

$^{154}\text{Eu}(\text{t},\alpha)$ 1985Ma26

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 170, 1 (2020)	16-Aug-2020

$J^\pi(^{154}\text{Eu target})=3^-$.

$E(\text{t})=16$ MeV and FWHM=20 keV. α measured in magnetic spectrograph with helical proportional counter along focal plane.

DWBA analysis used normalization factor $N=23$.

Target has $J^\pi=3^-$ with configuration $((\pi,5/2[413])(\nu,11/2[505]))$.

 ^{153}Sm Levels

<u>$E(\text{level})^\dagger$</u>	<u>$J^\pi^\ddagger$</u>	<u>$d\sigma/d\Omega(30^\circ)$ ($\mu\text{b/sr}$)</u>	<u>$E(\text{level})^\dagger$</u>	<u>$d\sigma/d\Omega(30^\circ)$ ($\mu\text{b/sr}$)</u>
98	11/2 ⁻	20	1662 12	7
245 2	(13/2 ⁻)	18	1691 10	6
411 3	(15/2 ⁻)	2	1731 12	4
595 5	(17/2 ⁻)		1756 8	17
1025 10		2	1798 8	13
1089?			1833?	
1130 9		4	1847 9	8
1158?			1875 10	4
1201?			1914 9	6
1254 8		12	1942?	
1299 9		5	1986 11	8
1336 8		13	2005 12	10
1368 10		3	2046 11	8
1404 9		5	2090 11	9
1439 9		4	2112 14	5
1486 8		22	2145 12	10
1516 10		5	2169 13	5
1547?			2208 11	11
1574 9		6	2239 12	6
1603 10		5	2390?	
1643 11		8		

[†] Measured relative to 98-keV level.

[‡] From authors.