Coulomb excitation 1981Be54

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 121, 695 (2014)	30-Sep-2013

1981Be54: 243 Am were bombarded with 17 MeV 4 He ions from the Oak Ridge EN Tandem Van de Graaff. Elastically and inelastically scattered α' s were detected with a split-pole magnetic spectrometer. Cross sections at θ =150° were measured, and excitation probabilities relative to the elastic scattering peak were determined.

²⁴³Am Levels

E(level) [†]	$J^{\pi \ddagger}$	Comments
0.0	5/2-	Q=4.29 3 based on intrinsic quadrupole moment of 12.02 9 deduced for the 42.4- and 96.4-keV levels (1981Be54).
42.20 22	7/2-	B(E2)\(\frac{1}{2}\)=6.89 10 Intrinsic quadrupole moment=12.06 (1981Be54).
96.4 <i>4</i>	9/2-	B(E2)↑=2.38 4 Intrinsic quadrupole moment=11.98 (1981Be54).
162.3 <i>10</i> 238 <i>1</i>	11/2 ⁻ 13/2 ⁻	

 $^{^\}dagger$ The energies of $7/2^-$ and $9/2^-$ states are from Adopted Levels, others were measured by 1981Be54.

[‡] From Adopted Levels.