

Abstract Submitted
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In-beam and decay spectroscopy of ^{251}Md ¹ C. MORSE, R.M. CLARK, Lawrence Berkeley National Laboratory, D. SEWERYNIAK, T. HUANG, Argonne National Laboratory, 1695 COLLABORATION — Spectroscopy of trans-fermium nuclei is an important frontier in nuclear science. Near $Z = 100$ and $N = 152$, production cross sections remain high enough that such studies are feasible and provide indirect insights into the structure of superheavy nuclei. Odd-mass nuclei present a particularly compelling opportunity, as the odd particle gives direct information regarding the orbitals near the Fermi surface. We have performed in-beam and decay spectroscopy of the odd- Z nucleus ^{251}Md using the Argonne Gas Filled Analyzer coupled with Digital Gammasphere, which allows us to identify rotational bands and search for excited states built on top of high- K isomers. The results of the experiment will be presented and the nuclear structure implications will be discussed.

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