

Abstract Submitted
for the 4CF12 Meeting of
The American Physical Society

Characterizing InGaAs quantum dot chains TYLER PARK, JOHN COLTON, JEFF FARRER, KEN CLARK, DAVID MEYER, SCOTT THALMAN, Brigham Young University, HAEYEON YANG, South Dakota School of Mines and Technology — We are studying epitaxially grown quantum dot chains by photoluminescence spectroscopy and transmission electron microscopy. Quantum dots and dot chains have potential use in optoelectronics and quantum computing. By studying these quantum dot samples by optical methods, we are able to determine the quality and geometry of the grown samples. Our photoluminescence study has shown peaks corresponding to structure in the sample. Our study using optical and analytical transmission electron microscopy methods is on going, but current results show that composition and structure is what is expected.

Tyler Park
Brigham Young University

Date submitted: 21 Sep 2012

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