

Adopted Levels, Gammas

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

Q(β^-)=1980.8 25; S(n)=6806.37 13; S(p)=6425 3; Q(α)=-3530 9 [2012Wa38](#)
 Note: Current evaluation has used the following Q record 1983.9 196806.38 156415.1 21-3525 8 [2003Au03](#).

¹²²Sb Levels

Cross Reference (XREF) Flags

A	¹²¹ Sb(n, γ) E=th: secondary	F	¹²³ Sb(p,d)
B	¹²¹ Sb(n, γ) E=th: primary	G	¹²³ Sb(d,t)
C	¹²¹ Sb(n, γ) E=res	H	¹²² Sb IT decay (4.191 min)
D	¹²² Sn(p,n γ)	I	¹²⁰ Sn(α ,d)
E	¹²¹ Sb(d,p)		

E(level) [†]	J $^\pi$	T _{1/2} [‡]	XREF	Comments
0.0	2 ⁻	2.7238 d 2	ABCD FGH	<p>$\% \beta^- = 97.59$ 12; $\% \epsilon + \% \beta^+ = 2.41$ 12 $\mu = -1.90$ 2; Q = +0.85 11 μ: dynamic nuclear orientation, value references to ^{121,123}Sb (1958Pi45,2005St24). Q: atomic resonance with magnetic state selection, value is relative to ¹²¹Sb and includes the Sternheimer correction (1960Fe08,2005St24); other: +0.9 2 static nuclear orientation (1985He16,2005St24). J$^\pi$: atomic beam J=2; $\pi = -$ is consistent with the log $f^{A\mu} t = 9.7$ to 0⁺; this rules out J$^\pi = 2^+$. T_{1/2}: from 1990Ab06. Others: 2.681 d 3 (1967Ha27) and 2.714 d 6 (1972Em01), 2.84 d 12 (1973Ka45), 2.68 d 4 (1972Pa13), 2.82 d 5 (1968Bo25), 2.74 d 1 (1958Gu09), 2.73 d 3 (1958Pe17), 2.75 d 2 (1954Co08), 2.80 d 2 (1951BI31).</p>
0+x	3 ⁺ , 4 ⁺		EFG	<p>Additional information 1. E(level): this level is suggested in (d,p) and (p,d) as a composite peak unresolved from g.s. J$^\pi$: L=0+5 in (p,d), L=(2) in (d,p). $\mu = +2.983$ 12; Q = +0.41 4 μ: stroboscopic observation of perturbed angular distributions, value is relative to ^{121,123}Sb (1973He10,2005St24). Q: differential perturbed angular distribution of γ rays following nuclear reactions, value is relative to ¹²¹Sb and includes the Sternheimer correction (1982Ma29,2005St24). J$^\pi$: L=0 in (p,d); E1 γ to 2⁻. T_{1/2}: from ¹²²Sn(p,nγ) (1973He10). Others: 1.8 μs 2 in ¹²²Sb IT decay (1962De20), 1.66 μs 25 in ¹²¹Sb(n,γ) (1974Iv02).</p>
78.0914 6	(3) ⁻	<0.14 ns	ABCD	J $^\pi$: see comment on 413.77 level. M1 γ to 2 ⁻ , M1 γ 's from (4) ⁻ and (3) ⁻ .
121.4967 9	(1) ⁺	6.3 ns 3	AB DE g	XREF: g(126). J $^\pi$: E1 γ to 2 ⁻ , no γ to 3 ⁺ .
137.4726 8	(5) ⁺	0.53 ms 3	A D FgH	<p>$\%IT = 100$ $\mu = +3.05$ 10 XREF: g(126). J$^\pi$: see comment on 163.55 level. T_{1/2}: from (ce 26γ)(ce 77γ)(t) in ¹²²Sb IT decay (1963De05). μ: differential perturbed angular distribution of γ rays following nuclear reactions (1977Co18,1989Ra17).</p>
163.5591 17	(8) ⁻	4.191 min 3	A Ef HI	<p>$\%IT = 100$ XREF: f(165).</p>

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Adopted Levels, Gammas (continued)

<u>¹²²Sb Levels (continued)</u>					
E(level) [†]	J ^π	T _{1/2} [‡]	XREF	Comments	
				J ^π : (E3)-E2 cascade to 3 ⁺ level via the 137.47 level along with T _{1/2} for the 163.55 and 137.47 levels and systematics of 8 ⁻ state suggests J ^π (163.55)=(8) ⁻ and J ^π (137.47)=(5) ⁺ .	
				T _{1/2} : from 1990Ab06. Others: 4.21 min 3 (1963Ke04), 4.15 min 15 (1963De05), 4.15 min 20 (1962En04), 4.2 min 3 (1968Bo25), 3.5 min (1947De06).	
167.2293 6	(2) ⁺	<0.28 ns	AB D f	XREF: f(165). J ^π : M1 γ's to 3 ⁺ and (1) ⁺ .	
178.6? 4			B		
192.9594 10	(4) ⁻	<0.11 ns	ABCD fg	XREF: f(205)g(195). J ^π : see comment on 413.77 level;	
209.6508 6	(4) ⁺	<0.14 ns	ABCD fg	XREF: f(205)g(195). J ^π : M1 γ's to 3 ⁺ and (5) ⁺ .	
255.4986 8	(3) ⁺	0.9 ns 2	AB DE	J ^π : M1 γ to (4) ⁺ , γ to the 2 ⁻ g.s. rules out J ^π =4 ⁺ , 5 ⁺ ; L=0 in (d,p).	
264.4260 13	(5) ⁻		A D f	XREF: f(264). J ^π : see comment on 413.77 level.	
265.1111 16	(7) ⁻		A f	XREF: f(264). J ^π : see comment on 413.77 level.	
271.7630 15			A G	XREF: G(274).	
282.6499 8	(3) ⁻	<0.14 ns	ABCDE	J ^π : M1 γ's to 2 ⁻ and (4) ⁻ .	
311.2612 14	(4) ⁻	<0.14 ns	ABCD	J ^π : M1 γ's to (3) ⁻ and (5) ⁻ .	
323.0922 12	(2) ⁺	<0.14 ns	AB De G	XREF: e(318)G(324). J ^π : M1 γ's to (3) ⁺ and (1) ⁺ .	
333.6801 8	(3) ⁺		AB DeF	XREF: e(318). J ^π : M1 γ's to (4) ⁺ and (2) ⁺ .	
393.6993 11	(3,4,5) ⁺	<0.14 ns	A DeFG	XREF: e(391)G(383). J ^π : M1 γ to (4) ⁺ .	
396.9373 10	(2,3) ⁺	<0.11 ns	ABCDe	XREF: e(391). J ^π : M1 γ to (3) ⁺ , γ to (1) ⁺ rules out J ^π =4 ⁺ .	
410.1 20			C		
413.7657 16	(6) ⁻		A ef	XREF: e(416)f(416). J ^π : M1-M1 cascade to (8) ⁻ level via the 265.11 level, and M1-M1-M1-M1 cascade via 264.43, 192.96 and 78.09 levels to 2 ⁻ (gs) are consistent with only J ^π =(6) ⁻ ; thus J ^π (265.11)=(7) ⁻ , J ^π (264.43)=(5) ⁻ , J ^π (192.96)=(4) ⁻ and J ^π (78.09)=(3) ⁻ .	
416 2	3 ⁺ ,4 ⁺		F	E(level): L=0+2 component. J ^π : L=0+2+(4,5) in (p,d); the L=(5) component corresponds to 413 level.	
425.1484 14	(3,4,5) ⁻	<0.14 ns	A Def	XREF: e(416)f(416). J ^π : M1 γ to (4) ⁻ .	
453.7478 20	(1,2,3) ⁺	<0.21 ns	A F	J ^π : γ to 2 ⁻ and 3 ⁺ , M1,E2 γ to (2) ⁺ .	
474 2	3 ⁺ ,4 ⁺		C FG	J ^π : L=0+2 in (p,d).	
480.436 11			A e	XREF: e(482).	
481.339 5	+		A e	XREF: e(482). J ^π : M1,E2 γ to 3 ⁺ .	
483.6519 8	(2,3,4) ⁺	<0.14 ns	AB De	XREF: e(482). J ^π : M1 γ to (3) ⁺ .	
586.054 3	+		A D Fg	XREF: g(593). J ^π : M1,E2 γ's to π=+.	
605 2	-		Fg	XREF: g(593). J ^π : L=5 in (p,d).	
620			I	Configuration=(π1h _{11/2})(ν1g _{7/2})(9 ⁻).	
631.82 4	(1 ⁻ ,2 ⁻ ,3 ⁻)		ABC	J ^π : γ to 2 ⁻ ; (E1) γ from 2 ⁺ resonances.	
642.5649 22	(3,4)		ABC FG	J ^π : L=2+4 in (p,d) and (M1) γ from 3 ⁺ resonance in (n,γ) suggest a possibility of exciting π=+ level, but contradicts with M1,E2 γ to (5) ⁻ .	
658.443 5			AB		
667.554 10			A		

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Adopted Levels, Gammas (continued)

¹²²Sb Levels (continued)

E(level) [†]	J ^π	XREF	Comments
693.995 4	(4 ⁻ ,5,6 ⁻)	A e g	XREF: e(695)g(700). J ^π : γ's to (4) ⁻ and (6) ⁻ .
702.727 16	+	A eFg	XREF: e(695)g(700). J ^π : L=4 in (p,d).
748 2	+	FG	J ^π : L=4 in (p,d).
790.7 20		C E	XREF: E(771).
796.67 5	(2 ⁻ ,3 ⁻)	ABC	J ^π : γ to (4) ⁻ ; (E1) γ's from 2 ⁺ and 3 ⁺ resonances in (n,γ).
810.9 20		C	
824.954 17	(2 ⁻ ,3 ⁻)	ABC	J ^π : (E1) γ's from 2 ⁺ and 3 ⁺ resonances in (n,γ).
855.3 8		B e g	XREF: e(867)g(870).
868.58 6	+	AB eFg	XREF: e(867)g(870). J ^π : L=2+4 in (p,d).
883 3		F	J ^π : L=2+5 in (p,d) requires levels with π=+ and π=-.
920.57 11	(2 ⁻ ,3 ⁻)	ABC	J ^π : (E1) γ's from 2 ⁺ and 3 ⁺ resonances in (n,γ).
935.5 7		BC e	XREF: e(941).
948.2 12	3 ⁺ ,4 ⁺	B eF	XREF: e(941). J ^π : L=0+2 in (p,d).
968.7 16	+	BC FG	J ^π : L=2 in (p,d).
997.9 10	+	B eF	XREF: e(994). J ^π : L=2 in (p,d).
1003.7 20		C e	XREF: e(994).
1005.5 5		BC	
1018.5 5		BC	
1030.5 5	+	BC FG	J ^π : L=2 in (p,d).
1043.4 8	+	BC eF	XREF: e(1053). J ^π : L=2 in (p,d).
1068.5 10		B e	XREF: e(1053).
1115.4 8		B eFG	XREF: f(1113). E(level): unresolved multiplet in (p,d). But L=0 requires a level with J ^π =3 ⁺ ,4 ⁺ .
1118.3 20	(2 ⁻ ,3 ⁻)	C f	XREF: f(1113). J ^π : (E1) γ's from 2 ⁺ and 3 ⁺ resonances in (n,γ).
1121.0 5		BC	
1128.9 5		BC g	XREF: g(1150). E(level): unresolved multiplet in (p,d).
1159.3 4	3 ⁺ ,4 ⁺	BC eF	XREF: e(1173). J ^π : L=0 in (p,d).
1177.7 6	+	BC eFg	XREF: e(1173)g(1187). J ^π : L=2 in (p,d).
1186.8 5		BC g	XREF: g(1187).
1189.7 20		C	
1199 5		F	E(level): unresolved multiplet in (p,d).
1205.6 5		BC G	
1229.6 5		BC e g	XREF: e(1236)g(1240).
1242.6 5	+	BC eFg	XREF: e(1236)g(1240). J ^π : L=2 in (p,d).
1247.8 6	(1 ⁻ ,2 ⁻ ,3 ⁻)	BC	J ^π : (E1) γ from 2 ⁺ resonance in (n,γ).
1258.5 20		C	
1273.9 20		C	
1301.0 20	(2 ⁻ ,3 ⁻ ,4 ⁻)	C FG	J ^π : (E1) γ from 3 ⁺ resonance in (n,γ).
1335 5	+	EF	XREF: E(1356). J ^π : L=2 in (p,d).
1382 2	+	C FG	J ^π : L=2 in (p,d).
1416 7	+	F	J ^π : L=2 in (p,d).
1432 4	+	FG	J ^π : L=2 in (p,d).
1467? 30		E	
1497.2 20		C E	

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Adopted Levels, Gammas (continued) ^{122}Sb Levels (continued)

E(level) [†]	J ^π	XREF	Comments
1500.4 20		C	
1527.1 20		C	
1536.5	+	FG	J ^π : L=2 in (p,d).
1547.5 20		C	
1561.3 20		C	
1571.0 20		C	
1588.8 20		C	
1603.5 20		C	
1651.6 20		C e	XREF: e(1660).
1677.7		C e	XREF: e(1660).
1760.7		C e i	XREF: e(1764)i(1750).
1779.6 20		C e i	XREF: e(1764)i(1750).
1786.8 20		C e i	XREF: e(1764)i(1750).
1808.3 20		C	
1816.3 20		C	
1835.4 20	-	C e	XREF: e(1850). J ^π : L=3 in (d,p).
1879.0 20		C e	XREF: e(1850).
1890.50	11 ⁺	I	J ^π : DWBA analysis in (α,d); configuration=(π1h _{11/2})(ν1h _{11/2}) _(11⁺) .
1945.0 20	-	C e	XREF: e(1947). J ^π : L=3 in (d,p).
1961.1 20		C e	XREF: e(1947).
2018.0 20		C	
2029.5 20		C e	XREF: e(2027).
2078.9 20		C	
2121.3 20	-	C e	XREF: e(2137). J ^π : L=3 in (d,p).
2150.7 20		C e	XREF: e(2137).
2157.1 20		C	
2185.4 20		C	
2205.0 20		C E	
2246.0 20		C	
2307? 30		E	
2347.3 20		C E	
2436.6 20		C	
2464.1 20		C	
2475.3 20		C	
2647 30		E	
2807 30		E	
3137 30		E	
3800		I	Composite states: E=3.25-4.6 MeV; configuration=(π1h _{11/2})(ν1h _{11/2}) _(10⁺) .
6100		I	Composite states: E=4.6-10.5 MeV; configuration=(π1h _{11/2})(ν1h _{9/2}) _(10⁺) (π1h _{11/2})(ν1i _{13/2}) _(12⁻) .
(6806.38 15)	2 ⁺ ,3 ⁺		

[†] Least-squares fit to E_γ's from $^{121}\text{Sb}(n,\gamma)$ E=th secondary, primary; E(levels) with ΔE(levels)=2 keV are from $^{121}\text{Sb}(n,\gamma)$ E=res.; E(levels) with ΔE(level)>2 keV are mainly from (p,d) and supplementary from (d,p) reaction.

[‡] From $^{121}\text{Sb}(n,\gamma)$ secondary, unless noted otherwise.

Adopted Levels, Gammas (continued)

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

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	Mult. [‡]	δ^\ddagger	$\alpha^\#$	Comments
61.4131	3 ⁺	61.4127 5	100	0.0	2 ⁻	E1		0.743	B(E1)(W.u.)=3.66×10 ⁻⁷ 17
78.0914	(3) ⁻	78.0918 7	100	0.0	2 ⁻	M1		1.27	B(M1)(W.u.)>0.14
121.4967	(1) ⁺	121.4958 14	100	0.0	2 ⁻	E1		0.109	B(E1)(W.u.)=2.19×10 ⁻⁵ 11
137.4726	(5) ⁺	76.0595 7	100	61.4131	3 ⁺	E2		4.41	B(E2)(W.u.)=0.00216 14
163.5591	(8) ⁻	26.0867 24	100	137.4726	(5) ⁺	(E3)		3.07×10 ⁴	B(E3)(W.u.)=0.0211 7
									E_γ : E_γ deduced from level scheme of ¹²¹ Sb(n, γ).
167.2293	(2) ⁺	45.7325 9	13.2 16	121.4967	(1) ⁺	M1		6.02	B(M1)(W.u.)>0.043
		89.1388 18	2.13 13	78.0914	(3) ⁻	E1		0.262	B(E1)(W.u.)>1.2×10 ⁻⁵
		105.8160 7	100 2	61.4131	3 ⁺	M1		0.533	B(M1)(W.u.)>0.026
192.9594	(4) ⁻	114.8674 9	100	78.0914	(3) ⁻	M1+E2	0.30 4	0.472 13	B(M1)(W.u.)>0.079; B(E2)(W.u.)>3.0×10 ²
209.6508	(4) ⁺	72.178 8	0.89 23	137.4726	(5) ⁺	M1		1.59	B(M1)(W.u.)>0.0030
		148.2376 4	100 2	61.4131	3 ⁺	M1		0.207	B(M1)(W.u.)>0.039
255.4986	(3) ⁺	45.847 4	9.2 13	209.6508	(4) ⁺	(M1)		5.97	B(M1)(W.u.)=0.0063 17
		88.2689 10	100 2	167.2293	(2) ⁺	M1		0.892	B(M1)(W.u.)=0.0096 22
		177.4073 20	10.2 2	78.0914	(3) ⁻	E1		0.0377	B(E1)(W.u.)=1.5×10 ⁻⁶ 4
		194.0820 16	64.1 13	61.4131	3 ⁺	M1		0.0992	B(M1)(W.u.)=0.00058 13
		255.5039 22	36.6 7	0.0	2 ⁻	[E1]		0.0138	B(E1)(W.u.)=1.8×10 ⁻⁶ 4
264.4260	(5) ⁻	71.4664 10	100 4	192.9594	(4) ⁻	M1		1.64	
		186.336 8	1.6 2	78.0914	(3) ⁻				
265.1111	(7) ⁻	101.5516 8	100	163.5591	(8) ⁻	M1+E2	0.57 8	0.84 5	
271.7630		(7.3366 22)		264.4260	(5) ⁻				E_γ deduced from level scheme of ¹²¹ Sb(n, γ).
282.6499	(3) ⁻	89.691 4	1.00 8	192.9594	(4) ⁻	M1		0.852	B(M1)(W.u.)>0.0017
		115.4203 7	4.2 1	167.2293	(2) ⁺	E1		0.126	B(E1)(W.u.)>4.2×10 ⁻⁵
		204.5591 11	13.5 2	78.0914	(3) ⁻	M1		0.0862	B(M1)(W.u.)>0.0020
		221.244 5	1.17 6	61.4131	3 ⁺				
		282.642 3	100 2	0.0	2 ⁻	M1		0.0368	B(M1)(W.u.)>0.0055
311.2612	(4) ⁻	28.607 4		282.6499	(3) ⁻				
		46.836 6	8.8 18	264.4260	(5) ⁻	M1		5.61	B(M1)(W.u.)>0.071
		118.3014 16	6.05 18	192.9594	(4) ⁻				
		173.83 4	2.5 4	137.4726	(5) ⁺				
		233.174 4	100 2	78.0914	(3) ⁻	M1		0.0610	B(M1)(W.u.)>0.0067
		249.857 6	4.47 18	61.4131	3 ⁺				
		311.291 14	6.47 24	0.0	2 ⁻				
323.0922	(2) ⁺	67.5952 16	9.0 12	255.4986	(3) ⁺	M1		1.93	B(M1)(W.u.)>0.031
		155.867 5	1.79 18	167.2293	(2) ⁺				
		201.5943 15	100 2	121.4967	(1) ⁺	M1		0.0897	B(M1)(W.u.)>0.013
		261.674 4	9.6 4	61.4131	3 ⁺				
333.6801	(3) ⁺	124.0293 10	49.3 15	209.6508	(4) ⁺	M1		0.341	
		140.727 15	1.62 22	192.9594	(4) ⁻				
		166.4511 11	100 2	167.2293	(2) ⁺	M1		0.151	

Adopted Levels, Gammas (continued)

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

$E_i(\text{level})$	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. ‡	δ^\ddagger	$\alpha^\#$	Comments
333.6801	(3) ⁺	272.265 3	25.7 7	61.4131	3 ⁺	M1,E2		0.046 5	
393.6993	(3,4,5) ⁺	138.201 3	11.7 3	255.4986	(3) ⁺	M1+E2	1.1 +20-4	0.40 10	
		184.0474 14	47.8 7	209.6508	(4) ⁺	M1		0.115	B(M1)(W.u.)>0.0063
		256.230 4	17.8 17	137.4726	(5) ⁺				
		332.284 4	100 2	61.4131	3 ⁺	M1,E2		0.0254	
396.9373	(2,3) ⁺	73.840 12	6.4 18	323.0922	(2) ⁺				
		141.4368 13	100 2	255.4986	(3) ⁺	M1		0.236	B(M1)(W.u.)>0.037
		229.707 3	35.4 9	167.2293	(2) ⁺				
		275.444 4	15.0 5	121.4967	(1) ⁺				
		335.497 19	10.9	61.4131	3 ⁺				
413.7657	(6) ⁻	148.6543 6	100 3	265.1111	(7) ⁻	M1		0.206	
		149.3392 13	45.7 13	264.4260	(5) ⁻	M1		0.203	
425.1484	(3,4,5) ⁻	113.8867 5	35.5 7	311.2612	(4) ⁻	M1(+E2)	0.5 2	0.56 8	B(M1)(W.u.)>0.013; B(E2)(W.u.)>77
		153.3853 8	22.1 6	271.7630					
		232.189 3	100 2	192.9594	(4) ⁻	M1		0.0617	B(M1)(W.u.)>0.0068
453.7478	(1,2,3) ⁺	286.5177 21	100 2	167.2293	(2) ⁺	M1,E2		0.039 4	
		392.340 11	31.7 16	61.4131	3 ⁺				
		453.77 4	33 3	0.0	2 ⁻				
480.436		208.673 12	100 8	271.7630					
		215.28 5	44 12	265.1111	(7) ⁻				
481.339	+	419.925 5	100	61.4131	3 ⁺	M1,E2		0.0132 2	
483.6519	(2,3,4) ⁺	86.7138 8	26.2 11	396.9373	(2,3) ⁺	M1		0.938	B(M1)(W.u.)>0.023
		89.9514 16	9.3 9	393.6993	(3,4,5) ⁺	M1+E2	0.73 23	1.39 24	B(M1)(W.u.)>0.0035; B(E2)(W.u.)>1.2×10 ²
		149.9717 6	42.9 9	333.6801	(3) ⁺	M1		0.203	B(M1)(W.u.)>0.0075
		160.560 3	9.6 4	323.0922	(2) ⁺				
		228.153 4	11.9 7	255.4986	(3) ⁺				
		274.0030 18	100 2	209.6508	(4) ⁺	M1+E2	>0.65	0.0407 19	B(E2)(W.u.)>8.1
		316.395 21	16 4	167.2293	(2) ⁺				
586.054	+	132.3058 22	11.9 5	453.7478	(1,2,3) ⁺	M1+E2	>1.25	0.37 11	
		252.381 11	13.0 9	333.6801	(3) ⁺				
		262.93 3	8.0 9	323.0922	(2) ⁺				
		330.555 5	100 4	255.4986	(3) ⁺	M1,E2		0.0258 13	
		418.76 4	37 5	167.2293	(2) ⁺				
631.82	(1 ⁻ ,2 ⁻ ,3 ⁻)	631.83 4	100	0.0	2 ⁻				
642.5649	(3,4)	217.4171 21	26.0 5	425.1484	(3,4,5) ⁻				
		331.308 7	25.3 24	311.2612	(4) ⁻				
		378.134 4	100 4	264.4260	(5) ⁻	M1,E2		0.0176 2	
		449.64 6	16 4	192.9594	(4) ⁻				
		564.2 @ 20		78.0914	(3) ⁻				
658.443		264.746 5	13.9 7	393.6993	(3,4,5) ⁺				
		324.718 17	12.5 7	333.6801	(3) ⁺				

Adopted Levels, Gammas (continued)

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

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\dagger	E_f	J_f^π
658.443		491.224 22	100 7	167.2293	(2) ⁺	796.67	(2 ⁻ ,3 ⁻)	603.60 6	67 12	192.9594	(4) ⁻
667.554		344.462 10	29.2 13	323.0922	(2) ⁺			719.04 20	58 17	78.0914	(3) ⁻
		546.01 6	100 13	121.4967	(1) ⁺			796.5 [@] 2	50 10	0.0	2 ⁻
693.995	(4 ⁻ ,5,6 ⁻)	268.847 3	9.0 10	425.1484	(3,4,5) ⁻	824.954	(2 ⁻ ,3 ⁻)	182.388 18	3.5 5	642.5649	(3,4)
		280.22 5	4.8 10	413.7657	(6) ⁻			193.15 6	9.2 18	631.82	(1 ⁻ ,2 ⁻ ,3 ⁻)
		382.68 6	13.0 18	311.2612	(4) ⁻			542.29 8	86 13	282.6499	(3) ⁻
		422.222 10	100 5	271.7630				747.00 12	100 4	78.0914	(3) ⁻
		501.16 7	35 5	192.9594	(4) ⁻			824.54 19	75 15	0.0	2 ⁻
702.727	+	222.284 21	7.8 13	480.436		868.58	+	471.67 10	100 11	396.9373	(2,3) ⁺
		288.93 3	14.3 22	413.7657	(6) ⁻			474.86 7	86 21	393.6993	(3,4,5) ⁺
		437.66 3	100 9	265.1111	(7) ⁻			841.9 2	33 7	78.0914	(3) ⁻
796.67	(2 ⁻ ,3 ⁻)	485.43 9	63 4	311.2612	(4) ⁻	920.57	(2 ⁻ ,3 ⁻)	920.77 12	100 20	0.0	2 ⁻
		514.12 8	100 12	282.6499	(3) ⁻						

[†] From ¹²¹Sb(n, γ) E=th: secondary, unless otherwise noted.

[‡] From ¹²¹Sb(n, γ) E=th: secondary.

Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

@ Placement of transition in the level scheme is uncertain.

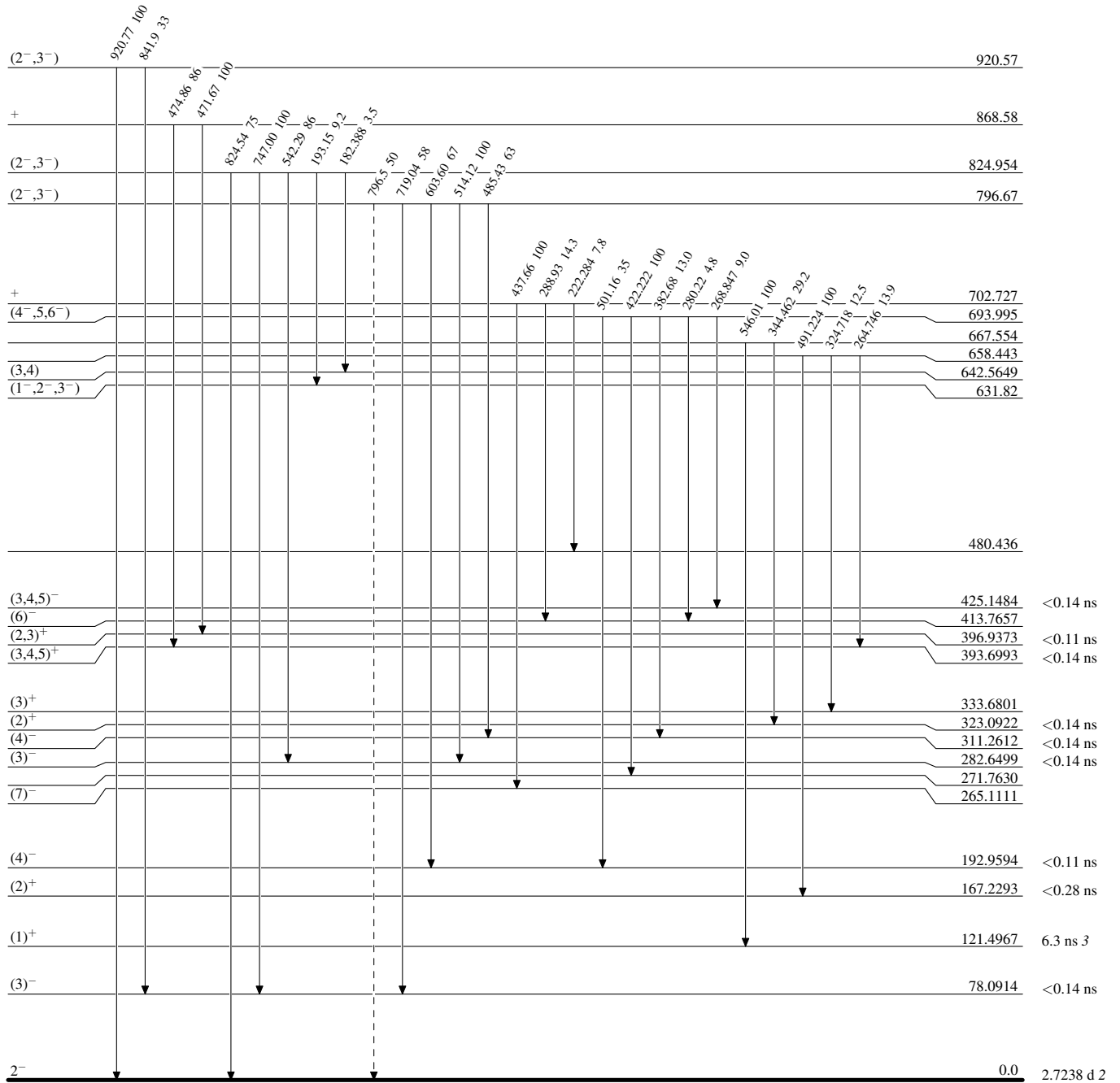
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{122}_{51}\text{Sb}_{71}$

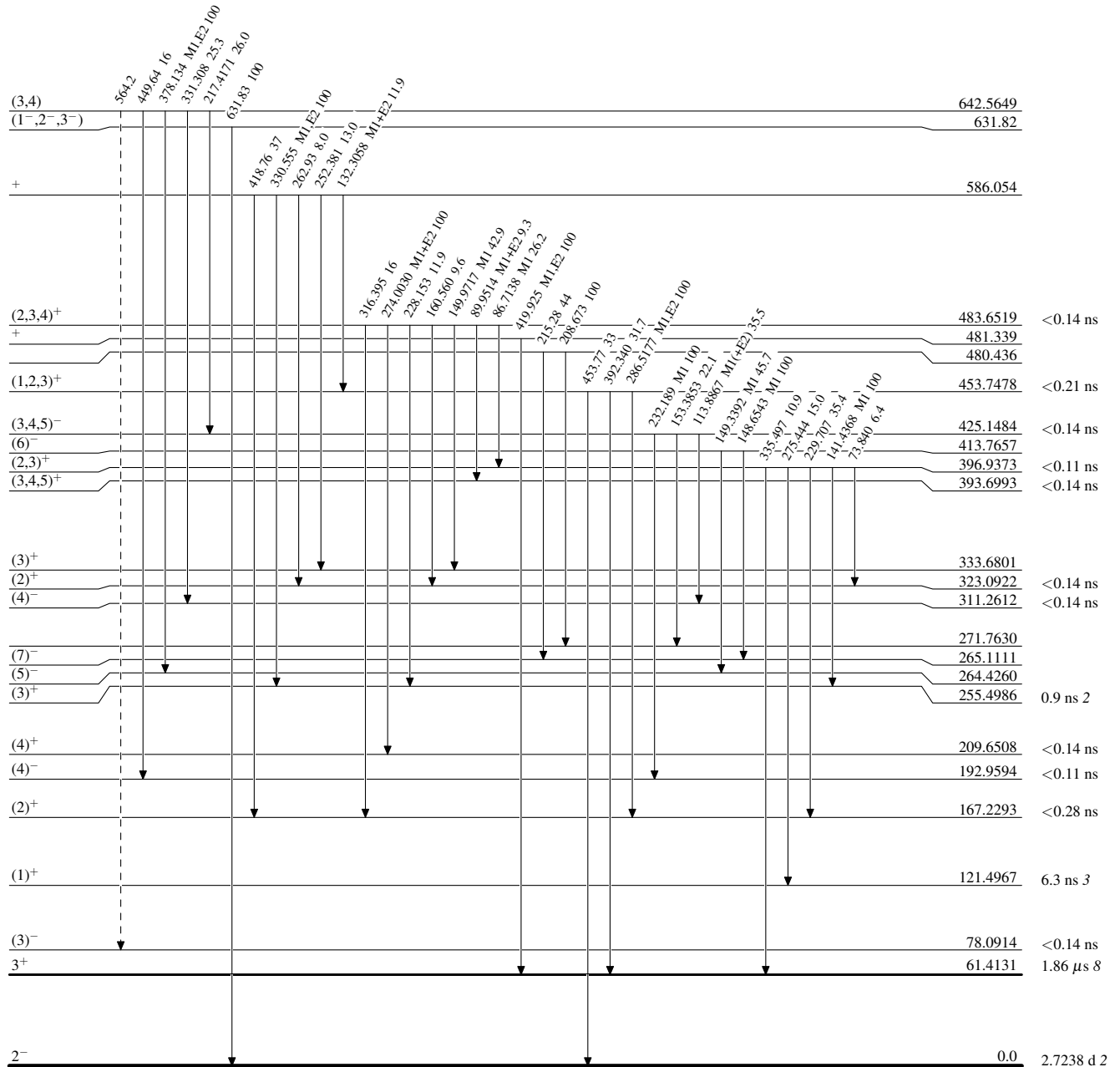
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{122}_{51}\text{Sb}_{71}$

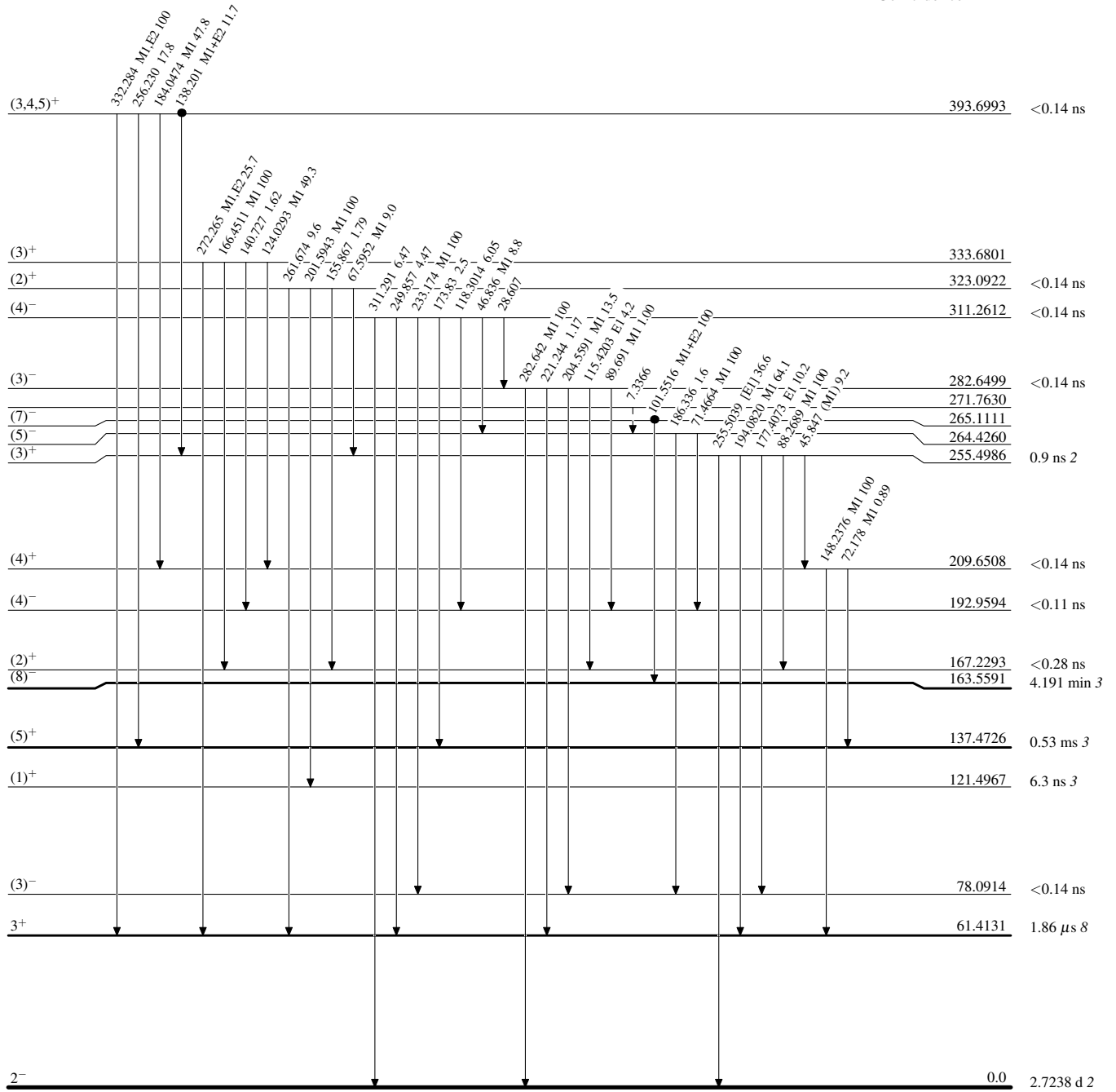
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

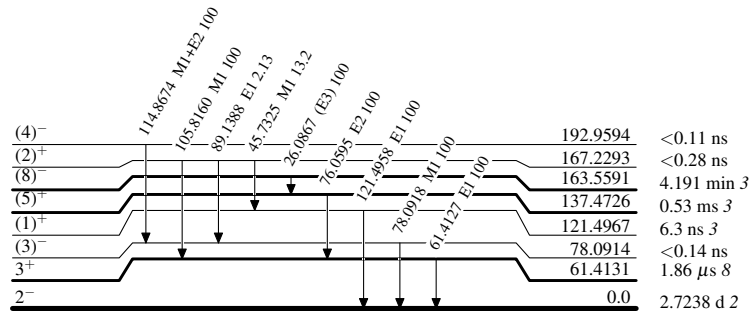
-----▶ γ Decay (Uncertain)
● Coincidence



$^{122}_{51}\text{Sb}_{71}$

Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level

 $^{122}_{51}\text{Sb}_{71}$