

Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Molecular Beam Epitaxial (MBE) Growth and Characterization of Thin Films of Semiconductor Tin P. FOLKES, P. TAYLOR, C. RONG, B. NICHOLS, H. HIER, R. BURKE, US Army Rsch Lab - Adelphi, M. NEUPANE, US Army Rsch Lab - Aberdeen — Recent theoretical predictions that a two-dimensional monolayer of semiconductor tin is a two-dimensional topological insulator and experimental evidence of three-dimensional topological insulator behavior in strained ultrathin films of semiconductor tin grown by MBE on InSb has generated intense research interest. This research is primarily focused on the MBE growth and topological characteristics of ultrathin films of semiconductor tin. In this talk we present results of a study on the MBE growth and the transport, structural and optical characterization of thin films of semiconductor tin on several different substrates.

Patrick Folkes
US Army Rsch Lab - Adelphi

Date submitted: 05 Nov 2015

Electronic form version 1.4