

$^{121}\text{Sb}(\text{p,d}),(\text{d,t})$ **1982Em01,1967Hj04**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	K. Kitao, Y. Tendow and A. Hashizume		NDS 96, 241 (2002)	1-Dec-2001

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

(p,d) **1982Em01**: E=26.2 MeV, FWHM=15-20 MeV

(d,t) **1967Hj04**: E=15 MeV, FWHM=30-50 keV

other: **1971BhZX**.

 ^{120}Sb Levels

E(level) [†]	L [‡]	C ² S ^e	Comments
0.0	2	0.11	
77 <i>l</i>	0	0.19	E(level): 88 in 1967Hj04 .
151 <i>& l</i>	0+5	0.05+0.63	
191 <i>& l</i>	0+2	0.11+0.068	
236 <i>3</i>	0+2	0.064+0.12	
280? <i>@</i>			
332 <i>3</i>	2+(4+5)	0.096	E(level): 310? in 1967Hj04 .
384 <i>2</i>	2+(4+5)	0.061	C ² S: for L=2; 0.36 for 1g _{7/2} , 0.54 for 1h _{11/2} . E(level): 362+362? in 1967Hj04 . C ² S: for L=2; 0.29 for 1g _{7/2} , 0.44 for 1h _{11/2} .
435 <i>4</i>	0+2	0.0065+0.016	E(level): 450 in 1967Hj04 .
623 <i>a</i> <i>5</i>	0+2	0.0017+0.021	
668 <i>a</i> <i>5</i>	0+2+4	0.001	C ² S: for L=2; 0.016 for 2d _{3/2} , 0.18 for 1g _{7/2} .
699 <i>b</i> <i>5</i>	2+4	0.023+0.18	
718 <i>b</i> <i>5</i>	0+2+4	0.0021	C ² S: for L=2; 0.014 for 1g _{7/2} , 0.28 for 1h _{11/2} .
772 <i>4</i>	4	0.45	E(level): 760 in 1967Hj04 .
842 <i>5</i>	0+2+4	0.042	E(level): 830 in 1967Hj04 . C ² S: for L=2; 0.016 for 1g _{7/2} , 0.16 for 1h _{11/2} .
907 <i>#</i> <i>4</i>	0+2	0.002+0.028	
934 <i>4</i>	2	0.19	E(level): 940 in 1967Hj04 .
974 <i>c</i> <i>4</i>	0+2	0.008+0.11	
1023 <i>c</i> <i>4</i>	2	0.068	
1059 <i>5</i>	0+2	0.008+0.16	
1104 <i>4</i>	2	0.294	
1164 <i>#</i> <i>4</i>	0+2+4	0.004	C ² S: for L=2; 0.058 for 1g _{7/2} , 0.46 for 1h _{11/2} .
1208 <i>4</i>	2	0.23	
1239 <i>4</i>	0+2	0.012+0.25	
1285 <i>4</i>	2+5	0.019+0.10	
1331 <i>#</i> <i>4</i>	0+2	0.0016+0.019	
1383 <i>4</i>	0+2	0.006+0.086	E(level): 1400 in 1967Hj04 .
1457 <i>d</i> <i>5</i>	0+2	0.005+0.12	
1499 <i>d</i> <i>4</i>	2	0.07	
1550 <i>5</i>	2	0.07	
1586 <i>5</i>	0+2+4	0.005	E(level): 1600 in 1967Hj04 . C ² S: for L=2; 0.032 for 1g _{7/2} , 0.16 for 1h _{11/2} .
1639 <i>@</i> <i>6</i>	0+2	0.0044+0.009	
1697 <i>6</i>	0+2	0.0070+0.014	E(level): 1720 in 1967Hj04 .

[†] From **1982Em01**, unless otherwise noted.

[‡] Assumed as a singlet, except for levels populated in both even and odd L-transfers (**1982Em01**). **1967Hj04** has also given

Continued on next page (footnotes at end of table)

 $^{121}\text{Sb}(\text{p,d}),(\text{d,t})$ [1982Em01,1967Hj04](#) (continued)

 ^{120}Sb Levels (continued)

L-assignments, but the evaluators do not give because of poor resolution, high level density, and limited number of angles studied.

Not observed in [1967Hj04](#).

@ From [1967Hj04](#) but not given in [1982Em01](#).

& Corresponds to the 175 level reported as a singlet by [1967Hj04](#).

^a Corresponds to the 650 level reported as a singlet by [1967Hj04](#).

^b Corresponds to the 710 level reported as a singlet by [1967Hj04](#).

^c Corresponds to the 1000 level reported as a singlet by [1967Hj04](#).

^d Corresponds to the 1470 level reported as a singlet by [1967Hj04](#).

^e From [1982Em01](#). Authors assumed $2d_{3/2}$, $1g_{7/2}$, $1h_{11/2}$ transfer for L=2,4,5. For $2d_{5/2}$ multiply by 1.5, for $1g_{9/2}$ by 1.25.