

Supplementary Material:

Boron Nitride Nanotubes Versus Carbon Nanotubes: A Thermal Stability and Oxidation Behavior Study

The Raman spectrum for the CNTs (see Figure S1) was recorded by a Jobin-Yvon LABRAM confocal spectrometer equipped with a frequency-doubled Nd-YAG laser emitting at 532.2 nm. The laser beam was focused onto the sample by an Olympus BX 40 microscope fitted with a $\times 50$ long-working distance objective lens at a power density of $0.1 \text{ mW}/\mu\text{m}^2$ and a spatial resolution of 1.5 cm^{-1} . The sharp peaks at ~ 1361 and $\sim 1593 \text{ cm}^{-1}$ correspond to the defect-activated D-band arising from breathing vibrations of carbon atoms with sp^3 hybridization and the graphitic G-band due to bond stretching of sp^2 hybridized carbon atoms in a 2-D hexagonal lattice, respectively. In the high-frequency region, the CNTs exhibit less-pronounced second order overtones, the 2D-band at $\sim 2695 \text{ cm}^{-1}$ and the 2D'-band at $\sim 3242 \text{ cm}^{-1}$, as well as the combination of the D+D' defect activated mode at $\sim 2941 \text{ cm}^{-1}$.

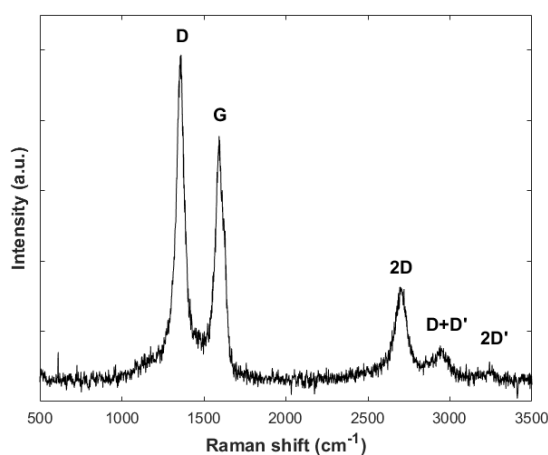


Figure S1. Raman spectrum for the CNTs.