

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Micromolding fabrication of “T” cross section SiC SPM probes
CHIAYUN WU, Physics U. Mass Lowell, SHIHANG WANG, DANIEL SCHMIDT,
Plastics Eng U. mass Lowell, JOEL THERRIEN, ECE U. Mass Lowell — Micro-
molding techniques using pre-ceramic polymers have been demonstrated for the cre-
ating silicon carbide based AFM cantilevers. In an attempt to reach higher resonance
frequencies without significantly increasing the spring constant of the cantilevers, a
“T” cross section cantilever was fabricated. The resonant frequency and spring con-
stant have been compared to the standard rectangular cross section cantilevers of
both Sic and commercially available silicon cantilevers.

Joel Therrien
ECE U. Mass Lowell

Date submitted: 22 Nov 2011

Electronic form version 1.4