

Abstract Submitted
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Spectroscopy of Functionalized Double-Walled Carbon Nanotubes J. SHAVER, Rice University, Houston TX, J. KONO, F. LIANG, W.E. BILLUPS, R.H. HAUGE, Rice University, Houston TX, E. FLAHAUT, Universite Paul Sabatier, CIRIMAT/LCMIE, Toulouse France — Double walled nanotubes are of recent interest for spectroscopic study partly due to the protected nature of the inner tubes. Functionalization of single walled nanotubes has been used to increase solubility, though this comes at the expense of disrupting the electronic properties. We present spectroscopy of DWNTs functionalized with various organic and inorganic compounds. Photoluminescence, Raman, and coherent phonon oscillations are utilized to determine the effect of sidewall modification of outer tubes on the DWNT spectra.

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