

RAMAN EFFECT IN CARBON NANOTUBES FILLED WITH NANOWIRES

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Unpolarized Raman spectra of radial and tangential modes on DWCNTs filled with 1D nanowires of different materials, were studied at room temperature. The G-band of the nanotubes can be used as measurement of factor filling. In the low wavenumber region we observed several phonons which correspond to the inner and outer radial modes of DWNTs, and the confined phonons of nanowires are observed.

Keywords: carbon nanotubes; nanowires; confinement; raman effect.