^{121}Sb(n,γ) E=th: primary 1972Sh02

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

J^π(^{121}Sb)=5/2$^+$, S(n)=6806.38 *15* (2003Au03).
1972Sh02: ^{121}Sb(n,γ); semi γ, $\gamma\gamma$-coin.

^{122}Sb Levels

E(level)†	Jπ	E(level)†	Jπ	E(level)†	Jπ	E(level)†	Jπ
0.0	2$^-$	322.4 *6*	(2)$^+$	920.8 *4*	(2$^-$,3$^-$)	1121.0 *5*	
61.4 *5*	3$^+$	333.6 *6*	(3)$^+$	935.5 *7*		1128.9 *5*	
78.1 *4*	(3)$^-$	396.4 *5*	(2,3)$^+$	948.2 *12*	3$^+$,4$^+$	1159.3 *5*	3$^+$,4$^+$
121.4 *6*	(1)$^+$	484.1 *9*	(2,3,4)$^+$	968.7 *16*	+	1177.7 *6*	+
167.0 *16*	(2)$^+$	631.8 *1*	(1$^-$,2$^-$,3$^-$)	997.9 *10*	+	1186.8 *5*	
178.1? *5*		642.4 *5*	(3,4)	1005.5 *5*		1205.6 *5*	
192.9 *6*	(4)$^-$	658.4 *8*		1018.4 *5*		1229.6 *5*	
209.4 *9*	(4)$^+$	796.7 *5*	(2$^-$,3$^-$)	1030.5 *5*	+	1242.6 *5*	+
255.9 *11*	(3)$^+$	824.9 *6*	(2$^-$,3$^-$)	1043.4 *8*	+	1247.8 *6*	(1$^-$,2$^-$,3$^-$)
282.7 *4*	(3)$^-$	854.9 *9*		1068.5 *11*		(6806.4 *2*)	2$^+$,3$^+$
311.2 *5*	(4)$^-$	868.4 *10*	+	1115.4 *8*			

† E(levels) are the difference between the energy of the primary γ's and that of the capturing state.

γ(^{122}Sb)

E_γ‡	I_γ†@	E_i(level)	J_i^π	E_f	J_f^π
5558.6 *5*	0.25 *5*	(6806.4)	2$^+$,3$^+$	1247.8	(1$^-$,2$^-$,3$^-$)
5563.8 *3*	0.44 *9*	(6806.4)	2$^+$,3$^+$	1242.6	+
5576.8 *4*	0.077 *20*	(6806.4)	2$^+$,3$^+$	1229.6	
5600.8 *3*	0.26 *5*	(6806.4)	2$^+$,3$^+$	1205.6	
5619.6 *3*	0.29 *6*	(6806.4)	2$^+$,3$^+$	1186.8	
5628.7 *5*	0.088 *20*	(6806.4)	2$^+$,3$^+$	1177.7	+
5647.2 *4*	0.093 *20*	(6806.4)	2$^+$,3$^+$	1159.3	3$^+$,4$^+$
5677.5 *4*	0.12 *3*	(6806.4)	2$^+$,3$^+$	1128.9	
5685.4 *4*	0.23 *5*	(6806.4)	2$^+$,3$^+$	1121.0	
5691.0 *7*	0.071 *20*	(6806.4)	2$^+$,3$^+$	1115.4	
5737.9 *10*	0.038 *10*	(6806.4)	2$^+$,3$^+$	1068.5	
5763.0 *7*	0.028 *8*	(6806.4)	2$^+$,3$^+$	1043.4	+
5775.9 *3*	0.21 *4*	(6806.4)	2$^+$,3$^+$	1030.5	+
5788.0 *3*	0.15 *3*	(6806.4)	2$^+$,3$^+$	1018.4	
5800.9 *3*	0.18 *4*	(6806.4)	2$^+$,3$^+$	1005.5	
5808.5 *9*	0.017 *7*	(6806.4)	2$^+$,3$^+$	997.9	+
5837.7# *15*	0.020 *7*	(6806.4)	2$^+$,3$^+$	968.7	+
5858.2 *11*	0.031 *10*	(6806.4)	2$^+$,3$^+$	948.2	3$^+$,4$^+$
5870.9 *6*	0.080 *20*	(6806.4)	2$^+$,3$^+$	935.5	
5885.58 *22*	0.86 *17*	(6806.4)	2$^+$,3$^+$	920.8	(2$^-$,3$^-$)
5938.0 *9*	0.041 *10*	(6806.4)	2$^+$,3$^+$	868.4	+
5951.5 *8*	0.042 *10*	(6806.4)	2$^+$,3$^+$	854.9	
5981.5 *5*	0.074 *20*	(6806.4)	2$^+$,3$^+$	824.9	(2$^-$,3$^-$)
6009.7 *3*	0.39 *8*	(6806.4)	2$^+$,3$^+$	796.7	(2$^-$,3$^-$)
6148.0 *7*	0.032 *8*	(6806.4)	2$^+$,3$^+$	658.4	
6164.1 *3*	0.26 *5*	(6806.4)	2$^+$,3$^+$	642.4	(3,4)
6174.7 *3*	0.13 *3*	(6806.4)	2$^+$,3$^+$	631.8	(1$^-$,2$^-$,3$^-$)
6322.5 *8*	0.032 *10*	(6806.4)	2$^+$,3$^+$	484.1	(2,3,4)$^+$

Continued on next page (footnotes at end of table)

^{121}Sb(n,γ) E=th: primary 1972Sh02 (continued)

$\gamma(^{122}Sb)$ (continued)

E_γ ‡	I_γ †@	E_i(level)	J_i^π	E_f	J_f^π	E_γ ‡	I_γ †@	E_i(level)	J_i^π	E_f	J_f^π
6409.9 *4*	0.073 *20*	(6806.4)	$2^+,3^+$	396.4	$(2,3)^+$	6613.5 *5*	0.028 *8*	(6806.4)	$2^+,3^+$	192.9	$(4)^-$
6472.7 *5*	0.069 *20*	(6806.4)	$2^+,3^+$	333.6	$(3)^+$	6628.3 *4*	0.060 *10*	(6806.4)	$2^+,3^+$	178.1?	
6483.9 *5*	0.047 *10*	(6806.4)	$2^+,3^+$	322.4	$(2)^+$	6639.4 *15*	0.014 *4*	(6806.4)	$2^+,3^+$	167.0	$(2)^+$
6495.1 *3*	0.14 *3*	(6806.4)	$2^+,3^+$	311.2	$(4)^-$	6685.0 *5*	0.0068 *20*	(6806.4)	$2^+,3^+$	121.4	$(1)^+$
6523.67 *22*	1.3 *3*	(6806.4)	$2^+,3^+$	282.7	$(3)^-$	6728.25 *23*	0.74 *15*	(6806.4)	$2^+,3^+$	78.1	$(3)^-$
6550.5 *10*	0.045 *10*	(6806.4)	$2^+,3^+$	255.9	$(3)^+$	6744.9 *4*	0.15 *3*	(6806.4)	$2^+,3^+$	61.4	3^+
6596.7 *8*	0.040 *10*	(6806.4)	$2^+,3^+$	209.4	$(4)^+$	6806.4 *3*	0.19 *4*	(6806.4)	$2^+,3^+$	0.0	2^-

† Photons per 100 thermal neutron captures.
‡ Uncorrected values for recoiled effect; the authors recoil-effect corrected data are recalculated by evaluator.
# Complex peak.
@ Intensity per 100 neutron captures.

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Level Scheme

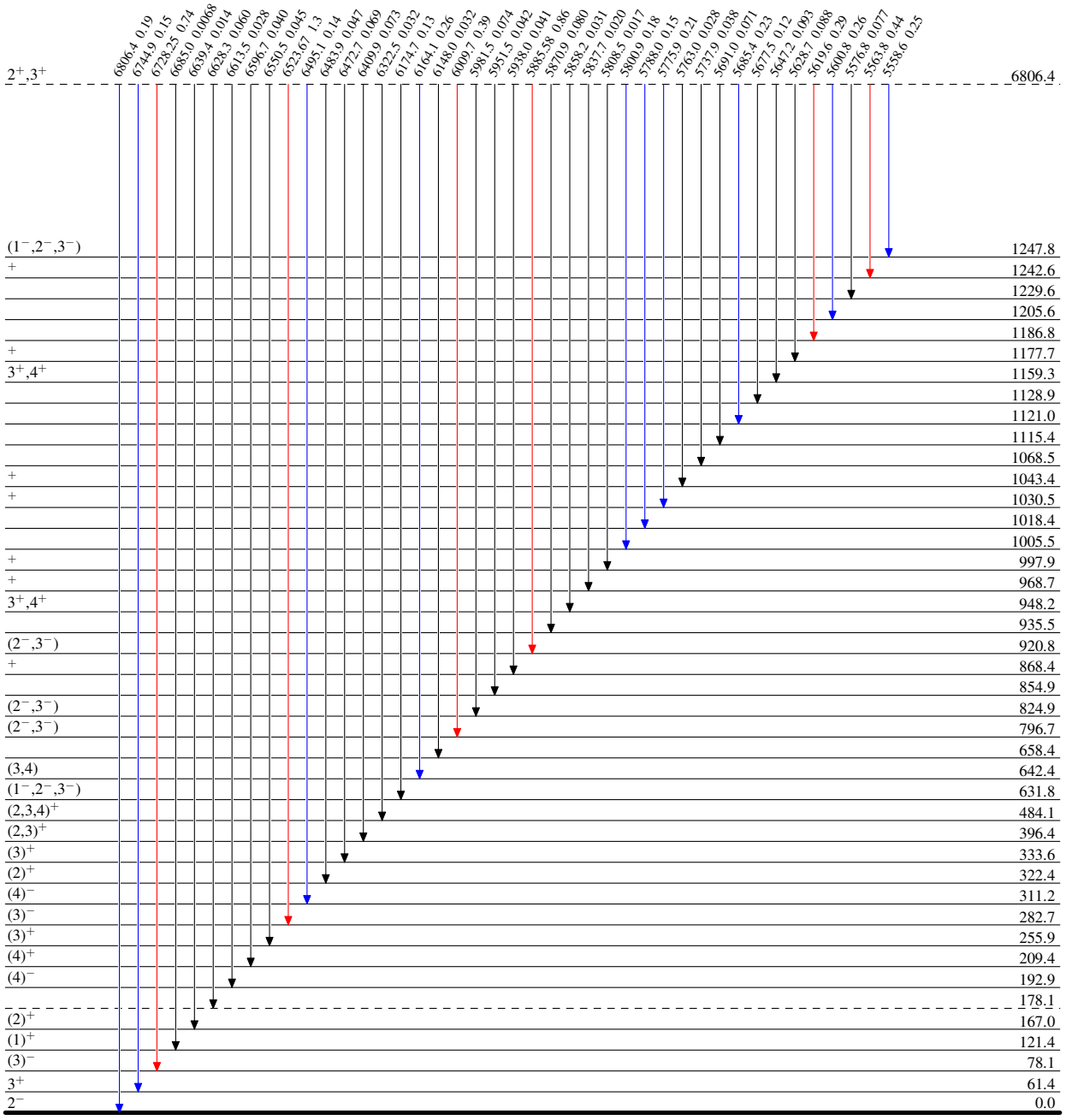
Intensities: photons per 100 neutron captures

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{122}_{51}Sb_{71}$