

Abstract Submitted  
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**Investigation of Strain in Si Materials Using Micro-Raman Spectroscopy**<sup>1</sup> LOGAN HANCOCK, TONI SAUNCY, Angelo State University, TIM DALLAS, Texas Tech University — In this study, micro-Raman spectroscopy has been used to probe for the presence of strain in two silicon structures of particular interest. The first involves examination of strain in a series of porous Silicon (pSi) thin films, prepared by photo etching, to yield information regarding the integrity and quality of the thin-films. The second study is a collaboration with the Texas Tech University Department of Electrical Engineering to examine the strain within a silicon-based microelectromechanical systems (MEMS) chevron/distance-multiplier device during actuation and to the point of device failure.

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