

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

High Speed Scanning Property Mapping (>1 frame per second)¹
BRYAN HUEY, NICHOLAS POLOMOFF, ATIF RAKIN, VINCENT PALUMBO,
University of Connecticut, Institute of Materials Science — Atomic Force Microscopy
is coupled with concepts of acoustics to achieve nanoscale property contrast at line
scanning rates approaching several kHz. This allows novel measurements of surface
dynamics, efficient large area imaging, and high throughput experiments with SPM.
Examples for mechanical contrast on block copolymers, semiconductors, and eutec-
tic alloys are included, as well as high speed electric and magnetic field imaging.
Coupled electromechanical contrast (piezoelectric) is also employed with PZT thin
films to uniquely monitor ferroelectric domain dynamics.

¹Sponsored by NSF DMR-IMR (#0817263).

Bryan Huey
University of Connecticut, Institute of Materials Science

Date submitted: 29 Nov 2008

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