Abstract Submitted
for the MAR17 Meeting of
The American Physical Society

Ge-on-Si Materials Created by Physical Vapor Deposition JOHN NGUYEN, YIZE STEPHANIE LI, California State University, Bakersfield — Ge nanostructures are grown on Si substrates using solid Ge sources in a compact chemical vapor deposition (CVD) system. The surface termination of the Si substrate and the flow rate of the Ar carrier gas are found to strongly impact the morphology and structure of the Ge nanostructures. The growth mechanism is revealed through a systematical analysis of the x-ray diffraction (XRD) patterns for samples grown under various conditions. The morphological, structural, and optoelectronic properties of these Ge-on-Si materials will be reported.

Yize Stephanie Li
California State University, Bakersfield

Date submitted: 11 Nov 2016 Electronic form version 1.4