

## Supporting Information for

# Effects of Morphology on the Micro-compression Response of Carbon Nanotube Forests<sup>†</sup>

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<sup>†</sup>*Electronic Supplementary Information (ESI) available: In situ SEM videos of flat-punch nanoindentation into a sample of each CNT forest type, videos of stress-strain curves, and CNT TEM images.*

## Supporting movies information

**Movie S1.** *In situ* SEM video of the indentation into the edge of a 190  $\mu\text{m}$  LPCVD forest (Fig. 4b).

**Movie S2.** Axial indentation stress-strain curve for indentation into the edge of a LPCVD forest shown in S1. If S2 is played side by side with S1, correlations between the deformations and the stress-strain curve can be observed.

**Movie S3.** *In situ* SEM video of the indentation into the edge of a APCVD forest (Fig. 6a).

**Movie S4.** Axial indentation stress-strain curve for indentation into the edge of a APCVD forest shown in S3. If S4 is played side by side with S3, correlations between the deformations and the stress-strain curve can be observed.

**Movie S5.** *In situ* SEM video of the indentation into the edge of a P-LPCVD forest (Fig. 7a).

**Movie S6.** Axial indentation stress-strain curve for indentation into the edge of a P-LPCVD forest shown in S5. If S6 is played side by side with S5, correlations between the deformations and the stress-strain curve can be observed.

## TEM images

Typical TEM images taken by JEOL 4000EX from CNTs grown with the three recipes are shown in Fig. S1. The CNTs were removed from the substrate and were sonicated in Dimethylformamide (DMF) for about an hour in order to disperse them in solution. Then a drop of each solution was applied to a holey carbon TEM grid and was let dry for several hours before imaging.

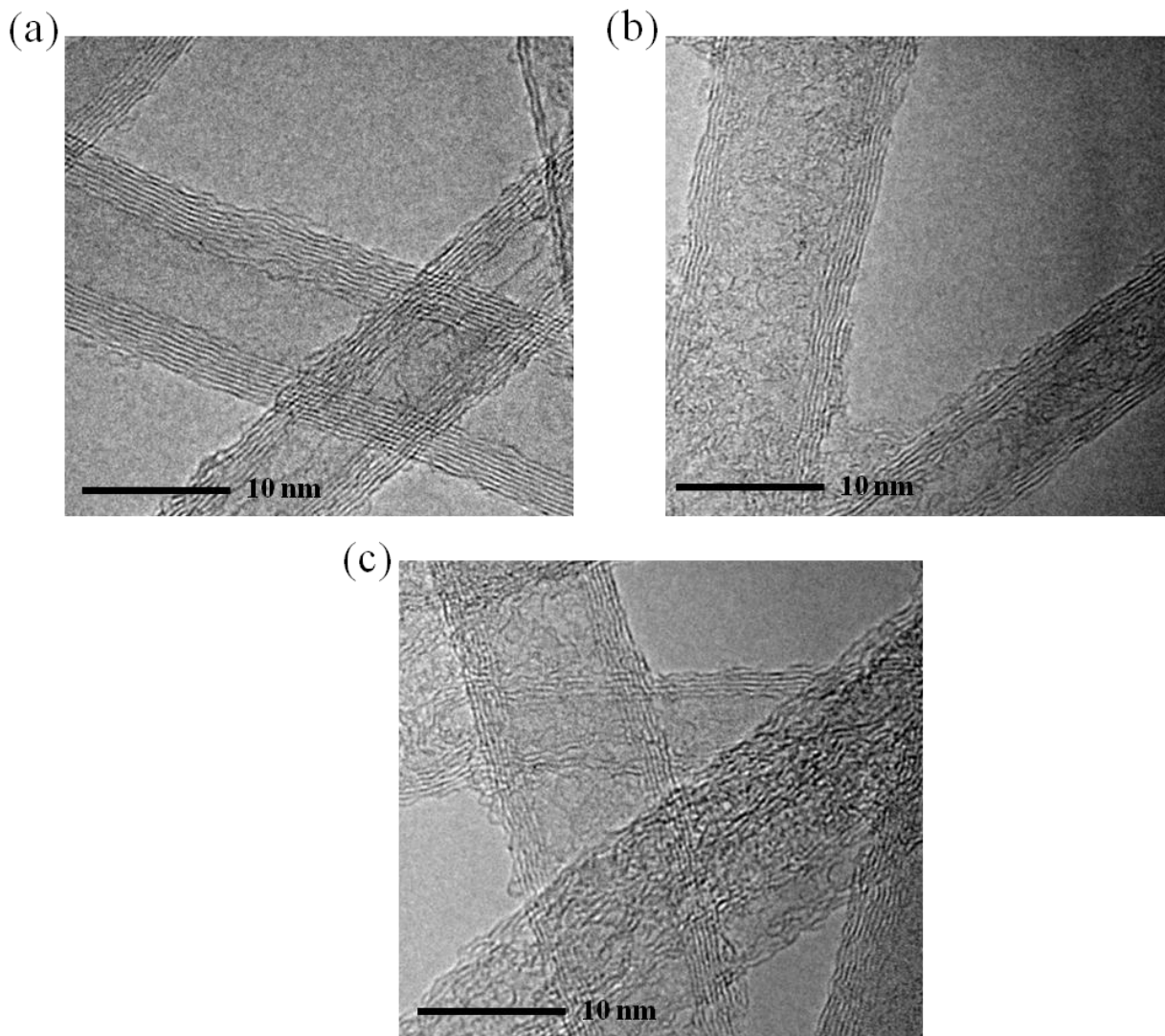


Fig. S1. TEM images taken by JEOL 4000EX from CNTs grown with a) LPCVD, b) APCVD, and c) P-LPCVD method.