

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Local Gating of Carbon Nanotube inside TEM LI-YING CHEN, YEN-SONG CHEN, CHIA-SENG CHANG, None — We report a new method of fabricating ultra-clean and hysteresis-free multi-wall carbon nanotube field-effect transistor (CNFET) inside an ultra-high vacuum transmission electron microscopy (TEM) equipped with a movable Au tip as a local gate. Local gating of CNFET is demonstrated concurrently with atomic-scale imaging. The development of the ambipolar characteristic of CNFET, the V_{ds} effect on CNFET as well as the localized characteristics of CNFET have been investigated.

Li-Ying Chen
None

Date submitted: 11 Nov 2013

Electronic form version 1.4