Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Graphene on Au-coated SiO_x substrate: Its visibility and intrinsic core-level photoemission CHUNG-LIN WU, JHIH-WEI CHEN, CHIANG-LUN WANG, Department of Physics, Narional Cheng-Kung University, CHIA-HAO CHEN, National Synchrotron Radiation Research Center, YI-CHUN CHEN, Department of Physics, Narional Cheng-Kung University — With the motivation of precisely and intrinsically characterizing a exfoliate graphene using photoelectron spectroscopy, a conducting substrate having high optical contrast is greatly desired. Here, we demonstrate that exfoliated graphene can be optically visible on a thin 9-nm Au-coated SiO_x substrate, and can be easily conducted into scanning photoelectron microscopy/spectroscopy (SPEM/S) studies. Because of the elimination of charging effect, precisely core-level characterization of exfoliated graphene is presented with different numbers of layers. Consequently, the usage of Au-coated SiO_x substrate serves a simple but effective method to study pristine graphene by photoelectron spectroscopy and other electron-detection techniques.

Chung-Lin Wu
Department of Physics, Narional Cheng-Kung University

Date submitted: 08 Nov 2011 Electronic form version 1.4