^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes	NDS 161, 1 (2019)	1-Apr-2019

Parent: ^{105}Sn: E=0.0; J$^{\pi}$=(5/2^{+}); $T_{1/2}$=32.7 s *5*; Q(ε)=6303 *11*; %ε+%β^{+} decay=98.9 *4*

^{105}Sn-%ε+%β^{+} decay: %ε=42.0 *35* (from Total Absorption measurements in 2006Ka44), %εp+%β^{+}p=0.011 *4* (2006Ka44).

1995Pf01: Source: chemically sepparated from ^{58}Ni+^{50}Cr; Beam: E(^{58}Ni)=5 MeV/nucleon; Target: 35 mg/cm^{2} thick ^{50}Cr, enriched to 97%; Detectors: on-line mass separator, ions source, catcher foils, transport tape, three Ge, particle telescope; Measured: X-rays, γ, p, Eγ, Iγ, γγ, X-γ coinc.; Deduced: ^{105}In level scheme, $T_{1/2}$.

2006Ka44: Facility: ISOL at GSI; Source: chemically separated from ^{50}Cr(^{58}Ni,2p1n) reaction; Beam: E(^{58}Ni)=5.2 MeV/nucleon; Target: 3-4 mg/cm^{2} thick ^{50}Cr; Detectors: ISOL, tape station, Total absorption spectrometer (TAS) consisting of one large-volume NaI, one plannar Ge x-ray detector (GEX), two Si charged-particles detectors; Measured: X-rays, γ-rays, Eγ, Iγ, particle − x-ray coinc., TAS-β+ coinc.; Deduced: ε channel, TAS(β+); Also, from the same collaboration: 2006Ka74, 2005Ka48. The 5.2 MeV beam was provided by the ISOL facility in Darmstadt. Measurements were taken using a large NaI(Tl) crystal. Total absorbtion γ-ray spectrometer was used to measure the β- and γ- intensity over the entire range of energies. A peak in β intensity was observed at 3.60 MeV.

Others: 1985De08.

^{105}In Levels

E(level)†	J$^{\pi}$‡	E(level)†	J$^{\pi}$‡	E(level)†	J$^{\pi}$‡
0.0	9/2^{+}	2311.6 *6*	(3/2^{+},5/2^{+},7/2^{+})	3143.7 *7*	(3/2^{+},5/2^{+},7/2^{+})
674.08 *25*	(1/2^{-})	2369? *5*		3158.4 *6*	(3/2^{+},5/2^{+},7/2^{+})
991.8 *3*	11/2^{+}	2370.3 *11*		3242.2 *11*	(3/2^{+},5/2^{+},7/2^{+})
1209.6 *4*		2399.1 *11*	(3/2^{+},5/2^{+},7/2^{+})	3262.2 *11*	(3/2^{+},5/2^{+},7/2^{+})
1281.73 *24*	(5/2^{+},7/2^{+})	2426.2 *8*	(7/2^{+} to 13/2^{+})	3414.2 *5*	(3/2^{+},5/2^{+},7/2^{+})
1302.9 *5*		2471.2 *8*	(3/2^{+},5/2^{+},7/2^{+})	3435.7? *10*	
1415.9 *3*	(7/2^{+})	2517.4 *11*	(3/2^{+},5/2^{+},7/2^{+})	3466.28 *10*	(5/2^{+},7/2^{+})
1417.0 *3*	(5/2^{+},7/2^{+})	2590.3 *4*	(3/2^{+})	3471.5 *5*	(5/2^{+},7/2^{+})
1465.9 *3*	(5/2^{+},7/2^{+})	2625.7 *11*	(7/2^{+})	3524.9 *11*	(3/2^{+},5/2^{+},7/2^{+})
1590.8 *4*		2664.9 *11*		3573.4? *10*	
1881.5 *8*	(7/2^{+})	2752.4 *11*	(3/2^{+},5/2^{+},7/2^{+})	3593.7 *8*	(3/2^{+},5/2^{+},7/2^{+})
1932.2 *5*	(3/2^{+})	2758.7 *8*		3626.8 *8*	(3/2^{+})
1942.4 *5*	(5/2^{+} to 11/2^{+})	2771 *5*		3636.1 *6*	(3/2^{+},5/2^{+},7/2^{+})
1978.7 *6*	(3/2^{+},5/2^{+},7/2^{+})	2782.1 *4*	(3/2^{+})	3655.6 *8*	(3/2^{+},5/2^{+},7/2^{+})
1984.5 *3*	(5/2^{+},7/2^{+})	2958.2 *11*	(3/2^{+},5/2^{+},7/2^{+})	3699.8 *8*	(3/2^{+},5/2^{+},7/2^{+})
1988.0 *11*		2964.4 *8*	(3/2^{+})	3952.1 *6*	(3/2^{+})
2222.1 *8*	(3/2^{+},5/2^{+},7/2^{+})	3024.6 *5*	(3/2^{+},5/2^{+},7/2^{+})	4197.9? *11*	(3/2^{+},5/2^{+},7/2^{+})
2269.9 *11*		3112.4 *8*	(7/2^{+})		

† From a least-squares fit to Eγ.
‡ From the Adopted Levels.

ε,β^{+} radiations

E(decay)	E(level)	Iβ^{+} †	Iε†	Log *ft*	I(ε+β^{+})†	Comments
(2105 *11*)	4197.9?	0.13 *2*	0.64 *13*	4.76 *9*	0.77 *15*	av Eβ=483.6 *49*; εK=0.719 *4*; εL=0.0928 *6*; εM+=0.02360 *14*
(2351 *11*)	3952.1	1.05 *6*	2.72 *14*	4.231 *25*	3.77 *19*	av Eβ=592.7 *50*; εK=0.621 *5*; εL=0.0799 *7*; εM+=0.02031 *16*
(2603 *11*)	3699.8	0.62 *8*	0.92 *11*	4.79 *6*	1.54 *19*	av Eβ=705.8 *50*; εK=0.513 *5*; εL=0.0659 *6*; εM+=0.01674 *16*
(2647 *11*)	3655.6	0.67 *5*	0.90 *6*	4.82 *4*	1.57 *11*	av Eβ=725.7 *50*; εK=0.494 *5*; εL=0.0635 *6*; εM+=0.01614 *15*

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^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44 (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ †	Iε†	Log *ft*	I($\varepsilon+\beta^+$)†	Comments
(2667 *11*)	3636.1	0.96 *17*	1.2 *2*	4.68 *8*	2.2 *4*	av Eβ=734.5 *50*; εK=0.486 *5*; εL=0.0624 *6*; εM+=0.01587 *15*
(2676 *11*)	3626.8	0.66 *8*	0.85 *11*	4.85 *6*	1.51 *19*	av Eβ=738.7 *50*; εK=0.483 *5*; εL=0.0620 *6*; εM+=0.01575 *15*
(2709 *11*)	3593.7	0.57 *8*	0.68 *10*	4.96 *7*	1.25 *18*	av Eβ=753.7 *50*; εK=0.469 *5*; εL=0.0602 *6*; εM+=0.01531 *15*
(2778 *11*)	3524.9	0.29 *12*	0.30 *12*	5.33 *18*	0.59 *24*	av Eβ=784.8 *51*; εK=0.442 *5*; εL=0.0567 *6*; εM+=0.01441 *15*
(2832 *11*)	3471.5	2.2 *3*	2.2 *2*	4.50 *5*	4.4 *5*	av Eβ=809.0 *50*; εK=0.422 *5*; εL=0.0541 *6*; εM+=0.01375 *14*
(2837 *11*)	3466.28	0.9 *3*	0.9 *3*	4.89 *15*	1.8 *6*	av Eβ=811.4 *50*; εK=0.420 *5*; εL=0.0538 *6*; εM+=0.01368 *14*
(2889 *11*)	3414.2	1.26 *8*	1.09 *7*	4.81 *3*	2.35 *14*	av Eβ=835.1 *50*; εK=0.401 *4*; εL=0.0514 *6*; εM+=0.01306 *13*
(3041 *11*)	3262.2	0.37 *7*	0.25 *5*	5.49 *9*	0.62 *12*	av Eβ=904.4 *51*; εK=0.349 *4*; εL=0.0447 *5*; εM+=0.01136 *12*
(3061 *11*)	3242.2	0.30 *7*	0.20 *5*	5.60 *11*	0.50 *12*	av Eβ=913.5 *51*; εK=0.343 *4*; εL=0.0439 *5*; εM+=0.01115 *12*
(3145 *11*)	3158.4	1.26 *4*	0.733 *24*	5.056 *17*	1.99 *6*	av Eβ=951.9 *51*; εK=0.317 *4*; εL=0.0406 *5*; εM+=0.01032 *11*
(3159 *11*)	3143.7	1.3 *4*	0.73 *22*	5.06 *13*	2.0 *6*	av Eβ=958.6 *51*; εK=0.313 *4*; εL=0.0401 *5*; εM+=0.01018 *11*
(3191 *11*)	3112.4	1.5 *2*	0.81 *11*	5.02 *6*	2.3 *3*	av Eβ=973.0 *51*; εK=0.304 *4*; εL=0.0389 *4*; εM+=0.00989 *11*
(3278 *11*)	3024.6	2.0 *3*	0.98 *13*	4.97 *6*	3.0 *4*	av Eβ=1013.3 *51*; εK=0.281 *3*; εL=0.0359 *4*; εM+=0.00912 *10*
(3339 *11*)	2964.4	0.55 *14*	0.25 *6*	5.58 *11*	0.80 *20*	av Eβ=1041.0 *51*; εK=0.265 *3*; εL=0.0340 *4*; εM+=0.00862 *9*
(3345 *11*)	2958.2	0.35 *4*	0.15 *2*	5.79 *6*	0.50 *6*	av Eβ=1043.9 *51*; εK=0.264 *3*; εL=0.0338 *4*; εM+=0.00858 *9*
(3521 *11*)	2782.1	3.5 *2*	1.3 *1*	4.92 *3*	4.8 *3*	av Eβ=1125.2 *51*; εK=0.2249 *23*; εL=0.0287 *3*; εM+=0.00730 *8*
(3544 *11*)	2758.7	0.37 *15*	0.13 *5*	5.92 *18*	0.50 *20*	av Eβ=1136.1 *51*; εK=0.2202 *22*; εL=0.0281 *3*; εM+=0.00715 *8*
(3551 *11*)	2752.4	0.9 *3*	0.30 *10*	5.54 *15*	1.2 *4*	av Eβ=1139.0 *52*; εK=0.2189 *22*; εL=0.0280 *3*; εM+=0.00711 *8*
(3638 *11*)	2664.9	0.25 *14*	0.08 *4*	6.16 *24*	0.33 *18*	av Eβ=1179.6 *52*; εK=0.2025 *20*; εL=0.0259 *3*; εM+=0.00657 *7*
(3677 *11*)	2625.7	0.66 *12*	0.20 *3*	5.77 *8*	0.86 *15*	av Eβ=1197.8 *52*; εK=0.1955 *20*; εL=0.02498 *25*; εM+=0.00634 *7*
(3713 *11*)	2590.3	1.7 *4*	0.48 *11*	5.38 *10*	2.2 *5*	av Eβ=1214.2 *52*; εK=0.1895 *19*; εL=0.02421 *24*; εM+=0.00615 *6*
(3786 *11*)	2517.4	0.6 *3*	0.2 *1*	5.87 *22*	0.8 *4*	av Eβ=1248.1 *52*; εK=0.1778 *18*; εL=0.02271 *22*; εM+=0.00577 *6*
(3832 *11*)	2471.2	1.4 *2*	0.34 *6*	5.57 *8*	1.7 *3*	av Eβ=1269.7 *52*; εK=0.1709 *17*; εL=0.02182 *21*; εM+=0.00554 *6*
(3877 *11*)	2426.2	0.4 *5*	0.10 *11*	6.1 *6*	0.5 *6*	av Eβ=1290.7 *52*; εK=0.1644 *16*; εL=0.02099 *20*; εM+=0.00533 *5*
(3904 *11*)	2399.1	1.16 *10*	0.266 *23*	5.68 *4*	1.43 *12*	av Eβ=1303.3 *52*; εK=0.1606 *16*; εL=0.02050 *20*; εM+=0.00521 *5*
(3933 *11*)	2370.3	0.61 *17*	0.13 *4*	5.99 *13*	0.74 *21*	av Eβ=1316.7 *52*; εK=0.1568 *15*; εL=0.02001 *19*; εM+=0.00508 *5*
(3991 *11*)	2311.6	1.2 *2*	0.26 *5*	5.71 *9*	1.5 *3*	av Eβ=1344.2 *52*; εK=0.1492 *14*; εL=0.01904 *18*; εM+=0.00483 *5*
(4033 *11*)	2269.9	0.35 *3*	0.070 *5*	6.29 *4*	0.42 *3*	av Eβ=1363.7 *52*; εK=0.1441 *14*; εL=0.01838 *17*; εM+=0.00467 *5*
(4081 *11*)	2222.1	2.0 *3*	0.39 *5*	5.56 *6*	2.4 *3*	av Eβ=1386.1 *52*; εK=0.1385 *13*; εL=0.01767 *17*;

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^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44 (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ †	Iε†	Log *ft*	I($\varepsilon+\beta^+$)†	Comments
						εM+=0.00449 *5*
(4315 *11*)	1988.0	0.85 *18*	0.13 *3*	6.08 *10*	0.98 *21*	av Eβ=1495.9 *52*; εK=0.1147 *10*; εL=0.01462 *13*; εM+=0.00371 *4*
(4319 *11*)	1984.5	2.9 *4*	0.44 *7*	5.56 *7*	3.3 *5*	av Eβ=1497.6 *52*; εK=0.1144 *10*; εL=0.01458 *13*; εM+=0.00370 *4*
(4324 *11*)	1978.7	1.5 *4*	0.22 *7*	5.85 *13*	1.7 *5*	av Eβ=1500.3 *52*; εK=0.1139 *10*; εL=0.01452 *13*; εM+=0.00369 *4*
(4361 *11*)	1942.4	1.1 *4*	0.17 *6*	5.98 *17*	1.3 *5*	av Eβ=1517.4 *52*; εK=0.1107 *10*; εL=0.01411 *13*; εM+=0.00358 *4*
(4371 *11*)	1932.2	4.0 *3*	0.59 *5*	5.44 *4*	4.6 *4*	av Eβ=1522.2 *52*; εK=0.1098 *10*; εL=0.01400 *13*; εM+=0.00355 *3*
(4422 *11*)	1881.5	1.67 *19*	0.23 *3*	5.85 *6*	1.90 *22*	av Eβ=1546.1 *52*; εK=0.1056 *9*; εL=0.01345 *12*; εM+=0.00342 *3*
(4712 *11*)	1590.8	1.5 *7*	0.17 *8*	6.05 *21*	1.7 *8*	av Eβ=1683.3 *52*; εK=0.0849 *7*; εL=0.01082 *9*; εM+=0.002746 *23*
(4837 *11*)	1465.9	6.9 *7*	0.68 *7*	5.46 *5*	7.6 *8*	av Eβ=1742.5 *53*; εK=0.0777 *6*; εL=0.00989 *8*; εM+=0.002510 *20*
(4886 *11*)	1417.0	4.0 *4*	0.38 *4*	5.72 *4*	4.4 *4*	av Eβ=1765.6 *53*; εK=0.0750 *6*; εL=0.00955 *8*; εM+=0.002425 *19*
(4887 *11*)	1415.9	4.2 *5*	0.40 *4*	5.70 *5*	4.6 *5*	av Eβ=1766.2 *53*; εK=0.0750 *6*; εL=0.00955 *8*; εM+=0.002423 *19*
(5021 *11*)	1281.73	10.1 *6*	0.87 *6*	5.39 *3*	11.0 *7*	av Eβ=1829.9 *53*; εK=0.0683 *6*; εL=0.00870 *7*; εM+=0.002208 *17*
(5311 *11*)	991.8	2.3 *4*	0.16 *3*	6.17 *7*	2.5 *4*	av Eβ=1967.9 *53*; εK=0.0564 *4*; εL=0.00717 *6*; εM+=0.001821 *13*

† For absolute intensity per 100 decays, multiply by 0.989 *4*.

γ(^{105}In)

Iγ normalization: from Σ(I(γ+ce) to g.s.)=100 and by assuming there is no direct feeding to the g.s.. Iγ normalization only tentative, given higher-lying γ are expected from TAS measurements (2006Ka44).

E_γ†	I_γ†‡	E_i(level)	J^π_i	E_f	J^π_f	Mult.	δ	α#	$I_{(\gamma+ce)}$‡	Comments
287.9 *10*	21 *4*	1590.8		1302.9						
309.1 *3*	282 *6*	1590.8		1281.73	($5/2^+$,$7/2^+$)	[M1]		0.0242	289 *6*	I_γ: Deduced by the evaluators from I(tot)= 289 given by the authors assuming transition is M1.
341.2 *10*	16 *8*	1932.2	($3/2^+$)	1590.8						
388.0 *10*	12 *2*	1978.7	($3/2^+$,$5/2^+$,$7/2^+$)	1590.8						
402.1& *10*	9 *1*	2771		2369?						
424.1 *5*	78 *4*	1415.9	($7/2^+$)	991.8	$11/2^+$					
476.6 *5*	55 *6*	1942.4	($5/2^+$ to $11/2^+$)	1465.9	($5/2^+$,$7/2^+$)					
535.5 *3*	209 *9*	1209.6		674.08	($1/2^-$)					
561.7 *10*	20 *4*	1978.7	($3/2^+$,$5/2^+$,$7/2^+$)	1417.0	($5/2^+$,$7/2^+$)					
599.6 *10*	36 *4*	1881.5	($7/2^+$)	1281.73	($5/2^+$,$7/2^+$)					
628.7 *5*	70 *10*	1302.9		674.08	($1/2^-$)					
629.3 *5*	50 *10*	1932.2	($3/2^+$)	1302.9						
674.1 *3*	679	674.08	($1/2^-$)	0.0	$9/2^+$	M4		0.0604	720	α(K)=0.0507 *8*; α(L)=0.00787 *12*; α(M)=0.001564 *4*; α(O)=1.94×10^{-5} *3* I_γ: Deduced by the evaluators from I(tot)=720 given by the authors assuming transition is M4. Mult.: from α(exp)=0.055 *6* (2006Ka44).
697.0 *10*	24 *14*	1978.7	($3/2^+$,$5/2^+$,$7/2^+$)	1281.73	($5/2^+$,$7/2^+$)					
722.5 *10*	39 *4*	1932.2	($3/2^+$)	1209.6						
733.7& *10*	7 *2*	2664.9		1932.2	($3/2^+$)					
756.2 *10*	49 *8*	2222.1	($3/2^+$,$5/2^+$,$7/2^+$)	1465.9	($5/2^+$,$7/2^+$)					
778.3 *10*	33 *7*	1988.0		1209.6						
832.3& *10*	<15	3143.7	($3/2^+$,$5/2^+$,$7/2^+$)	2311.6	($3/2^+$,$5/2^+$,$7/2^+$)					
880.1 *10*	36 *6*	2471.2	($3/2^+$,$5/2^+$,$7/2^+$)	1590.8						
889.9 *10*	28 *6*	1881.5	($7/2^+$)	991.8	$11/2^+$					
895.7 *5*	50 *10*	2311.6	($3/2^+$,$5/2^+$,$7/2^+$)	1415.9	($7/2^+$)					
903.2& *5*	49 *12*	2369?		1465.9	($5/2^+$,$7/2^+$)					
933.2 *10*	48 *4*	2399.1	($3/2^+$,$5/2^+$,$7/2^+$)	1465.9	($5/2^+$,$7/2^+$)					
954.4 *10*	25 *7*	2370.3		1415.9	($7/2^+$)					
991.8 *3*	276 *6*	991.8	$11/2^+$	0.0	$9/2^+$	M1+E2	0.5 *1*			δ: from the Adopted Gammas.
1012.4 *10*	31 *6*	2222.1	($3/2^+$,$5/2^+$,$7/2^+$)	1209.6						
1026.0 *10*	17 *2*	2958.2	($3/2^+$,$5/2^+$,$7/2^+$)	1932.2	($3/2^+$)					
1040.0 *10*	40 *18*	3466.28	($5/2^+$,$7/2^+$)	2426.2	($7/2^+$ to $13/2^+$)					
1046.0 *10*	19 *10*	3636.1	($3/2^+$,$5/2^+$,$7/2^+$)	2590.3	($3/2^+$)					

γ(^{105}In) (continued)

E_γ[†]	I_γ[†‡]	E_i(level)	J^π_i	E_f	J^π_f
1051.5 *10*	26 *11*	2517.4	(3/2+,5/2+,7/2+)	1465.9	(5/2+,7/2+)
1060.2 *10*	14 *1*	2269.9		1209.6	
1074.0 *10*	11 *6*	2664.9		1590.8	
1161.5 *10*	39 *12*	2752.4	(3/2+,5/2+,7/2+)	1590.8	
1167.8 *10*	12 *6*	2758.7		1590.8	
1189.7 *10*	22 *6*	2471.2	(3/2+,5/2+,7/2+)	1281.73	(5/2+,7/2+)
[x]1244.5 *10*	34 *6*				
1258.2 *5*	66 *1*	1932.2	(3/2+)	674.08	(1/2−)
1281.7 *3*	1000	1281.73	(5/2+,7/2+)	0.0	9/2+
1361.9 *10*	31 *1*	3952.1	(3/2+)	2590.3	(3/2+)
1364.7 *10*	48 *4*	2782.1	(3/2+)	1417.0	(5/2+,7/2+)
[x]1400.5 *10*	29 *5*				
1415.9 *3*	216 *10*	1415.9	(7/2+)	0.0	9/2+
1416.9 *3*	231 *10*	1417.0	(5/2+,7/2+)	0.0	9/2+
1433.9 *10*	45 *7*	3024.6	(3/2+,5/2+,7/2+)	1590.8	
1434.2 *10*	25 *4*	2426.2	(7/2+ to 13/2+)	991.8	11/2+
1465.9 *3*	553 *20*	1465.9	(5/2+,7/2+)	0.0	9/2+
1477.0 *10*	<10	2758.7		1281.73	(5/2+,7/2+)
1486.8 *10*	27 *10*	3471.5	(5/2+,7/2+)	1984.5	(5/2+,7/2+)
1500.4 *5*	53 *7*	2782.1	(3/2+)	1281.73	(5/2+,7/2+)
1521.7 *10*	45 *8*	3112.4	(7/2+)	1590.8	
1547.5[&] *10*	14 *3*	2222.1	(3/2+,5/2+,7/2+)	674.08	(1/2−)
1547.5 *10*	14 *3*	2964.4	(3/2+)	1417.0	(5/2+,7/2+)
1590.8 *10*	35 *8*	1590.8		0.0	9/2+
1607.6 *10*	26 *5*	4197.9?	(3/2+,5/2+,7/2+)	2590.3	(3/2+)
1633.9 *10*	29 *5*	2625.7	(7/2+)	991.8	11/2+
1651.3[@] *10*	17[@] *4*	3242.2	(3/2+,5/2+,7/2+)	1590.8	
1651.3[@] *10*	16[@] *3*	3593.7	(3/2+,5/2+,7/2+)	1942.4	(5/2+ to 11/2+)
1671.3 *10*	21 *4*	3262.2	(3/2+,5/2+,7/2+)	1590.8	
1692.5 *5*	67 *2*	3158.4	(3/2+,5/2+,7/2+)	1465.9	(5/2+,7/2+)
1713.0 *10*	26 *2*	3655.6	(3/2+,5/2+,7/2+)	1942.4	(5/2+ to 11/2+)
[x]1725.6 *10*	19 *6*				
1742.8 *5*	56 *11*	3024.6	(3/2+,5/2+,7/2+)	1281.73	(5/2+,7/2+)
[x]1770.5 *10*	17 *1*				
1822.9 *10*	15 *3*	3414.2	(3/2+,5/2+,7/2+)	1590.8	
1916.2 *3*	149 *9*	2590.3	(3/2+)	674.08	(1/2−)
1934.0[@] *5*	68[@] *18*	3143.7	(3/2+,5/2+,7/2+)	1209.6	
1934.0[@] *10*	20[@] *8*	3524.9	(3/2+,5/2+,7/2+)	1590.8	
1942.2 *10*	30 *14*	1942.4	(5/2+ to 11/2+)	0.0	9/2+
1984.5 *3*	139 *12*	1984.5	(5/2+,7/2+)	0.0	9/2+
2005.9 *10*	24 *9*	3471.5	(5/2+,7/2+)	1465.9	(5/2+,7/2+)
2019.7[&] *10*	22 *8*	3435.7?		1415.9	(7/2+)

$^{105}_{49}In_{56}$-5

^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44 (continued)

γ(^{105}In) (continued)

Eγ[†]	Iγ[†‡]	Ei(level)	J_i^π	E_f	J_f^π
2108.1 *5*	59 *5*	2782.1	(3/2+)	674.08	(1/2−)
2120.4 *10*	32 *6*	3112.4	(7/2+)	991.8	11/2+
2132.5 *5*	64 *2*	3414.2	(3/2+,5/2+,7/2+)	1281.73	(5/2+,7/2+)
2189.8[@] *10*	28[@] *3*	3471.5	(5/2+,7/2+)	1281.73	(5/2+,7/2+)
2189.8[@] *10*	27[@] *3*	3655.6	(3/2+,5/2+,7/2+)	1465.9	(5/2+,7/2+)
2219.9 *10*	41 *3*	3636.1	(3/2+,5/2+,7/2+)	1415.9	(7/2+)
2261.2 *10*	35 *4*	3471.5	(5/2+,7/2+)	1209.6	
2283.6[&] *10*	23 *4*	2958.2	(3/2+,5/2+,7/2+)	674.08	(1/2−)
2283.6 *10*	23 *4*	3699.8	(3/2+,5/2+,7/2+)	1415.9	(7/2+)
2290.3 *10*	13 *6*	2964.4	(3/2+)	674.08	(1/2−)
2291.6[&] *10*	12 *6*	3573.4?		1281.73	(5/2+,7/2+)
2311.9 *10*	26 *5*	3593.7	(3/2+,5/2+,7/2+)	1281.73	(5/2+,7/2+)
2344.8 *10*	27 *5*	3626.8	(3/2+)	1281.73	(5/2+,7/2+)
[x]2351.3 *10*	26 *6*				
[x]2371.0 *5*	51 *1*				
2426 *10*	33 *6*	2426.2	(7/2+ to 13/2+)	0.0	9/2+
[x]2527.0 *5*	68 *6*				
2589[&] *10*	39 *2*	3262.2	(3/2+,5/2+,7/2+)	674.08	(1/2−)
[x]2676 *1*	16 *2*				
[x]2706 *1*	19 *2*				
[x]2732 *1*	45 *8*				
2953 *1*	24 *4*	3626.8	(3/2+)	674.08	(1/2−)
[x]2984 *1*	42 *3*				
[x]3254 *1*	16 *8*				
3278.0 *5*	96 *6*	3952.1	(3/2+)	674.08	(1/2−)
3466.22 *10*	22 *6*	3466.28	(5/2+,7/2+)	0.0	9/2+
3472 *1*	33 *6*	3471.5	(5/2+,7/2+)	0.0	9/2+
[x]3542 *1*	24 *4*				
3636 *1*	14 *3*	3636.1	(3/2+,5/2+,7/2+)	0.0	9/2+
[x]3681 *1*	12 *6*				
3700 *1*	29 *5*	3699.8	(3/2+,5/2+,7/2+)	0.0	9/2+
[x]3751 *1*	5 *2*				
[x]3787 *1*	10 *4*				
[x]3819 *1*	10 *8*				

[†] From 1995Pf01; ΔE not given by the authors, but estimated by the evaluators as ΔE = 0.3 keV for Iγ>100; ΔE = 0.5 keV for Iγ between 50 and 100; and ΔE = 1.0 keV for Iγ<50.

[‡] For absolute intensity per 100 decays, multiply by 0.02970 *13*.

[#] 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.

[@] Multiply placed with intensity suitably divided.

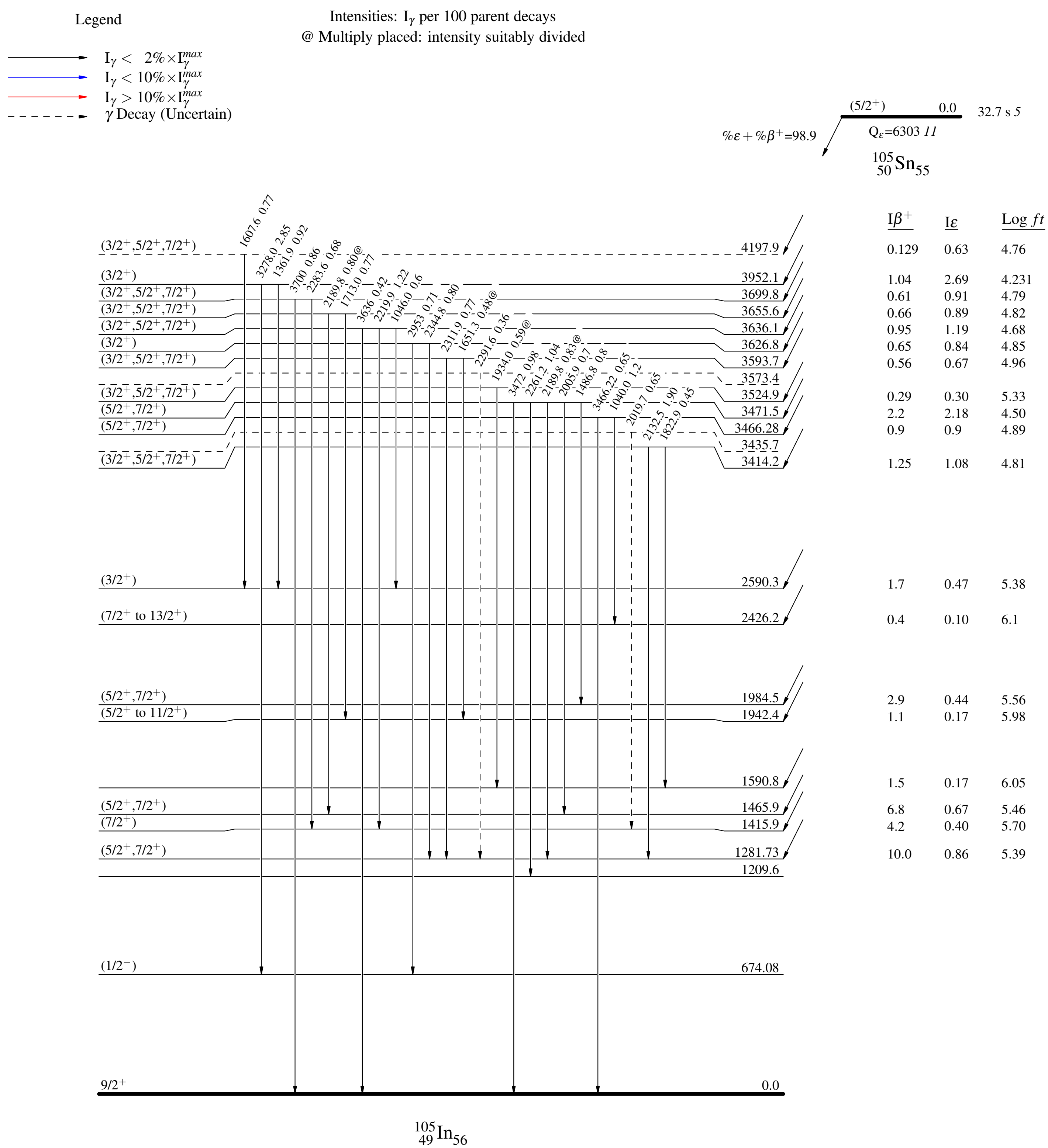
[&] Placement of transition in the level scheme is uncertain.

[x] γ ray not placed in level scheme.

^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44

Decay Scheme

Intensities: I_γ per 100 parent decays
@ Multiply placed: intensity suitably divided

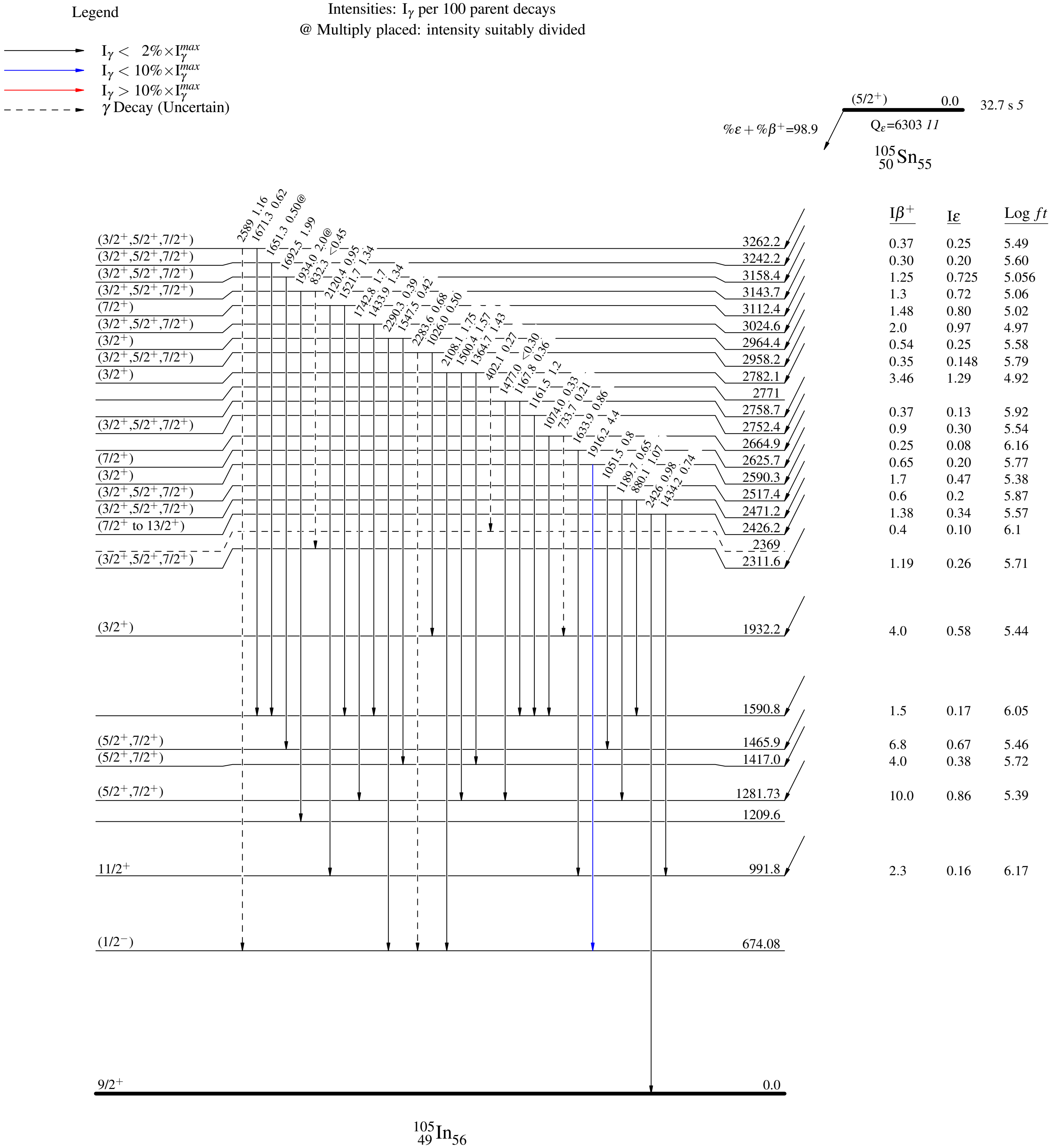


^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays

@ Multiply placed: intensity suitably divided



^{105}Sn ε decay (32.7 s) 1995Pf01,2006Ka44

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays
@ Multiply placed: intensity suitably divided