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Raman spectra of suspended individual single wall carbon nanotubes using a tunable excitation laser. HYUNGBIN SON, MIT, E.B. BAR-ROS, UFC, GE. G. SAMSONIDZE, JING KONG, M.S. DRESSELHAUS, MIT — Due to the enhanced Raman signal from suspended individual single wall carbon nanotubes (SWNTs), a detailed study of weak Raman features, such as the intermediate frequency modes (IFMs), became possible at a single nanotube level (1). Using a tunable excitation laser, the resonance window, the dispersion, and the resonance mechanism of these Raman features are studied in detail. This information will be correlated to the (n,m) chirality of the SWNTs. (1) Hyungbin Son, et al. *Appl. Phys. Letts*, **2004**, 85, 20, 4744.

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