^{121}I ε decay 1990Ma55

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111, 1619 (2010)	20-Jan-2009

Parent: ^{121}I: E=0.0; J$^{\pi}$=5/2^{+}; T$_{1/2}$=2.12 h *1*; Q(ε)=2292 *26*; %ε+%β^{+} decay=100.0

1990Ma55: ^{92}Mo(^{32}S,xnyp) E=175 MeV, mass separated source measured γ, $\gamma\gamma$, α(exp); deduced decay scheme.

1980Bo35: Ce(p,spallation) E=660 MeV, mass separated source γ, $\gamma\gamma$ coincidence, deduced levels, log *ft*.

1968Gf02: sources produced by ^{122}Te(d,3n); measured γ, $\gamma\gamma$.

1970Sp03: sources from La(p,spallation) E(p)=3 GeV; measured γ, $\gamma\gamma$.

^{121}Te Levels

E(level)†	J$^{\pi}$‡	T$_{1/2}$‡	E(level)†	J$^{\pi}$‡
0.0	1/2^{+}	19.17 d *4*	994.02 *4*	3/2^{+},5/2^{+}
212.197 *19*	3/2^{+}		1148.65 *4*	5/2^{+}
293.89 *7*	11/2^{-}	164.2 d *8*	1170.20 *6*	3/2^{+},5/2^{+}
438.46 *7*	(9/2)$^{-}$		1172.86 *6*	(5/2^{-},7/2^{+})
443.11 *3*	7/2^{+}		1185.59 *10*	
475.243 *23*	5/2^{+}		1226.88 *3*	5/2^{+}
532.054 *24*	3/2^{+}		1306.34 *4*	3/2
538.65 *6*	7/2^{-}		1324.65 *12*	(3/2^{+},5/2^{+})
594.49 *3*	5/2^{+}		1340.62 *5*	5/2^{+}
681.29 *6*	1/2^{+}		1363.96 *5*	3/2^{+},5/2^{+}
683.06 *3*	(7/2)$^{+}$		1437.19 *6*	
757.92 *6*	(7/2^{-})		1486.62 *4*	(7/2)$^{+}$
806.69 *5*	3/2^{+}		1540.19 *13*	
810.92 *3*	(5/2^{+},7/2^{+})		1626.37 *6*	
830.51 *11*	(9/2)$^{+}$		1681.03 *5*	3/2,5/2^{+}
887.62 *6*	(7/2^{+})		1730.71 *5*	3/2,5/2^{+}
912.23 *4*	5/2^{+}		1913.23 *12*	

† E(levels) are based on a least-squares fit to E(γ's).

‡ From Adopted Levels.

ε,β^{+} radiations

E(decay)	E(level)	Iε†	Log *ft*	I($\varepsilon+\beta^{+}$)†	Comments
(3.8×10^{2} *3*)	1913.23	0.033 *3*	6.98 *8*	0.033 *3*	εK=0.8403 *16*; εL=0.1259 *13*; εM+=0.0338 *4*
(5.6×10^{2} *3*)	1730.71	0.134 *6*	6.74 *5*	0.134 *6*	εK=0.8471 *7*; εL=0.1207 *5*; εM+=0.03220 *16*
(6.1×10^{2} *3*)	1681.03	0.144 *5*	6.78 *5*	0.144 *5*	εK=0.8482 *6*; εL=0.1198 *5*; εM+=0.03194 *13*
(6.7×10^{2} *3*)	1626.37	0.089 *13*	7.07 *8*	0.089 *13*	εK=0.8492 *5*; εL=0.1191 *4*; εM+=0.03170 *11*
(7.5×10^{2} *3*)	1540.19	0.024 *4*	7.75 *8*	0.024 *4*	εK=0.8505 *4*; εL=0.1181 *3*; εM+=0.03140 *9*
(8.1×10^{2} *3*)	1486.62	0.216 *7*	6.86 *4*	0.216 *7*	εK=0.8512 *3*; εL=0.11760 *24*; εM+=0.03124 *8*
(8.5×10^{2} *3*)	1437.19	0.078 *6*	7.35 *5*	0.078 *6*	εK=0.8517 *3*; εL=0.11720 *21*; εM+=0.03112 *7*
(9.3×10^{2} *3*)	1363.96	0.186 *6*	7.05 *3*	0.186 *6*	εK=0.8524 *3*; εL=0.11668 *18*; εM+=0.03096 *6*
(9.5×10^{2} *3*)	1340.62	0.147 *6*	7.18 *3*	0.147 *6*	εK=0.8525 *3*; εL=0.11654 *17*; εM+=0.03091 *5*
(9.7×10^{2} *3*)	1324.65	0.024 *3*	7.98 *6*	0.024 *3*	εK=0.8527 *2*; εL=0.11644 *16*; εM+=0.03088 *5*
(9.9×10^{2} *3*)	1306.34	0.268 *8*	6.95 *3*	0.268 *8*	εK=0.8528 *2*; εL=0.11634 *16*; εM+=0.03085 *5*
(1.07×10^{3} *3*)	1226.88	0.567 *14*	6.690 *25*	0.567 *14*	εK=0.8534 *2*; εL=0.11592 *13*; εM+=0.03072 *4*
(1.11×10^{3} *3*)	1185.59	0.0326 *24*	7.96 *4*	0.0326 *24*	εK=0.8536 *2*; εL=0.11573 *12*; εM+=0.03066 *4*
(1.12×10^{3} *3*)	1172.86	0.174 *6*	7.25 *3*	0.174 *6*	εK=0.8537 *2*; εL=0.11567 *12*; εM+=0.03065 *4*
(1.12×10^{3} *3*)	1170.20	0.100 *5*	7.49 *3*	0.100 *5*	εK=0.8537 *2*; εL=0.11566 *12*; εM+=0.03064 *4*
(1.14×10^{3} *3*)	1148.65	0.470 *12*	6.834 *24*	0.470 *12*	εK=0.8538 *2*; εL=0.1156 *2*; εM+=0.03061 *4*
(1.30×10^{3} *3*)	994.02	0.167 *8*	7.40 *3*	0.167 *8*	εK=0.8539 *3*; εL=0.11491 *13*; εM+=0.03041 *4*

Continued on next page (footnotes at end of table)

^{121}I ε decay 1990Ma55 (continued)

ϵ,$β^+$ radiations (continued)

E(decay)	E(level)	I$β^+$ †	Iε†	Log *ft*	I(ε+$β^+$)†	Comments
($1.38×10^3$ *3*)	912.23	0.0009 *3*	0.361 *19*	7.12 *3*	0.362 *19*	av Eβ=169 *12*; εK=0.8528 *6*; εL=0.11448 *17*; εM+=0.03029 *5*
($1.40×10^3$ *3*)	887.62	0.00022 *7*	0.070 *4*	7.85 *3*	0.070 *4*	av Eβ=180 *12*; εK=0.8523 *8*; εL=0.11433 *18*; εM+=0.03025 *5*
($1.46×10^3$ *3*)	830.51	$6.0×10^{-5}$ *18*	0.0109 *17*	8.69 *7*	0.0110 *17*	av Eβ=205 *12*; εK=0.8505 *11*; εL=0.11392 *22*; εM+=0.03013 *7*
($1.48×10^3$ *3*)	810.92	0.012 *3*	1.78 *6*	6.486 *22*	1.79 *6*	av Eβ=213 *12*; εK=0.8497 *13*; εL=0.11375 *24*; εM+=0.03009 *7*
($1.49×10^3$ *3*)	806.69	0.0014 *3*	0.204 *11*	7.43 *3*	0.205 *11*	av Eβ=215 *12*; εK=0.8495 *13*; εL=0.11372 *24*; εM+=0.03008 *7*
($1.61×10^3$ *3*)	683.06	0.012 *2*	0.71 *4*	6.96 *3*	0.72 *4*	av Eβ=269 *12*; εK=0.8416 *24*; εL=0.1123 *4*; εM+=0.02970 *10* Log *ft*: An expected log *ft* for a second forbidden transition is >12.8. There is missing γ feeding to this level from higher levels.
($1.61×10^3$ *3*)	681.29	0.0013 *2*	0.075 *4*	7.94 *3*	0.076 *4*	av Eβ=269 *12*; εK=0.8415 *24*; εL=0.1123 *4*; εM+=0.02969 *11* Log *ft*: An expected log *ft* for a second forbidden transition is >12.8. There is missing γ feeding to this level from higher levels.
($1.70×10^3$ *3*)	594.49	0.014 *2*	0.52 *4*	7.14 *4*	0.53 *4*	av Eβ=307 *12*; εK=0.833 *4*; εL=0.1109 *5*; εM+=0.02932 *14*
($1.75×10^3$ *3*)	538.65	0.0031 *6*	0.082 *11*	7.97 *6*	0.085 *11*	av Eβ=332 *12*; εK=0.825 *4*; εL=0.1098 *6*; εM+=0.02903 *16*
($1.76×10^3$ *3*)	532.054	0.26 *4*	6.8 *7*	6.05 *5*	7.1 *7*	av Eβ=334 *12*; εK=0.824 *4*; εL=0.1097 *6*; εM+=0.02899 *16*
($2.08×10^3$ *3*)	212.197	10.3 *8*	76.2 *8*	5.154 *16*	86.54 *18*	av Eβ=475 *12*; εK=0.754 *8*; εL=0.0999 *11*; εM+=0.0264 *3*

† Absolute intensity per 100 decays.

γ(^{121}Te)

Iγ normalization: no β-feeding to g.s. (second forbidden β); and assumed ΣI(γ+ce to g.s. + 294 level)=100.
α(exp): normalized to α(K)(258γ)=0.0514 (1990Ma55).

$E_γ$[†]	$I_γ$[†f]	E_i(level)	$J^π_i$	E_f	$J^π_f$	Mult.[d]	δ	α	Comments
56.8 *1*	0.070[&] *6*	532.054	3/2+	475.243	5/2+	[M1,E2][e]		8 *5*	α(K)=4.6 *16*; α(L)=2.9 *25*; α(M)=0.6 *6*; α(N+..)=0.12 *11* α(N)=0.11 *10*; α(O)=0.009 *8*
62.7 *2*	0.003 *1*	594.49	5/2+	532.054	3/2+	[M1,E2][e]		6 *4*	α(K)=3.5 *13*; α(L)=1.8 *16*; α(M)=0.4 *4*; α(N+..)=0.08 *7* α(N)=0.07 *6*; α(O)=0.006 *5*
127.9[‡] *1*	0.003[‡] *1*	810.92	(5/2+,7/2+)	683.06	(7/2)+	[M1,E2][e]		0.52 *18*	
144.58 *5*	0.107 *6*	438.46	(9/2)−	293.89	11/2−	M1+E2	−0.29 *10*	0.259 *13*	α(K)=0.220 *9*; α(L)=0.031 *4*; α(M)=0.0063 *7*; α(N+..)=0.00137 *14* α(N)=0.00124 *13*; α(O)=0.000130 *11* Mult.,δ: from adopted gammas.
151.3 *1*	0.013 *2*	594.49	5/2+	443.11	7/2+	[M1,E2][e]		0.30 *9*	α(K)=0.24 *6*; α(L)=0.048 *24*; α(M)=0.010 *5*; α(N+..)=0.0020 *10* α(N)=0.0019 *10*; α(O)=0.00018 *8*
154.2 *1*	0.010 *2*	912.23	5/2+	757.92	(7/2−)	[E1][e]		0.0581	α(K)=0.0502 *7*; α(L)=0.00635 *9*; α(M)=0.001258 *18*; α(N+..)=0.000271 *4* α(N)=0.000246 *4*; α(O)=2.57×10^{-5} *4*
[x]202.27 *9*	0.051 *7*								
207.81 *7*	0.127 *6*	683.06	(7/2)+	475.243	5/2+	[M1,E2][e]		0.111 *21*	α(K)=0.092 *15*; α(L)=0.015 *6*; α(M)=0.0031 *11*; α(N+..)=0.00065 *22* α(N)=0.00059 *20*; α(O)=5.9×10^{-5} *17*
212.20 *4*	100	212.197	3/2+	0.0	1/2+	M1+E2	+0.226 *8*	0.0869	α(K)=0.0747 *11*; α(L)=0.00982 *14*; α(M)=0.00196 *3*; α(N+..)=0.000429 *7* α(N)=0.000387 *6*; α(O)=4.16×10^{-5} *6* Mult.,δ: from adopted gammas. α(K)exp=0.076 *11*, α(L)exp=0.0099 *4*.
219.3 *1*	0.028 *3*	757.92	(7/2−)	538.65	7/2−	[M1,E2][e]		0.094 *16*	α(K)=0.078 *11*; α(L)=0.013 *4*; α(M)=0.0025 *9*; α(N+..)=0.00054 *17* α(N)=0.00049 *16*; α(O)=4.9×10^{-5} *13*
230.95 *5*	0.33 *2*	443.11	7/2+	212.197	3/2+	E2		0.0918	α(K)=0.0749 *11*; α(L)=0.01353 *19*; α(M)=0.00276 *4*; α(N+..)=0.000581 *9* α(N)=0.000530 *8*; α(O)=5.07×10^{-5} *8* α(K)exp=0.086 *8*.
239.9[‡] *1*	0.021[‡] *5*	683.06	(7/2)+	443.11	7/2+	[M1,E2][e]		0.071 *10*	α(K)=0.060 *7*; α(L)=0.009 *3*; α(M)=0.0019 *6*; α(N+..)=0.00040 *11* α(N)=0.00036 *10*; α(O)=3.7×10^{-5} *8*
244.75 *6*	0.19 *1*	538.65	7/2−	293.89	11/2−	[E2][e]		0.0755	α(K)=0.0619 *9*; α(L)=0.01089 *16*; α(M)=0.00222 *4*; α(N+..)=0.000468 *7* α(N)=0.000427 *6*; α(O)=4.11×10^{-5} *6*

γ(^{121}Te) (continued)

E_γ[†]	I_γ[†f]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[d]	α	Comments
263.07 7	0.082 5	475.243	5/2+	212.197	3/2+	[M1,E2][e]	0.054 6	α(K)=0.045 4; α(L)=0.0068 16; α(M)=0.0014 4; α(N+..)=0.00029 7 α(N)=0.00027 6; α(O)=2.7×10^{-5} 5 α(K)exp=0.028 7.
278.87[@] 6	0.152 8	810.92	(5/2+,7/2+)	532.054	3/2+	(M1)	0.0413	α(K)=0.0357 5; α(L)=0.00451 7; α(M)=0.000900 13; α(N+..)=0.000197 3 α(N)=0.0001781 25; α(O)=1.94×10^{-5} 3 α(K)exp=0.031 2; corrected for ^{121}Xe parent ce lines.
293.27 6	0.074 4	887.62	(7/2+)	594.49	5/2+	[M1,E2][e]	0.039 3	α(K)=0.0329 17; α(L)=0.0048 9; α(M)=0.00097 18; α(N+..)=0.00021 4 α(N)=0.00019 4; α(O)=1.94×10^{-5} 24
317.82 6	0.093 5	912.23	5/2+	594.49	5/2+	[M1,E2][e]	0.0307 14	α(K)=0.0261 8; α(L)=0.0037 6; α(M)=0.00075 11; α(N+..)=0.000162 22 α(N)=0.000146 21; α(O)=1.51×10^{-5} 14
319.6 1	[b]	757.92	(7/2−)	438.46	(9/2)−			
319.90 4	1.11 5	532.054	3/2+	212.197	3/2+	M1,E2	0.0302 13	α(K)=0.0256 7; α(L)=0.0036 5; α(M)=0.00073 11; α(N+..)=0.000158 21 α(N)=0.000143 20; α(O)=1.49×10^{-5} 14 α(K)exp=0.023 1.
335.7 2	0.013 4	810.92	(5/2+,7/2+)	475.243	5/2+			
367.80 5	0.108 5	810.92	(5/2+,7/2+)	443.11	7/2+	[M1,E2][e]	0.0202	α(K)=0.0173 4; α(L)=0.00239 20; α(M)=0.00048 5; α(N+..)=0.000104 8 α(N)=9.4×10^{-5} 8; α(O)=9.8×10^{-6} 4
380.2 1	0.022 2	912.23	5/2+	532.054	3/2+			
382.25 4	0.56 3	594.49	5/2+	212.197	3/2+	M1	0.0184	α(K)=0.01589 23; α(L)=0.00199 3; α(M)=0.000396 6; α(N+..)=8.70×10^{-5} 13 α(N)=7.84×10^{-5} 11; α(O)=8.55×10^{-6} 12 α(K)exp=0.018 1.
387.4 1	0.013 2	830.51	(9/2)+	443.11	7/2+			
412.0[‡] 1	0.006[‡] 1	887.62	(7/2+)	475.243	5/2+			I_γ: Authors' value of 0.06 1 in γ table is possibly a misprint. 0.006 in level scheme.
420.2 3	0.011 3	1226.88	5/2+	806.69	3/2+			
[x]423.8 1	0.030 4							
437.0 1	0.023 2	912.23	5/2+	475.243	5/2+			
443.3 1	0.032 3	1437.19		994.02	3/2+,5/2+			
469.18[g] 7	0.071[g] 4	681.29	1/2+	212.197	3/2+			
469.18[g] 7	0.071[g] 4	912.23	5/2+	443.11	7/2+			
470.83 4	0.72[a] 4	683.06	(7/2)+	212.197	3/2+	E2	0.00968 14	α=0.00968 14; α(K)=0.00823 12; α(L)=0.001167 17; α(M)=0.000234 4; α(N+..)=5.05×10^{-5} 7 α(N)=4.58×10^{-5} 7; α(O)=4.73×10^{-6} 7 α(K)exp=0.0102 8, α(L)exp=0.0020 4.
475.28 4	1.21 5	475.243	5/2+	0.0	1/2+	E2	0.00942 14	α=0.00942 14; α(K)=0.00801 12; α(L)=0.001134 16;

$^{121}_{52}$Te$_{69}$-4

γ(^{121}Te) (continued)

E_γ[†]	I_γ[†f]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[d]	α	Comments
								α(M)=0.000228 *4*; α(N+..)=4.91×10^{-5} *7* α(N)=4.45×10^{-5} *7*; α(O)=4.60×10^{-6} *7* α(K)exp=0.0090 *5*, α(L)exp=0.0016 *3*.
487.1 *1*	0.015 *2*	1170.20	3/2$^+$,5/2$^+$	683.06	(7/2)$^+$			
489.9 *2*	0.011 *2*	1172.86	(5/2$^-$,7/2$^+$)	683.06	(7/2)$^+$			
502.5 *1*	0.019 *2*	1185.59		683.06	(7/2)$^+$			
518.9 *1*	0.012 *3*	994.02	3/2$^+$,5/2$^+$	475.243	5/2$^+$			
532.08 *4*	7.2 *3*	532.054	3/2$^+$	0.0	1/2$^+$	E2	0.00686 *10*	α=0.00686 *10*; α(K)=0.00585 *9*; α(L)=0.000808 *12*; α(M)=0.0001621 *23*; α(N+..)=3.50×10^{-5} *5* α(N)=3.17×10^{-5} *5*; α(O)=3.31×10^{-6} *5* α(K)exp=0.0057 *3*, α(L)exp=0.00077 *5*, α(M)exp=0.00021 *5*.
543.5 *1*	0.013 *2*	1226.88	5/2$^+$	683.06	(7/2)$^+$			
546.2[h] *2*	0.011 *2*	757.92	(7/2$^-$)	212.197	3/2$^+$			Data given in γ table, but not shown in the decay scheme (1990Ma55).
548.62 *9*	0.032 *3*	1306.34	3/2	757.92	(7/2$^-$)			
550.8 *1*	0.018 *3*	994.02	3/2$^+$,5/2$^+$	443.11	7/2$^+$			
554.2 *1*	0.035 *4*	1148.65	5/2$^+$	594.49	5/2$^+$			
594.50[‡] *5*	0.41[‡] *2*	594.49	5/2$^+$	0.0	1/2$^+$			α(K)exp=0.0040 *6*; not resolved from neighboring peaks in ce spectra, α(exp) value was derived from the ratio of γ and ce composite areas.
594.5[‡] *1*	0.024[‡] *6*	806.69	3/2$^+$	212.197	3/2$^+$			
598.74 *5*	1.74 *7*	810.92	(5/2$^+$,7/2$^+$)	212.197	3/2$^+$			α(K)exp=0.0051 *2*, α(L)exp=0.00068 *12*.
626.3 *1*	0.026 *4*	1437.19		810.92	(5/2$^+$,7/2$^+$)			
628.2 *2*	0.014 *2*	1540.19		912.23	5/2$^+$			
[x]629.9 *2*	0.018 *2*							
632.2 *1*	0.023 *2*	1226.88	5/2$^+$	594.49	5/2$^+$			
634.0 *2*	0.018 *2*	1172.86	(5/2$^-$,7/2$^+$)	538.65	7/2$^-$			
640.8 *1*	0.097 *4*	1172.86	(5/2$^-$,7/2$^+$)	532.054	3/2$^+$			
[x]663.9 *1*	0.018 *2*							
[x]670.2 *2*	0.008 *2*							
673.34 *6*	0.111 *6*	1148.65	5/2$^+$	475.243	5/2$^+$			
[x]678.38 *6*	0.113 *6*							
681.1[g] *1*	0.019[g] *2*	681.29	1/2$^+$	0.0	1/2$^+$			
681.1[g] *1*	0.019[g] *2*	1363.96	3/2$^+$,5/2$^+$	683.06	(7/2)$^+$			
683.10 *7*	0.062 *4*	683.06	(7/2)$^+$	0.0	1/2$^+$			
686.2 *2*	0.011 *2*	1913.23		1226.88	5/2$^+$			
688.1 *1*	0.035 *3*	1226.88	5/2$^+$	538.65	7/2$^-$			
694.89 *5*	0.22 *1*	1226.88	5/2$^+$	532.054	3/2$^+$			
697.68[#] *7*	0.062 *3*	1172.86	(5/2$^-$,7/2$^+$)	475.243	5/2$^+$			
699.96 *5*	0.26 *2*	912.23	5/2$^+$	212.197	3/2$^+$			α(K)exp=0.0039 *6*; not resolved from neighboring peaks in ce spectra, α(exp) value was derived from the ratio of γ and ce composite areas.

γ(^{121}Te) (continued)

Eγ[†]	Iγ[†f]	Ei(level)	J^π_i	Ef	J^π_f	Mult.[d]	α	Comments
705.5[‡] *1*	0.039[‡] *5*	1148.65	5/2+	443.11	7/2+			
711.69 *7*	0.044 *3*	1306.34	3/2	594.49	5/2+	(E1)	0.001210 *17*	α=0.001210 *17*; α(K)=0.001053 *15*; α(L)=0.0001266 *18*; α(M)=2.51×10^{-5} *4*; α(N+..)=5.49×10^{-6} α(N)=4.96×10^{-6} *7*; α(O)=5.38×10^{-7} *8* α(K)exp=0.0011 *5*.
734.3 *1*	0.018 *2*	1172.86	(5/2−,7/2+)	438.46	(9/2)−			
751.65 *7*	0.050 *3*	1226.88	5/2+	475.243	5/2+			
754.2[@] *2*	0.011 *2*	1437.19		683.06	(7/2)+			α(K)exp=0.0041 *7*.
764.7 *2*	0.014 *2*	1913.23		1148.65	5/2+			
768.80 *9*	0.039 *3*	1681.03	3/2,5/2+	912.23	5/2+			
ˣ772.6 *2*	0.011 *2*							
781.85[@] *6*	0.098 *5*	994.02	3/2+,5/2+	212.197	3/2+			α(K)exp=0.0007 *1*; corrected for ^{121}Xe parent ce lines.
783.8 *2*	0.014 *2*	1226.88	5/2+	443.11	7/2+			
802.1 *1*	0.023 *3*	1340.62	5/2+	538.65	7/2−			
806.63[#] *5*	0.26 *1*	806.69	3/2+	0.0	1/2+			α(K)exp=0.0026 *5*; not resolved from neighboring peaks in ce spectra, α(exp) value was derived from the ratio of γ and ce composite areas.
808.3 *2*	0.025 *4*	1340.62	5/2+	532.054	3/2+			
810.91 *6*	0.149 *7*	810.92	(5/2+,7/2+)	0.0	1/2+			
ˣ825.5 *1*	0.032 *4*							
831.2 *1*	0.034 *3*	1306.34	3/2	475.243	5/2+			
ˣ838.4 *3*	0.011 *2*							
842.5 *1*	0.024 *3*	1437.19		594.49	5/2+			
849.7 *2*	0.009 *2*	1324.65	(3/2+,5/2+)	475.243	5/2+			
857.0 *3*	0.005 *2*	1540.19		683.06	(7/2)+			
865.35 *7*	0.050 *3*	1340.62	5/2+	475.243	5/2+			
870.1 *1*	0.019 *2*	1681.03	3/2,5/2+	810.92	(5/2+,7/2+)			
874.1 *1*	0.030 *3*	1681.03	3/2,5/2+	806.69	3/2+			
ˣ879.07 *8*	0.044 *3*							
888.91 *7*	0.064 *4*	1363.96	3/2+,5/2+	475.243	5/2+			
892.4 *2*	0.013 *2*	1486.62	(7/2)+	594.49	5/2+			
936.44 *5*	0.32 *1*	1148.65	5/2+	212.197	3/2+	M1	0.00212 *3*	α=0.00212 *3*; α(K)=0.00185 *3*; α(L)=0.000224 *4*; α(M)=4.46×10^{-5} *7*; α(N+..)=9.80×10^{-6} *14* α(N)=8.83×10^{-6} *13*; α(O)=9.68×10^{-7} *14* α(K)exp=0.0024 *3*.
954.5 *2*	0.010 *2*	1486.62	(7/2)+	532.054	3/2+			
957.96 *7*	0.052 *3*	1170.20	3/2+,5/2+	212.197	3/2+			
ˣ981.4 *2*	0.010 *2*							
994.03[@] *6*	0.102 *5*	994.02	3/2+,5/2+	0.0	1/2+	M1,E2	0.00166 *20*	α=0.00166 *20*; α(K)=0.00144 *18*; α(L)=0.000177 *19*; α(M)=3.5×10^{-5} *4*; α(N+..)=7.7×10^{-6} *9* α(N)=7.0×10^{-6} *8*; α(O)=7.6×10^{-7} *9* α(K)exp=0.0016 *4*; corrected for ^{121}Xe parent ce lines.

γ(^{121}Te) (continued)

E_γ[†]	I_γ[†f]	E_i(level)	J^π_i	E_f	J^π_f	Comments
1011.23 6	0.088 5	1486.62	$(7/2)^+$	475.243	$5/2^+$	
1014.75 5	0.28 1	1226.88	$5/2^+$	212.197	$3/2^+$	α(K)exp=0.0012 4.
^{x}1019.99 8	0.040 4					
^{x}1029.4 3	0.007 2					
1043.65 7	0.068 4	1486.62	$(7/2)^+$	443.11	$7/2^+$	
^{x}1046.5 2	0.014 2					
^{x}1052.4 2	0.011 2					
^{x}1082.3 2	0.011 2					
1086.52 9	0.033 2	1681.03	$3/2,5/2^+$	594.49	$5/2^+$	
1094.20 6	0.107 5	1306.34	3/2	212.197	$3/2^+$	α(K)exp=0.0015 8.
1094.2 1	0.034[c] 10	1626.37		532.054	$3/2^+$	
^{x}1100.0 2	0.009 2					
1112.4 2	0.011 2	1324.65	$(3/2^+,5/2^+)$	212.197	$3/2^+$	
1128.42 7	0.076 4	1340.62	$5/2^+$	212.197	$3/2^+$	
^{x}1132.8 1	0.026 2					
1136.0 1	0.024 2	1730.71	$3/2,5/2^+$	594.49	$5/2^+$	
^{x}1142.0 3	0.005 2					
^{x}1146.7 3	0.009 2					
1148.9 1	0.066 4	1148.65	$5/2^+$	0.0	$1/2^+$	
1151.57 7	0.077 4	1363.96	$3/2^+,5/2^+$	212.197	$3/2^+$	
1151.6 1	0.04[c] 1	1626.37		475.243	$5/2^+$	
1170.3 1	0.052[&] 4	1170.20	$3/2^+,5/2^+$	0.0	$1/2^+$	
1185.7 2	0.009 2	1185.59		0.0	$1/2^+$	
1198.78 7	0.081 5	1730.71	$3/2,5/2^+$	532.054	$3/2^+$	
^{x}1212.8 2	0.014 2					
1226.9 1	0.037 3	1226.88	$5/2^+$	0.0	$1/2^+$	
1255.4 1	0.033 3	1730.71	$3/2,5/2^+$	475.243	$5/2^+$	
^{x}1267.9 5	0.004 2					
1274.47 9	0.037 3	1486.62	$(7/2)^+$	212.197	$3/2^+$	
1306.25 6	0.101 5	1306.34	3/2	0.0	$1/2^+$	
^{x}1308.7 2	0.011 2					
^{x}1316.3 4	0.004 1					
1324.4 2	0.009 1	1324.65	$(3/2^+,5/2^+)$	0.0	$1/2^+$	
^{x}1339.8 1	0.035 2					
1363.81 8	0.060 3	1363.96	$3/2^+,5/2^+$	0.0	$1/2^+$	
1413.8 1	0.031 3	1626.37		212.197	$3/2^+$	
1438.0 2	0.014 2	1913.23		475.243	$5/2^+$	
1469.1 1	0.018 2	1681.03	$3/2,5/2^+$	212.197	$3/2^+$	
^{x}1480.5 1	0.014 1					
1486.6 1	0.040 2	1486.62	$(7/2)^+$	0.0	$1/2^+$	
^{x}1493.0 2	0.007 1					
^{x}1512.8 2	0.006 1					
1518.5 1	0.021 2	1730.71	$3/2,5/2^+$	212.197	$3/2^+$	

$\gamma(^{121}$Te) (continued)

E_γ[†]	I_γ[†f]	E_i(level)	J^π_i	E_f	J^π_f
[x]1523.1 *1*	0.013 *1*				
[x]1535.7 *3*	0.008 *2*				
1540.0 *2*	0.009[&] *3*	1540.19		0.0	1/2$^+$
[x]1543.4 *4*	0.007 *2*				
[x]1549.7 *1*	0.028 *3*				
[x]1553.0 *2*	0.020 *3*				
[x]1564.3 *2*	0.009 *1*				
[x]1574.5 *3*	0.004 *1*				
[x]1630.8 *1*	0.009[&] *2*				
[x]1656.4 *2*	0.007 *1*				
1681.0 *1*	0.032 *2*	1681.03	3/2,5/2$^+$	0.0	1/2$^+$

E_γ[†]	I_γ[†f]	E_i(level)
[x]1757.9 *2*	0.011 *2*	
[x]1770.4 *4*	0.004 *2*	
[x]1774.9 *2*	0.008 *1*	
[x]1777.4 *2*	0.010 *1*	
[x]1781.0 *3*	0.004 *1*	
[x]1786.4 *3*	0.004 *1*	
[x]1800.5 *2*	0.010 *1*	
[x]1834.7 *3*	0.005 *1*	
[x]1840.3 *1*	0.013 *1*	
[x]1868.1 *3*	0.004 *1*	
[x]1891.6 *2*	0.005 *1*	

[†] From 1990Ma55, unless noted otherwise.
[‡] From peak fitting of coincidence spectra.
[#] ce line was not resolved.
[@] ce line was corrected for ^{121}Xe parent.
[&] Corrected for ^{121}Xe parent decay.
[a] Corrected for ^{121}Te daughter decay.
[b] No Iγ value is given.
[c] No numerical value is given in 1990Ma55. Evaluators deduced Iγ from I(γ+ce) values (1980Bo35).
[d] From α(exp) (1990Ma55), unless noted otherwise.
[e] Assumed to deduce α.
[f] For absolute intensity per 100 decays, multiply by 0.843 *3*.
[g] Multiply placed with undivided intensity.
[h] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

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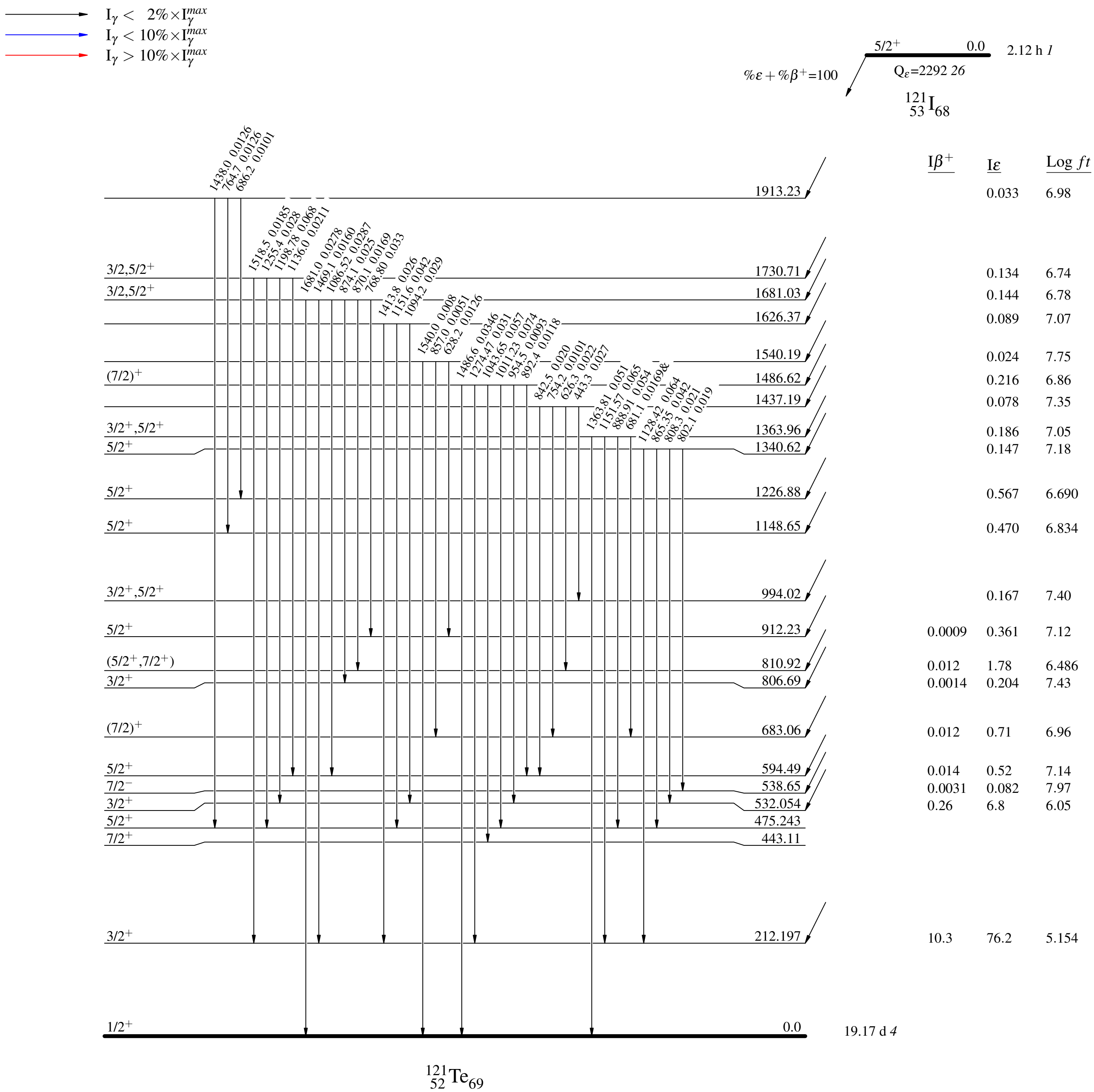
^{121}I ε decay 1990Ma55

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

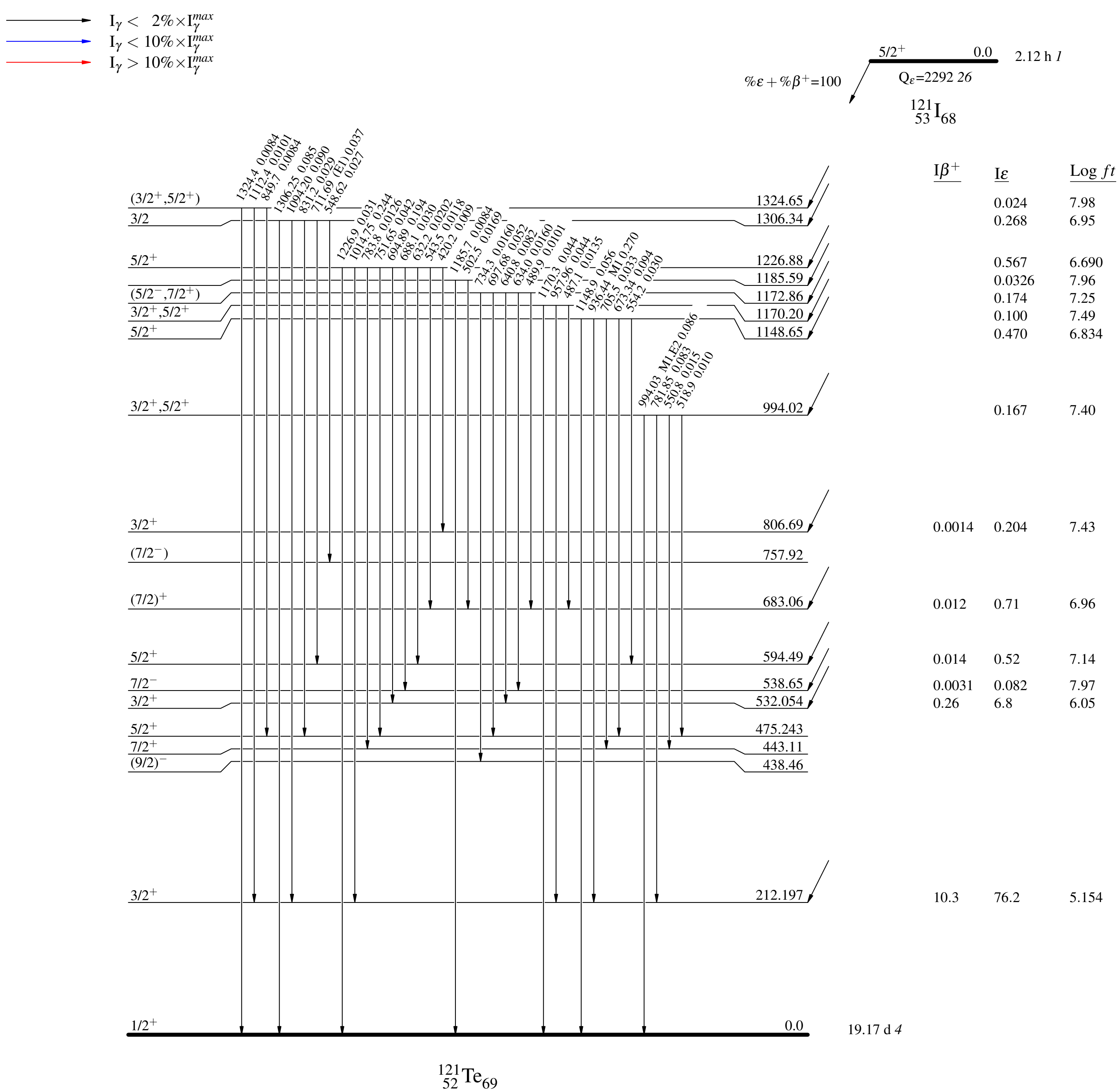
& Multiply placed: undivided intensity given



^{121}I ε decay 1990Ma55

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given



^{121}I ε decay 1990Ma55

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given