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Symposium GG: Ion-Beam-Based Nanofabrication

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April 10 - 12, 2007

Chairs

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Symposium Support

National Electrostatics Corporation
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National Institute for Materials Science, Tsukuba

Alabama A & M University Research Institute (AAMURI)

Proceedings to be published in both book form and online
(see Proceedings Library at www.mrs.org/publications_library)
as volume 1020
of the Materials Research Society
Symposium Proceedings Series.



* 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