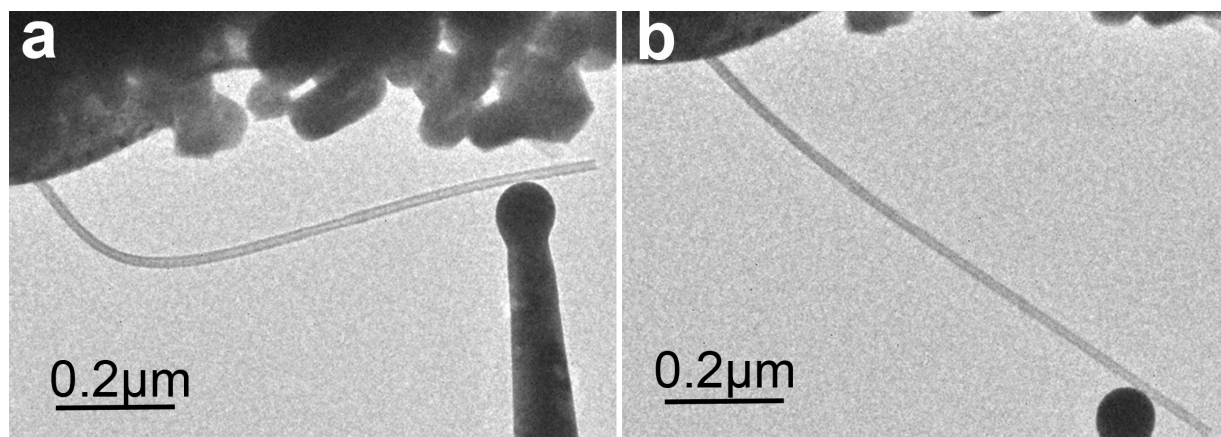
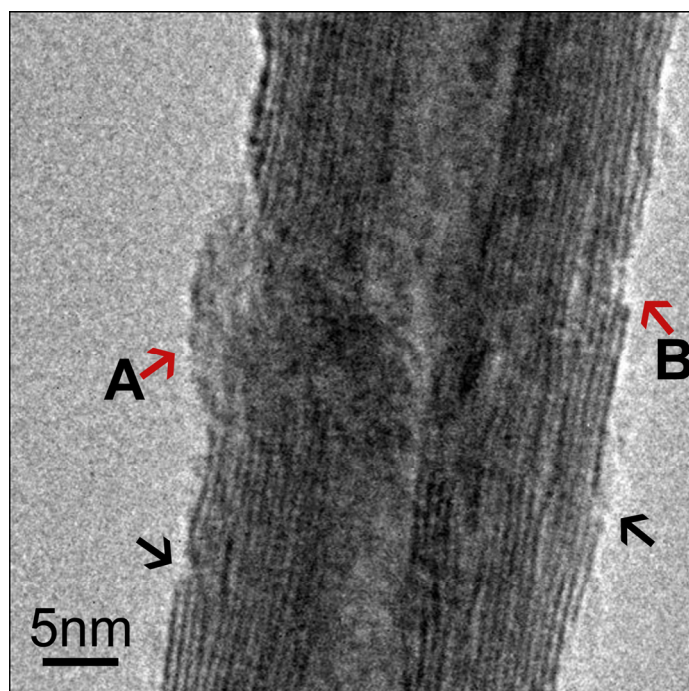


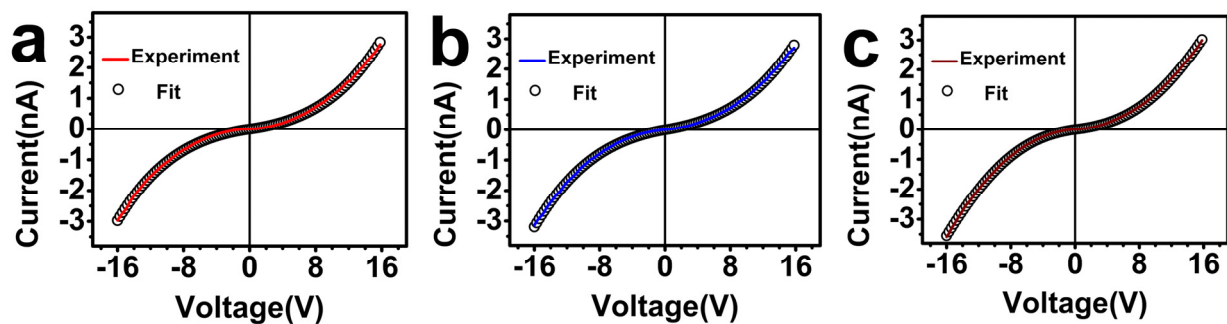
## Supplementary Information



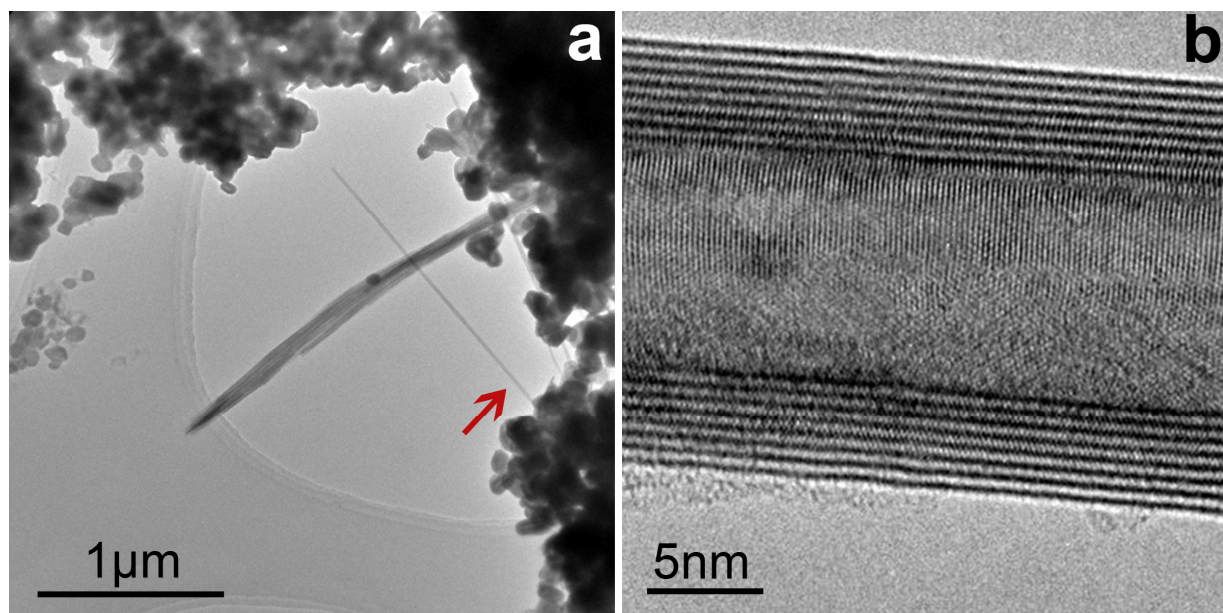
**Figure S1.** (a) TEM image showing a WS<sub>2</sub> NT is bent uniformly. (b) TEM image of the NT after the load is released.



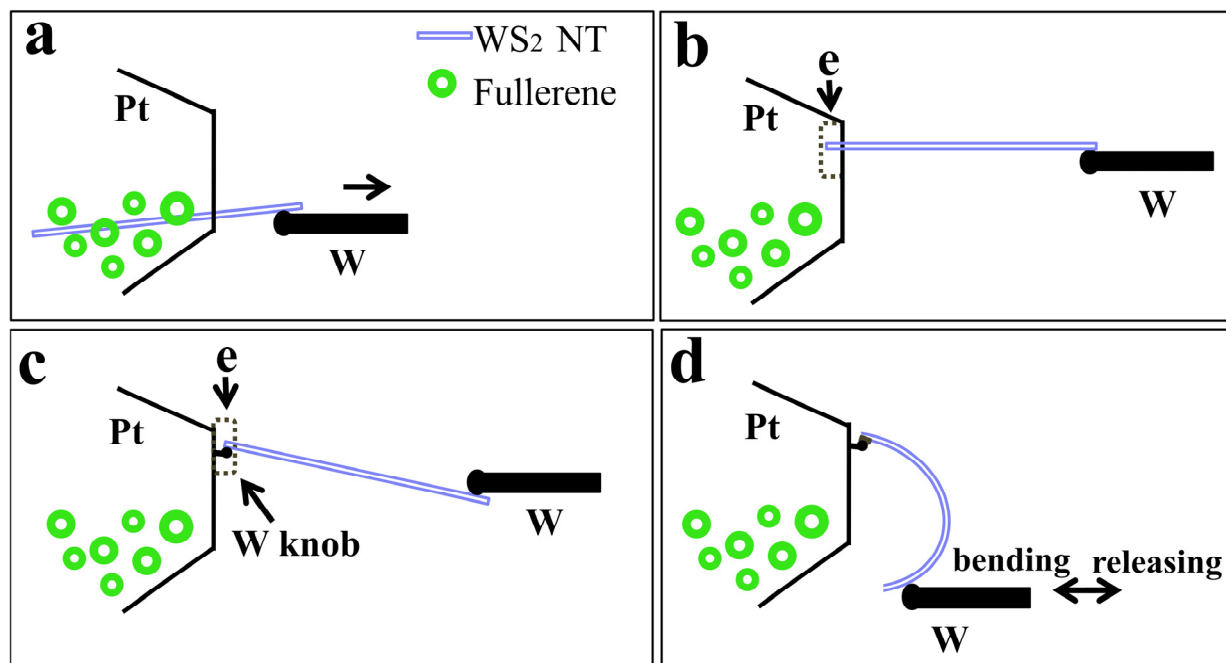
**Figure S2.** HRTEM image of the broken shells in NT3 after electron irradiation with the dose of  $5.2 \times 10^{10}$ .



**Figure S3.** Experimental  $I$ - $V$  curves (solid line) measured at three different bending stages and the fittings using the M-S-M model (dotted line). Figures S3a, S3b, S3c correspond to the  $I$ - $V$  curves 'o', 'a', 'c' in Figure 6a, respectively.



**Figure S4.** (a) TEM image of the sample containing WS<sub>2</sub> NTs and fullerenes. (b) A high-resolution TEM image of the area pointed by the red arrow in (a).



**Figure S5.** A set of schematic pictures showing the experimental setup. (a) An individual WS<sub>2</sub> NT with perfect crystal structure is selected and pulled out from the NT/fullerenes mixture. (b) The NT is fixed at one end to the Pt wire by electron beam induced deposition. (c) The NT is fixed at one end to a W knob by electron beam induced deposition. (d) The NT is bent and released by moving the W tip.