Scanning tunneling microscopy of graphene field effect transistors
MASA ISHIGAMI, JIANHAO CHEN, ELLEN WILLIAMS, Physics Department and the Material Research Science and Engineering Center, University of Maryland, College Park, MD 20742 — We have investigated the electronic properties of graphene field effect transistors at atomic scale using scanning tunneling microscopy. We find that photoresist, required by conventional electron beam lithography, binds to graphene and leaves residues with thickness of approximately 1 nm. We will present the procedure necessary to eliminate this residue and report our results of scanning tunneling microscopy and spectroscopy performed on graphene.

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