

$^{121}\text{Sb}(\text{d,p})$ 1972El01,1967Hj04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

$J^\pi(^{121}\text{Sb})=5/2^+$.

1972El01: E(d)=13 MeV; enriched metallic target, semi, FWHM=25 keV.

1967Hj04: E(d)=15 MeV; enriched metallic target, magnetic spectrograph, $p(\theta)$, FWHM $\approx$ 50 keV.

 ^{122}Sb Levels

E(level) [†]	L [‡]	C ² S' [‡]	Comments
0+x	(2)	0.04	This level is evidenced from the L=(2) in (d,p) and from the L=0+5 in (p,d).
61 10	(2)+(0)	0.09	
118 10	(2)	0.23	
163 10	(2)	0.10	
256 10	0	0.55	
282 10			Three components: L=0 with S=0.022, L=2 with S=0.50 and L=5? with S=2.5. Two components: L=2 with S=2.5 and L=5? with S=5.6.
318 10			
391 10			
416 10			
482 10	2	0.45	
695? 20			C ² S': includes s-wave of questionable level at 1330 keV.
771? 20			
867? 20			
941 20			
994 20	(4)	0.39	
1053 20	(4)	0.26	
1108 20	(4)	0.51	
1173 20	(4)	0.70	
1236 30	2	0.37	
1356 30			
1467? 30	(2)	0.038	
1497? 30	(2)	0.072	
1660 30	(2)	0.055	
1764 30	(2)	0.037	
1850 30	3	0.077	
1947? 30	3	0.13	
2027? 30			
2077? 30			
2137? 30	3	0.09	
2217? 30			
2307? 30			
2347? 30			
2647 30			
2807 30			
3137 30			

[†] E(levels)<500 keV are taken from 1972El01 with values lowered by 10 keV to correct for systematic deviation from other data.
E(levels)>500 keV are from 1967Hj04 with values increased by 30 keV to correct for systematic deviation from other E(level) data.

[‡] Values are taken from 1967Hj04; L and S values were obtained by 1967Hj04 from comparison of experimental angular distributions with those obtained from the (d,p) results on ^{124}Sn by 1967Sc12. 1967Hj04 considered that many of the L values were uncertain due to insufficient resolution, poor statistics, and interference from strong sulfur contaminant peaks.