

$^{154}\text{Gd}(\text{p,t})$ 2006Me25,1973F104

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 114, 1497 (2013)	31-Aug-2013

1973F104: E=18 MeV, FWHM=12 keV.

2006Me25: E=25 MeV, FWHM=4-6 keV.

Others:

1972E107: E=18 MeV, FWHM \approx 20 keV.

2006Me13: same authors as in 2006Me25. Discussion of shape phase transitional behavior.

The L values are from $\sigma(\theta)$. The L=0 values are from 2006Me25 based on a comparison with DWBA calculations. The other L values are from 1973F104 based on a comparison with $\sigma(\theta)$ for levels with known J^π in neighboring nuclei. 1973F104 also report L=0 for the g.s., 615, and 1048 levels.

 ^{152}Gd Levels

E(level) [†]	L	S [‡] #	E(level) [†]	L	E(level) [†]	L	S [‡] #	E(level) [†]	L	S [‡] #
0	0	913 4	1109	(2)	1668			2579.8 7	0	5.0 4
344	(2)		1123		1680.5 5	0	5.8 4	2767.7 7	0	7.1 6
614.8 4	0	1080 5	1227		1961.9 5	(0)	7.7 5	2810.2 7	0	3.9 5
755	(4)		1282		2363.2 6	0	12.2 6			
931	(2)		1318		2421.5 7	0	8.0 5			
1048.0 4	0	506 3	1606		2491.9 7	(0)	2.1 7			

[†] From 2006Me25 for the L=0 states. The energies for other states, reported by 1973F104, are rounded-off values from Adopted Levels.

[‡] Label= $d\sigma/d\Omega$ ($\mu\text{b/sr}$).

At 5°. 2006Me25 provide data at 17.5° and 30° also.