Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev	NDS 124, 157 (2015)	1-Aug-2014

$Q(\beta^-)=-4031$ *20*; $S(n)=8834$ *20*; $S(p)=2948$ *19*; $Q(\alpha)=96$ *20*   2012Wa38

^{112}Sb Levels

Cross Reference (XREF) Flags

A	^{112}Te ε decay	D	^{103}Rh(^{12}C,3nγ),^{90}Zr(^{31}P,2αnγ)
B	^{112}Sb IT decay (0.56 μs)	E	^{89}Y(^{29}Si,α2nγ),^{88}Sr(^{28}Si,p3nγ)
C	^{112}Sn(p,nγ)	F	^{112}Sn(^{3}He,t)

E(level)[†]	J^π	$T_{1/2}$	XREF	Comments
0.0[‡]	(3$^+$)	53.5 s *6*	ABCDE	%ε+%β^+=100 J^π: direct feeding of 2$^+$ and 4$^+$ levels in ^{112}Sb following %ε+%β^+ decay. $T_{1/2}$: weighted average for 51.4 *10* s (1976Wi10), 53.5 *5* s (1972Si28), 56 *1* s (1972Mi27), 53 *1* s (1970SuZY), 54 *6* s (1959Se56). configuration: $\pi d_{5/2} \otimes \nu g_{7/2}$.
38.40[‡] *6*	(2$^+$)		C	J^π: 38.3γ to (3$^+$); 357.54γ M1(+E2) from (3$^+$); assignment is tentative.
60.97[‡] *16*	(1$^+$)		C	J^π: Tentative assignment based on the association of this level as a member of the $\pi d_{5/2} \otimes \nu g_{7/2}$ split multiplet.
103.88[‡] *6*	(4$^+$)		ABCDE	J^π: 103.9γ M1(+E2) to (3$^+$).
132.37[‡] *22*	(5$^+$)		BCDE	XREF: C(129.6)D(133.5). J^π: 133.5γ E2 to (3$^+$).
140 *30*	(1$^+$)[a]		F	
167.14[#] *6*	(4$^+$)		CDE	J^π: 167.1γ M1(+E2) to (3$^+$), prompt 37.5γ to (5$^+$).
236.51[#] *5*	(3$^+$)		A CD	J^π: 132.59γ M1+E2 to (4$^+$), 198.08γ M1(+E2) to (2$^+$).
296.16[#] *4*	(2$^+$)		A C	J^π: 296.18γ M1+E2 to (3$^+$), 257.8γ M1 to (2$^+$); member of the $\pi d_{5/2} \otimes \nu d_{5/2}$ split multiplet.
350.90? *20*	(1$^+$)		A	J^π: 350.9γ to (3$^+$); probable feeding in ^{112}Te ε decay (J^π=0$^+$).
369.2[‡] *3*	(6$^+$)		BCDE	XREF: B(366.3)D(370.1). J^π: 236.9γ M1+E2 to (5$^+$), 976.0γ M1+E2 from (7$^+$).
372.70 *20*	(1$^+$)		A	J^π: 372.7γ to (3$^+$); probable feeding in ^{112}Te ε decay (J^π=0$^+$).
395.94[&] *6*	(3$^+$)		C	J^π: 292.1γ M1(+E2) to (4$^+$), 99.9γ to (2$^+$).
411.12[@] *7*	(1$^+$,2$^+$)		C	J^π: 372.72γ M1+E2 to (2$^+$); 350.0γ to (1$^+$).
501.96[#] *21*	(5$^+$)		CDE	J^π: 398.2γ M1+E2 to (4$^+$); member of the $\pi d_{5/2} \times \nu d_{5/2}$ split multiplet.
510.56 *6*	(2$^+$,3$^+$)		C F	XREF: F(510). J^π: 274.05γ M1+E2 to (3$^+$) and 214.4γ M1 to (2$^+$); Probable member of the $\pi d_{5/2} \times \nu s_{1/2}$ split multiplet; J^π=1$^+$ in ^{112}Sn(^{3}He,t), but level not observed in ^{112}Te ε decay (J^π=0$^+$).
672.84 *8*	(3$^+$,4$^+$)		C	J^π: 569.05γ M1 to (4$^+$), 436.8γ M1+E2 to (3$^+$).
714.68 *6*	(2$^+$,3$^+$)		A C	J^π: 418.59γ M1+E2 to (2$^+$), 611.9γ to (4$^+$).
780.97[@] *7*	(1$^+$,2$^+$)		C	J^π: 369.8γ (M1+E2) to (1$^+$), 742.58γ M1 to (2$^+$).
788.25[@] *6*	(2$^+$,3$^+$)		C	J^π: 749.89γ M1 to (2$^+$), 684.6γ to (4$^+$); member of the $\pi d_{5/2} \times \nu d_{3/2}$ split multiplet.
804.37 *11*	2$^+$,3,4,5$^+$		C	J^π: 637.2γ to (4$^+$) and 804.6γ to (3$^+$).
808.18 *4*	(2$^+$)		C	J^π: 808.17γ M1+E2 to (3$^+$), 704.3γ (E2) to (4$^+$).
825.9 *4*	(8$^-$)	536 ns *22*	B DE	XREF: D(826.7). J^π: 456.4γ M2+E3 to (6$^+$). $T_{1/2}$: from γ(t) in 1982Ma29. Other: 0.56 μs *12* from 456.4γ(t) in 1976Ke07. μ: +2.19 *4* (1976Ke07) using the perturbed angular correlations technique.

Adopted Levels, Gammas (continued)

^{112}Sb Levels (continued)

E(level)[†]	J^{π}	$T_{1/2}$	XREF	Comments
				Q: 0.71 8 from $\gamma(\theta,t)$ from abs(Q(^{112}Sb,8$^-$)/Q(^{123}Sb,5/2$^+$))=1.958 10 in 1982Ma29, deduced using the perturbed angular correlations technique, and Q(^{121}Sb,5/2$^+$)=−0.36 4 (1978Bu24).
				configuration: πd$_{5/2}$⊗νh$_{11/2}$.
844.9? 4			A	
973.4 3	(6$^+$)		CDE	J^{π}: 471.7γ M1+E2 to (5$^+$), 701.3γ E1 from (7$^-$).
1042.7 4	(8$^-$)		D	J^{π}: 216.8γ (M1+E2) to (8$^-$), 631.6γ (M1+E2) from (7$^-$).
1120 30	(1$^+$)[a]		F	
1169.9 5			D	
1184.3 5	(7$^+$)		DE	XREF: D(1185.2).
				J^{π}: 815.1γ (M1+E2) to (6$^+$).
1268.0 4	(7$^-$)		DE	J^{π}: 441.9γ M1+E2 to (8$^-$).
1340 30	(1$^+$)[a]		F	
1340.3 4			D	
1344.7 3	(7$^+$)		D	J^{π}: 976.0γ M1+E2 to (6$^+$), 1211.9γ E2 to (5$^+$).
1389.5 3	(6$^+$)		D	J^{π}: 1285.6γ E2 to (4$^+$).
1529.8 4	(9$^-$)		D	J^{π}: 704.0γ M1+E2 to (8$^-$).
1540 30	1$^+$[a]		F	
1674.4 4	(7$^-$)		DE	J^{π}: 701.3γ E1 to (6$^+$) and 848.4γ M1+E2 to (8$^-$).
1681.5 5	(8$^+$)		D	J^{π}: 1312.3γ E2 to (6$^+$).
1690.5 5	(7$^+$)		D	J^{π}: 1321.3γ M1+E2 to (6$^+$).
1746.6[e] 4	(8$^-$)		DE	J^{π}: 920.8γ M1+E2 to (8$^-$), 402.0γ E1 to (7$^+$) and 72.4γ M1+E2 to (7$^-$).
1830 30	(1$^+$)[a]		F	
1884.4 4	(10$^-$)		D	XREF: D(1885.2).
				J^{π}: 1058.5γ E2 to (8$^-$) and 355.2γ M1+E2 to (9$^-$).
1948.7[e] 4	(9$^-$)		DE	J^{π}: 1122.9γ M1+E2 to (8$^-$); band member.
2075.0 4	(9$^-$)		D	J^{π}: 1249.1γ (M1+E2) to (8$^-$).
2100.0 6	(9$^+$)		D	J^{π}: 418.5γ (M1+E2) to (8$^+$).
2161.5 6	(8$^+$)		D	J^{π}: 471.0γ (M1+E2) to (7$^+$).
2180 30	(1$^+$)[a]		F	
2274.3[e] 4	(10$^-$)		DE	J^{π}: 527.7γ E2 to (8$^-$), 325.5γ M1+E2 to (9$^-$).
2320.1 5	(11$^+$)		D	J^{π}: 435.7γ E1 to (10$^-$).
2410 30	(1$^+$)[a]		F	
2481.8 5	(12$^-$)		D	J^{π}: 161.8γ (E1) to (11$^+$), 597.5γ (E2) to (10$^-$).
2492.1 5			D	
2547.9 5	(11$^-$)		D	J^{π}: 664.0γ (M1+E2) to (10$^-$) and 1017.6γ (E2) to (9$^-$).
2569.8 6	(9$^+$)		D	J^{π}: 1385.5γ E2 to (7$^+$).
2581.6 11			D	
2601.5 5	(12$^-$)		D	J^{π}: 717.1γ E2 to (10$^-$).
2628.1[e] 4	(11$^-$)	0.39 ps $+17-18$	DE	XREF: E(2626.9).
				J^{π}: 679.1γ E2 to (9$^-$) and 353.9γ M1+E2 to (10$^-$).
				$T_{1/2}$: From 354γ DSAM in 2005De02.
2720 30	(1$^+$)[a]		F	
2868.2 5	(12$^-$)		D	J^{π}: 983.8γ E2 to (10$^-$).
2908.1 6			D	
2987.6 4	(12$^-$)		D	J^{π}: 1103.4γ E2 to (10$^-$), 358.9γ M1+E2 to (11$^-$).
3008.8[e] 4	(12$^-$)	0.35 ps $+11-12$	DE	XREF: E(3007.3).
				J^{π}: 734.6γ E2 to (10$^-$) and 380.6γ M1+E2 to (11$^-$).
				$T_{1/2}$: From 380γ DSAM in 2005De02.
3082.0 5	(12$^-$)		D	J^{π}: 1197.7γ E2 to (10$^-$), 761.9γ to (11$^+$).
3100 30	(1$^+$)[a]		F	
3224.0 6	(14$^-$)		D	J^{π}: 622.6γ E2 to (12$^-$).
3295.7 5	(12$^-$)		D	J^{π}: 1411.3γ (E2) to (10$^-$); assumed yrast state.
3380.1 5	(13$^+$)		D	J^{π}: 1060.0γ E2 to (11$^+$) and 511.8γ to (12$^-$).
3382.3 4	(13$^-$)		D	J^{π}: 754.3γ E2 to (11$^-$), 373.5γ M1+E2 to (12$^-$).

Adopted Levels, Gammas (continued)

^{112}Sb Levels (continued)

E(level)[†]	J^π	$T_{1/2}$	XREF	Comments
3401.4[e] 5	(13$^-$)	0.35 ps 8	D	J^π: 773.5γ E2 to (11$^-$), 392.4γ M1+E2 to (12$^-$); band member.
				$T_{1/2}$: From 392γ DSAM in 2005De02;
3403.1 5	(12$^+$)		D	J^π: 1083.0γ M1+E2 to (11$^+$).
3420 30	(1$^+$)[a]		F	
3489.1 5	(12$^+$)		D	J^π: 1168.8γ M1+E2 to (11$^+$), 1007.4γ (E1) to (12$^-$).
3622.0 5	(14$^-$)		D	J^π: 613.2γ E2 to (12$^-$).
3680 30	(1$^+$)[a]		F	
3686.6 5	(14$^-$)		D	J^π: 285.2γ (M1+E2) to (13$^-$);
3686.8 6	(14$^-$)		D	J^π: 818.6γ E2 to (12$^-$); yrast state assumed.
3725.6 7			D	
3730.8 6			D	
3747.3 6	(13$^-$)		D	J^π: 1199.4γ (E2) to (11$^-$).
3794.1 7			D	
3808.3[e] 5	(14$^-$)		DE	XREF: E(3806.8).
				J^π: 799.7γ E2 to (12$^-$), 425.9γ M1+E2 to (13$^-$); band member.
3845.1 6			D	
3850 30	1^{+a}		F	
4050 30	1^{+a}		F	
4088.9 6	(15$^+$)		D	J^π: 708.8γ E2 to (13$^+$).
4089.3 7	(15$^-$)		D	J^π: 402.5γ (M1+E2) to (14$^-$).
4121.3 5	(14$^+$)		D	J^π: 632.0γ E2 to (12$^+$).
4223.0 6			D	
4240 30	1^{+a}		F	
4254.8[c] 6	(14$^-$)		D	J^π: 1653.3γ E2 to (12$^-$); band member.
4260.5 5	(15$^-$)		DE	XREF: E(4258.7).
				J^π: 451.9γ M1+E2 to (14$^-$); band member.
4276.5 6			D	
4294.7[e] 5	(15$^-$)		DE	XREF: E(4293.0).
				J^π: 893.2γ E2 to (13$^-$), 486.3γ M1+E2 to (14$^-$); band member.
4320.2 6	(15$^+$)		D	J^π: 940.1γ E2 to (13$^+$); yrast state.
4391.3 7	(16$^-$)		D	J^π: 302.0γ (M1+E2) to (15$^-$).
4433.4[b] 6	(15$^+$)		D	J^π: 312.1γ M1+E2 to (14$^+$); band member.
4600 30	1^{+a}		F	
4675.7 7	(16$^+$)		D	J^π: 586.8γ (M1+E2) to (15$^+$).
4797.8[e] 5	(16$^-$)		DE	XREF: E(4794.9).
				J^π: 989.8γ E2 to (14$^-$), 503.0γ M1+E2 to (15$^-$); band member.
4837.2[c] 6	(16$^-$)		D	J^π: 1613.2γ E2 to (14$^-$); band member.
4863.9 6	(16$^+$)		D	J^π: 742.6γ E2 to (14$^+$); yrast state.
4880 30	1^{+a}		F	
5161.0[b] 6	(17$^+$)		D	J^π: 727.7γ E2 to (15$^+$), 297.0γ M1+E2 to (16$^+$); band member.
5310 30	(1$^+$)[a]		F	
5325.7[e] 6	(17$^-$)		DE	XREF: E(5320.3).
				J^π: 1030.8γ to (15$^-$), 527.9γ M1+E2 to (16$^-$); band member.
5570 30	(1$^+$)[a]		F	
5643.7[c] 7	(18$^-$)		D	J^π: 806.5γ E2 to (16$^-$).
5717.0 7			D	
5729.3 7	(18$^+$)		D	J^π: 865.4γ E2 to (16$^+$).
6002.3[b] 7	(19$^+$)		D	J^π: 841.2γ E2 to (17$^+$), 273.0γ M1+E2 to (18$^+$); band member.
6544.5[c] 7	(20$^-$)		D	J^π: 900.8γ to (18$^-$); band member.
6934.5[b] 7	(21$^+$)		D	J^π: 932.2γ E2 to (19$^+$); band member.
7535.3[c] 8	(22$^-$)		D	J^π: 990.8γ E2 to (20$^-$); band member.
7937.4[b] 8	(23$^+$)		D	J^π: 1002.9γ E2 to (21$^+$); band member.
8615.9[c] 9	(24$^-$)		D	J^π: 1080.6γ (22$^-$); band member.

Adopted Levels, Gammas (continued)

^{112}Sb Levels (continued)

E(level)†	J^π	XREF	Comments
8996.4^b 9	(25$^+$)	D	J^π: 1059.0γ E2 to (23$^+$); band member.
9784.2^c 9	(26$^-$)	D	J^π: 1168.3γ to (24$^-$); band member.
10113.2^b 10	(27$^+$)	D	J^π: 1116.8γ E2 to (25$^+$); band member.
11041.2^c 10	(28$^-$)	D	J^π: 1257.0γ to (26$^-$); band member.
11296.4^b 10	(29$^+$)	D	J^π: 1183.2γ E2 to (27$^+$); band member.
12393.6^c 11	(30$^-$)	D	J^π: 1352.4γ to (28$^-$); band member.
12595.2^b 10	(31$^+$)	D	J^π: 1298.8 γ E2 to (29$^+$); band member.
13839.4^c 12	(32$^-$)	D	J^π: 1445.8γ to (30$^-$); band member.
14088.8^b 11	(33$^+$)	D	J^π: 1493.6γ to (31$^+$); band member.
15387.6^c 13	(34$^-$)	D	J^π: 1548.2γ to (32$^-$); band member.
15784.3^b 11	(35$^+$)	D	J^π: 1695.5γ to (33$^+$); band member.
17053.6^c 15	(36$^-$)	D	J^π: 1666.0γ to (34$^-$); band member.
17655.6^b 12	(37$^+$)	D	J^π: 1871.3γ to (35$^+$); band member.
y^f	(10$^+$)	D	Additional information 1.
			J^π: Possible γ-ray transitions to the (8$^+$) level at 2161.4 keV and the (9$^+$) level at 2569.5 keV. All transitions in the band associated with this level are observed by 1998La14 in coincidence with the 471γ, depopulating the (8$^+$) level at 2161.4 keV and 1385γ, depopulating the (9$^+$) level at 2569.5 keV.
y+378.09^f 24	(11$^+$)	D	J^π: 378.2γ M1+E2 to (10$^+$); band member.
y+709.4 11	(12$^+$)	D	J^π: 368.2γ (M1+E2) from (13$^+$).
y+750.72^f 24	(12$^+$)	D	J^π: 750.6γ to (10$^+$), 372.6γ M1+E2 to (11$^+$); band member.
y+1077.6^f 3	(13$^+$)	D	J^π: 699.7γ to (11$^+$), 326.8γ M1+E2 to (12$^+$); band member.
y+1095.4 5	(13$^+$)	D	J^π: 277.2γ M1+E2 from (14$^+$).
y+1372.6^f 4	(14$^+$)	D	J^π: 621.7γ to (12$^+$), 294.9γ M1+E2 to (13$^+$); band member.
y+1690.4^f 5	(15$^+$)	D	J^π: 613.0γ to (13$^+$), 317.8γ M1+E2 to (14$^+$); band member.
y+2046.2^f 6	(16$^+$)	D	J^π: 673.9γ to (14$^+$), 355.8γ M1+E2 to (15$^+$); band member.
y+2437.8^f 6	(17$^+$)	D	J^π: 747γ to (15$^+$), 391.6γ M1+E2 to (16$^+$); band member.
y+2852.1^f 7	(18$^+$)	D	J^π: 414.2γ M1+E2 to (17$^+$); band member.
y+3217.1 8	(19$^+$)	D	J^π: 365.0γ M1+E2 to (18$^+$); band member.
y+3284.6^f 8	(19$^+$)	D	J^π: 432.5γ M1+E2 to (18$^+$); band member.
x^d	(11$^-$)	D	Additional information 2.
			J^π: Possible γ-ray transition to the (10$^-$) level at 1884.4 keV. All in-band transitions are observed by 1998La14 to be in coincidence with the 1059γ, depopulating the (10$^-$) level at 1884.4 keV.
x+561.0^d 3	(13$^-$)	D	J^π: 561.0γ to (11$^-$); band member.
x+1216.8^d 5	(15$^-$)	D	J^π: 655.8γ to (13$^-$); band member.
x+1960.5^d 6	(17$^-$)	D	J^π: 743.7γ E2 to (15$^-$); band member.
x+2794.5^d 6	(19$^-$)	D	J^π: 834.0γ E2 to (17$^-$); band member.
x+3718.4^d 7	(21$^-$)	D	J^π: 923.9γ (E2) to (19$^-$); band member.
x+4733.7^d 8	(23$^-$)	D	J^π: 1015.3γ (E2) to (21$^-$); band member.
x+5842.6^d 8	(25$^-$)	D	J^π: 1108.9γ to (23$^-$); band member.
x+7046.5^d 9	(27$^-$)	D	J^π: 1203.9γ to (25$^-$); band member.
x+8346.3^d 9	(29$^-$)	D	J^π: 1299.8γ to (27$^-$); band member.
x+9733.3^d 10	(31$^-$)	D	J^π: 1387.0γ to (29$^-$); band member.
x+11202.0^d 10	(33$^-$)	D	J^π: 1468.6γ to (31$^-$); band member.
x+12772.6^d 11	(35$^-$)	D	J^π: 1570.6γ to (33$^-$); band member.
x+14480.6^d 12	(37$^-$)	D	J^π: 1708.0γ to (35$^-$); band member.

Adopted Levels, Gammas (continued)

^{112}Sb Levels (continued)

E(level)[†]	J^{π}	XREF	Comments
x+16361.4[d] *14*	(39⁻)	D	J^{π}: 1880.8γ to (37⁻); band member.
x+18439.4?[d] *17*	(41⁻)	D	J^{π}: 2078γ to (39⁻); band member.

[†] From a least squares fit to Eγ.

[‡] Probable member of the $\pi d_{5/2} \otimes \nu g_{7/2}$ split multiplet.

[#] Probable member of the $\pi d_{5/2} \otimes \nu d_{5/2}$ split multiplet.

[@] Probable member of the $\pi d_{5/2} \otimes \nu d_{3/2}$ split multiplet.

[&] Probable member of the $\pi d_{5/2} \otimes \nu s_{1/2}$ split multiplet.

[a] From ΔL=0 in ^{112}Sn(^{3}He,t) in 1995Ph01.

[b] Band(A): ΔJ=2 band based on the 4433.4-keV (15⁺) state.

[c] Band(B): ΔJ=2 band based on the 4254.8-keV (14⁻) state.

[d] Band(C): ΔJ=2 band based on the (11⁻) state.

[e] Band(D): ΔJ=1 band, based on the 1746.6-keV (8⁻) state configuration=$\pi g_{9/2}^{-1} \nu h_{11/2}$.

[f] Band(E): ΔJ=1 band, based on the (10⁺) state.

Adopted Levels, Gammas (continued)

$$\gamma(^{112}\text{Sb})$$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ^a	$\alpha^{\&}$	Comments
38.40	(2^+)	$38.3^{\ddagger}$ 4	$100^{\ddagger}$	0.0	(3^+)				
60.97	(1^+)	$(22.7^{\ddagger})$	$100^{\ddagger}$	38.40	(2^+)				E_γ: not measured directly, but inferred from γ-γ coincidences in ^{112}Sn(p,nγ) (1997Fa08).
103.88	(4^+)	103.9 3	100	0.0	(3^+)	M1(+E2)$^{@}$	$-0.01^{@}$ 4	0.555 10	α(K)=0.479 8; α(L)=0.0616 12; α(M)=0.01220 24 α(N)=0.00235 5; α(O)=0.000232 5 Mult.: A$_2$=−0.264 86 (1997Fa08); A$_4$=−0.042 73 (1997Fa08); A$_2$=−0.30 3 and DCO=0.61 6 in ^{103}Rh(^{12}C,3nγ) (1998La14).
132.37	(5^+)	(29.6)		103.88	(4^+)				E_γ: not measured directly, but inferred from γ-γ coincidences in 1998La14.
		133.5 3	100 4	0.0	(3^+)	E2		0.593 10	α(K)=0.454 8; α(L)=0.1116 19; α(M)=0.0228 4 α(N)=0.00420 7; α(O)=0.000331 6 Mult.: A$_2$=0.18 5 and DCO=1.47 5 in ^{103}Rh(^{12}C,3nγ) (1998La14).
167.14	(4^+)	$37.5^{\ddagger}$ 4	$7^{\ddagger}$ 4	132.37	(5^+)				
		167.1 3	100 5	0.0	(3^+)	M1(+E2)$^{@}$	$+0.01^{@}$ 4	0.1482 23	α(K)=0.1280 19; α(L)=0.0163 3; α(M)=0.00322 5 α(N)=0.000622 10; α(O)=6.14×10^{-5} 10 Mult.: α(K)exp=0.102 30 (1997Fa08); A$_2$=−0.254 95 and A$_4$=−0.044 81 (1997Fa08); A$_2$=−0.29 4 and DCO=0.98 9 in ^{103}Rh(^{12}C,3nγ) (1998La14).
236.51	(3^+)	$69.39^{\ddagger}$ 4	$22^{\ddagger}$ 4	167.14	(4^+)	M1(+E2)$^{@}$	$+0.02^{@}$ 8	1.76 5	α(K)=1.52 3; α(L)=0.197 17; α(M)=0.039 4 α(N)=0.0075 7; α(O)=0.00074 5 Mult.: A$_2$=−0.145 103 (1997Fa08); A$_4$=−0.132 89 (1997Fa08).
		$132.59^{\ddagger}$ 4	$100^{\ddagger}$ 6	103.88	(4^+)	M1+E2$^{@}$	$-0.07^{@}$ 6	0.282 6	α(K)=0.243 5; α(L)=0.0314 11; α(M)=0.00621 23 α(N)=0.00120 4; α(O)=0.000118 3 Mult.,δ: α(K)exp=0.225 44, A$_2$=−0.011 107 and A$_4$=0.064 93 (1997Fa08).
		$198.08^{\ddagger}$ 4	$31^{\ddagger}$ 3	38.40	(2^+)	M1(+E2)$^{@}$	$-0.04^{@}$ 6	0.0935 14	α(K)=0.0808 12; α(L)=0.01025 18; α(M)=0.00203 4 α(N)=0.000391 7; α(O)=3.87×10^{-5} 6 Mult.,δ: α(K)exp=0.075 14, A$_2$=−0.243 139 and A$_4$=−0.133 121 (1997Fa08).
		$236.6^{\ddagger}$ 3	$17^{\ddagger}$ 8	0.0	(3^+)	(M1+E2)		0.0582	α(K)=0.0503 8; α(L)=0.00634 10; α(M)=0.001253 18 α(N)=0.000242 4; α(O)=2.39×10^{-5} 4 Mult.: α(K)exp=0.067 18 (1997Fa08); doublet.
296.16	(2^+)	$59.7^{\ddagger}$ 1	$8.3^{\ddagger}$ 15	236.51	(3^+)				
		$257.8^{\ddagger}$ 1	$5.5^{\ddagger}$ 7	38.40	(2^+)	M1$^{@}$		0.0464	α(K)=0.0401 6; α(L)=0.00504 7; α(M)=0.000997 14 α(N)=0.000192 3; α(O)=1.91×10^{-5} 3
		$296.18^{\ddagger}$ 4	$100^{\ddagger}$ 4	0.0	(3^+)	M1+E2$^{@}$		0.0323	α(K)=0.0280 4; α(L)=0.00350 5; α(M)=0.000691 10 α(N)=0.0001335 19; α(O)=1.323×10^{-5} 19
350.90?	(1^+)	$350.9^{\#}$ 2	$100^{\#}$	0.0	(3^+)				

Adopted Levels, Gammas (continued)

$\gamma(^{112}\text{Sb})$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ^a	$\alpha^\&$	Comments
369.2	(6+)	236.9 3	100	132.37	(5+)	M1+E2		0.0580	α(K)=0.0501 8; α(L)=0.00632 9; α(M)=0.001249 18 α(N)=0.000241 4; α(O)=2.39×10⁻⁵ 4 Mult.: A₂=−0.18 3, DCO=0.55 2 in ¹⁰³Rh(¹²C,3nγ) (1998La14); α(K)exp=0.067 18 (1997Fa08).
372.70	(1+)	372.7[#] 2	100[#]	0.0	(3+)				
395.94	(3+)	99.9[‡] 3	3.0[‡] 9	296.16	(2+)				
		159.3 4	18.2 17	236.51	(3+)	M1+E2[@]		0.169 3	α(K)=0.1458 23; α(L)=0.0186 3; α(M)=0.00368 6 α(N)=0.000710 11; α(O)=7.00×10⁻⁵ 11 Mult.: α(K)exp=0.158 50 (1997Fa08).
		228.8[‡] 2	42.9[‡] 22	167.14	(4+)	(M1)[@]		0.0636	α(K)=0.0550 8; α(L)=0.00693 10; α(M)=0.001371 20 α(N)=0.000265 4; α(O)=2.62×10⁻⁵ 4 Mult.: α(K)exp=0.050 5 (1997Fa08).
		292.1[‡] 1	19.9[‡] 22	103.88	(4+)	M1(+E2)[@]	+0.07[@] 9	0.0335	α(K)=0.0290 5; α(L)=0.00364 7; α(M)=0.000718 13 α(N)=0.0001387 24; α(O)=1.374×10⁻⁵ 22 Mult.: α(K)exp=0.048 2 (1997Fa08); Mult.: A₂=−0.154 (1997Fa08); A₄=0.017 111 (1997Fa08).
		357.54[‡] 4	100[‡] 5	38.40	(2+)	M1(+E2)[@]	+0.01[@] 5	0.0199	α(K)=0.01727 25; α(L)=0.00215 3; α(M)=0.000424 6 α(N)=8.19×10⁻⁵ 12; α(O)=8.13×10⁻⁶ 12 Mult.: α(K)exp=0.017 2 (1997Fa08); A₂=−0.234 105 (1997Fa08); A₄=−0.024 89 (1997Fa08).
411.12	(1+,2+)	350.0[‡] 4	39[‡] 6	60.97	(1+)				
		372.72[‡] 4	100[‡] 3	38.40	(2+)	M1+E2[@]	−0.07[@] 4	0.0179	α(K)=0.01555 22; α(L)=0.00193 3; α(M)=0.000381 6 α(N)=7.37×10⁻⁵ 11; α(O)=7.31×10⁻⁶ 11 Mult.: α(K)exp=0.017 2 (1997Fa08); A₂=−0.002 81 (1997Fa08); A₄=−0.001 71 (1997Fa08).
501.96	(5+)	335.0 3	42.2 16	167.14	(4+)	M1+E2[@]	−0.14[@] 8	0.0236	α(K)=0.0204 3; α(L)=0.00255 5; α(M)=0.000505 9 α(N)=9.74×10⁻⁵ 16; α(O)=9.64×10⁻⁶ 15 Mult.: α(K)exp=0.029 9 and A₂=−0.229 371, A₄=−0.058 311 (1997Fa08); DCO=0.76 4 in ¹⁰³Rh(¹²C,3nγ) (1998La14).
		398.2 3	100 4	103.88	(4+)	M1+E2[@]	−0.14[@] 8	0.01519	α(K)=0.01316 19; α(L)=0.001635 24; α(M)=0.000323 5 α(N)=6.24×10⁻⁵ 9; α(O)=6.18×10⁻⁶ 9 Mult.: α(K)exp=0.014 2 and A₂=−0.508 218, A₄=−0.010 169 (1997Fa08); DCO=0.70 9 in ¹⁰³Rh(¹²C,3nγ) (1998La14).
510.56	(2+,3+)	114.9[‡] 5	24[‡] 5	395.94	(3+)	M1(+E2)[@]	+0.07[@] 15	0.42 3	α(K)=0.363 18; α(L)=0.047 7; α(M)=0.0093 15 α(N)=0.0018 3; α(O)=0.000176 18 Mult.: A₂=−0.147 135 (1997Fa08); A₄=−0.077 116 (1997Fa08).
		214.4[‡] 1	16.1[‡] 23	296.16	(2+)	M1[@]	[@]	0.0756	α(K)=0.0653 10; α(L)=0.00826 12; α(M)=0.001633 23 α(N)=0.000315 5; α(O)=3.12×10⁻⁵ 5 Mult.: α(K)exp=0.055 8 (1997Fa08).
		274.05[‡] 4	50.6[‡] 23	236.51	(3+)	M1+E2[@]		0.0395	α(K)=0.0342 5; α(L)=0.00429 6; α(M)=0.000848 12

Adopted Levels, Gammas (continued)

γ(¹¹²Sb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ^a	α[&]	Comments
									α(N)=0.0001637 23; α(O)=1.622×10⁻⁵ 23
									Mult.: α(K)exp=0.038 4 (1997Fa08).
									Mult.: A₂=−0.276 166 (1997Fa08); A₄=−0.176 146 (1997Fa08).
510.56	(2⁺,3⁺)	510.7[‡] 3	100[‡] 20	0.0	(3⁺)				
672.84	(3⁺,4⁺)	436.8[‡] 4	22.1[‡] 15	236.51	(3⁺)	M1+E2		0.01206	α(K)=0.01046 15; α(L)=0.001291 19; α(M)=0.000255 4
									α(N)=4.92×10⁻⁵ 7; α(O)=4.89×10⁻⁶ 7
									Mult.: α(K)exp=0.012 2 (1997Fa08).
		505.7[‡] 5	100[‡] 27	167.14	(4⁺)	M1+E2		0.00840	α(K)=0.00729 11; α(L)=0.000896 13; α(M)=0.000177 3
									α(N)=3.42×10⁻⁵ 5; α(O)=3.40×10⁻⁶ 5
									Mult.: α(K)exp=0.0075 9 (1997Fa08).
		569.05[‡] 9	26.7[‡] 15	103.88	(4⁺)	M1		0.00631	α(K)=0.00548 8; α(L)=0.000670 10; α(M)=0.0001322 19
									α(N)=2.55×10⁻⁵ 4; α(O)=2.54×10⁻⁶ 4
									Mult.: α(K)exp=0.0062 7 (1997Fa08).
		672.7[‡] 1	25[‡] 3	0.0	(3⁺)				
714.68	(2⁺,3⁺)	418.59[‡] 5	100[‡] 7	296.16	(2⁺)	M1(+E2)[@]	+0.28[@] 56	0.01338 23	α(K)=0.01158 25; α(L)=0.00145 6; α(M)=0.000286 12
									α(N)=5.52×10⁻⁵ 20; α(O)=5.45×10⁻⁶ 9
									Mult.: α(K)exp=0.012 2, A₂=−0.057 100 and A₄=−0.004 87 (1997Fa08).
		476.9[#] 2	25[#] 5	236.51	(3⁺)				
		611.9[#] 5	8[#] 2	103.88	(4⁺)				
		653.8[‡] 2	5.4[‡] 12	60.97	(1⁺)				
		714.7[#] 5	4.2[#] 16	0.0	(3⁺)				
780.97	(1⁺,2⁺)	369.8[‡] 1	24.1[‡] 25	411.12	(1⁺,2⁺)	(M1+E2)[@]	−0.02[@] 14	0.0183	α(K)=0.01586 23; α(L)=0.00197 3; α(M)=0.000389 6
									α(N)=7.51×10⁻⁵ 12; α(O)=7.46×10⁻⁶ 11
									Mult.: α(K)exp=0.016 2, A₂=−0.304 219 and A₄=−0.104 183 (1997Fa08).
		719.9[‡] 3	8.9[‡] 13	60.97	(1⁺)				
		742.58[‡] 4	100[‡] 8	38.40	(2⁺)	M1[@]		0.00335	α(K)=0.00291 4; α(L)=0.000354 5; α(M)=6.97×10⁻⁵ 10
									α(N)=1.347×10⁻⁵ 19; α(O)=1.343×10⁻⁶ 19
									Mult.: α(K)exp=0.0040 10 (1997Fa08).
788.25	(2⁺,3⁺)	491.8[‡] 4	72[‡] 16	296.16	(2⁺)	(M1+E2)		0.00900	α(K)=0.00781 11; α(L)=0.000960 14; α(M)=0.000189 3
									α(N)=3.66×10⁻⁵ 6; α(O)=3.64×10⁻⁶ 6
									Mult.: α(K)exp=0.0082 18 (1997Fa08).
		551.6[‡] 5	28[‡] 6	236.51	(3⁺)				
		684.6[‡] 3	20[‡] 3	103.88	(4⁺)				
		749.89[‡] 5	100[‡] 6	38.40	(2⁺)	M1		0.00328	α(K)=0.00285 4; α(L)=0.000346 5; α(M)=6.81×10⁻⁵ 10

Adopted Levels, Gammas (continued)

$\gamma(^{112}$Sb$)$ (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [†]	E_f	J_f^π	Mult. [†]	δ [a]	α [&]	Comments
									α(N)=1.316×10^{-5} *19*; α(O)=1.313×10^{-6} *19*
									Mult.: α(K)exp=0.0032 *6* (1997Fa08).
788.25	(2$^+$,3$^+$)	788.1[‡] *1*	45[‡] *6*	0.0	(3$^+$)				
804.37	2$^+$,3,4,5$^+$	637.2[‡] *1*	100[‡] *7*	167.14	(4$^+$)				
		804.6[‡] *3*	85[‡] *11*	0.0	(3$^+$)				
808.18	(2$^+$)	641.2[‡] *2*	7[‡] *3*	167.14	(4$^+$)				
		704.3[‡] *2*	79[‡] *9*	103.88	(4$^+$)	(E2)[@]		0.00311	α(K)=0.00268 *4*; α(L)=0.000347 *5*; α(M)=6.87×10^{-5} *10*
									α(N)=1.318×10^{-5} *19*; α(O)=1.271×10^{-6} *18*
									Mult.: α(K)exp=0.0031 *3* (1997Fa08).
		808.17[‡] *4*	100[‡] *23*	0.0	(3$^+$)	M1+E2[@]	+0.25[@] *11*	0.00272 *5*	α(K)=0.00236 *5*; α(L)=0.000287 *5*; α(M)=5.65×10^{-5} *10*
									α(N)=1.093×10^{-5} *19*; α(O)=1.089×10^{-6} *19*
									Mult.: α(K)exp=0.0027 *4* and A$_2$=0.022 *396*, A$_4$=−0.179 *342*
									(1997Fa08).
825.9	(8$^-$)	456.4 *3*	100	369.2	(6$^+$)	M2(+E3)		0.034 *4*	α(K)=0.028 *4*; α(L)=0.00443 *13*; α(M)=0.00089 *4*
									α(N)=0.000170 *5*; α(O)=1.57×10^{-5} *7*
									Mult.: A$_2$=0.28 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.75
									3 in ^{103}Rh(^{12}C,3nγ) (1998La14); K/L=5.6 *13* in
									1976Ka19.
									δ: 2.5 *20* from K/L=5.6 *13* in 1976Ka19. However, the
									deduced E3 transition strength of B(E3)(W.u.)=620 *140*
									exceeds RUL=100 by more than 3 sigma.
844.9?		494.0[#] *3*	100[#]	350.90?	(1$^+$)				
973.4	(6$^+$)	471.7 *3*	100	501.96	(5$^+$)	M1+E2		0.00997	α(K)=0.00865 *13*; α(L)=0.001065 *15*; α(M)=0.000210 *3*
									α(N)=4.06×10^{-5} *6*; α(O)=4.04×10^{-6} *6*
									Mult.: α(K)exp=0.010 *2* (1997Fa08); A$_2$=−0.17 *3* and
									DCO=0.77 *2* in ^{103}Rh(^{12}C,3nγ)(1998La14).
1042.7	(8$^-$)	216.8 *3*	100	825.9	(8$^-$)	(M1+E2)		0.0734	α(K)=0.0634 *10*; α(L)=0.00801 *12*; α(M)=0.001584 *23*
									α(N)=0.000306 *5*; α(O)=3.03×10^{-5} *5*
									Mult.: DCO=1.52 *12* in ^{103}Rh(^{12}C,3nγ) (1998La14).
1169.9		196.5 *3*	100	973.4	(6$^+$)				
1184.3	(7$^+$)	815.1 *3*	100	369.2	(6$^+$)	(M1+E2)		0.00270	α(K)=0.00235 *4*; α(L)=0.000284 *4*; α(M)=5.59×10^{-5} *8*
									α(N)=1.082×10^{-5} *16*; α(O)=1.079×10^{-6} *16*
									Mult.: from DCO=0.44 *6* in ^{103}Rh(^{12}C,3nγ) (1998La14).
									Other: Mult.=(E2) in ^{89}Y(^{29}Si,α2nγ) (1997Mo01), but no
									arguments were given.
1268.0	(7$^-$)	441.9 *3*	100	825.9	(8$^-$)	M1+E2		0.01171	α(K)=0.01016 *15*; α(L)=0.001254 *18*; α(M)=0.000247 *4*
									α(N)=4.78×10^{-5} *7*; α(O)=4.75×10^{-6} *7*
									Mult.: DCO=0.94 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14).
1340.3		513.9 *3*	100	825.9	(8$^-$)				
1344.7	(7$^+$)	976.0 *3*	100 *5*	369.2	(6$^+$)	M1+E2		0.00179	α(K)=0.001554 *22*; α(L)=0.000187 *3*; α(M)=3.69×10^{-5} *6*

Adopted Levels, Gammas (continued)

$\gamma(^{112}$Sb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	α &	Comments
								α(N)=7.13×10^{-6} 10; α(O)=7.12×10^{-7} 10
								Mult.: DCO=0.56 6 in ^{103}Rh(^{12}C,3nγ) (1998La14).
1344.7	(7$^+$)	1211.9 3	100 5	132.37	(5$^+$)	E2	9.13×10^{-4}	α(K)=0.000785 11; α(L)=9.59×10^{-5} 14; α(M)=1.89×10^{-5} 3
								α(N)=3.64×10^{-6} 5; α(O)=3.59×10^{-7} 5; α(IPF)=8.33×10^{-6} 13
								Mult.: DCO=1.95 16 in ^{103}Rh(^{12}C,3nγ) (1998La14).
1389.5	(6$^+$)	1285.6 3	100	103.88	(4$^+$)	E2	8.21×10^{-4}	α(K)=0.000696 10; α(L)=8.45×10^{-5} 12; α(M)=1.664×10^{-5} 24
								α(N)=3.21×10^{-6} 5; α(O)=3.17×10^{-7} 5; α(IPF)=2.00×10^{-5} 3
								Mult.: DCO=1.76 21 in ^{103}Rh(^{12}C,3nγ) (1998La14).
1529.8	(9$^-$)	704.0 3	100	825.9	(8$^-$)	M1+E2	0.00380	α(K)=0.00330 5; α(L)=0.000401 6; α(M)=7.91×10^{-5} 11
								α(N)=1.529×10^{-5} 22; α(O)=1.524×10^{-6} 22
								Mult.: A$_2$=−0.58 5 in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.39 9 in
								^{103}Rh(^{12}C,3nγ) (1998La14).
1674.4	(7$^-$)	406.2 3	17.5 9	1268.0	(7$^-$)	M1+E2	0.01445	α(K)=0.01253 18; α(L)=0.001550 22; α(M)=0.000306 5
								α(N)=5.91×10^{-5} 9; α(O)=5.87×10^{-6} 9
								Mult.: DCO(406.2+406.9)=1.14 4 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		631.6 3	13.1 7	1042.7	(8$^-$)	(M1+E2)	0.00491	α(K)=0.00427 6; α(L)=0.000521 8; α(M)=0.0001026 15
								α(N)=1.98×10^{-5} 3; α(O)=1.98×10^{-6} 3
								Mult.: DCO=0.94 14 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		701.3 3	81 3	973.4	(6$^+$)	E1	1.18×10^{-3}	α(K)=0.001029 15; α(L)=0.0001229 18; α(M)=2.41×10^{-5} 4
								α(N)=4.65×10^{-6} 7; α(O)=4.60×10^{-7} 7
								Mult.: A$_2$=0.10 2 in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.98 3 in
								^{103}Rh(^{12}C,3nγ) (1998La14).
		848.4 3	100 4	825.9	(8$^-$)	M1+E2	0.00246	α(K)=0.00214 3; α(L)=0.000259 4; α(M)=5.09×10^{-5} 8
								α(N)=9.85×10^{-6} 14; α(O)=9.83×10^{-7} 14
								Mult.: A$_2$=0.42 5 in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=1.39 5 in
								^{103}Rh(^{12}C,3nγ) (1998La14).
1681.5	(8$^+$)	1312.3 3	100	369.2	(6$^+$)	E2	7.93×10^{-4}	α(K)=0.000667 10; α(L)=8.10×10^{-5} 12; α(M)=1.594×10^{-5} 23
								α(N)=3.07×10^{-6} 5; α(O)=3.04×10^{-7} 5; α(IPF)=2.53×10^{-5} 4
								Mult.: A$_2$=0.7 3 in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=2.05 12 in
								^{103}Rh(^{12}C,3nγ) (1998La14).
1690.5	(7$^+$)	1321.3 3	100	369.2	(6$^+$)	M1+E2	9.37×10^{-4}	α(K)=0.000794 12; α(L)=9.49×10^{-5} 14; α(M)=1.87×10^{-5} 3
								α(N)=3.61×10^{-6} 5; α(O)=3.61×10^{-7} 5; α(IPF)=2.47×10^{-5} 4
								Mult.: DCO=0.69 6 in ^{103}Rh(^{12}C,3nγ) (1998La14).
1746.6	(8$^-$)	72.4 3	85 3	1674.4	(7$^-$)	M1+E2	1.56 3	α(K)=1.343 25; α(L)=0.174 4; α(M)=0.0344 7
								α(N)=0.00663 13; α(O)=0.000652 12
								Mult.: DCO=0.97 3 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		402.0 3	21 1	1344.7	(7$^+$)	E1	0.00426	α(K)=0.00370 6; α(L)=0.000450 7; α(M)=8.84×10^{-5} 13
								α(N)=1.698×10^{-5} 24; α(O)=1.660×10^{-6} 24
								Mult.: DCO=0.87 5 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		478.5 3	100 4	1268.0	(7$^-$)	M1+E2	0.00962	α(K)=0.00835 12; α(L)=0.001028 15; α(M)=0.000203 3

Adopted Levels, Gammas (continued)

$\gamma(^{112}\text{Sb})$ (continued)

E_i(level)	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.†	$\alpha^\&$	Comments
								$\alpha(\text{N})=3.92\times10^{-5}$ 6; $\alpha(\text{O})=3.90\times10^{-6}$ 6
								Mult.: $A_2=-0.45$ 5 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=0.55 2 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
1746.6	(8^-)	920.8 3	14 1	825.9	(8^-)	M1+E2	0.00204	$\alpha(\text{K})=0.001774$ 25; $\alpha(\text{L})=0.000214$ 3; $\alpha(\text{M})=4.21\times10^{-5}$ 6
								$\alpha(\text{N})=8.15\times10^{-6}$ 12; $\alpha(\text{O})=8.14\times10^{-7}$ 12
								Mult.: DCO=1.44 17 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
1884.4	(10^-)	355.2 3	4.90 20	1529.8	(9^-)	M1+E2	0.0203	$\alpha(\text{K})=0.01756$ 25; $\alpha(\text{L})=0.00218$ 3; $\alpha(\text{M})=0.000431$ 7
								$\alpha(\text{N})=8.33\times10^{-5}$ 12; $\alpha(\text{O})=8.27\times10^{-6}$ 12
								Mult.: $A_2=-0.03$ 3 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=0.40 5 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
		1058.5 3	100	825.9	(8^-)	E2	1.21×10^{-3}	$\alpha(\text{K})=0.001045$ 15; $\alpha(\text{L})=0.0001290$ 18; $\alpha(\text{M})=2.54\times10^{-5}$ 4
								$\alpha(\text{N})=4.90\times10^{-6}$ 7; $\alpha(\text{O})=4.81\times10^{-7}$ 7
								Mult.: $A_2=0.40$ 3 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=1.01 2 for 1058.5+1060.0 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
1948.7	(9^-)	202.2 3	100 3	1746.6	(8^-)	M1+E2	0.0884	$\alpha(\text{K})=0.0764$ 12; $\alpha(\text{L})=0.00967$ 14; $\alpha(\text{M})=0.00191$ 3
								$\alpha(\text{N})=0.000369$ 6; $\alpha(\text{O})=3.65\times10^{-5}$ 6
								Mult.: $A_2=-0.15$ 3 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=0.86 5 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
		607.9 3	2.2 3	1340.3				
		1122.9 3	28.8 9	825.9	(8^-)	M1+E2	1.31×10^{-3}	$\alpha(\text{K})=0.001136$ 16; $\alpha(\text{L})=0.0001363$ 19; $\alpha(\text{M})=2.68\times10^{-5}$ 4
								$\alpha(\text{N})=5.19\times10^{-6}$ 8; $\alpha(\text{O})=5.18\times10^{-7}$ 8; $\alpha(\text{IPF})=8.91\times10^{-7}$ 16
								Mult.: $A_2=0.37$ 5 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=1.34 10 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
2075.0	(9^-)	1249.1 3	100	825.9	(8^-)	(M1+E2)	1.04×10^{-3}	$\alpha(\text{K})=0.000898$ 13; $\alpha(\text{L})=0.0001075$ 15; $\alpha(\text{M})=2.11\times10^{-5}$ 3
								$\alpha(\text{N})=4.09\times10^{-6}$ 6; $\alpha(\text{O})=4.09\times10^{-7}$ 6; $\alpha(\text{IPF})=1.236\times10^{-5}$ 18
								Mult.: DCO=0.32 10 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
2100.0	(9^+)	418.5 3	100	1681.5	(8^+)	(M1+E2)	0.01341	$\alpha(\text{K})=0.01163$ 17; $\alpha(\text{L})=0.001438$ 21; $\alpha(\text{M})=0.000284$ 4
								$\alpha(\text{N})=5.48\times10^{-5}$ 8; $\alpha(\text{O})=5.45\times10^{-6}$ 8
								Mult.: DCO=0.91 6 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
2161.5	(8^+)	471.0 3	100	1690.5	(7^+)	(M1+E2)	0.01000	$\alpha(\text{K})=0.00868$ 13; $\alpha(\text{L})=0.001069$ 15; $\alpha(\text{M})=0.000211$ 3
								$\alpha(\text{N})=4.07\times10^{-5}$ 6; $\alpha(\text{O})=4.05\times10^{-6}$ 6
								Mult.: DCO=0.84 7 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
2274.3	(10^-)	199.3 3	2.61 15	2075.0	(9^-)	(M1+E2)	0.0919 14	$\alpha(\text{K})=0.0794$ 12; $\alpha(\text{L})=0.01006$ 15; $\alpha(\text{M})=0.00199$ 3
								$\alpha(\text{N})=0.000384$ 6; $\alpha(\text{O})=3.80\times10^{-5}$ 6
								Mult.: DCO=1.33 24 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
		325.5 3	100 4	1948.7	(9^-)	M1+E2	0.0253	$\alpha(\text{K})=0.0219$ 4; $\alpha(\text{L})=0.00274$ 4; $\alpha(\text{M})=0.000540$ 8
								$\alpha(\text{N})=0.0001044$ 15; $\alpha(\text{O})=1.035\times10^{-5}$ 15
								Mult.: $A_2=-0.05$ 3 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14); DCO=0.92 2 in $^{103}\text{Rh}(^{12}\text{C},3\text{n}\gamma)$ (1998La14).
		527.7 3	3.4 4	1746.6	(8^-)	E2	0.00667	$\alpha(\text{K})=0.00571$ 8; $\alpha(\text{L})=0.000777$ 11; $\alpha(\text{M})=0.0001543$ 22

Adopted Levels, Gammas (continued)

$\gamma(^{112}Sb)$ (continued)

E_i(level)	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.†	$\alpha^\&$	Comments
								$\alpha(N)=2.95\times10^{-5}$ 5; $\alpha(O)=2.78\times10^{-6}$ 4 Mult.: From $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2320.1	(11^+)	435.7 3	100	1884.4	(10^-)	E1	0.00350	$\alpha(K)=0.00304$ 5; $\alpha(L)=0.000368$ 6; $\alpha(M)=7.24\times10^{-5}$ 11 $\alpha(N)=1.392\times10^{-5}$ 20; $\alpha(O)=1.363\times10^{-6}$ 20 Mult.: $A_2=-0.25$ 3 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); DCO=0.49 2 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); Pol=+0.19 7.
2481.8	(12^-)	161.8 3	28.4 15	2320.1	(11^+)	(E1)	0.0486	$\alpha(K)=0.0421$ 7; $\alpha(L)=0.00526$ 8; $\alpha(M)=0.001033$ 16 $\alpha(N)=0.000197$ 3; $\alpha(O)=1.87\times10^{-5}$ 3 Mult.: DCO=0.67 11 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
		597.5 3	100 6	1884.4	(10^-)	(E2)	0.00476	$\alpha(K)=0.00409$ 6; $\alpha(L)=0.000543$ 8; $\alpha(M)=0.0001077$ 16 $\alpha(N)=2.06\times10^{-5}$ 3; $\alpha(O)=1.97\times10^{-6}$ 3 Mult.: DCO=1.24 14 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2492.1		607.7 3	100	1884.4	(10^-)			
2547.9	(11^-)	664.0 3	19 4	1884.4	(10^-)	(M1+E2)	0.00436	$\alpha(K)=0.00379$ 6; $\alpha(L)=0.000462$ 7; $\alpha(M)=9.09\times10^{-5}$ 13 $\alpha(N)=1.758\times10^{-5}$ 25; $\alpha(O)=1.752\times10^{-6}$ 25 Mult.: DCO=0.61 5 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
		1017.6 3	100 4	1529.8	(9^-)	(E2)	1.31×10^{-3}	$\alpha(K)=0.001139$ 16; $\alpha(L)=0.0001411$ 20; $\alpha(M)=2.78\times10^{-5}$ 4 $\alpha(N)=5.36\times10^{-6}$ 8; $\alpha(O)=5.26\times10^{-7}$ 8 Mult.: $A_2=0.28$ 3 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2569.8	(9^+)	1385.5 3	100	1184.3	(7^+)	E2	7.32×10^{-4}	$\alpha(K)=0.000599$ 9; $\alpha(L)=7.23\times10^{-5}$ 11; $\alpha(M)=1.423\times10^{-5}$ 20 $\alpha(N)=2.75\times10^{-6}$ 4; $\alpha(O)=2.72\times10^{-7}$ 4; $\alpha(IPF)=4.38\times10^{-5}$ 7 Mult.: $A_2=0.37$ 9 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); DCO=2.2 4 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2581.6		1397.3 10	100	1184.3	(7^+)			$A_2=0.47$ 10 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); DCO=1.25 13 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14);
2601.5	(12^-)	717.1 3	100	1884.4	(10^-)	E2	0.00298	$\alpha(K)=0.00256$ 4; $\alpha(L)=0.000331$ 5; $\alpha(M)=6.56\times10^{-5}$ 10 $\alpha(N)=1.258\times10^{-5}$ 18; $\alpha(O)=1.214\times10^{-6}$ 17 Mult.: DCO=0.92 6 for 717.1+718.2γ in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2628.1	(11^-)	353.9 3	100 3	2274.3	(10^-)	M1+E2		$\alpha(K)=0.0177$ 3; $\alpha(L)=0.00220$ 4; $\alpha(M)=0.000435$ 7 $\alpha(N)=8.41\times10^{-5}$ 12; $\alpha(O)=8.34\times10^{-6}$ 12 Mult.: $A_2=-0.06$ 3 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); DCO=0.91 2 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
		679.1 3	14.1 6	1948.7	(9^-)	E2	0.00341	$\alpha(K)=0.00294$ 5; $\alpha(L)=0.000383$ 6; $\alpha(M)=7.58\times10^{-5}$ 11 $\alpha(N)=1.452\times10^{-5}$ 21; $\alpha(O)=1.397\times10^{-6}$ 20 B(E2)(W.u.)=39 +18−17 Mult.: DCO=1.71 8 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2868.2	(12^-)	983.8 3	100	1884.4	(10^-)	E2	1.42×10^{-3}	$\alpha(K)=0.001226$ 18; $\alpha(L)=0.0001525$ 22; $\alpha(M)=3.01\times10^{-5}$ 5 $\alpha(N)=5.79\times10^{-6}$ 9; $\alpha(O)=5.67\times10^{-7}$ 8 Mult.: $A_2=0.41$ 5 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14); DCO=0.97 4 in $^{103}Rh(^{12}C,3n\gamma)$ (1998La14).
2908.1		416.0 3	100	2492.1				

Adopted Levels, Gammas (continued)

$\gamma(^{112}\mathrm{Sb})$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[&]	Comments
2987.6	(12⁻)	358.9 *3*	65.9 *25*	2628.1	(11⁻)	M1+E2	0.0197	α(K)=0.01711 *25*; α(L)=0.00213 *3*; α(M)=0.000420 *6* α(N)=8.11×10⁻⁵ *12*; α(O)=8.05×10⁻⁶ *12* Mult.: DCO=0.79 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		1103.4 *3*	100 *5*	1884.4	(10⁻)	E2	1.10×10⁻³	α(K)=0.000956 *14*; α(L)=0.0001176 *17*; α(M)=2.32×10⁻⁵ *4* α(N)=4.47×10⁻⁶ *7*; α(O)=4.39×10⁻⁷ *7*; α(IPF)=5.23×10⁻⁷ *10* Mult.: DCO=1.02 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3008.8	(12⁻)	380.6 *3*	100 *3*	2628.1	(11⁻)	M1+E2		α(K)=0.01475 *21*; α(L)=0.00183 *3*; α(M)=0.000361 *6* α(N)=6.98×10⁻⁵ *10*; α(O)=6.93×10⁻⁶ *10* Mult.: A₂=−0.13 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.95 *14* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		734.6 *3*	18.9 *8*	2274.3	(10⁻)	E2	0.00280	B(E2)(W.u.)=37 +*13*−*12* α(K)=0.00242 *4*; α(L)=0.000311 *5*; α(M)=6.16×10⁻⁵ *9* α(N)=1.181×10⁻⁵ *17*; α(O)=1.142×10⁻⁶ *16* Mult.: DCO=1.51 *8* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3082.0	(12⁻)	761.9 *3*	36 *3*	2320.1	(11⁺)			
		1197.7 *3*	100 *9*	1884.4	(10⁻)	E2	9.33×10⁻⁴	α(K)=0.000805 *12*; α(L)=9.83×10⁻⁵ *14*; α(M)=1.94×10⁻⁵ *3* α(N)=3.73×10⁻⁶ *6*; α(O)=3.68×10⁻⁷ *6*; α(IPF)=6.54×10⁻⁶ *10* Mult.: DCO=1.01 *12* for 1197.7+1199.4γ in ^{103}Rh(^{12}C,3nγ) (1998La14).
3224.0	(14⁻)	622.6 *3*	100	2601.5	(12⁻)	E2	0.00427	α(K)=0.00367 *6*; α(L)=0.000485 *7*; α(M)=9.60×10⁻⁵ *14* α(N)=1.84×10⁻⁵ *3*; α(O)=1.758×10⁻⁶ *25* Mult.: DCO=1.01 *14* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3295.7	(12⁻)	1411.3 *3*	100	1884.4	(10⁻)	(E2)	7.15×10⁻⁴	α(K)=0.000577 *8*; α(L)=6.97×10⁻⁵ *10*; α(M)=1.370×10⁻⁵ *20* α(N)=2.64×10⁻⁶ *4*; α(O)=2.62×10⁻⁷ *4*; α(IPF)=5.15×10⁻⁵ *8* Mult.: A₂=0.40 *9* in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=1.0 *2* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3380.1	(13⁺)	511.8 *3*	23.0 *9*	2868.2	(12⁻)			
		1060.0 *3*	100 *3*	2320.1	(11⁺)	E2	1.20×10⁻³	α(K)=0.001042 *15*; α(L)=0.0001286 *18*; α(M)=2.54×10⁻⁵ *4* α(N)=4.88×10⁻⁶ *7*; α(O)=4.80×10⁻⁷ *7* Mult.: A₂=0.40 *3* for 1058.5+1060.0γ in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=1.01 *2* for 1058.5+1060.0γ in ^{103}Rh(^{12}C,3nγ) (1998La14).
3382.3	(13⁻)	373.5 *3*	100 *3*	3008.8	(12⁻)	M1+E2	0.0178 *3*	α(K)=0.01547 *22*; α(L)=0.00192 *3*; α(M)=0.000379 *6* α(N)=7.32×10⁻⁵ *11*; α(O)=7.27×10⁻⁶ *11* Mult.: DCO=0.89 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		394.4 *3*	45.7 *18*	2987.6	(12⁻)	M1+E2	0.01556	α(K)=0.01349 *19*; α(L)=0.001671 *24*; α(M)=0.000330 *5* α(N)=6.37×10⁻⁵ *9*; α(O)=6.33×10⁻⁶ *9* Mult.: DCO=0.61 *8* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		754.3 *3*	37.2 *18*	2628.1	(11⁻)	E2	0.00263	α(K)=0.00227 *4*; α(L)=0.000291 *4*; α(M)=5.75×10⁻⁵ *8* α(N)=1.104×10⁻⁵ *16*; α(O)=1.068×10⁻⁶ *15* Mult.: DCO=1.39 *10* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3401.4	(13⁻)	392.4 *3*	100 *3*	3008.8	(12⁻)	M1+E2	0.01576 *23*	α(K)=0.01366 *20*; α(L)=0.001693 *24*; α(M)=0.000334 *5*

Adopted Levels, Gammas (continued)

$\gamma(^{112}$Sb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[&]	Comments
								$\alpha(N)=6.46\times10^{-5}$ *10*; $\alpha(O)=6.41\times10^{-6}$ *9*
								Mult.: DCO=0.86 *2* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3401.4	(13$^-$)	773.5 *3*	23.8 *12*	2628.1	(11$^-$)	E2	0.00247	$\alpha(K)=0.00213$ *3*; $\alpha(L)=0.000273$ *4*; $\alpha(M)=5.39\times10^{-5}$ *8*
								$\alpha(N)=1.035\times10^{-5}$ *15*; $\alpha(O)=1.003\times10^{-6}$ *14*
								B(E2)(W.u.)=35 *9*
								Mult.: DCO=1.55 *10* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3403.1	(12$^+$)	1083.0 *3*	100	2320.1	(11$^+$)	M1+E2	1.41×10^{-3}	$\alpha(K)=0.001231$ *18*; $\alpha(L)=0.0001478$ *21*; $\alpha(M)=2.91\times10^{-5}$ *4*
								$\alpha(N)=5.63\times10^{-6}$ *8*; $\alpha(O)=5.62\times10^{-7}$ *8*
								Mult.: DCO=0.54 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=-0.3 *3*.
3489.1	(12$^+$)	1007.4 *3*	93 *5*	2481.8	(12$^-$)	(E1)	5.71×10^{-4}	$\alpha(K)=0.000498$ *7*; $\alpha(L)=5.88\times10^{-5}$ *9*; $\alpha(M)=1.155\times10^{-5}$ *17*
								$\alpha(N)=2.23\times10^{-6}$ *4*; $\alpha(O)=2.21\times10^{-7}$ *4*
								Mult.: DCO=1.08 *14* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		1168.8 *3*	100 *5*	2320.1	(11$^+$)	M1+E2	1.20×10^{-3}	$\alpha(K)=0.001039$ *15*; $\alpha(L)=0.0001246$ *18*; $\alpha(M)=2.45\times10^{-5}$ *4*
								$\alpha(N)=4.74\times10^{-6}$ *7*; $\alpha(O)=4.74\times10^{-7}$ *7*; α(IPF)=3.18×10^{-6} *5*
								Mult.: DCO=0.47 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3622.0	(14$^-$)	613.2 *3*	100	3008.8	(12$^-$)	E2	0.00444	$\alpha(K)=0.00382$ *6*; $\alpha(L)=0.000505$ *8*; $\alpha(M)=0.0001002$ *14*
								$\alpha(N)=1.92\times10^{-5}$ *3*; $\alpha(O)=1.83\times10^{-6}$ *3*
								Mult.: DCO=1.51 *14* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3686.6	(14$^-$)	285.2 *3*	100	3401.4	(13$^-$)	(M1+E2)	0.0356	$\alpha(K)=0.0308$ *5*; $\alpha(L)=0.00386$ *6*; $\alpha(M)=0.000763$ *11*
								$\alpha(N)=0.0001474$ *21*; $\alpha(O)=1.460\times10^{-5}$ *21*
								Mult.: DCO=0.86 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3686.8	(14$^-$)	818.6 *3*	100	2868.2	(12$^-$)	E2	0.00216	$\alpha(K)=0.00186$ *3*; $\alpha(L)=0.000237$ *4*; $\alpha(M)=4.68\times10^{-5}$ *7*
								$\alpha(N)=8.98\times10^{-6}$ *13*; $\alpha(O)=8.73\times10^{-7}$ *13*
								Mult.: DCO=1.14 *11* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3725.6		501.6 *3*	100	3224.0	(14$^-$)			
3730.8		1238.7 *3*	100	2492.1				
3747.3	(13$^-$)	1199.4 *3*	100	2547.9	(11$^-$)	(E2)	9.31×10^{-4}	$\alpha(K)=0.000803$ *12*; $\alpha(L)=9.80\times10^{-5}$ *14*; $\alpha(M)=1.93\times10^{-5}$ *3*
								$\alpha(N)=3.72\times10^{-6}$ *6*; $\alpha(O)=3.67\times10^{-7}$ *6*; α(IPF)=6.75×10^{-6} *11*
								Mult.: DCO=1.01 *12* for 1197.7+1199.4γ in ^{103}Rh(^{12}C,3nγ)
								(1998La14).
3794.1		570.1 *3*	100	3224.0	(14$^-$)			
3808.3	(14$^-$)	406.9 *3*	100 *3*	3401.4	(13$^-$)	M1+E2	0.01439	$\alpha(K)=0.01248$ *18*; $\alpha(L)=0.001544$ *22*; $\alpha(M)=0.000305$ *5*
								$\alpha(N)=5.89\times10^{-5}$ *9*; $\alpha(O)=5.85\times10^{-6}$ *9*
								Mult.: DCO=1.14 *4* for 406.2+406.9γ in ^{103}Rh(^{12}C,3nγ) (1998La14).
		425.9 *3*	64.7 *22*	3382.3	(13$^-$)	M1+E2	0.01284 *19*	$\alpha(K)=0.01113$ *16*; $\alpha(L)=0.001376$ *20*; $\alpha(M)=0.000271$ *4*
								$\alpha(N)=5.25\times10^{-5}$ *8*; $\alpha(O)=5.21\times10^{-6}$ *8*
								Mult.: DCO=0.46 *9* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		799.7 *3*	50.7 *22*	3008.8	(12$^-$)	E2	0.00228	$\alpha(K)=0.00197$ *3*; $\alpha(L)=0.000251$ *4*; $\alpha(M)=4.96\times10^{-5}$ *7*
								$\alpha(N)=9.52\times10^{-6}$ *14*; $\alpha(O)=9.24\times10^{-7}$ *13*
								Mult.: DCO=1.43 *9* in ^{103}Rh(^{12}C,3nγ) (1998La14).
3845.1		356.2 *3*	100	3489.1	(12$^+$)			

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

$\gamma(^{112}$Sb) (continued)

E_i(level)	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.†	$\alpha^\&$	Comments
4088.9	(15$^+$)	708.8 *3*	100	3380.1	(13$^+$)	E2	0.00306	α(K)=0.00264 *4*; α(L)=0.000342 *5*; α(M)=6.76×10^{-5} *10* α(N)=1.297×10^{-5} *19*; α(O)=1.251×10^{-6} *18* Mult.: DCO=1.07 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4089.3	(15$^-$)	402.5 *3*	100	3686.8	(14$^-$)	(M1+E2)	0.01479	α(K)=0.01282 *19*; α(L)=0.001587 *23*; α(M)=0.000313 *5* α(N)=6.05×10^{-5} *9*; α(O)=6.01×10^{-6} *9* Mult.: DCO=0.28 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4121.3	(14$^+$)	632.0 *3*	100 *4*	3489.1	(12$^+$)	E2	0.00410	α(K)=0.00353 *5*; α(L)=0.000465 *7*; α(M)=9.21×10^{-5} *13* α(N)=1.764×10^{-5} *25*; α(O)=1.689×10^{-6} *24* Mult.: DCO=1.13 *8* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		718.2 *3*	45.5 *18*	3403.1	(12$^+$)	E2	0.00296	α(K)=0.00255 *4*; α(L)=0.000330 *5*; α(M)=6.53×10^{-5} *10* α(N)=1.253×10^{-5} *18*; α(O)=1.209×10^{-6} *17* Mult.: DCO=0.92 *6* for 717.1+718.2γ in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=+0.12 *19*.
4223.0		842.9 *3*	100	3380.1	(13$^+$)			
4254.8	(14$^-$)	1653.3 *3*	100	2601.5	(12$^-$)	E2	6.27×10^{-4}	α(K)=0.000424 *6*; α(L)=5.08×10^{-5} *8*; α(M)=9.98×10^{-6} *14* α(N)=1.93×10^{-6} *3*; α(O)=1.92×10^{-7} *3*; α(IPF)=0.0001403 *20* Mult.: A$_2$=0.4 *1* in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.85 *18* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4260.5	(15$^-$)	451.9 *3*	100	3808.3	(14$^-$)	M1+E2	0.01108	α(K)=0.00961 *14*; α(L)=0.001185 *17*; α(M)=0.000234 *4* α(N)=4.52×10^{-5} *7*; α(O)=4.49×10^{-6} *7* Mult.: DCO=0.32 *6* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4276.5		896.4 *3*	100	3380.1	(13$^+$)			
4294.7	(15$^-$)	486.3 *3*	100 *3*	3808.3	(14$^-$)	M1+E2	0.00925	α(K)=0.00802 *12*; α(L)=0.000987 *14*; α(M)=0.000195 *3* α(N)=3.76×10^{-5} *6*; α(O)=3.74×10^{-6} *6* Mult.: DCO=0.78 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		893.2 *3*	32.1 *22*	3401.4	(13$^-$)	E2	1.76×10^{-3}	α(K)=0.001523 *22*; α(L)=0.000191 *3*; α(M)=3.78×10^{-5} *6* α(N)=7.26×10^{-6} *11*; α(O)=7.09×10^{-7} *10* Mult.: DCO=2.1 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4320.2	(15$^+$)	940.1 *3*	100	3380.1	(13$^+$)	E2	1.57×10^{-3}	α(K)=0.001357 *19*; α(L)=0.0001695 *24*; α(M)=3.34×10^{-5} *5* α(N)=6.43×10^{-6} *9*; α(O)=6.29×10^{-7} *9* Mult.: DCO=1.09 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4391.3	(16$^-$)	302.0 *3*	100	4089.3	(15$^-$)	(M1+E2)	0.0307	α(K)=0.0266 *4*; α(L)=0.00332 *5*; α(M)=0.000657 *10* α(N)=0.0001268 *18*; α(O)=1.257×10^{-5} *18* Mult.: DCO=0.76 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
4433.4	(15$^+$)	312.1 *3*	100 *6*	4121.3	(14$^+$)	M1+E2	0.0282	α(K)=0.0244 *4*; α(L)=0.00305 *5*; α(M)=0.000603 *9* α(N)=0.0001164 *17*; α(O)=1.154×10^{-5} *17* Mult.: DCO=0.33 *6* in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=0.5 *2*.
		588.5 *3*	80 *6*	3845.1				
4675.7	(16$^+$)	586.8 *3*	100	4088.9	(15$^+$)	(M1+E2)	0.00586	α(K)=0.00509 *8*; α(L)=0.000622 *9*; α(M)=0.0001226 *18* α(N)=2.37×10^{-5} *4*; α(O)=2.36×10^{-6} *4* Mult.: DCO=0.16 *8* in ^{103}Rh(^{12}C,3nγ) (1998La14).

Adopted Levels, Gammas (continued)

$\gamma(^{112}\text{Sb})$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[&]	Comments
4797.8	(16⁻)	503.0 3	100 4	4294.7	(15⁻)	M1+E2	0.00851	α(K)=0.00739 11; α(L)=0.000908 13; α(M)=0.000179 3 α(N)=3.46×10⁻⁵ 5; α(O)=3.44×10⁻⁶ 5 Mult.: DCO=0.87 7 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		537.0 3	43 3	4260.5	(15⁻)	M1+E2	0.00726	α(K)=0.00630 9; α(L)=0.000773 11; α(M)=0.0001523 22 α(N)=2.94×10⁻⁵ 5; α(O)=2.93×10⁻⁶ 5 Mult.: DCO=0.86 8 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		989.8 3	53 4	3808.3	(14⁻)	E2	1.40×10⁻³	α(K)=0.001210 17; α(L)=0.0001503 21; α(M)=2.96×10⁻⁵ 5 α(N)=5.71×10⁻⁶ 8; α(O)=5.59×10⁻⁷ 8 Mult.: DCO=1.62 9 in ^{103}Rh(^{12}C,3nγ) (1998La14).
4837.2	(16⁻)	582.3 3	26.7 23	4254.8	(14⁻)			
		1613.2 3	100 5	3224.0	(14⁻)	E2	6.34×10⁻⁴	α(K)=0.000445 7; α(L)=5.33×10⁻⁵ 8; α(M)=1.047×10⁻⁵ 15 α(N)=2.02×10⁻⁶ 3; α(O)=2.01×10⁻⁷ 3; α(IPF)=0.0001237 18 Mult.: A₂=0.36 5 in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=1.01 16 in ^{103}Rh(^{12}C,3nγ) (1998La14).
4863.9	(16⁺)	742.6 3	100	4121.3	(14⁺)	E2	0.00273	α(K)=0.00235 4; α(L)=0.000303 5; α(M)=5.99×10⁻⁵ 9 α(N)=1.149×10⁻⁵ 17; α(O)=1.111×10⁻⁶ 16 Mult.: DCO=1.00 10 in ^{103}Rh(^{12}C,3nγ) (1998La14) for 742.6+743.7γ; Pol=+0.21 18.
5161.0	(17⁺)	297.0 3	71 4	4863.9	(16⁺)	M1+E2	0.0321	α(K)=0.0278 4; α(L)=0.00347 5; α(M)=0.000686 10 α(N)=0.0001325 19; α(O)=1.313×10⁻⁵ 19 Mult.: DCO=0.57 8 in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=−0.15 20.
		727.7 3	100 5	4433.4	(15⁺)	E2	0.00287	α(K)=0.00247 4; α(L)=0.000319 5; α(M)=6.31×10⁻⁵ 9 α(N)=1.211×10⁻⁵ 17; α(O)=1.169×10⁻⁶ 17 Mult.: DCO=1.35 18 in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=+0.55 10.
5325.7	(17⁻)	527.9 3	100 5	4797.8	(16⁻)	M1+E2	0.00757	α(K)=0.00657 10; α(L)=0.000806 12; α(M)=0.0001589 23 α(N)=3.07×10⁻⁵ 5; α(O)=3.06×10⁻⁶ 5 Mult.: DCO=0.75 6 in ^{103}Rh(^{12}C,3nγ) (1998La14).
		1030.8 10	<4.5	4294.7	(15⁻)			
5643.7	(18⁻)	806.5 3	100	4837.2	(16⁻)	E2	0.00224	α(K)=0.00193 3; α(L)=0.000246 4; α(M)=4.85×10⁻⁵ 7 α(N)=9.32×10⁻⁶ 13; α(O)=9.05×10⁻⁷ 13 Mult.: DCO=0.85 8 in ^{103}Rh(^{12}C,3nγ) (1998La14).
5717.0		1041.3 3	100	4675.7	(16⁺)			
5729.3	(18⁺)	865.4 3	100	4863.9	(16⁺)	E2	0.00189	α(K)=0.001638 23; α(L)=0.000207 3; α(M)=4.08×10⁻⁵ 6 α(N)=7.84×10⁻⁶ 11; α(O)=7.64×10⁻⁷ 11 Mult.: DCO=1.00 8 in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=+0.2 3.
6002.3	(19⁺)	273.0 10	8.4 15	5729.3	(18⁺)	M1+E2	0.0399 7	α(K)=0.0346 6; α(L)=0.00433 8; α(M)=0.000856 15 α(N)=0.000165 3; α(O)=1.64×10⁻⁵ 3 Mult.: DCO=0.50 16 in ^{103}Rh(^{12}C,3nγ) (1998La14); Pol=−0.3 3.
		841.2 3	100 5	5161.0	(17⁺)	E2	0.00202	α(K)=0.001749 25; α(L)=0.000221 4; α(M)=4.37×10⁻⁵ 7 α(N)=8.40×10⁻⁶ 12; α(O)=8.18×10⁻⁷ 12 Mult.: DCO=0.98 7 in ^{103}Rh(^{12}C,3nγ) (1998La14), 0.97 5 in ^{90}Zr(^{31}P,2αnγ) (1998La14); Pol=+0.41 8.

Adopted Levels, Gammas (continued)

γ(¹¹²Sb) (continued)

E_i(level)	J_i^π	E_γ†	I_γ†	E_f	J_f^π	Mult.†	α&	Comments
6544.5	(20⁻)	900.8 3	100	5643.7	(18⁻)			
6934.5	(21⁺)	932.2 3	100	6002.3	(19⁺)	E2	1.60×10⁻³	α(K)=0.001383 20; α(L)=0.0001729 25; α(M)=3.41×10⁻⁵ 5 α(N)=6.56×10⁻⁶ 10; α(O)=6.42×10⁻⁷ 9 Mult.: DCO=0.98 16 in ¹⁰³Rh(¹²C,3nγ) (1998La14), 1.21 11 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol=+0.67 11.
7535.3	(22⁻)	990.8 3	100	6544.5	(20⁻)	E2	1.39×10⁻³	α(K)=0.001207 17; α(L)=0.0001500 21; α(M)=2.96×10⁻⁵ 5 α(N)=5.69×10⁻⁶ 8; α(O)=5.58×10⁻⁷ 8 Mult.: DCO=0.91 7 in ¹⁰³Rh(¹²C,3nγ) (1998La14).
7937.4	(23⁺)	1002.9 3	100	6934.5	(21⁺)	E2	1.36×10⁻³	α(K)=0.001175 17; α(L)=0.0001459 21; α(M)=2.88×10⁻⁵ 4 α(N)=5.54×10⁻⁶ 8; α(O)=5.43×10⁻⁷ 8 Mult.: DCO=0.98 7 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol=+0.52 11.
8615.9	(24⁻)	1080.6 3	100	7535.3	(22⁻)			
8996.4	(25⁺)	1059.0 5	100	7937.4	(23⁺)	E2	1.20×10⁻³	α(K)=0.001044 15; α(L)=0.0001289 18; α(M)=2.54×10⁻⁵ 4 α(N)=4.89×10⁻⁶ 7; α(O)=4.81×10⁻⁷ 7 Mult.: DCO=0.99 5 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol(1059+1059+1060)=+0.46 11.
9784.2	(26⁻)	1168.3 3	100	8615.9	(24⁻)			
10113.2	(27⁺)	1116.8 2	100	8996.4	(25⁺)	E2	1.07×10⁻³	α(K)=0.000932 13; α(L)=0.0001145 16; α(M)=2.26×10⁻⁵ 4 α(N)=4.35×10⁻⁶ 6; α(O)=4.28×10⁻⁷ 6; α(IPF)=8.32×10⁻⁷ 13 Mult.: DCO=1.27 20 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol=+0.76 18.
11041.2	(28⁻)	1257.0 4	100	9784.2	(26⁻)			
11296.4	(29⁺)	1183.2 2	100	10113.2	(27⁺)	E2	9.55×10⁻⁴	α(K)=0.000826 12; α(L)=0.0001009 15; α(M)=1.99×10⁻⁵ 3 α(N)=3.83×10⁻⁶ 6; α(O)=3.78×10⁻⁷ 6; α(IPF)=4.94×10⁻⁶ 8 Mult.: DCO=1.2 3 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol=+0.6 3.
12393.6	(30⁻)	1352.4 4	100	11041.2	(28⁻)			
12595.2	(31⁺)	1298.8 2	100	11296.4	(29⁺)	E2	8.07×10⁻⁴	α(K)=0.000682 10; α(L)=8.27×10⁻⁵ 12; α(M)=1.629×10⁻⁵ 23 α(N)=3.14×10⁻⁶ 5; α(O)=3.11×10⁻⁷ 5; α(IPF)=2.26×10⁻⁵ 4 Mult.: DCO=1.06 22 in ⁹⁰Zr(³¹P,2αnγ) (1998La14); Pol=+0.3 3.
13839.4	(32⁻)	1445.8 5	100	12393.6	(30⁻)			
14088.8	(33⁺)	1493.6 3	100	12595.2	(31⁺)			
15387.6	(34⁻)	1548.2 6	100	13839.4	(32⁻)			
15784.3	(35⁺)	1695.5 3	100	14088.8	(33⁺)			
17053.6	(36⁻)	1666.0 7	100	15387.6	(34⁻)			
17655.6	(37⁺)	1871.3 5	100	15784.3	(35⁺)			
y+378.09	(11⁺)	378.2 3	100	y	(10⁺)	M1+E2	0.01729	α(K)=0.01499 22; α(L)=0.00186 3; α(M)=0.000367 6 α(N)=7.09×10⁻⁵ 10; α(O)=7.04×10⁻⁶ 10 Mult.: DCO=1.09 17 in ¹⁰³Rh(¹²C,3nγ) (1998La14).
y+750.72	(12⁺)	372.6 3	100	y+378.09	(11⁺)	M1+E2	0.0180	α(K)=0.01556 22; α(L)=0.00193 3; α(M)=0.000381 6 α(N)=7.37×10⁻⁵ 11; α(O)=7.31×10⁻⁶ 11 Mult.: DCO=1.04 5 in ¹⁰³Rh(¹²C,3nγ) (1998La14).
		750.6 3	42.0 20	y	(10⁺)			
y+1077.6	(13⁺)	326.8 3	100	y+750.72	(12⁺)	M1+E2	0.0251	α(K)=0.0217 3; α(L)=0.00271 4; α(M)=0.000535 8

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

$\gamma(^{112}$Sb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[&]	Comments
								α(N)=0.0001033 *15*; α(O)=1.024×10^{-5} *15*
								Mult.: DCO=0.96 *4* in ^{103}Rh(^{12}C,3nγ) (1998La14).
y+1077.6	(13$^+$)	368.2 *10*	12.9 *10*	y+709.4	(12$^+$)	(M1+E2)	0.0185	α(K)=0.0160 *3*; α(L)=0.00199 *4*; α(M)=0.000393 *7*
								α(N)=7.60×10^{-5} *12*; α(O)=7.54×10^{-6} *12*
								Mult.: DCO=1.26 *25* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		699.7 *3*	21.8 *14*	y+378.09	(11$^+$)			
y+1372.6	(14$^+$)	277.2 *3*	18.9 *10*	y+1095.4	(13$^+$)	M1+E2	0.0384	α(K)=0.0332 *5*; α(L)=0.00416 *6*; α(M)=0.000823 *12*
								α(N)=0.0001588 *23*; α(O)=1.574×10^{-5} *23*
								Mult.: DCO=0.68 *11* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		294.9 *3*	100 *3*	y+1077.6	(13$^+$)	M1+E2	0.0327	α(K)=0.0283 *4*; α(L)=0.00354 *5*; α(M)=0.000699 *10*
								α(N)=0.0001350 *20*; α(O)=1.338×10^{-5} *19*
								Mult.: DCO=0.51 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		621.7 *10*	4.5 *7*	y+750.72	(12$^+$)			
y+1690.4	(15$^+$)	317.8 *3*	100	y+1372.6	(14$^+$)	M1+E2	0.0269	α(K)=0.0233 *4*; α(L)=0.00291 *5*; α(M)=0.000575 *9*
								α(N)=0.0001111 *16*; α(O)=1.101×10^{-5} *16*
								Mult.: A$_2$=−0.10 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14); DCO=0.43 *5* in
								^{103}Rh(^{12}C,3nγ) (1998La14).
		613.0 *10*	0.9 *8*	y+1077.6	(13$^+$)			
y+2046.2	(16$^+$)	355.8 *3*	100	y+1690.4	(15$^+$)	M1+E2	0.0202	α(K)=0.01749 *25*; α(L)=0.00217 *3*; α(M)=0.000429 *6*
								α(N)=8.29×10^{-5} *12*; α(O)=8.23×10^{-6} *12*
								Mult.: A$_2$=−0.03 *3* for 355.2+355.8+356.2γ in ^{103}Rh(^{12}C,3nγ) (1998La14);
								DCO=0.90 *3* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		673.9 *10*	7.0 *9*	y+1372.6	(14$^+$)			
y+2437.8	(17$^+$)	391.6 *3*	100	y+2046.2	(16$^+$)	M1+E2	0.01584	α(K)=0.01373 *20*; α(L)=0.001701 *24*; α(M)=0.000336 *5*
								α(N)=6.49×10^{-5} *10*; α(O)=6.44×10^{-6} *10*
								Mult.: DCO=0.54 *7* in ^{103}Rh(^{12}C,3nγ) (1998La14).
		747.6 *10*	100	y+1690.4	(15$^+$)			
y+2852.1	(18$^+$)	414.2 *3*	100	y+2437.8	(17$^+$)	M1+E2	0.01376	α(K)=0.01193 *17*; α(L)=0.001476 *21*; α(M)=0.000291 *5*
								α(N)=5.63×10^{-5} *8*; α(O)=5.59×10^{-6} *8*
								Mult.: DCO=0.91 *5* in ^{103}Rh(^{12}C,3nγ) (1998La14).
y+3217.1	(19$^+$)	365.0 *3*	100	y+2852.1	(18$^+$)	M1+E2	0.0189	α(K)=0.01639 *24*; α(L)=0.00204 *3*; α(M)=0.000402 *6*
								α(N)=7.77×10^{-5} *11*; α(O)=7.71×10^{-6} *11*
								Mult.: DCO=1.10 *12* in ^{103}Rh(^{12}C,3nγ) (1998La14).
y+3284.6	(19$^+$)	432.5 *3*	100	y+2852.1	(18$^+$)	M1+E2	0.01236	α(K)=0.01072 *16*; α(L)=0.001323 *19*; α(M)=0.000261 *4*
								α(N)=5.05×10^{-5} *8*; α(O)=5.01×10^{-6} *7*
								Mult.: DCO=0.91 *8* in ^{103}Rh(^{12}C,3nγ) (1998La14).
x+561.0	(13$^-$)	561.0 *3*	100	x	(11$^-$)			
x+1216.8	(15$^-$)	655.8 *3*	100	x+561.0	(13$^-$)			
x+1960.5	(17$^-$)	743.7 *3*	100	x+1216.8	(15$^-$)	E2	0.00272	α(K)=0.00235 *4*; α(L)=0.000302 *5*; α(M)=5.96×10^{-5} *9*
								α(N)=1.144×10^{-5} *16*; α(O)=1.107×10^{-6} *16*
								Mult.: DCO=1.00 *10* for 742.6+743.7γ in ^{103}Rh(^{12}C,3nγ) (1998La14).

Adopted Levels, Gammas (continued)

$\gamma(^{112}\text{Sb})$ (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	α &	Comments
x+2794.5	(19⁻)	834.0 *3*	100	x+1960.5	(17⁻)	E2	0.00206	α(K)=0.00178 *3*; α(L)=0.000226 *4*; α(M)=4.46×10⁻⁵ *7*
								α(N)=8.58×10⁻⁶ *12*; α(O)=8.35×10⁻⁷ *12*
								Mult.: DCO=0.93 *10* in ^{103}Rh(^{12}C,3nγ) (1998La14).
x+3718.4	(21⁻)	923.9 *3*	100	x+2794.5	(19⁻)			
x+4733.7	(23⁻)	1015.3 *3*	100	x+3718.4	(21⁻)			
x+5842.6	(25⁻)	1108.9 *2*	100	x+4733.7	(23⁻)			
x+7046.5	(27⁻)	1203.9 *3*	100	x+5842.6	(25⁻)			
x+8346.3	(29⁻)	1299.8 *3*	100	x+7046.5	(27⁻)			
x+9733.3	(31⁻)	1387.0 *3*	100	x+8346.3	(29⁻)			
x+11202.0	(33⁻)	1468.6 *3*	100	x+9733.3	(31⁻)			
x+12772.6	(35⁻)	1570.6 *4*	100	x+11202.0	(33⁻)			
x+14480.6	(37⁻)	1708.0 *5*	100	x+12772.6	(35⁻)			
x+16361.4	(39⁻)	1880.8 *7*	100	x+14480.6	(37⁻)			
x+18439.4?	(41⁻)	2078 *1*	100	x+16361.4	(39⁻)			

† From ^{103}Rh(^{12}C,3nγ) (1998La14), unless otherwise noted.
‡ From ^{112}Sn(p,nγ) (1997Fa08).
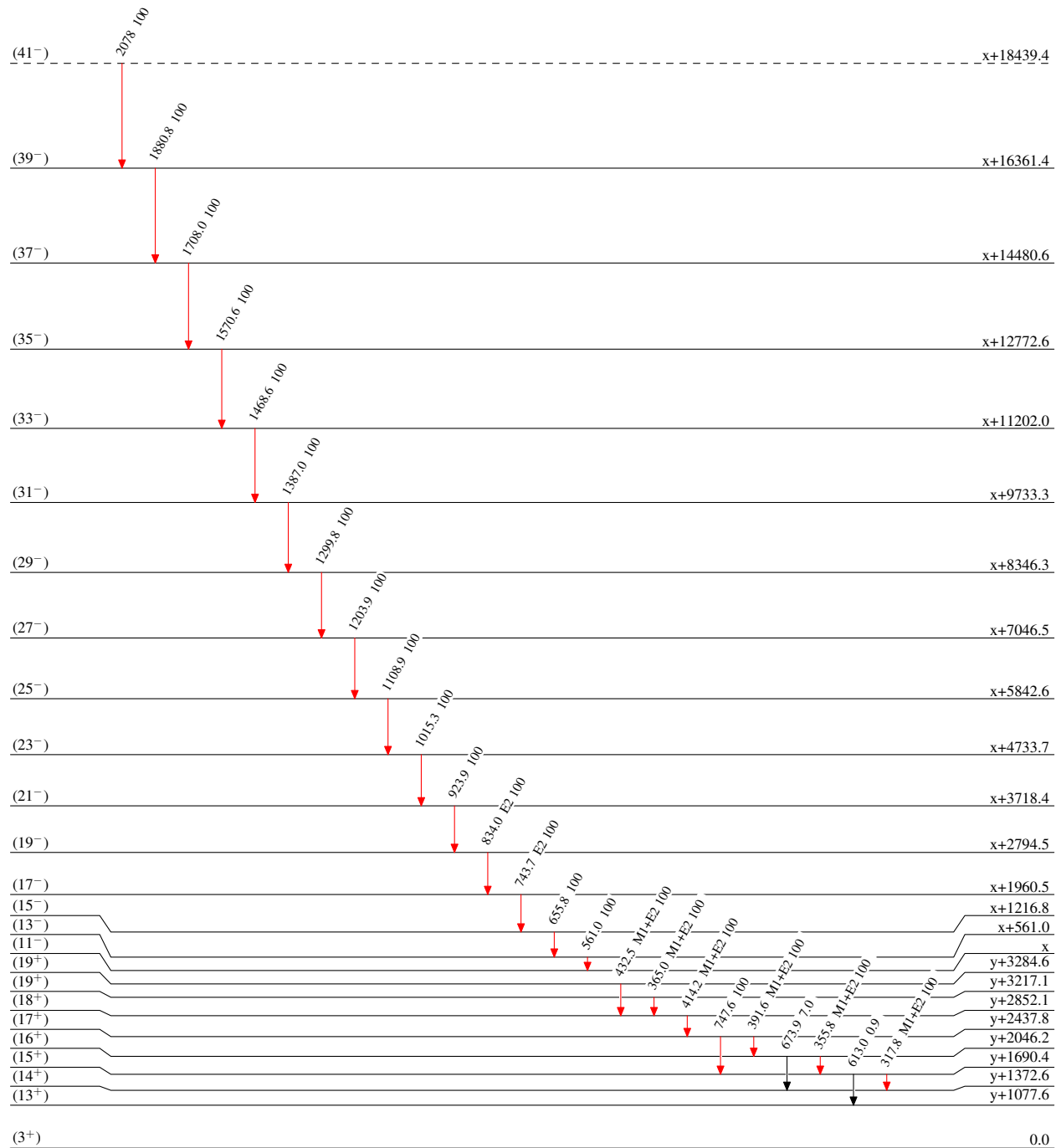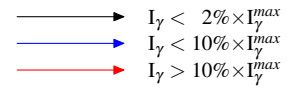# From ^{112}Te ε decay (1976Wi11, 1975WiZX).
@ From ^{112}Sn(p,nγ) (1997Fa08).
& Additional information 3.
a If no value given it was assumed δ=0.00 for E2/M1, δ=1.00 for E3/M2 and δ=0.10 for the other multipolarities.

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

Legend

$I_\gamma < \ 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
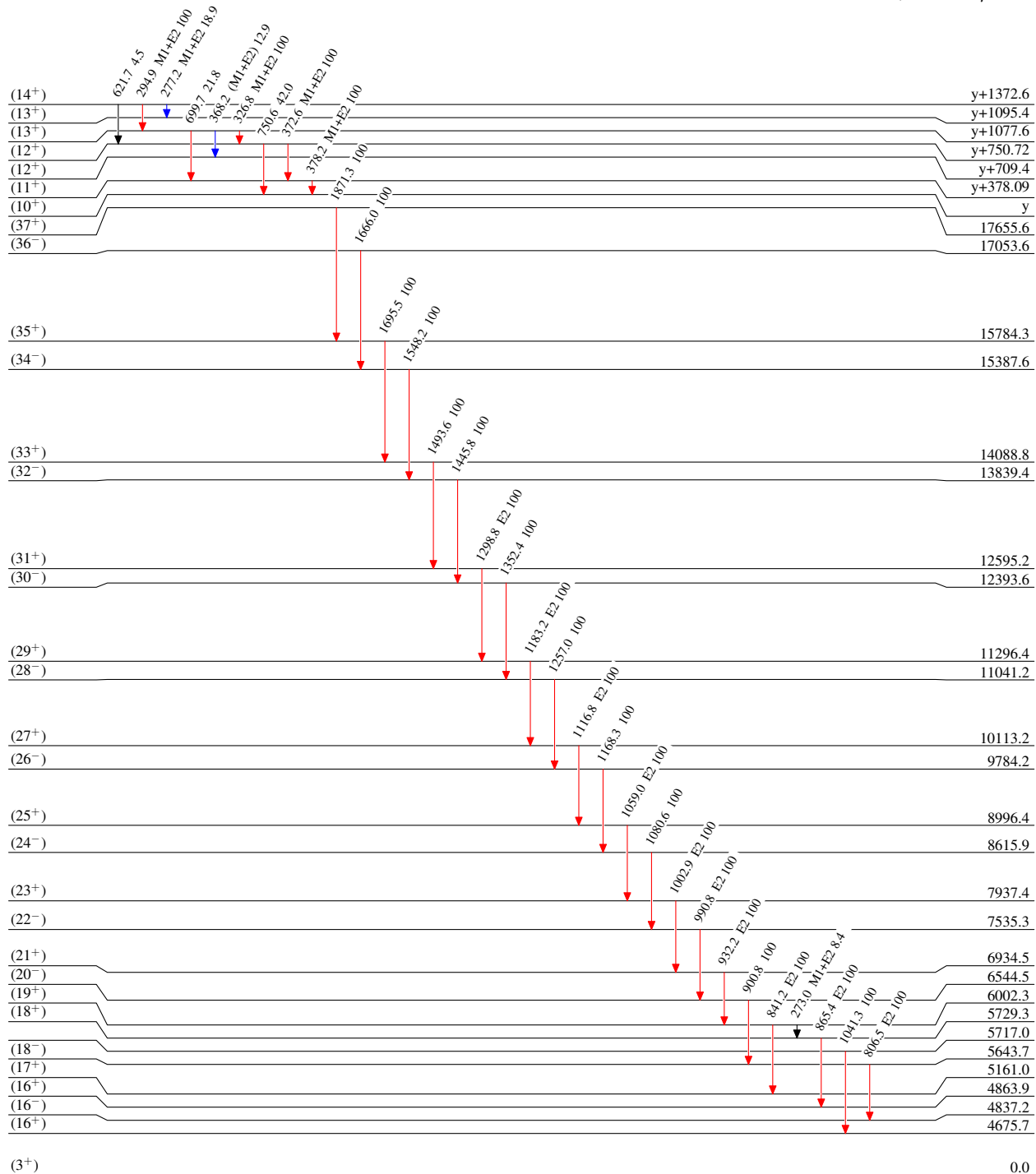

$^{112}_{51}\text{Sb}_{61}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

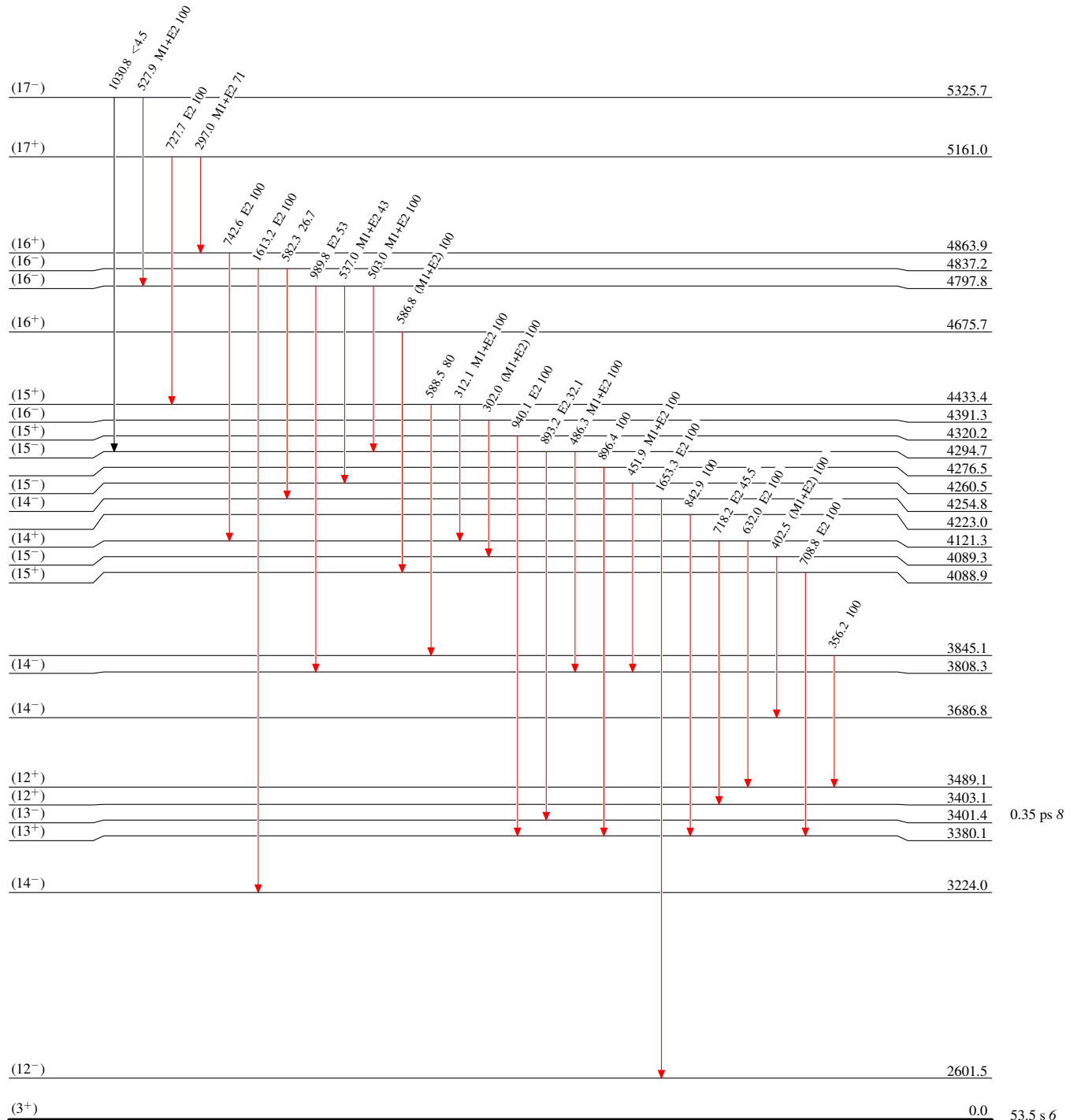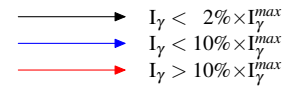$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$

$^{112}_{51}Sb_{61}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

I$_\gamma$ < 2%×I$_\gamma^{max}$
I$_\gamma$ < 10%×I$_\gamma^{max}$
I$_\gamma$ > 10%×I$_\gamma^{max}$

$^{112}_{51}$Sb$_{61}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

I$_\gamma$ < 2%×I$_\gamma^{max}$
I$_\gamma$ < 10%×I$_\gamma^{max}$
I$_\gamma$ > 10%×I$_\gamma^{max}$
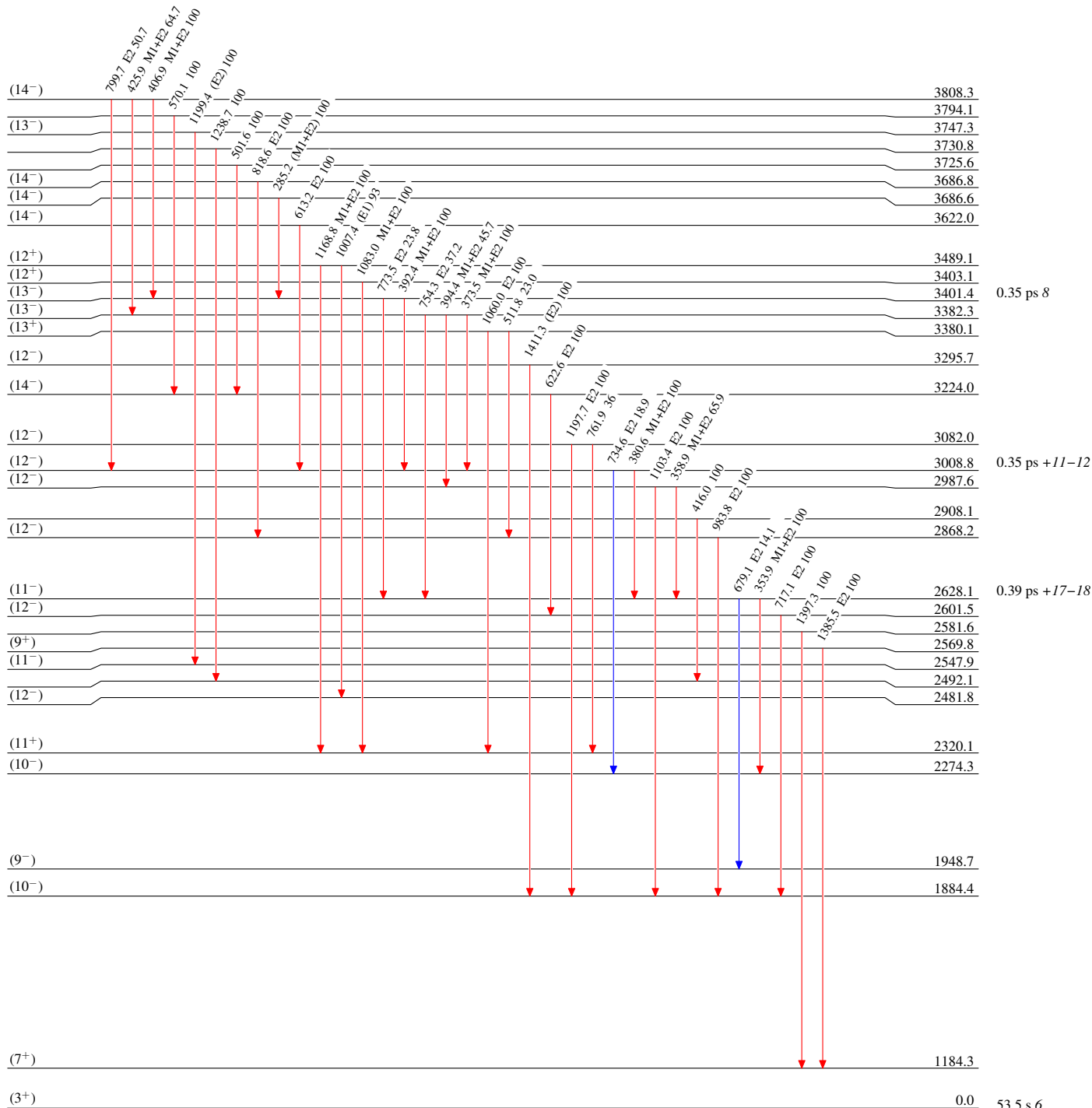

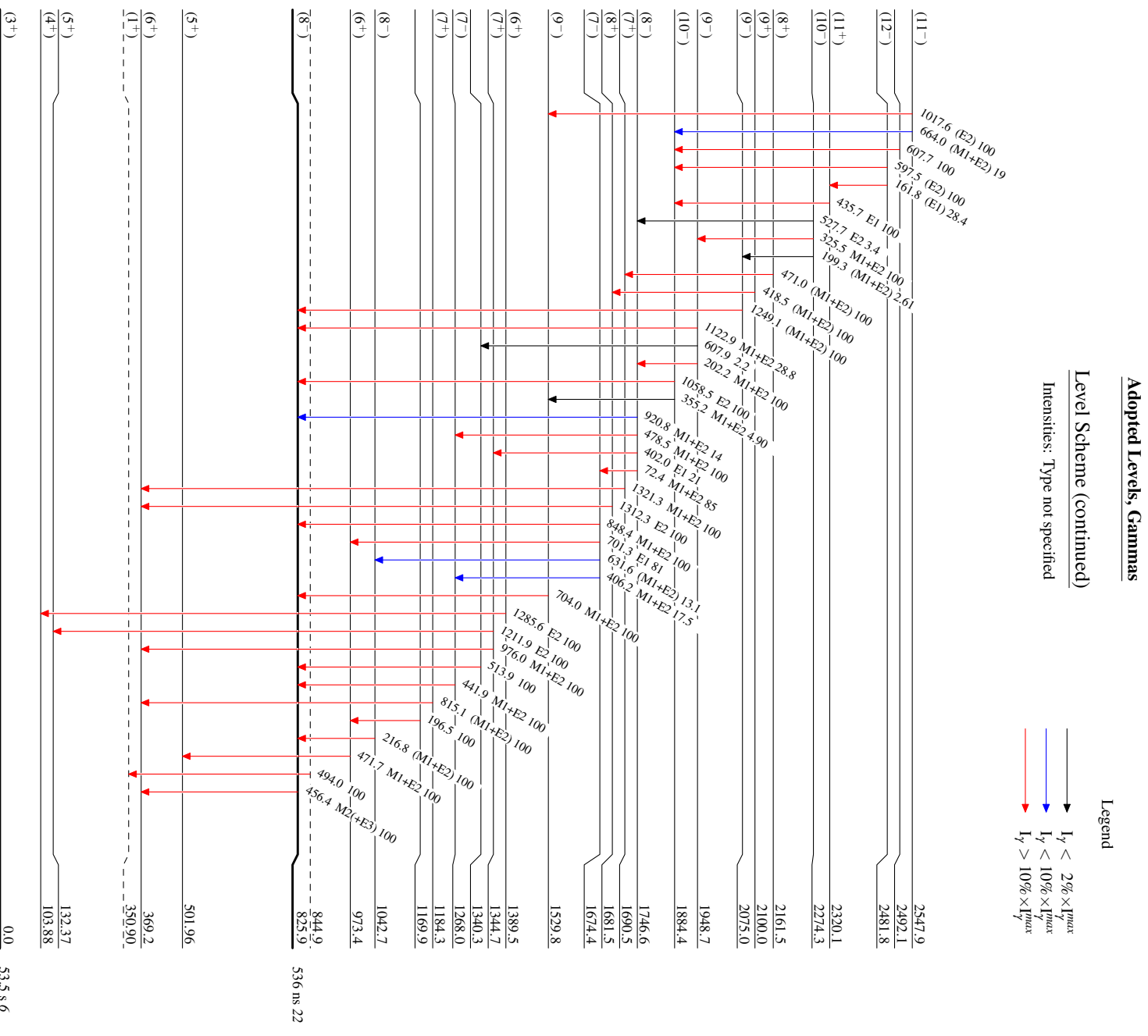$^{112}_{51}$Sb$_{61}$

From ENSDF

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
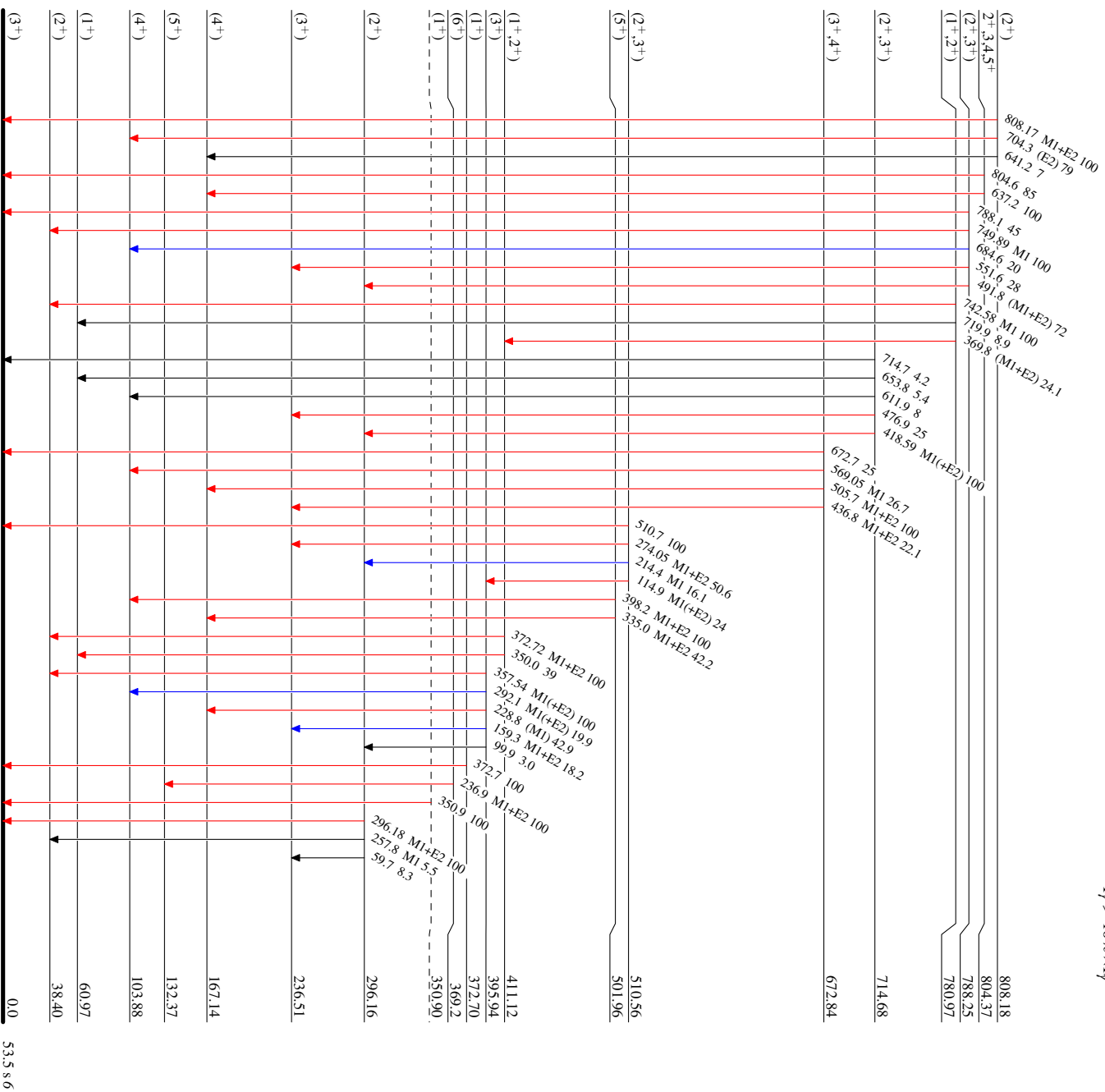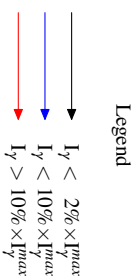
$I_\gamma < 10\% \times I_\gamma^{max}$

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

1017.6 (E2) 100
664.0 (M1+E2) 19
607.7 100
597.5 (E2) 100
161.8 (E1) 28.4
435.7 E1 100
527.7 E2 3.4
325.5 M1+E2 100
199.3 (M1+E2) 2.61
471.0 (M1+E2) 100
418.5 (M1+E2) 100
1249.1 (M1+E2) 100
1122.9 M1+E2 28.8
607.9 2.2
202.2 M1+E2 100
1058.5 E2 100
355.2 M1+E2 4.90
920.8 M1+E2 14
478.5 M1+E2 100
402.0 E1 21
72.4 M1+E2 85
1321.3 M1+E2 100
1312.3 E2 100
848.4 M1+E2 100
701.3 E1 81
631.6 (M1+E2) 13.1
406.2 M1+E2 17.5
704.0 M1+E2 100
1285.6 E2 100
1211.9 E2 100
976.0 M1+E2 100
513.9 100
441.9 M1+E2 100
815.1 (M1+E2) 100
196.5 100
216.8 (M1+E2) 100
471.7 M1+E2 100
494.0 100
456.4 M2(+E3) 100

(11^-)
(12^-)
(11^+)
(10^-)
(8^+)
(9^+)
(9^+)
(9^+)
(9^-)
(10^-)
(8^-)
(7^+)
(8^+)
(7^-)
(9^-)
(6^+)
(7^+)
(7^-)
(7^+)
(8^-)
(6^+)
(8^-)
(5^+)
(8^+)
(5^+)
(6^+)
(1^+)
(4^+)
(5^+)
(3^+)

2547.9
2492.1
2481.8
2320.1
2274.3
2161.5
2100.0
2075.0
1948.7
1884.4
1746.6
1690.5
1681.5
1674.4
1529.8
1389.5
1344.7
1340.3
1268.0
1184.3
1169.9
1042.7
973.4
844.9
825.9
501.96
369.2
350.90
132.37
103.88
0.0

536 ns 22
53.5 s 6

From ENSDF

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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

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

$I_\gamma > 10\% \times I_\gamma^{max}$
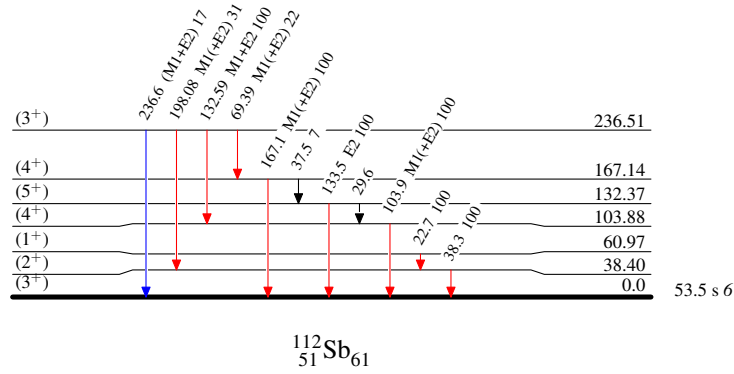
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

→ $I_\gamma < 2\% \times I_\gamma^{max}$
→ $I_\gamma < 10\% \times I_\gamma^{max}$
→ $I_\gamma > 10\% \times I_\gamma^{max}$
⇢ γ Decay (Uncertain)

$^{112}_{51}Sb_{61}$

Adopted Levels, Gammas

Band(C): ΔJ=2
band based on the
(11⁻) state

(41⁻)	x+18439.4
	2078
(39⁻)	x+16361.4
	1881
(37⁻)	x+14480.6
	1708
(35⁻)	x+12772.6
	1571
(33⁻)	x+11202.0
	1469
(31⁻)	x+9733.3
	1387
(29⁻)	x+8346.3
	1300
(27⁻)	x+7046.5
	1204
(25⁻)	x+5842.6
	1109
(23⁻)	x+4733.7
(21⁻)	1015 x+3718.4
(19⁻)	924 x+2794.5
(17⁻)	834 x+1960.5
(15⁻)	744 x+1216.8
(13⁻)	656 x+561.0
(11⁻)	561 x

Band(A): ΔJ=2
band based on the
4433.4-keV (15⁺) state

(37⁺)		17655.6
	1871	
(35⁺)		15784.3
	1696	
(33⁺)		14088.8
	1494	
(31⁺)		12595.2
(29⁺)	1299	11296.4
(27⁺)	1183	10113.2
(25⁺)	1117	8996.4
(23⁺)	1059	7937.4
(21⁺)	1003	6934.5
(19⁺)	932	6002.3
(17⁺)	841	5161.0
(15⁺)	728	4433.4

Band(B): ΔJ=2
band based on the
4254.8-keV (14⁻) state

(36⁻)		17053.6
	1666	
(34⁻)		15387.6
	1548	
(32⁻)		13839.4
	1446	
(30⁻)		12393.6
(28⁻)	1352	11041.2
(26⁻)	1257	9784.2
(24⁻)	1168	8615.9
(22⁻)	1081	7535.3
(20⁻)	991	6544.5
(18⁻)	901	5643.7
(16⁻)	806	4837.2
(14⁻)	582	4254.8

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Adopted Levels, Gammas (continued)

Band(E): ΔJ=1 band, based on the
(10⁺) state

(19⁺)	y+3284.6
	432
(18⁺)	y+2852.1
	414
(17⁺)	y+2437.8
	392 748
(16⁺)	y+2046.2
	356
(15⁺)	y+1690.4
	674 318
(14⁺)	y+1372.6
	295 613
(13⁺)	y+1077.6
	622 327
(12⁺)	y+750.72
	700 373
(11⁺)	y+378.09
	751 378
(10⁺)	y

Band(D): ΔJ=1 band, based on the
1746.6-keV (8⁻) state
configuration=$\pi g_{9/2}^{-1} \nu h_{11/2}$

(17⁻)	5325.7
	528
(16⁻)	1031 4797.8
	503
(15⁻)	990 4294.7
	486
(14⁻)	893 3808.3
	407
(13⁻)	800 3401.4
	392
(12⁻)	774 3008.8
	381
(11⁻)	735 2628.1
	354
(10⁻)	679 2274.3
	326
(9⁻)	528 1948.7
(8⁻)	202 1746.6

$^{112}_{51}$Sb$_{61}$