

Abstract Submitted
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Electrical contact to carbon nanotubes encapsulated in hexagonal boron nitride JHAO-WUN HUANG, CHENG PAN, SON TRAN, Department of Physics and Astronomy, University of California, Riverside, CA, USA, TAKASHI TANIGUCHI, National Institute for Materials Science, Namiki 1-1, Tsukuba, Ibaraki 305-0044, Japan, MARC BOCKRATH, JEANIE LAU, Department of Physics and Astronomy, University of California, Riverside, CA, USA — Hexagonal boron nitride has been an excellent platform for low dimensional materials. We have fabricated ultra clean single-walled carbon nanotube(SWNT) devices encapsulated in hexagonal boron nitride by a dry transfer technique. Contacts to the SWNTs were made by reactive ion etching to expose the ends of SWNTs, followed by metal deposition. Ohmic contacts to SWNTs were achieved. We will discuss the quality of the contacts using different combinations of metals and present latest transport data.

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