Abstract Submitted for the TS4CF08 Meeting of The American Physical Society

Selectively Grown Silicon Nano-Wires for Transistor Devices JON BRAME, Brigham Young University, NATHAN WOODS, University of Colorado, NASA GODDARD SPACE FLIGHT CENTER COLLABORATION — The goal of this project is to fabricate a transistor device using silicon nano-wires (SiNW) as semiconductors. In order to be able to establish electrical conduct with the nano-wires the SiNW growth is confined to certain areas that can be contacted using electron-beam lithography (EBL). This is done by controlling the catalyst deposition through angle-evaporation onto pillars on the device. The nanowires then grow from the sidewalls of the pillars and can be contacted using EBL.

Jon Brame Brigham Young University

Date submitted: 12 Sep 2008 Electronic form version 1.4