

$^{152}\text{Eu}(t,\alpha)$  1985Ma26

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

E=16 MeV.

Radioactive target of 90% purity. Magnetic spectrograph (Q3D type). FWHM $\approx$ 20 keV.  $\sigma(\theta)$  for levels below 1 MeV. DWBA calculations for levels below 1 MeV, assigned to 11/2[505] band.

 $^{151}\text{Sm}$  Levels

E(level) <sup>†</sup>	J $\pi^{\ddagger}$	E(level) <sup>†</sup>	E(level) <sup>†</sup>	E(level) <sup>†</sup>
261	(11/2) <sup>-</sup>	1549 10	1894 12	2165 11
447 2	(13/2) <sup>-</sup>	1636?@	1953 8	2205?@
651 3	(15/2) <sup>-</sup>	1697 10	1991 10	2233 13
870# 4	(17/2) <sup>-</sup>	1747 9	2045 11	2259 13
1167 9		1771 9	2080 11	2299 11
1271 9		1815 9	2102?@	
1398 9		1845 11	2119?@	
1489 11		1871 11	2134 11	

<sup>†</sup> Normalized to 261 level, known from ( $\alpha,3n\gamma$ ) studies. Uncertainties are statistical errors. Above 1.5 MeV excitation, the observed groups may be unresolved multiplets of single levels.

<sup>‡</sup> From 'Adopted Levels'.  $\sigma(\theta)$  data agree well with DWBA calculations for 261, 447 and 651 levels.

# Excited probably by a 2-step mechanisms.

@ Weak evidence for population of this level.