Abstract Submitted for the MAR09 Meeting of The American Physical Society

Anisotropic etching of graphene sheets ANTHONY MENDEZ, BRIAN STANDLEY, MARC BOCKRATH, California Institute of Technology — One challenge in the development of graphene nanoribbon transistors and graphene devices in general is the minimization of edge-induced disorder. We have discovered a simple etching process which may help address this challenge. Preliminary inspection of our etched graphene sheets reveals faceting of the edges and occasionally even hexagonal holes. We will present an atomic force microscopy study with the aim of determining the smoothness of the edges and their orientation relative to the crystal lattice.

> Brian Standley California Institute of Technology

Date submitted: 21 Nov 2008

Electronic form version 1.4