

$^{71}\text{Ga}(\text{d,p})$ 1973Yn01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 111,1 (2010)	1-May-2009

$J^\pi(^{71}\text{Ga})=3/2^-$.

E=12 MeV, magnetic spectrograph, $\sigma(\theta)$, $\theta=10^\circ-135^\circ$, FWHM $\approx$ 18 keV, DWBA analysis (1973Yn01).

Other: 1970Sa22.

 ^{72}Ga Levels

E(level) [†]	L [‡]	C ² S' [#]	Comments
162 3	1	0.06	
208 3	1	0.04	
250 3	4	2.75	
274 3			
331 3	4	0.38	
400 3	4	2.66	
560			
605 3	1	0.08	
639 3	4	0.41	
684 3	1	0.05	
709 3	4	0.65	
741 3	2	0.09	
856 3	1	0.2	
900 3	3	0.7	L: C ² S' value corresponds well with the value for L=3 to the 904 state in $^{69}\text{Ga}(\text{d,p})^{70}\text{Ga}$.
917 3			
983 3	1	0.03	
1038 3			
1061 3	1	0.02	
1150 3	1	0.04	
1208 3			
1267 3	2	0.15	
1338 3			
1380 3	2	0.03	
1435 3	(3)	1.7	L: not a good fit, could be fitted with L=2+4 also.
1473 3			
1517 3			
1558 3	2	0.1	
1592 3	0	0.03	
1633 3	0	0.03	
1685 3	(3)	1.1	L: not a good fit, could be fitted with L=2+4 also.
1732 3			
1752 3	2	0.06	
1782 3	2	0.06	
1798 3	0	0.04	
1872 3			
1919 3			
1989 3			
2059 3			

[†] The g.s. was not observed in this reaction.

[‡] From DWBA. 1973Yn01 cast some doubt on the correctness of L=3 measurements, commenting that, by comparison with L=3 transfers in $^{69}\text{Ga}(\text{d,p})$, the C²S' values are unexpectedly large.

[#] $d\sigma/d\Omega(\text{DWBA})$ calculated with the computer code JULIE have been multiplied by 1.6.