

Abstract Submitted
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Photoluminescent properties of InGaAs quantum dot structures KENNETH CLARK, JOHN COLTON, Brigham Young University, MATT GUERRON¹, University of Pennsylvania, DALLAS SMITH, SCOTT THALMAN, Brigham Young University, HAEYEON YANG, Utah State University — Quantum dots are promising candidates for use in optical-electronic applications such as near infrared detectors and light sources. They have also been suggested for future use in quantum computers. We have been studying quantum dot and quantum dot chain samples, which were grown using a variation of the Stranski–Krastanov “self-assembled” method. We have used photoluminescence (PL) spectroscopy to study these samples, examining the existence of quantum dots/chains, and determining the optical quality of the samples. I will be presenting our ongoing investigations of a series of such samples.

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