

Abstract Submitted
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Zinc Oxide Nanowire Capture of Silicon Quantum Dots LEAH MOLDAUER, BEN SCHOH, Colorado Sch of Mines — A zinc oxide nanowire array is being fabricated to capture silicon quantum dots synthesized using a gas-phase process. There may be a variation of dot diameter when dots are deposited on a planar surface which is not apparent due to dot mixing. By using the nanowire array to trap the dots, a model can be developed to describe the variations in dot diameter. The nanowire, quantum dot hybrid device will be characterized using spectroscopy and possible applications of the device will be explored.

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