^{121}Sb(^{3}He,d)   1999Sc19,1972Au02

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

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

1972Au02: E(^{3}He)=25 MeV; broad-range magnetic spectrograph, ΔE$\approx$25 keV, σ(d); DWBA analysis, deduced L.

1999Sc19: E(^{3}He)=32 MeV; broad-range magnetic spectrograph, enriched target 98.4%, measured deuteron energy spectra at
θ=10°,15°, 20°, 25°, 30°, 35°, 40° and 60°, deduced $\sigma(\theta)$, compared with IBM model and quasi-phonon model.

^{122}Te Levels

Cross sections $\sigma(\theta)$ (μb/sr) from 1999Sc19 are listed in comments. Additional notes from 1999Sc19 are also included in comments.

E(level)[†]	L[‡]	C^{2}S′[#]	Comments
0.0	2	0.11	C^{2}S′: 0.04 for L=0; 0.15 for L=2; 0.4 for L=(4).
			σ(10°)=66 *3*, σ(15°)=44.7 *21*, σ(20°)=25.2 *12*, σ(25°)=24.6 *16*, σ(30°)=15.0 *10*, σ(35°)=13.3 *11*, σ(40°)=7.7 *8*, σ(60°)=1.7 *4*.
564.1 *5*	0+2+(4)		C^{2}S′: 0.04 for L=0; 0.15 for L=2; 0.4 for L=(4).
			σ(10°)=114 *9*, σ(15°)=100 *14*, σ(20°)=52.0 *16*, σ(25°)=63.6 *25*, σ(30°)=35.4 *16*, σ(35°)=31.7 *19*, σ(40°)=20.5 *13*, σ(60°)=4.7 *6*.
1181.5 *4*	2	0.21	σ(10°)=116 *8*, σ(15°)=84 *5*, σ(20°)=50.7 *22*, σ(25°)=52.6 *23*, σ(30°)=31.6 *15*, σ(35°)=31.2 *19*, σ(40°)=18.9 *13*, σ(60°)=5.1 *6*.
1257.5 *15*	0+2	0.01+0.07	σ(10°)=50 *5*, σ(15°)=48.2 *29*, σ(20°)=22.9 *11*, σ(25°)=26.9 *16*, σ(30°)=16.2 *11*, σ(35°)=11.4 *10*, σ(40°)=8.1 *9*, σ(60°)=1.8 *4*.
1357.1 *5*	2	0.04	σ(10°)=30 *4*, σ(15°)=22.8 *21*, σ(20°)=14.4 *9*, σ(25°)=12.4 *12*, σ(30°)=10.1 *9*, σ(35°)=8.3 *8*, σ(40°)=3.4 *7*, σ(60°)=1.1 *4*.
1749.8 *5*	2+4	0.20+1.4	E(level): doublet (1751+1752).
			σ(10°)=136 *5*, σ(15°), σ(15°)=130 *5*, σ(20°)=111 *4*, σ(25°)=85.6 *30*, σ(30°)=60.9 *22*, σ(35°)=48.0 *20*, σ(40°)=34.9 *17*, σ(60°)=9.8 *8*.
1908.5 *7*			σ(10°)=26.5 *21*, σ(15°)=22.3 *23*, σ(20°)=10.1 *15*, σ(25°)=10.4 *11*, σ(30°)=6.5 *9*, σ(35°)=6.2 *7*, σ(40°)=3.1 *6*, σ(60°)=0.83 *30*.
1940.5 *15*			σ(10°)=13.8 *20*, σ(15°)=11.0 *20*, σ(20°)=5.3 *15*, σ(25°)=6.0 *10*, σ(30°)=3.9 *9*, σ(35°)=2.7 *7*, σ(40°)=1.41 *30*, σ(60°)=0.78 *30* (sum for 1940.5+1951.6 levels at 60°).
1951.6 *6*			σ(10°)=10.3 *6*, σ(15°)=8.5 *19*, σ(20°)=4.1 *14*, σ(25°)=5.7 *10*, σ(30°)=3.1 *9*, σ(35°)=2.7 *7*, σ(40°)=1.6 *4*, σ(60°)=0.78 *30* (sum for 1941+1951.6 levels at 60°).
2039.6 *15*			E(level): admixture of ^{124}Te 2618 level.
			σ(10°)=79 *4*, σ(15°)=65 *4*, σ(20°)=35.6 *26*, σ(25°)=38.1 *19*, σ(30°)=21.1 *15*, σ(35°)=17.0 *12*, σ(40°)=11.1 *13*, σ(60°)=3.7 *5*.
2099.5 *4*	2+(4)	0.51+0.8	σ(10°)=390 *8*, σ(15°)=275 *8*, σ(20°)=158 *6*, σ(25°)=160 *4*, σ(30°)=96.1 *28*, σ(35°)=79.7 *25*, σ(40°)=57.1 *21*, σ(60°)=14.3 *9*.
2202.8 *5*	(5)	0.6	σ(10°)=13.1 *17*, σ(15°)=32.5 *20*, σ(20°)=42.9 *16*, σ(25°)=25.6 *16*, σ(30°)=20.2 *13*, σ(35°)=14.8 *13*, σ(40°)=13.4 *11*, σ(60°)=3.8 *6*.
2287.4 *10*			σ(10°)=20.5 *22*, σ(15°)=31.2 *18*, σ(20°)=39.1 *28*, σ(25°)=29.5 *26*, σ(30°)=20.5 *15*, σ(35°)=16.1 *18*, σ(40°)=10.1 *13*, σ(60°)=5.7 *6* (sum for 2287.4+2298.3+2311 levels at 60°).
2298.3 *8*			σ(10°)=32.7 *28*, σ(15°)=27.5 *17*, σ(20°)=19.5 *24*, σ(25°)=14.3 *21*, σ(30°)=7.7 *11*, σ(35°)=10.4 *16*, σ(40°)= 6.4 *10*, σ(60°)=5.7 *6* (sum for 2287.4+2298.3+2311 levels at 60°).
2311 *3*			σ(10°)=31.4 *27*, σ(15°)=28.1 *15*, σ(20°)=13.5 *11*, σ(25°)=16.4 *17*, σ(30°)=7.1 *8*, σ(35°)=7.5 *8*, σ(40°)=6.4 *7*, σ(60°)=5.7 *6* (sum for 2287.4+2298.3+2311 levels at 60°).
2409.1 *15*	0+2	0.03+0.15	σ(10°)=127 *6*, σ(15°)=92 *16* (doublet?), σ(20°)=67 *7* (doublet?), σ(25°)=71.2 *25*, σ(30°)=40.8 *18*, σ(35°)=30.7 *22*, σ(40°)=25.5 *15*, σ(60°)=4.7 *8*.
2449.0 *7*			σ(10°)=36 *4*, σ(15°)=31.2 *15*, σ(20°)=17.0 *10*, σ(25°)=15.7 *13*, σ(30°)=8.5 *9*, σ(35°)=8.1 *12*, σ(40°)= 7.8 *9*, σ(60°)=0.7 *5*.
2499.6 *21*	0+2+(4)		C^{2}S′: 0.03 for L=0; 0.12 for L=2; 0.3 for L=(4).
			σ(10°)=6 *4*, σ(15°)=7.6 *11*, σ(20°)=5.9 *8*, σ(25°)=4.4 *10*, σ(30°)=3.4 *9*, σ(35°)=4.1 *12*.
2510.3 *6*			E(level): admixture of ^{124}Te 3091 level.

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$^{121}\text{Sb}(^3\text{He,d})$　　1999Sc19,1972Au02 **(continued)**

^{122}Te Levels (continued)

E(level)[†]	L[‡]	C²S′[#]	Comments
			$\sigma(10°)=104$ *6*, $\sigma(15°)=81.8$ *24*, $\sigma(20°)=46.5$ *16*, $\sigma(25°)=54.6$ *23*, $\sigma(30°)=29.6$ *16*, $\sigma(35°)=19.0$ *17*, $\sigma(40°)=16.9$ *14*, $\sigma(60°)=3.3$ *7*.
2563.7 *12*	2+(4)	0.26+0.6	$\sigma(10°)=215$ *8*, $\sigma(15°)=178$ *4*, $\sigma(20°)=106.1$ *23*, $\sigma(25°)=100$ *4*, $\sigma(30°)=62.8$ *22*, $\sigma(35°)=53.5$ *27*, $\sigma(40°)=34.4$ *21*, $\sigma(60°)=8.8$ *9*.
2604.7 *18*	2+(4)	0.13+0.7	$\sigma(10°)=112$ *8*, $\sigma(15°)=90.0$ *24*, $\sigma(20°)=51.3$ *30*, $\sigma(25°)=54.7$ *23*, $\sigma(30°)=32.3$ *16*, $\sigma(35°)=27.4$ *19*, $\sigma(40°)=17.9$ *14*, $\sigma(60°)=4.1$ *7*.
2639.8? *6*			E(level): possible admixture of ^{124}Te 3520 level. $\sigma(15°)=4.2$ *7*, $\sigma(20°)=5.0$ *7*, $\sigma(25°)=5.5$ *9*, $\sigma(30°)=4.7$ *8*, $\sigma(35°)=2.3$ *7*, $\sigma(40°)=2.5$ *7*.
2659.2 *16*	2+4	0.18+1.5	E(level): possible admixture of ^{124}Te 3520 level. L,C²S′: For 2659.2+2671.8 levels. $\sigma(10°)=22$ *4*, $\sigma(15°)=14.8$ *13*, $\sigma(20°)=13.0$ *26*, $\sigma(25°)=10.4$ *12*, $\sigma(30°)=5.5$ *8*, $\sigma(35°)=3.6$ *7*, $\sigma(40°)=2.4$ *7*.
2671.8 *20*	2+4	0.18+1.5	E(level): triplet (2671.8+2683.2+2692 levels). L,C²S′: For 2659.2+2671.8 levels. $\sigma(10°)=105$ *6* (for 2672+2683.2 levels at 10°), $\sigma(15°)=54.0$ *25*, $\sigma(20°)=47$ *4*, $\sigma(25°)=27.4$ *25*, $\sigma(30°)=20.5$ *18*, $\sigma(35°)=16.9$ *17*, $\sigma(40°)=9.0$ *18*, $\sigma(60°)=3.8$ *6*.
2683.2 *24*			E(level): triplet (2671.8+2683.2+2692 levels). $\sigma(10°)=105$ *6* (for 2672+2683.2 levels at 10°), $\sigma(15°)=80.2$ *28*, $\sigma(20°)=43$ *4*, $\sigma(25°)=48.9$ *30*, $\sigma(30°)=33.3$ *26*, $\sigma(35°)=26.1$ *18*, $\sigma(40°)=22.6$ *21*, $\sigma(60°)=3.5$ *6* (sum for 2683.2+2692 levels at 60°).
2692 *4*			$\sigma(10°)=21$ *4*, $\sigma(15°)=12.3$ *15*, $\sigma(20°)=7$ *4*, $\sigma(25°)=10.6$ *21*, $\sigma(30°)=4.0$ *16*, $\sigma(35°)=5.5$ *10*, $\sigma(40°)=4.9$ *17*, $\sigma(60°)=3.5$ *6* (sum for 2683+2692 levels at 60°). E(level): triplet (2671.8+2683.2+2692 levels).
2743.2 *8*			$\sigma(10°)=69$ *4*, $\sigma(15°)=78.5$ *24*, $\sigma(20°)=35.6$ *22*, $\sigma(25°)=47.2$ *23*, $\sigma(30°)=28.6$ *21*, $\sigma(35°)=16.5$ *12*, $\sigma(40°)=12.9$ *12*, $\sigma(60°)=2.0$ *6* (assignment questionable).
2761 *4*			$\sigma(10°)=90$ *4*, $\sigma(15°)=74.7$ *23*, $\sigma(20°)=32.1$ *22*, $\sigma(25°)=39.9$ *21*, $\sigma(30°)=24.0$ *19*, $\sigma(35°)=20.6$ *13*, $\sigma(40°)=14.4$ *13*, $\sigma(60°)=3.9$ *7*.
2778.6 *10*			$\sigma(10°)=79$ *4*, $\sigma(15°)=78.8$ *24*, $\sigma(20°)=43.0$ *23*, $\sigma(25°)=57.4$ *25*, $\sigma(30°)=34.2$ *22*, $\sigma(35°)=19.9$ *13*, $\sigma(40°)=17.7$ *14*, $\sigma(60°)=3.9$ *7*.
2796.6 *15*			$\sigma(10°)=52$ *4*, $\sigma(15°)=29.6$ *18*, $\sigma(20°)=20.6$ *20* (2802 level stronger), $\sigma(25°)=16.5$ *15*, $\sigma(30°)=11.1$ *15*, $\sigma(35°)=7.6$ *10*, $\sigma(40°)=6.6$ *9*, $\sigma(60°)=1.7$ *4* (sum for 2796.6+2814 levels at 60°).
2801.7 *15*			
2814.4 *30*			$\sigma(10°)=16.5$ *27*, $\sigma(15°)=26.5$ *17*, $\sigma(20°)=13.4$ *18*, $\sigma(25°)=19.3$ *16*, $\sigma(30°)=12.6$ *15*, $\sigma(35°)=8.0$ *13*, $\sigma(40°)=9.1$ *10*, $\sigma(60°)=1.7$ *4* (sum for 2796.6+2814 levels at 60°).
2882.6 *9*			$\sigma(15°)=3.5$ *7*, $\sigma(20°)=14.8$ *14*, $\sigma(25°)=11.1$ *13*, $\sigma(30°)=6.6$ *11*, $\sigma(35°)=4.8$ *11*, $\sigma(40°)=4.0$ *12*, $\sigma(60°)=1.2$ *4*.
2914.0 *5*			$\sigma(10°)=43$ *4*, $\sigma(15°)=47$ *4*, $\sigma(20°)=25.6$ *17*, $\sigma(25°)=35.3$ *19*, $\sigma(30°)=21.7$ *18*, $\sigma(35°)=11.8$ *18*, $\sigma(40°)=13.9$ *16*, $\sigma(60°)=2.1$ *5*.
2937.7 *10*			E(level): doublet. $\sigma(10°)=113$ *6*, $\sigma(15°)=99$ *15*, $\sigma(20°)=64.1$ *26*, $\sigma(25°)=68$ *6*, $\sigma(30°)=43$ *5*, $\sigma(35°)=23.0$ *27*, $\sigma(40°)=21.7$ *19*, $\sigma(60°)=3.2$ *6*.
2960.5 *4*			$\sigma(10°)=79$ *5*, $\sigma(15°)=60$ *4*, $\sigma(20°)=34.5$ *20*, $\sigma(25°)=44.7$ *22*, $\sigma(30°)=24.6$ *19*, $\sigma(35°)=15.2$ *29*, $\sigma(40°)=19.0$ *18*, $\sigma(60°)=3.1$ *6*.
2982? *4*	0+2	0.2+1.0	$\sigma(10°)=98$ *7*, $\sigma(15°)=78$ *6*, $\sigma(20°)=29$ *4*, $\sigma(25°)=47.2$ *29*, $\sigma(30°)=36.2$ *30*, $\sigma(35°)=13.2$ *5*, $\sigma(40°)=15.8$ *30*, $\sigma(60°)=2.0$ *7*.
2997.3 *30*			$\sigma(10°)=749$ *16*, $\sigma(15°)=563$ *12*, $\sigma(20°)=324$ *7*, $\sigma(25°)=318$ *6*, $\sigma(30°)=182$ *5*, $\sigma(35°)=135$ *14*, $\sigma(40°)=118$ *8*, $\sigma(60°)=28.1$ *19*.
3012 *4*			$\sigma(10°)=43$ *11*, $\sigma(15°)=30$ *5*, $\sigma(20°)=21.2$ *24*, $\sigma(25°)=33.3$ *29*, $\sigma(30°)=34$ *4*, $\sigma(35°)=32$ *11*, $\sigma(40°)=12.7$ *5*, $\sigma(60°)=3.8$ *15*.
3044.5 *30*	(2)	0.63	E(level): probably doublet. $\sigma(10°)=336$ *10*, $\sigma(15°)=264$ *28*, $\sigma(20°)=154$ *15*, $\sigma(25°)=172$ *19*, $\sigma(30°)=94$ *5*, $\sigma(35°)=7.6$ *4*, $\sigma(40°)=58.9$ *29*, $\sigma(60°)=13.9$ *10*.
3066 *5*			$\sigma(10°)=152$ *7* (assignment and intensity questionable), $\sigma(15°)=61$ *7* (doublet?), $\sigma(20°)=32.3$ *21*, $\sigma(25°)=37.8$ *21*, $\sigma(30°)=19.7$ *14*, $\sigma(35°)=13.8$ *18*, $\sigma(40°)=10.1$ *16*, $\sigma(60°)=1.8$ *5*.
3096.6 *30*	2	0.54	E(level): multiplet (between 3096.6 keV and 3166.9 keV). $\sigma(10°)=133$ *7* (assignment and intensity questionable), $\sigma(15°)=44$ *4*, $\sigma(20°)=27.5$ *18*, $\sigma(25°)=33.9$

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¹²¹Sb(³He,d)   **1999Sc19,1972Au02 (continued)**

<u>^{122}Te Levels (continued)</u>

E(level)[†]	L[‡]	C²S′[#]	Comments
			19, $\sigma(30°)$=17.6 13, $\sigma(35°)$=12.9 17, $\sigma(40°)$=11.1 17, $\sigma(60°)$=1.3 4.
3120.6 30			E(level): multiplet (between 3096.6 keV and 3166.9 keV).
			$\sigma(10°)$=250 10 (assignment and intensity questionable), $\sigma(15°)$=162 10, $\sigma(20°)$=97 4, $\sigma(25°)$=102 4, $\sigma(30°)$=55.9 24, $\sigma(35°)$=44 4,$\sigma(40°)$=42.3 27, $\sigma(60°)$=7.7 18 (sum for 3121+3136 levels at 60°).
3136 5			E(level): multiplet (between 3096.6 keV and 3166.9 keV).
			$\sigma(10°)$=100 8 (assignment and intensity questionable), $\sigma(15°)$=46 6, $\sigma(20°)$=26.6 28, $\sigma(25°)$=21.3 26, $\sigma(30°)$=16.3 17, $\sigma(35°)$=12.1 23, $\sigma(40°)$=6.9 17, $\sigma(60°)$=7.7 18 (sum for 3121+3136 levels at 60°).
3148 5			E(level): multiplet (between 3096.6 keV and 3166.9 keV).
			$\sigma(10°)$=83 7 (assignment and intensity questionable), $\sigma(15°)$=29 4, $\sigma(20°)$=14.4 21, $\sigma(25°)$=19.1 17, $\sigma(30°)$=12.1 12, $\sigma(35°)$=10.5 18, $\sigma(40°)$=7.8 15, $\sigma(60°)$=2.8 6.
3166.9 30			E(level): multiplet (between 3096.6 keV and 3166.9 keV).
			$\sigma(10°)$=60 6 (assignment and intensity questionable), $\sigma(15°)$=50 4, $\sigma(20°)$=78.1 28, $\sigma(25°)$=48.7 23, $\sigma(30°)$=30.9 17, $\sigma(35°)$=27.6 23, $\sigma(40°)$=19.8 17, $\sigma(60°)$=7.3 17 (sum for 3167+3184.6 levels at 60°).
3184.6 30			$\sigma(10°)$=60 5, $\sigma(15°)$=22.2 27, $\sigma(20°)$=13.3 16, $\sigma(25°)$=13.7 14, $\sigma(30°)$=9.5 11, $\sigma(35°)$=8.5 16, $\sigma(40°)$=8.2 13, $\sigma(60°)$=7.3 17 (sum for 3167+3184.6 levels at 60°).
3209.8 30			$\sigma(10°)$=85 5, $\sigma(15°)$=26.5 27, $\sigma(20°)$=12.1 13, $\sigma(25°)$=13.1 13, $\sigma(30°)$=7.3 9, $\sigma(35°)$=5.6 14, $\sigma(40°)$=4.6 11, $\sigma(60°)$=0.8 4.
3250 5			$\sigma(10°)$=22 5, $\sigma(15°)$=14 8, $\sigma(20°)$=9.4 20, $\sigma(25°)$=9.0 4, $\sigma(30°)$=6.4 24, $\sigma(35°)$=7.5 14 (sum for 3250+3257 levels at 35°), $\sigma(40°)$=4.8 11 (sum for 3250+3257 levels at 40°).
3257 5			$\sigma(15°)$=13 8, $\sigma(20°)$=6.8 20, $\sigma(25°)$=11.8 5, $\sigma(30°)$=5.8 24, $\sigma(35°)$=7.5 14 (sum for 3250+3257 levels at 35°), $\sigma(40°)$=4.8 11 (sum for 3250+3257 levels at 40°).
3282.7 30	(0)+2	0.02+0.18	E(level): triplet (3282.7+3295.1+3311.1 levels).
			$\sigma(\theta)$ are questionable due to multiplet: $\sigma(10°)$=46 6, $\sigma(15°)$=9 7, $\sigma(20°)$=42.6 22, $\sigma(25°)$=30.0 25, $\sigma(30°)$=18 4, $\sigma(35°)$=14.1 25, $\sigma(40°)$=10.5 16, $\sigma(60°)$=3.5 7 (sum for 3282.7+3295.1 levels at 60°).
3295.1 30			E(level): triplet (3282.7+3295.1+3311.1 levels).
			$\sigma(\theta)$ are questionable due to multiplet: $\sigma(10°)$=46 6, $\sigma(15°)$=30 6, $\sigma(20°)$=16.8 18, $\sigma(25°)$=28.2 25, $\sigma(30°)$=20 4, $\sigma(35°)$=9.8 21, $\sigma(40°)$=11.6 17, $\sigma(60°)$=3.5 7 (sum for 3282.7+3295.1 levels at 60°).
3311.1 30			E(level): triplet (3282.7+3295.1+3311.1 levels).
			$\sigma(\theta)$ are questionable due to multiplet: $\sigma(10°)$=24 5, $\sigma(15°)$=20 4, $\sigma(20°)$=13.0 13, $\sigma(25°)$=15.5 16, $\sigma(30°)$=11.5 19, $\sigma(35°)$=5.2 16, $\sigma(40°)$=4.8 12, $\sigma(60°)$=2.0 6.
3331.2 20			L,C²S′: 0.08 for L=0; 0.22 for L=2, 3331.2+3360.0 levels.
			$\sigma(10°)$=13 3, $\sigma(15°)$=14 3, $\sigma(20°)$=14.4 16, $\sigma(25°)$=13.5 14, $\sigma(30°)$=8.9 14, $\sigma(35°)$=5.4 13, $\sigma(40°)$=4.6 11, $\sigma(60°)$=1.3 5.
3360.0 20			L,C²S′: 0.08 for L=0; 0.22 for L=2, 3331.2+3360.0 levels.
			$\sigma(10°)$=95 6, $\sigma(15°)$=106 6, $\sigma(20°)$=55 6, $\sigma(25°)$=60.7 26, $\sigma(30°)$=41.3 26, $\sigma(35°)$=19.1 20, $\sigma(40°)$=2.1 17, $\sigma(60°)$=3.4 7.
3389.7 20			$\sigma(10°)$=41 4, $\sigma(15°)$=46 5, $\sigma(20°)$=25 5 (questionable due to multiplet), $\sigma(25°)$=29.3 27, $\sigma(30°)$=27.4 22, $\sigma(35°)$=12.1 17, $\sigma(40°)$=7.2 14,
3443.8 10			L,C²S′: 0.05 for L=0; 0.20 for L=2, 3440+3460 levels.
			$\sigma(10°)$=58 6 (doublet?), $\sigma(15°)$=59 5, $\sigma(20°)$=42 5 (questionable due to multiplet), $\sigma(25°)$=26.2 29, $\sigma(30°)$=23.0 28, $\sigma(35°)$=10.1 14, $\sigma(40°)$=9.4 15, $\sigma(60°)$=3.2 8.
3460 5			L,C²S′: 0.05 for L=0; 0.20 for L=2, 3440+3460 levels.
			$\sigma(\theta=20-30°)$ are questionable due to multiplet: $\sigma(10°)$=77 6 (doublet), $\sigma(15°)$=59 5 (doublet), $\sigma(20°)$=38 5 , $\sigma(25°)$=25 4, $\sigma(30°)$=15.5 24 (doublet), $\sigma(35°)$=8.0 13, $\sigma(40°)$=17.2 30 (doublet), $\sigma(60°)$= 3.9 8.
3514 5			$\sigma(10°)$=38 6, $\sigma(15°)$=41 4, $\sigma(20°)$=17.9 26, $\sigma(25°)$=21 5 (doublet), $\sigma(30°)$=12.4 22, $\sigma(35°)$=6.6 20.
3529.9 5			$\sigma(10°)$=81 7, $\sigma(15°)$=42 3, $\sigma(20°)$=25.5 28, $\sigma(25°)$=20.2 30, $\sigma(30°)$=13.7 22, $\sigma(35°)$=8.3 15, $\sigma(40°)$=11.5 16.
3552.1 3			$\sigma(10°)$=153 8, $\sigma(15°)$=104 5, $\sigma(20°)$=76 4, $\sigma(25°)$=90 4, $\sigma(30°)$=50 4, $\sigma(35°)$=40.9 22, $\sigma(40°)$=33.8 23, $\sigma(60°)$=5.3 7.

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^{121}Sb(^{3}He,d)   1999Sc19,1972Au02 (continued)

^{122}Te Levels (continued)

E(level)[†]	L[‡]	C^{2}S′[#]	Comments
3590.42 17	0+2	0.28+0.23	$\sigma(10°)$=193 9, $\sigma(15°)$=267 7, $\sigma(20°)$=131 5, $\sigma(25°)$=147 6, $\sigma(30°)$=107 5, $\sigma(35°)$=50 5, $\sigma(40°)$=51.5 27, $\sigma(60°)$=9.0 9.
3640 20			E(level): multiplet (between 3618 keV and 3653 keV).
3698.5 15			$\sigma(10°)$=7.0 24, $\sigma(15°)$=26.4 25, $\sigma(20°)$=10 4, $\sigma(25°)$=17.1 19, $\sigma(30°)$=13.7 18, $\sigma(35°)$=3.5 15, $\sigma(40°)$=3.5 13.
3727.1 15			$\sigma(10°)$=23 5, $\sigma(15°)$=44 4, $\sigma(20°)$=15.7 23, $\sigma(25°)$=15.1 19, $\sigma(30°)$=15.8 20, $\sigma(35°)$=7.0 18, $\sigma(40°)$=11.9 21.
3744.1 15			$\sigma(10°)$=78 6, $\sigma(15°)$=55 6, $\sigma(20°)$=31.0 25, $\sigma(25°)$=35.3 25, $\sigma(30°)$=23.8 22, $\sigma(35°)$=12.1 21, $\sigma(40°)$=11.8 21, $\sigma(60°)$=5.7 7.
3788.5 30			$\sigma(10°)$=67 5, $\sigma(15°)$=51 4 (overlap due to 3814 levels), $\sigma(20°)$=47.3 23, $\sigma(25°)$=44.5 29, $\sigma(30°)$=39 5, $\sigma(35°)$=20.1 22, $\sigma(40°)$=20.7 18, $\sigma(60°)$=5.8 7.
3814 5			$\sigma(10°)$=29 4 (doublet), $\sigma(15°)$=23 5 (overlap due to 3788 levels), $\sigma(20°)$=12.7 5, $\sigma(30°)$=9.3 16.
3878 5			$\sigma(10°)$=18 4, $\sigma(15°)$=25.1 24 (doublet), $\sigma(20°)$=14.1 20, $\sigma(25°)$=12 3, $\sigma(30°)$=11.6 17, $\sigma(35°)$=9.0 16, $\sigma(40°)$=7.4 4.
3936 5			$\sigma(10°)$=55 6, $\sigma(15°)$=25.6 23, $\sigma(20°)$=31.3 23, $\sigma(25°)$=35.3 25 (sum for 3936+3953 levels at this angle), $\sigma(30°)$=11.0 22, $\sigma(35°)$=8.1 20, $\sigma(40°)$=6.5 16.
3953 6			$\sigma(10°)$=55 6, $\sigma(15°)$=42.5 26, $\sigma(20°)$=26.2 24, $\sigma(25°)$=35.3 25 (sum for 3936+3953 levels at 25°), $\sigma(30°)$=16.4 23, $\sigma(35°)$=9.3 20, $\sigma(40°)$=12.8 18.
3983 6			$\sigma(10°)$=29 6, $\sigma(15°)$=49.2 4, $\sigma(20°)$=30.0 26, $\sigma(25°)$=51 5 (sum for 3983+3998 levels at 25°), $\sigma(30°)$=19.7 26, $\sigma(35°)$=14 4, $\sigma(40°)$=18.3 29.
3998 6			$\sigma(10°)$=105 13, $\sigma(15°)$=62 4, $\sigma(20°)$=32.4 22, $\sigma(25°)$=51 4 (sum for 3983+3998 levels at 25°), $\sigma(30°)$=25.1 26, $\sigma(35°)$=20 4, $\sigma(40°)$=21.2 29.
4020 6			$\sigma(10°)$=54 6, $\sigma(15°)$=79 4, $\sigma(20°)$=40.0 25, $\sigma(25°)$=23.9 30, $\sigma(30°)$=28.6 23, $\sigma(35°)$=15.2 21, $\sigma(40°)$=16.9 18.
4111 6			$\sigma(10°)$=181 11 (sum for 4111+4130 levels at 10°), $\sigma(15°)$=53 10, $\sigma(20°)$=39.8 29, $\sigma(25°)$=24 4, $\sigma(35°)$=6.1 20, $\sigma(40°)$=12.6 21 (assignment questionable), $\sigma(60°)$=7.8 12 (sum for 4111+4130 levels at 60°).
4130 6			$\sigma(10°)$=181 11 (sum for 4111+4130 levels at 10°), $\sigma(15°)$=71 10, $\sigma(20°)$=28.6 27, $\sigma(25°)$=38 4, $\sigma(30°)$=25.9 26, $\sigma(35°)$=19.2 22, $\sigma(40°)$=18.2 24, $\sigma(60°)$=7.8 12 (sum for 4111+4130 levels at 60°).
4168 6	0+2	0.16+0.34	$\sigma(10°)$=221 22, $\sigma(15°)$=243 8, $\sigma(20°)$=155 10, $\sigma(25°)$=104 7 (assignment questionable), $\sigma(30°)$=79 4, $\sigma(35°)$=56.4 28, $\sigma(40°)$=61 7 (assignment questionable), $\sigma(60°)$=12.5 11.
4240 21			E(level): from 1972Au02.

[†] From 1999Sc19, unless noted otherwise.
[‡] From 1972Au02.
[#] From 1972Au02; C^{2}S′ from DWBA analysis assuming 3s$_{1/2}$, 2d$_{5/2}$, 1g$_{7/2}$ or 1h$_{11/2}$ proton transfer. Multiply L(p)=2 strengths by 1.3 for 2d$_{3/2}$ proton stripping.