^{152}**Gd(^{3}He,d)**   **1976St10**

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

0^+ target and E(^{3}He)=24 MeV; measured angular distribution of deuterons in magnetic spectrometer, FWHM $\approx$ 18 keV estimated by evaluator; DWBA analysis;

^{153}Tb Levels

Cross section data in μb/sr

Level energy	$d\sigma/d\Omega$ (30°)	$d\sigma/d\Omega$ (55°)
0	279	209
80	41	31
165	84	119
222	457	285
375	19	9
542	104	88
626	65	43
659	22	27
710	$\approx$43	$\approx$19
725	$\approx$44	$\approx$47
767	25	15
885	25	31
962	8	7
1064	33	22
1102	13	9
1126	46	30
1170	63	67
1187	23	19
1219	24	19
1242	11	$\approx$7
1283	155	119
1308	$\approx$39	$\approx$20
1346	80	86
1391	38	24
1603	$\approx$20	25
1745	40	23
1791	21	10
1827	55	51

E(level)	L[†]	(2j+1)S[‡]	Comments
0.0	2	1.8	
80 4	4	1.4	
165 4	4,5	6.9	L: L=5 assignment is consistent with Adopted J^π.
222 4	2	2.6	
375 4		<3	
542 4	2	0.63	
626 4	1,2[#]	0.38	
659 4	2	0.16	
$\approx$710	1,2[#]	0.18	
$\approx$725	1,2[#]	0.29	
767 4		<2	
885 4	(5)	1.8	
962 4		$\leq$3	

^{152}Gd(^{3}He,d)   **1976St10 (continued)**

^{153}Tb Levels (continued)

E(level)	L[†]	(2j+1)S[‡]	E(level)	L[†]	(2j+1)S[‡]	E(level)	L[†]
1064 *4*	<3		1219 *4*	<3		1391 *4*	≤2
1102 *4*	≤3		1242 *4*	≤3		1603 *4*	
1126 *4*	≤3		1283 *4*	(0)	0.41	1745 *4*	
1170 *4*	0	0.21	≈1308	<4		1791 *4*	
1187 *4*	<3		1346 *4*	2	0.42	1827 *4*	

[†] Values were deduced by 1976St10 from comparison of ratios of experimental (α,t) to (^{3}He,d) cross sections with DWBA predictions.

[‡] Calculated by using normalization factor N=6.0.

[#] Likely assignment is 2, but 1 cannot be ruled out.