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**Chirality dependence of Raman cross-section of carbon nanotubes** SERGUEI GOUPALOV, Los Alamos National Laboratory — The chirality dependence for the cross-section of Raman scattering from the radial breathing mode of carbon nanotubes observed in recent experiments [S.K. Doorn *et al.*, Appl. Phys. A **78**, 1147 (2004)] is explained using the empirical tight-binding method. It is shown that the transfer and overlap integrals usually neglected while accounting for the electron energy spectrum in carbon nanotubes play a crucial role in description of the electron-phonon coupling.

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