

Abstract Submitted
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Suggested title of session
in which paper should be placed
Cosmic Rays

Accelerator Tests of Large Area Silicon Detectors for the
Advanced Composition Explorer (ACE) Mission. * M. E. WIE-
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MINGS, R. A. LESKE, R. A. MEWALDT, R. S. SELESNICK,
Caltech, T. P. VON ROSENVINGE, NASA/GSFC. Large area
($\geq 60 \text{ cm}^2$) silicon solid state detectors with thicknesses ranging
from 100 μm to 3000 μm are being developed for use in the Solar
Isotope Spectrometer (SIS) and the Cosmic Ray Isotope Spec-
trometer (CRIS) instruments for the ACE mission. Prototypes
of these detectors were tested with beams of 115 MeV/nucleon
heavy ions from $Z = 14$ through $Z = 28$ at the Michigan State
University cyclotron. Using these data we are able to study the
depletion characteristics, the thickness uniformity, and the dead
layers of these devices, and to investigate the contributions of
the detector characteristics to the mass resolution achievable in a
 ΔE - E telescope instrument. Results from our analysis of the test
data will be presented.

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Prefer Standard Session



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