Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Single Layer Graphene formation on Silicon Oxide surface(001)
HEESUNG CHOI, YOUNG-KYUN KWON, University of Massachusetts Lowell —
Recently graphene is one of most interesting topics in physics and other research fields. For future nanoelectronics applications, graphene formation becomes an important issue. Here we present our theoretical study of how to make a graphene layer on silicon oxide surfaces. In this work, density functional theory calculations are used to determine atomic structures and energies for graphene formation from various carbon sources, such anthracene, on silicon oxide. We will also preresent optimal graphene formation conditions obtained from our ab inito molecular dynamics simulations.

YoungKyun Kwon
University of Massachusetts Lowell

Date submitted: 27 Nov 2007 Electronic form version 1.4