Gate dependence of electrical contacts of individual carbon nanotube

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Abstract

A individual nanotube is dispersed on a SiO_2 substrate. We measure the gate dependence of electrical contacts between individual multiwall carbon nanotube (MWCNT) and Au/Ti electrodes by four prove measurement. A individual MWCNT shows an p-type field effect transistor (FET) characteristic. And we observe Schottky barrier which makes contact effects in a individual MWCNT.