

$^{155}\text{Gd}(t,p)$ 1989Lo07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 132, 1 (2016)	4-Dec-2015

$^{155}\text{Gd}(t,p)$ reaction with $E(t)=17$ MeV and outgoing p measured in magnetic spectrograph with FWHM ≈ 25 keV (1989Lo07).

 ^{157}Gd Levels

E(level) [†]	J^{π} [‡]	L	Comments
0.0 [#]	3/2 ⁻	0	
55 [#]	7	5/2 ⁻	
131 [#]	7	7/2 ⁻	
180 [@]	7	9/2 ⁺	
228 [#]	7	9/2 ⁻	
347 [#]	7	11/2 ⁻	
434 ^{&}	7	5/2 ⁻	
513 ^{&}	7	7/2 ⁻	
643 [#]	7	15/2 ⁻	
703 ^a	7	(1/2) ⁻	
766	7	3/2 ⁻	
792 ^a	7	5/2 ⁻	
816 ^b	7	3/2 ⁻	
845 ^b	7	(5/2 ⁻)	
900	7	(7/2 ⁻)	J^{π} : Assigned as the 7/2 ⁻ levels from both the 1/2[521] and the 1/2[530] bands.
923	7		
967 ^b	7	(9/2 ⁻)	
1044	7	3/2 ⁻	0
1109	7		
1178	7		
1201	7		
1282	7		
1316	7		
1383	7		
1406	7	(3)	
1474	7		
1520	7	3/2 ⁻	0
1578	7		
1599	7		
1798	7	(3/2 ⁻)	(0)
1840	7		
1899	7		
1958	7	(3/2 ⁻)	(0)
2004	7		
2119	7	(3/2 ⁻)	(0)

[†] Uncertainties are from general comment (1989Lo07).

[‡] Assignments for levels above 1000 keV are from L values from this study. J^{π} and band assignments for lower energy levels are from Adopted Levels.

[#] Band(A): 3/2[521] band.

[@] Band(B): 5/2[642] band.

[&] Band(C): 5/2[523] band.

^a Band(D): 1/2[521] band.

^b Band(E): 1/2[530] band.

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			Band(E): 1/2[530] band
			<u>(9/2⁻) 967</u>
			<u>(5/2⁻) 845</u>
		Band(D): 1/2[521] band	<u>3/2⁻ 816</u>
		<u>5/2⁻ 792</u>	
		<u>(1/2⁻) 703</u>	
Band(A): 3/2[521] band			
<u>15/2⁻ 643</u>			
		Band(C): 5/2[523] band	
		<u>7/2⁻ 513</u>	
		<u>5/2⁻ 434</u>	
<u>11/2⁻ 347</u>			
<u>9/2⁻ 228</u>			
		Band(B): 5/2[642] band	
		<u>9/2⁺ 180</u>	
<u>7/2⁻ 131</u>			
<u>5/2⁻ 55</u>			
<u>3/2⁻ 0.0</u>			