

Abstract Submitted  
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**Economical Atomic Layer Deposition** RICHARD WYMAN, Brigham Young University, ROBERT DAVIS, MATTHEW LINFORD — Atomic Layer Deposition is a self limiting deposition process that can produce films at a user specified height. At BYU we have designed a low cost and automated atomic layer deposition system. We have used the system to deposit silicon dioxide at room temperature using silicon tetrachloride and tetramethyl orthosilicate. Basics of atomic layer deposition, the system set up, automation techniques and our system's characterization are discussed.

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