

$^{121}\text{Sb}(\text{d},^3\text{He}),(\text{t},\alpha)$ **1972LeYL,1978Ba25**

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

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

- $^{121}\text{Sb}(\text{d},^3\text{He})$ **1972LeYL**: E=45 MeV; 50 keV(FWHM), $\sigma(\theta)$.
The evaluators regard these unpublished results as tentative.
- $^{121}\text{Sb}(\text{t},\alpha)$ **1978Ba25**: E=12 MeV; emulsion plate 30 keV (FWHM), $\sigma(\theta)$, $\theta=5^\circ$ - 175° , deduced spectroscopic factors; enriched target.
Other: **1969ChZL**.

 ^{120}Sn Levels

E(level) [†]	L	$C^2S^{&}$	Comments
0.0 [‡] 10	2	0.61	C^2S : if 2d5/2. Other: 0.47 ($\text{d},^3\text{He}$).
1150 [‡] 10	2	0.31	C^2S : if 2d5/2. Other: 0.19 ($\text{d},^3\text{He}$). E(level): other: 1170 in ($\text{d},^3\text{He}$).
1930?@ 20			
2100 20	2	0.01	
2190 [‡] 10	(2)	(0.05)	C^2S : if 2d3/2. Other: 0.04 ($\text{d},^3\text{He}$). E(level): 2210 ($\text{d},^3\text{He}$).
2420 [‡] 10	(2)	(0.05)	C^2S : if 2d3/2. Other: 0.04 ($\text{d},^3\text{He}$). E(level): 2410 ($\text{d},^3\text{He}$).
3090 20	1	0.018	
3640 20	4	0.09	
3750 20	4	0.11	
3890 20	1	0.07	
4000 [‡] 10	4	0.74	C^2S : if 1g9/2. Other: 0.53 ($\text{d},^3\text{He}$).
4120 20	1	0.09	
4180# 10	1	0.70	C^2S : if 2p _{1/2} ; 0.57 if 2p _{3/2} .
4230?@ 20	4	0.65	
4330# 10	1	0.69	C^2S : if 2p _{1/2} ; 0.56 if 2p _{3/2} .
4370 20	1	0.35	
4410# 10	1	0.79	C^2S : if 2p _{1/2} ; 0.65 if 2p _{3/2} .
4460?@ 20	1	0.44	
4580 20			
4650# 10	1	0.54	C^2S : if 2p _{1/2} ; 0.44 if 2p _{3/2} .
4690?@ 20	1	0.30	
4720# 10	(4,3)	(0.81)	C^2S : if 1g9/2; 1.66 if 1f5/2.
4770?@ 20	1	0.74	
4870# 10	(4,1)	(0.56)	C^2S : if 1g9/2; 0.26 if 2p _{3/2} .
4920?@ 20	1	0.21	
4970# 10			
5030# 10			
5090?@ 20	1	0.22	
5170 [‡] 10	1	0.23	C^2S,L : from ($\text{d},^3\text{He}$).
5230?@ 20	4	0.54	

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 $^{121}\text{Sb}(\text{d},^3\text{He}),(\text{t},\alpha)$ 1972LeYL,1978Ba25 (continued) **^{120}Sn Levels (continued)**

[†] From ($\text{d},^3\text{He}$), unless otherwise noted. No uncertainty was given by authors. The evaluators assigned 20 keV for uncertainty.

[‡] Observed in (t,α) and ($\text{d},^3\text{He}$).

[#] From (t,α) only.

[@] From ($\text{d},^3\text{He}$), but not confirmed by any other reaction.

[&] C²S from DWBA (t,α), unless otherwise noted.