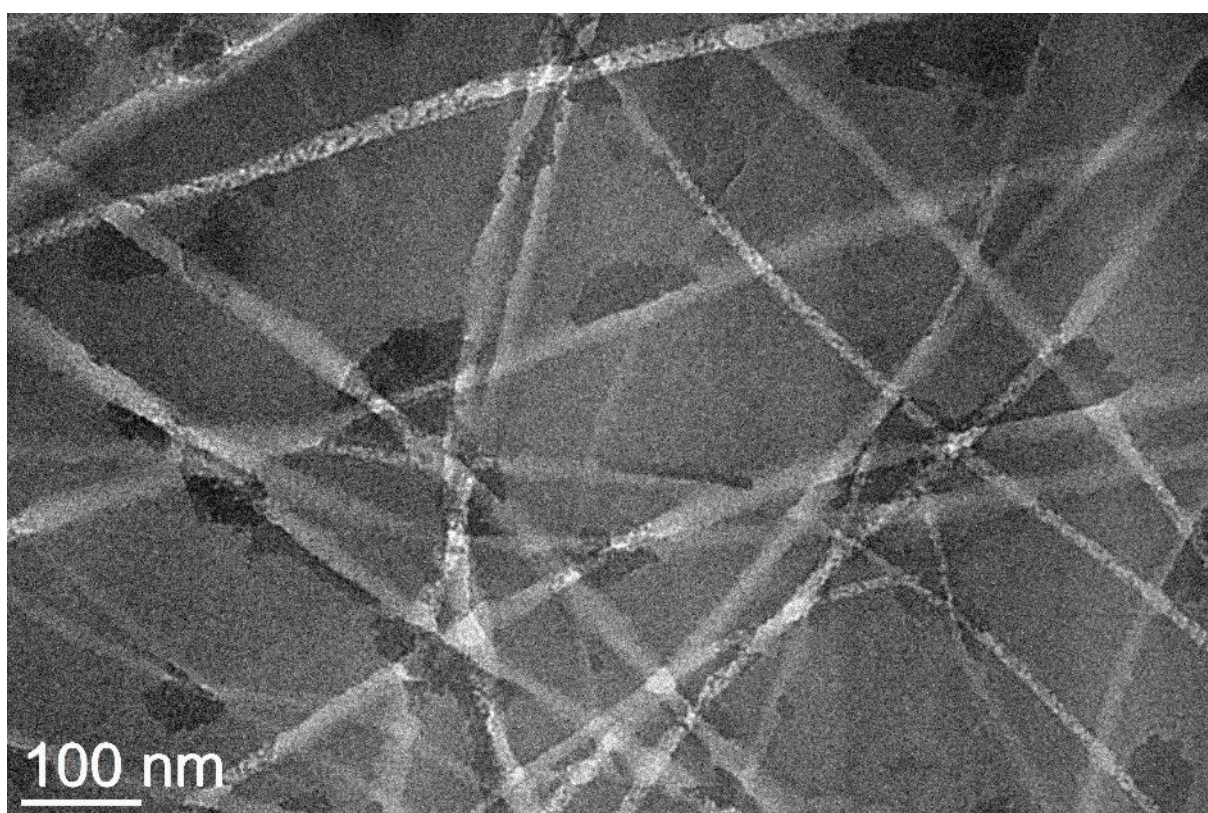
### 4. TEM micrographs of composite gels



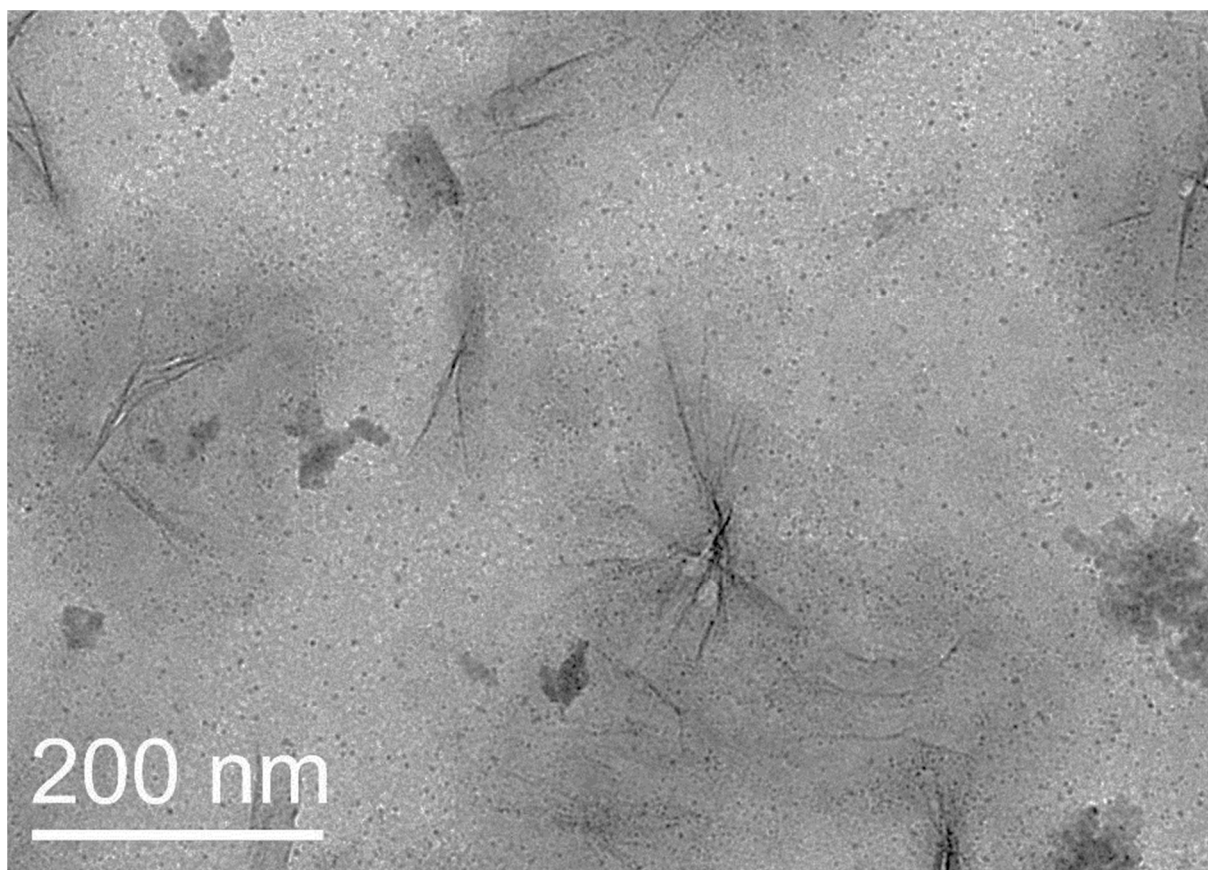
**Figure S5.** TEM micrograph of composite gel with 0.1 mg/mL ox-DWCNTs.



**Figure S6.** TEM micrograph of composite gel with 1.0 mg/mL ox-DWCNTs.



**Figure S7.** TEM micrograph of composite gel with 0.1 mg/mL ox-SWCNTs.



**Figure S8.** TEM micrograph of composite gel with 1.0 mg/mL ox-SWCNTs.