MATERIALS RESEARCH SOCIETY

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Global Symposium GG: Ion-Beam-Based Nanofabrication

April 10 - 12, 2007

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Symposium Support
National Electrostatics Corporation
National Aeronautics and Space Administration
National Institute for Materials Science, Tsukuba
Alabama A & M University Research Institute (AAMURI)


* Invited paper

SESSION GG1: Ion Beam Nanofab: Tools and Techniques
Chairs: John Baglin and Robert Zimmerman
Tuesday Morning, April 10, 2007
Room 3016 (Moscone West)

8:45 AM *GG1.1
Ion-Beam Projection Techniques for Nanometer-Scale Patterning
Ka-Ngo Leung, Plasma and Ion Source Technology Group, Lawrence Berkeley National Laboratory, Berkeley, California; Nuclear Engineering Department, University of California, Berkeley, California.

Maskless ion beam lithography schemes have been investigated at Lawrence Berkeley National Laboratory (LBNL) for future integrated circuit manufacturing, thin film media patterning, and micromachining. The Maskless Micro-Ion-Beam Reduction Lithography (MMRL) system completely eliminates the first stage of the conventional IPL tool that contains the ion beam illumination column before the