

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. Hashizume	NDS 112,1647 (2011)	1-Oct-2009

Q(β⁻)=702 4; S(n)=6287.65 18; S(p)=9.18×10³ 4; Q(α)=-2890 3 [2012Wa38](#)
 Note: Current evaluation has used the following Q record 702 3 6287.8 4 9170 30 -2886 3 [2003Au03](#).
 Nuclear structure calculations on the levels and their properties: [2007Ji14](#), [2000Bu15](#), [1995Ce07](#), [1985Jo03](#), [1975DiZG](#), [1975Se02](#), [1974Ku09](#).

¹²⁷Te Levels

Cross Reference (XREF) Flags

A	¹²⁷ Sb β ⁻ decay (3.85 d)	F	¹²⁸ Te(d,t),(³ He,α)
B	¹²⁷ Te IT decay (106.1 d)	G	¹³⁰ Te(⁶⁴ Ni, ⁶⁷ Niγ)
C	¹²⁶ Te(pol d,p),(d,p)	H	¹²⁶ Te(n,γ)
D	¹²⁶ Te(t,d)	I	¹²⁷ I(μ ⁻ ,νγ)
E	¹²⁸ Te(p,d)		

E(level) †‡a	Jπb	T _{1/2}	XREF	Comments
0.0	3/2 ⁺	9.35 h 7	ABCDEFGHI	μ=0.635 4 J ^π : L=2 in (pol d,p); M4 γ from the 88 level which has L=5 in (pol d,p). T _{1/2} : weighted average of 9.48 h 13 (1970Bo22), 9.23 h 13 (1968Qa02), 9.36 h 20 (1963Ma20), 9.35 h 10 (1956Kn20), 9.3 h 5 (1940Se01). μ: radiative detection of NMR (1989Ra17); value relative to μ=+0.605 4 for the 36 level of ¹²⁵ Te. Configuration=(ν 2d _{3/2}). J ^π : L=0 in (pol d,p). Configuration=(ν 3s _{1/2}). %IT=97.6 2; %β ⁻ =2.4 2 (1970Ap02) μ=-1.041 6 J ^π : see comments on g.s. T _{1/2} : from 2008Ea01 . Others: 109 d 2 (1965An05), 105 d 2 (1956Kn20), 115 d (1951Co34), 90 d 2 (1940Se01). μ: radiative detection of NMR (1989Ra17); value relative to μ=+0.605 4 for the 36 level of ¹²⁵ Te. Configuration=(ν 1h _{11/2}). μ=-0.963 63 J ^π : L=(5) in (pol d,p),(d,t),(³ He,α); D+Q γ from 7/2 ⁻ . T _{1/2} : from ¹²⁷ Sb β ⁻ decay. μ: integral perturbed angular correlations (1989Ra17). J ^π : L=2 in (pol d,p),(d,t),(³ He,α); log ft=7.8 from 7/2 ⁺ . J ^π : L=2 in (pol d,p),(d,t); D+Q γ to 1/2 ⁺ . XREF: D(632). J ^π : L=0 in (pol d,p). J ^π : L=3 in (pol d,p),(d,t),(³ He,α); γ to 11/2 ⁻ . J ^π : L=4 in (pol d,p),(d,t),(³ He,α); γ to 3/2 ⁺ . J ^π : L=2 in (pol d,p). J ^π : L=2 in (d,t),(³ He,α); log ft=7.40 from 7/2 ⁺ . J ^π : stretched E2 to 11/2 ⁻ . J ^π : L=3 in (pol d,p). J ^π : L=4 in (pol d,p),(d,t),(³ He,α); γ to 3/2 ⁺ . J ^π : L=2 in (pol d,p),(d,t); L=(1) is reported in (t,d), however, later experiments do not confirm L=1 transfer.
61.161 19	1/2 ⁺		A CDEF H	
88.23 7	11/2 ⁻	106.1 d 7	ABCDEF HI	
340.87 6	(9/2 ⁻)	0.41 ns 2	A C EFGHI	
473.26 4	5/2 ⁺ ^c		A C EF HI	
501.928 10	3/2 ⁺		A CDEF H	
622.963 25	1/2 ⁺		CD H	
631.40 6	7/2 ⁻		A C FGH I	
685.09 7	7/2 ⁺		A CDEFGHI	
762.64 5	3/2 ⁺		A CDEF HI	
782.62 3	5/2 ⁺		A DEF HI	
785.63 @ 12	15/2 ⁻		G	
786.13 6	7/2 ⁻		A C GH	
924.02 18	7/2 ⁺		A CDEF H	
1075.01 7	3/2 ⁺		C EF H	

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Adopted Levels, Gammas (continued)

^{127}Te Levels (continued)

E(level) ^{†‡α}	J ^π ^b	XREF	Comments
1077.13 17	5/2-,7/2,9/2	A H	J ^π : log ft=7.23 from 7/2 ⁺ ; D+Q γ to 5/2 ⁺ and 7/2 ⁺ .
1140.20 7	5/2 ⁺	A CDEF H	J ^π : L=2 in (pol d,p); log ft=7.57 from 7/2 ⁺ .
1154.70 9	5/2 ⁺	A H	J ^π : log ft=7.76 from 7/2 ⁺ ; D+Q γ to 3/2 ⁺ .
1156.8 [#] 15	(9/2 ⁻ ,11/2 ⁻)	CD F	J ^π : L=(5) in (t,d),(d,t).
1176		E	
1183.07 6	(5/2 ⁻ ,7/2,9/2)	C H	J ^π : γ to 7/2 ⁻ and (9/2 ⁻).
1206 5	3/2 ⁺ ,5/2 ⁺	F	J ^π : L=2 in (d,t).
1289.79 8	5/2 ⁺	A C EF HI	J ^π : L=2 in (pol d,p),(d,t),(³ He,α); γ to 3/2 ⁺ .
1293.21 10	(3/2 ⁺ ,5/2,7/2 ⁺)	H	J ^π : γ to 3/2 ⁺ and 7/2 ⁺ .
1309.25 7	3/2 ⁺ ,5/2 ⁺	C F H	J ^π : L=2 in (d,t).
1323.4? 8		A	
1353.09 [@] 12	(11/2 ⁺)	G	J ^π : probable Q γ to (7/2 ⁺); systematics of odd Te nuclei.
1353.80 6	3/2 ⁻	CDEF H	J ^π : L=1 in (pol d,p), L=(1) in (d,t),(³ He,α); γ to 7/2 ⁻ .
1378.58 7	5/2 ⁺	A CDEF H	XREF: F(1373). J ^π : L=2 in (pol d,p), (d,t), (t,d).
1405.89 20	1/2 ⁺	C EF H	J ^π : L=0 in (pol d,p),(d,t).
1429.0 3	7/2 ⁺	C F H	J ^π : L=4 in (pol d,p),(d,t),(³ He,α).
1447.4 [#] 15	(7/2 ⁺ ,9/2 ⁺)	C F	J ^π : L=(4) in (d,t),(³ He,α).
1462.0 3		H	
1464.02 [@] 15	19/2 ⁻	G	J ^π : stretched E2 to 15/2 ⁻ .
1491.8 3	(7/2 ⁺ ,9/2 ⁺)	C F H	J ^π : L=(4) in (d,t).
1544.86 [@] 15		G	
1549 5		C	
1550.71 13	(5/2 ⁻ ,7/2,9/2)	H	J ^π : γ to 7/2 ⁻ and (9/2 ⁻).
1555.7 6	5/2 ⁺	C F H	J ^π : L=2 in (pol d,p),(d,t),(³ He,α).
1568.13 11	5/2 ⁺	C F H	J ^π : L=2 in (pol d,p),(d,t).
1602.3 [#] 15	(3/2 ⁺ ,5/2 ⁺)	C F	J ^π : L=(2) in (d,t).
1608.20 8	(5/2 ⁻ ,7/2,9/2)	H	J ^π : γ to 7/2 ⁻ and (9/2 ⁻).
1612.2 5	7/2 ⁺ ,9/2 ⁺	C F H	J ^π : L=4 in (pol d,p),(d,t),(³ He,α).
1616.29 [@] 16	(15/2 ⁺)	G	J ^π : probable Q γ to (11/2 ⁺); systematics of odd Te nuclei.
1676 5		C	
1683.5 5	3/2 ⁺ ,5/2 ⁺	F H	J ^π : L=2 in (d,t).
1687.54 11	3/2 ⁻	C H	J ^π : L=1 in (pol d,p); primary γ from 1/2 ⁺ ; γ to 7/2 ⁻ .
1704.29 18	3/2 ⁺ ,5/2 ⁺	F H	J ^π : L=2 in (d,t).
1731.8 [#] 15	(7/2 ⁺ ,9/2 ⁺)	C F	J ^π : L=(4) in (d,t).
1758.19 24	(3/2 ⁺ ,5/2,7/2 ⁻)	C H	J ^π : L=(2),3 in (pol d,p).
1773.09 8	3/2 ⁺ ,5/2 ⁺	C F H	J ^π : L=2 in (d,t).
1778.97 8	(5/2 ⁻ ,7/2 ⁺)	C H	J ^π : γ to 3/2 ⁺ and (9/2 ⁻).
1803.49 21	7/2 ⁺ ,9/2 ⁺	C F H	J ^π : L=4 in (d,t),(³ He,α).
1805.54 10		H	J ^π : Primary γ from 1/2 ⁺ .
1815.3 4	(3/2 ⁺ ,5/2,7/2 ⁻)	C H	J ^π : L=(2),3 in (pol d,p).
1844.80 21	5/2 ⁻	C H	J ^π : L=3 in (pol d,p).
1846.74 11	(5/2 ⁺)	H	J ^π : γ to 1/2 ⁺ and 7/2 ⁻ .
1856.34 [@] 17		G	
1868.58 22	1/2,3/2,5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
1877.96 13	3/2 ⁺ ,5/2 ⁺	C F H	J ^π : L=2 in (d,t).
1883.78 19		H	J ^π : γ to 7/2 ⁻ and (9/2).
1888.68 13	1/2 ⁺	F H	J ^π : L=0 in (d,t),(³ He,α).
1906 5	3/2 ⁺ ,5/2 ⁺	CD	J ^π : 1985Ro19 suggest J ^π =3/2 ⁺ from the ratio of spectroscopic factors in (d,t) and (t,d).
1915.7? 4	3/2 ⁺ ,5/2 ⁺	F H	J ^π : L=2 in (d,t).
1919.57 25	7/2 ⁻	C H	J ^π : L=(2),3 in (pol d,p); γ to 11/2 ⁻ .

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Adopted Levels, Gammas (continued)

^{127}Te Levels (continued)

E(level) ^{†‡a}	J ^π ^b	XREF	Comments
1938& 5	7/2 ⁺ ,9/2 ⁺	C F	J ^π : L=4 in (d,t),(³ He,α).
1954 5	1/2 ⁺	F	J ^π : L=0 in (d,t).
1955.68@ 16		G	
1956.27 9	(3/2 ⁺ ,5/2 ⁺)	C H	J ^π : L=(1,2) in (pol d,p); γ to 1/2 ⁺ and 7/2 ⁺ .
1959.26 17	(3/2 ⁻ ,5/2,7/2 ⁺)	C H	J ^π : γ to 3/2 ⁺ and 7/2 ⁻ .
1975.5 3	(3/2 ⁺ ,5/2,7/2 ⁻)	C F H	J ^π : L=(2),3 in (pol d,p), L=2 in (d,t).
1985.2# 15	(7/2 ⁺ ,9/2 ⁺)	C F	J ^π : L=(4) in (pol d,p),(d,t),(³ He,α).
1992.67 16	1/2,3/2,5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
2001.7# 20	1/2 ⁻ ,3/2 ⁻	CD F	XREF: D(1992).
2008 5	(1/2 ⁺)	F	J ^π : L=1 in (t,d),(d,t).
2009.81 8	3/2 ⁻	C H	J ^π : L=(0) in (d,t).
2025.8 5	7/2 ⁻	C H	J ^π : L=1 in (pol d,p); γ to 5/2 ⁺ ; (L=3 in (t,d)).
2026 5	3/2 ⁺ ,5/2 ⁺	F	J ^π : L=3 in (pol d,p).
2029.99 12	(3/2 ⁻ ,5/2,7/2 ⁺)	H	J ^π : L=2 in (t,d),(d,t).
2048.58 10	(3/2 ⁺ ,5/2 ⁺)	C F H	J ^π : γ to 3/2 ⁺ and 7/2 ⁻ .
2056.28 12	(3/2 ⁺ ,5/2,7/2 ⁺)	H	J ^π : L=2 in (t,d), L=(2) in (d,t).
2099.8# 20	7/2 ⁻	C F	J ^π : γ to 3/2 ⁺ and 7/2 ⁺ .
2101.88? 20		H	J ^π : L=3 in (pol d,p), (L=2 in (d,t)).
2109.14 9	1/2,3/2,5/2 ⁺	H	J ^π : L=3 in (pol d,p), (L=2 in (d,t)).
2120.00 14	1/2 ⁺	C F H	J ^π : Primary γ from 1/2 ⁺ .
2137.5# 20	7/2 ⁻	C F	J ^π : L=0 in (d,t), (L=3) in (t,d).
2138.10 18	1/2,3/2,5/2 ⁺	H	J ^π : L=3 in (pol d,p).
2144.17 6	3/2 ⁻	C H	J ^π : Primary γ from 1/2 ⁺ .
2156.82? 20	1/2,3/2,5/2 ⁺	H	J ^π : L=1 in (pol d,p); γ to 7/2 ⁻ .
2167.1? 4	7/2 ⁻	C H	J ^π : Primary γ from 1/2 ⁺ .
2175.66 23	3/2 ⁺ ,5/2 ⁺	F H	J ^π : L=3 in (pol d,p).
2189.6 3		C H	J ^π : L=2 in (d,t).
2196 5	7/2 ⁺ ,9/2 ⁺	F	J ^π : L=4 (d,t),(³ He,α).
2206.752 20	3/2 ⁻	C H	J ^π : L=4 (d,t),(³ He,α).
2217 5	3/2 ⁺ ,5/2 ⁺	F	J ^π : L=1 in (pol d,p); γ to 7/2 ⁻ .
2224.93 15	1/2 ⁺	CD H	J ^π : L=2 (d,t).
2243.83 19	(7/2 ⁺ ,9/2 ⁺)	F H	J ^π : L=0 in (t,d).
2246.05 15	3/2 ⁻	C H	J ^π : L=(4) in (d,t),(³ He,α).
2254.06 21	3/2 ⁺ ,5/2 ⁺	D H	J ^π : L=1 in (pol d,p).
2278.34 25	5/2 ⁻	C H	J ^π : L=2 in (t,d).
2299.2 4	(3/2 ⁺ ,5/2,7/2 ⁻)	CD H	J ^π : L=3 in (pol d,p), γ to 3/2 ⁺ .
2304.7? 3		H	J ^π : L=(2), 3 in (pol d,p), L=3 in (t,d), (L=1 in (d,p) (1968Gr16)).
2314.26@ 17		G	
2317.91 5	3/2 ⁻	C H	J ^π : L=1 in (pol d,p); γ to 7/2 ⁻ .
2327.35? 21		H	
2327.7# 25	7/2 ⁻	C	J ^π : L=1 in (pol d,p); γ to 7/2 ⁻ .
2328.30 14	1/2 ⁺ ,3/2,5/2 ⁺	H	J ^π : L=3 in (pol d,p).
2338.01 13	(3/2 ⁻)	C H	J ^π : Primary γ from 1/2 ⁺ ; γ to 5/2 ⁺ .
2339.68 15	(1/2,3/2,5/2 ⁺)	D H	J ^π : L=(1) in (pol d,p); γ to 7/2 ⁻ .
2357.90 22		H	J ^π : γ to 1/2 ⁺ and 3/2 ⁺ .
2359.57 16	3/2 ⁻	C H	J ^π : L=1 in (pol d,p); γ to 5/2 ⁺ .
2368.3# 25	7/2 ⁺	C	J ^π : L=1 in (pol d,p); γ to 5/2 ⁺ .
2391.38 24		C H	J ^π : L=4 in (pol d,p).
2401.3# 25	7/2 ⁻	C	J ^π : L=4 in (pol d,p).
2417.22@ 18		G	
2427.0# 25		C	J ^π : L=3 in (pol d,p).

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Adopted Levels, Gammas (continued)

¹²⁷Te Levels (continued)

E(level) ^{†±α}	J ^π ^b	XREF	Comments
2429.14 15	(3/2 ⁺ ,5/2 ⁺)	H	J ^π : Primary γ from 1/2 ⁺ ; γ to 7/2 ⁺ .
2438.36 11	(3/2 ⁻)	C H	J ^π : L=(1) in (pol d,p); γ to 5/2 ⁺ .
2458.41 20	(1/2 ⁺)	F H	J ^π : L=(0) in (d,t).
2468.90 4	1/2 ⁻	C H	J ^π : L=1 in (pol d,p).
2473 5	(3/2 ⁺ ,5/2 ⁺)	D F	J ^π : L=(2) in (d,t).
2492.7 3	(1/2,3/2,5/2 ⁺)	H	J ^π : γ to 1/2 ⁺ .
2496.88 11	3/2 ⁺ ,5/2 ⁺	C H	J ^π : L=2,(3) in (pol d,p); γ to 1/2 ⁺ .
2519.6 4	(5/2,7/2 ⁻)	C H	J ^π : L=(2),(3) in (pol d,p); γ to 7/2 ⁻ .
2554.2? 3		H	
2561.29 14	(1/2 ⁻ ,3/2,5/2 ⁺)	C H	J ^π : L=(1) or 2 in (pol d,p).
2592.63 8	(3/2 ⁻)	C H	J ^π : L=(1) or (3) in (pol d,p); γ to 1/2 ⁺ and 7/2 ⁻ .
2619.22 7	1/2 ⁻	C H	J ^π : L=1 in (pol d,p).
2667.25 15	1/2 ⁻	C H	J ^π : L=1 in (pol d,p).
2690.38 17	1/2,3/2,5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ .
2700.71 24	1/2,3/2,5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ . Could be a doublet.
2713# 3		C	
2729.72 9	3/2 ⁺	C H	J ^π : L=2 in (pol d,p).
2759.1 3	3/2 ⁺	C H	J ^π : L=2 in (pol d,p).
2762.8? 4		H	
2767# 3	(3/2 ⁺ ,5/2,7/2 ⁻)	C	J ^π : L=2 or (3) in (pol d,p).
2772.96 12	(3/2 ⁻ ,5/2 ⁺)	H	J ^π : Primary γ from 1/2 ⁺ ; γ to 1/2 ⁺ and 7/2 ⁻ .
2783# 3	(5/2 ⁻ ,7/2 ⁻)	C	J ^π : L=(3) in (pol d,p).
2790# 3	5/2 ⁻	C	J ^π : L=3 in (pol d,p).
2799# 3		C	
2819# 3	5/2 ⁻	C	J ^π : L=3 in (pol d,p).
2844# 3	(1/2 ⁻ ,3/2 ⁻)	C	J ^π : L=(1) in (pol d,p).
2856.45 21	1/2 ⁻	C H	J ^π : L=1 in (pol d,p).
2870# 3	(5/2 ⁻ ,7/2 ⁻)	C	J ^π : L=(3) in (pol d,p).
2878.02 15	1/2,3/2,5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
2896# 3	3/2 ⁺ ,5/2,7/2 ⁻	C	J ^π : L=2 or 3 in (pol d,p).
2904.86 17		H	J ^π : Primary γ from 1/2 ⁺ .
2912.97 19	(1/2 ⁻ ,3/2 ⁻)	C H	J ^π : L=(1) in (pol d,p).
2915.93 15	1/2,3/2,5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
2925# 3	(1/2 ⁻ ,3/2 ⁻)	C	J ^π : L=(1) in (pol d,p).
2932.01 22	1/2 ⁺ ,3/2,5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ ; γ to 5/2 ⁺ .
2954.75 11	(3/2 ⁻)	C H	J ^π : L=(1) in (pol d,p); γ to 5/2 ⁺ .
2966# 3	(3/2 ⁺ ,5/2,7/2 ⁻)	C	J ^π : L=(2,3) in (pol d,p).
2978.9? 4		H	
2994.4 4	(3/2 ⁻ ,5/2,7/2 ⁺)	C H	J ^π : γ to 3/2 ⁺ and 7/2 ⁻ .
3005# 3		C	
3017# 3	3/2 ⁺ ,5/2,7/2 ⁻	C	J ^π : L=2,3 in (pol d,p).
3035# 3	3/2 ⁺ ,5/2,7/2 ⁻	C	J ^π : L=2,3 in (pol d,p).
3064# 3	(1/2 ⁻ ,3/2 ⁻)	C	J ^π : L=(1) in (pol d,p).
3096# 3	3/2 ⁺ ,5/2,7/2 ⁻	C	J ^π : L=2,3 in (pol d,p).
3128# 3	7/2 ⁻	C	J ^π : L=3 in (pol d,p).
3131.26@ 20		G	J ^π : high spin state: γ to (23/2 ⁺).
3131.6? 4		H	
3138# 3		C	
3153.8 3	(3/2 ⁻)	C H	J ^π : L=1,(3) in (pol d,p); γ to 1/2 ⁺ and 5/2 ⁺ .
3176# 3		C	

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Adopted Levels, Gammas (continued)

^{127}Te Levels (continued)

E(level) ^{†‡a}	J ^π ^b	XREF	Comments
3187 [#] 3	(5/2 ⁻ , 7/2 ⁻)	C	J ^π : L=(3) in (pol d,p).
3218 [#] 3		C	
3238 [#] 3	(3/2 ⁺ , 5/2, 7/2 ⁻)	C	J ^π : L=(2,3) in (pol d,p).
3252 [#] 3		C	
3254.8 3		H	
3265 [#] 3	(3/2 ⁺ , 5/2, 7/2 ⁻)	C	J ^π : L=(2,3) in (pol d,p).
3286.8? 5	(1/2, 3/2, 5/2 ⁺)	C H	J ^π : γ to 1/2 ⁺ and 5/2 ⁺ .
3304 [#] 3		C	
3314 [#] 3		C	
3342 [#] 3	(3/2 ⁺ , 5/2, 7/2 ⁻)	C	J ^π : L=2,3 in (pol d,p).
3375.4? 3	(1/2 ⁻ , 3/2 ⁻ , 5/2 ⁻)	C H	J ^π : L=(1,3) in (pol d,p).
3392.2 3	3/2 ⁻	C H	J ^π : L=1 in (pol d,p); γ to 5/2 ⁺ .
3415.97 20	3/2 ⁻	C H	J ^π : L=1 in (pol d,p); γ to 5/2 ⁺ .
3450 [#] 3	3/2 ⁻	C	J ^π : L=1 in (pol d,p).
3480 [#] 3		C	
3503 [#] 3		C	
3545.46 15	(1/2 ⁻ , 3/2 ⁻)	C H	J ^π : L=(1) in (pol d,p).
3554 [#] 3		C	
3567.37 19	1/2, 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
3572.3? 6	(3/2 ⁻)	C H	J ^π : L=(1) in (pol d,p); γ to 5/2 ⁺ .
3583 [#] 3		C	
3595.8 6		C H	
3609 [#] 3		C	
3615 [#] 8		C	
3653 [#] 3		C	
3661 [#] 8		C	
3679.05 16	1/2, 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
3711 ^{&} 8	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
3719.6 4	(1/2, 3/2, 5/2 ⁺)	H	J ^π : γ to 1/2 ⁺ and 3/2 ⁺ .
3739 ^{&} 8		C	
3749 ^{&} 8		C	
3764.54 16	1/2, 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
3780 ^{&} 8	(5/2 ⁻ , 7/2 ⁻)	C	J ^π : L=(3) in (d,p).
3814 ^{&} 8	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
3836.3 3	1/2, 3/2, 5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ .
3852.88 10	1/2, 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
3865.73 16	(3/2 ⁻ , 5/2 ⁺)	C H	J ^π : Primary γ from 1/2 ⁺ ; γ to 7/2 ⁻ .
3883.52 15	1/2 ⁺ , 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ ; γ to 5/2 ⁺ .
3891 ^{&} 8		C	
3908 ^{&} 8		C	
3922.25 9	1/2, 3/2, 5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ .
3954.1? 5		C H	
3973.73 23	1/2, 3/2, 5/2 ⁺	H	J ^π : Primary γ from 1/2 ⁺ .
3983 ^{&} 8		C	
4000 ^{&} 10		C	
4022 ^{&} 10		C	
4036.59 23	1/2, 3/2, 5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ .
4057.33 22	1/2, 3/2, 5/2 ⁺	C H	J ^π : Primary γ from 1/2 ⁺ .

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) ^{127}Te Levels (continued)

<u>E(level)^{†‡a}</u>	<u>J^π^b</u>	<u>XREF</u>	<u>Comments</u>
4072 & 10		C	
4100 & 10		C	
4114 & 10		C	
4133 & 10		C	
4161 & 10		C	
4175 & 10		C	
4196 & 10	1/2 ⁻ , 3/2 ⁻	C	J ^π : L=1 in (d,p).
4215 & 10		C	
4239 & 10	(1/2 ⁻ , 3/2, 5/2 ⁺)	C	J ^π : L=(1,2) in (d,p).
4258 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4284 & 10	1/2 ⁻ , 3/2 ⁻	C	J ^π : L=1 in (d,p).
4313 & 10		C	
4332 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4353 & 10		C	
4386 & 10	1/2 ⁻ , 3/2 ⁻	C	J ^π : L=1 in (d,p).
4424 & 10		C	
4470 & 10		C	
4489 & 10	1/2 ⁻ , 3/2 ⁻	C	J ^π : L=1 in (d,p).
4523 & 10		C	
4544 & 10		C	
4573 & 10		C	
4590 & 10		C	
4624 & 10		C	
4660 & 10		C	
4675 & 10		C	
4688 & 10		C	
4717 & 10		C	
4741 & 10		C	
4765 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4796 & 10		C	
4812 & 10		C	
4841 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4867 & 10		C	
4883 & 10		C	
4905 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4934 & 10		C	
4958 & 10	(1/2 ⁻ , 3/2 ⁻)	C	J ^π : L=(1) in (d,p).
4995 & 10		C	
5017 & 10		C	
5050 & 10		C	
5070 & 10		C	
5102 & 10		C	
5130 & 10	(1/2, 3/2 ⁻)	C	J ^π : L=(1,0) in (d,p).
5167 & 10		C	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) ^{127}Te Levels (continued)

E(level) ^{†‡a}	J^π ^b	XREF	Comments
5198& 10	(1/2 ⁻ ,3/2 ⁻)	C	J^π : L=(1) in (d,p).
5223& 10		C	
5254& 10		C	
5286& 10		C	
5297& 10		C	
5317& 10		C	
5338& 10		C	
5365& 10		C	
5380& 10		C	
5407& 10		C	
5417& 10		C	
5441& 10		C	
5475& 10		C	
5498& 10		C	
5531& 10		C	
5545& 10		C	
5570& 10		C	
5584& 10		C	
5603& 10		C	
5623& 10		C	
5634& 10		C	
5655& 10		C	
5675& 10		C	
5700& 10		C	
6287.59 3	1/2 ⁺	H	J^π : Thermal n capture state. S(n)=6287.8 4.

[†] For the levels emitting γ 's, their energies were adjusted from a least-squares fit to $E(\gamma$'s).

[‡] From $^{126}\text{Te}(n,\gamma)$ if not otherwise indicated.

From (pol d,p), (d,p).

@ From $^{130}\text{Te}(^{64}\text{Ni}, ^{67}\text{Ni}\gamma)$.

& From 1968Gr16.

^a The 603, 966, 984, 1175 and 2279 keV levels reported by (d,t) were not confirmed by later (d,p) experiment (2005Ho15), and are not adopted. The 366 keV level reported by (p,d) and L=0 level at 632 keV reported by (t,d) are also not supported by any later experiments and are not adopted. The 632 keV level is probably the same level at 623 keV, 1/2⁺ level (evaluator).

^b J^π values which have been determined in $^{126}\text{Te}(\text{pol d,p})$ are based on the comparison of spectroscopic strength and analyzing power using DWBA calc with experimental angular distributions by 2005Ho15.

^c L=4 in (d, ^3He) and (t, α) for ^{127}Sb g.s., L=2 in (d,t),($^3\text{He},\alpha$) for the 473 level in ^{127}Te , and the existing of a β^- branch connecting these levels uniquely establishes $J(^{127}\text{Sb g.s.})=7/2^+$, and $J(^{127}\text{Te 473})=5/2^+$.

Adopted Levels, Gammas (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ	E _f	J ^π _f	Mult. @	γ(¹²⁷ Te)		Comments	
							δ@	α&		
61.161	1/2 ⁺	61.1 1	100	0.0	3/2 ⁺	M1+E2	0.32	+12-17	3.5 5	α(K)=2.66 20; α(L)=0.64 25; α(M)=0.13 6; α(N+..)=0.028 11 α(N)=0.025 10; α(O)=0.0023 8 E _γ : Weighted mean of values from (n,γ) and ¹²⁷ Sb β ⁻ decay (3.85 d).
88.23	11/2 ⁻	88.3 1	100	0.0	3/2 ⁺	M4			1133	B(M4)(W.u.)=3.6 α(K)=484 8; α(L)=504 8; α(M)=119.8 19; α(N+..)=25.1 4 α(N)=23.1 4; α(O)=1.99 4 Additional information 1. From ¹²⁷ Te IT decay (106.1 d).
340.87	(9/2 ⁻)	252.7 1	100.0	88.23	11/2 ⁻	D+Q	-2.1	5	0.0642 9	B(M1)(W.u.)=0.00092; B(E2)(W.u.)=24
473.26	5/2 ⁺	412.0 1	14.8 3	61.161	1/2 ⁺	[E2]			0.01432	α(K)=0.01211 17; α(L)=0.001777 25; α(M)=0.000358 5; α(N+..)=7.68×10 ⁻⁵ 11 α(N)=6.97×10 ⁻⁵ 10; α(O)=7.11×10 ⁻⁶ 10
		473.3 1	100 5	0.0	3/2 ⁺	(M1+E2)			0.0102 7	α(K)=0.0087 7; α(L)=0.001154 17; α(M)=0.000231 4; α(N+..)=5.02×10 ⁻⁵ 9 α(N)=4.54×10 ⁻⁵ 7; α(O)=4.82×10 ⁻⁶ 18
501.928	3/2 ⁺	440.77 2	48.7 6	61.161	1/2 ⁺	D+Q				
		501.93 1	100.0 10	0.0	3/2 ⁺	D+Q				
622.963	1/2 ⁺	561.79 2	50.1 5	61.161	1/2 ⁺					
		622.9 1	100.0 21	0.0	3/2 ⁺					
631.40	7/2 ⁻	290.54 3	50.0 5	340.87	(9/2 ⁻)	(M1+E2)			0.040 3	α(K)=0.0338 18; α(L)=0.0049 9; α(M)=0.00099 19; α(N+..)=0.00021 4 α(N)=0.00019 4; α(O)=2.0×10 ⁻⁵ 3
685.09	7/2 ⁺	543.2 1	100.0 10	88.23	11/2 ⁻					
		183.6 3	2.5 10	501.928	3/2 ⁺					
		212.2 2	9.9 10	473.26	5/2 ⁺					
		624 ^{±a} 1	0.18 6	61.161	1/2 ⁺					
		685.0 1	100.0 10	0.0	3/2 ⁺					
762.64	3/2 ⁺	139.3 7	1.07 18	622.963	1/2 ⁺					
		260.6 3	2.9 4	501.928	3/2 ⁺					
		289.40 22	8.1 6	473.26	5/2 ⁺					
		701.4 4	41.9 9	61.161	1/2 ⁺					
		762.6 1	100.0 20	0.0	3/2 ⁺					
782.62	5/2 ⁺	280.8 4	3.0 8	501.928	3/2 ⁺	(M1+E2)			0.044 4	α(K)=0.0374 24; α(L)=0.0055 11; α(M)=0.00111 23; α(N+..)=0.00024 5 α(N)=0.00022 5; α(O)=2.2×10 ⁻⁵ 4
		309.4 4	1.3 3	473.26	5/2 ⁺	(M1+E2)			0.0332 18	α(K)=0.0282 11; α(L)=0.0040 7; α(M)=0.00081 13; α(N+..)=0.00018 3 α(N)=0.000159 24; α(O)=1.64×10 ⁻⁵ 17

Adopted Levels, Gammas (continued)

$\gamma(^{127}\text{Te})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ	E_f	J_f^π	Mult. @	$\delta^@$	$\alpha^\&$	Comments
782.62	5/2 ⁺	721.8 5 782.63 3	13 3 100.0 11	61.161 0.0	1/2 ⁺ 3/2 ⁺	(M1+E2)		0.0029 4	$\alpha(\text{K})=0.0025$ 3; $\alpha(\text{L})=0.00031$ 3; $\alpha(\text{M})=6.2\times 10^{-5}$ 6; $\alpha(\text{N}+..)=1.36\times 10^{-5}$ 14 $\alpha(\text{N})=1.23\times 10^{-5}$ 12; $\alpha(\text{O})=1.33\times 10^{-6}$ 15
785.63	15/2 ⁻	697.4 [#] 1	100.0	88.23	11/2 ⁻	Q			
786.13	7/2 ⁻	154.6 4 445.26 3 697.9 1	2.5 9 100.0 9 91.8 17	631.40 340.87 88.23	7/2 ⁻ (9/2 ⁻) 11/2 ⁻	D+Q D+Q	-1.0 4	0.222 22 0.0126	
924.02	7/2 ⁺	239.4 8 292.6 3 451.0 7	15 8 35 8 65 16	685.09 631.40 473.26	7/2 ⁺ 7/2 ⁻ 5/2 ⁺	E1(+M2) (M1+E2)		0.09 8 0.0115 6	$\alpha(\text{K})=0.07$ 7; $\alpha(\text{L})=0.011$ 10; $\alpha(\text{M})=0.0022$ 20; $\alpha(\text{N}+..)=0.0005$ 5 $\alpha(\text{N})=0.0004$ 4; $\alpha(\text{O})=5.E-5$ 5 $\alpha(\text{K})=0.0099$ 7; $\alpha(\text{L})=0.001321$ 24; $\alpha(\text{M})=0.000264$ 6; $\alpha(\text{N}+..)=5.74\times 10^{-5}$ 9 $\alpha(\text{N})=5.19\times 10^{-5}$ 9; $\alpha(\text{O})=5.50\times 10^{-6}$ 15
1075.01	3/2 ⁺	583.0 4 924.0 3 292.7 4 452.2 3 573.1 1 601.8 1 1013.8 6 1075.0 3	54 16 100 12 9 4 39 4 46.3 19 58 15 100.0 19 41 3	340.87 0.0 782.62 622.963 501.928 473.26 61.161 0.0	(9/2 ⁻) 3/2 ⁺ 5/2 ⁺ 1/2 ⁺ 3/2 ⁺ 5/2 ⁺ 1/2 ⁺ 3/2 ⁺				
1077.13	5/2,7/2,9/2	≈153 391.8 3 604.1 2		924.02 685.09 473.26	7/2 ⁺ 7/2 ⁺ 5/2 ⁺				E_γ : From β^- decay.
1140.20	5/2 ⁺	357.4 5 454.9 3 517.3 1 638.3 1	9.3 21 34.0 11 100 5 79 6	782.62 685.09 622.963 501.928	5/2 ⁺ 7/2 ⁺ 1/2 ⁺ 3/2 ⁺	(M1+E2)		0.0047 5	$\alpha(\text{K})=0.0041$ 5; $\alpha(\text{L})=0.00052$ 4; $\alpha(\text{M})=0.000103$ 8; $\alpha(\text{N}+..)=2.26\times 10^{-5}$ 17 $\alpha(\text{N})=2.04\times 10^{-5}$ 15; $\alpha(\text{O})=2.20\times 10^{-6}$ 20
1154.70	5/2 ⁺	667.0 3 1139.90 23 652.8 1 681.3 2 1155.2 ^a 10	91 14 38 7 100 12 89 6 7 4	473.26 0.0 501.928 473.26 0.0	5/2 ⁺ 3/2 ⁺ 3/2 ⁺ 5/2 ⁺ 3/2 ⁺	D+Q D+Q			
1183.07	(5/2 ⁻ ,7/2,9/2)	397.0 3 551.7 1 842.2 1	100.0 13 89.6 20 89.6 20	786.13 631.40 340.87	7/2 ⁻ 7/2 ⁻ (9/2 ⁻)				
1289.79	5/2 ⁺	527.2 2	14.3 21	762.64	3/2 ⁺				

Adopted Levels, Gammas (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ	E_f	$\gamma(^{127}\text{Te})$ (continued)			
					J_f^π	Mult. @		
1289.79	5/2 ⁺	604.4 3	35 9	685.09	7/2 ⁺			
		666.8 3	14 4	622.963	1/2 ⁺			
		787.9 1	61 7	501.928	3/2 ⁺			
		816.6 2	88 7	473.26	5/2 ⁺			
		1229.6 7	33 4	61.161	1/2 ⁺			
1293.21	(3/2 ⁺ , 5/2, 7/2 ⁺)	1289.4 3	100 4	0.0	3/2 ⁺	(D+Q)		
		530.6 3	25 5	762.64	3/2 ⁺			
		608.5 3	20 5	685.09	7/2 ⁺			
		819.9 1	100 25	473.26	5/2 ⁺			
		1309.25	3/2 ⁺ , 5/2 ⁺	526.4 4	6.4 16	782.62	5/2 ⁺	
1309.25	3/2 ⁺ , 5/2 ⁺	546.8 3	10.4 24	762.64	3/2 ⁺			
		686.5 3	27.2 24	622.963	1/2 ⁺			
		807.5 2	27 4	501.928	3/2 ⁺			
		835.80 21	7.2 8	473.26	5/2 ⁺			
		1248.0 3	36.0 24	61.161	1/2 ⁺			
		1309.2 1	100.0 24	0.0	3/2 ⁺			
		1323.4?		820.6 ^{‡a} 6	100	501.928	3/2 ⁺	
		1353.09	(11/2 ⁺)	668.0 [#] 1	100.0	685.09	7/2 ⁺	
		1353.80	3/2 ⁻	170.7 4	3.8 9	1183.07	(5/2 ⁻ , 7/2, 9/2)	
				567.6 3	9.2 13	786.13	7/2 ⁻	
571.3 2	10.9 21			782.62	5/2 ⁺			
591.3 2	10.5 9			762.64	3/2 ⁺			
722.60 20	100.0 17			631.40	7/2 ⁻			
730.8 1	25.2 13			622.963	1/2 ⁺			
851.6 4	3.8 9			501.928	3/2 ⁺			
1292.7 2	15.1 17			61.161	1/2 ⁺			
1378.58	5/2 ⁺			596.1 1	64 12	782.62	5/2 ⁺	
				615.8 7	16.25	762.64	3/2 ⁺	
		694.0 3	28 7	685.09	7/2 ⁺			
		905.3 5	5.0 13	473.26	5/2 ⁺			
		1378.4 1	100 8	0.0	3/2 ⁺			
1405.89	1/2 ⁺	904.0 5	25 5	501.928	3/2 ⁺			
		932.2 5	4.5 15	473.26	5/2 ⁺			
		1344.9 4	100 8	61.161	1/2 ⁺			
1429.0	7/2 ⁺	743.9 3	100.0	685.09	7/2 ⁺			
1462.0		387.3 4	100 15	1075.01	3/2 ⁺			
		699.0 4	71 15	762.64	3/2 ⁺			
		989.1 6	9.×10 ¹ 3	473.26	5/2 ⁺			
1464.02	19/2 ⁻	678.2 [#] 1	100.0	785.63	15/2 ⁻	Q		
1491.8	(7/2 ⁺ , 9/2 ⁺)	806.7 3	100.0	685.09	7/2 ⁺			
1544.86		759.4 [#] 1	100.0	785.63	15/2 ⁻			

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
1550.71	(5/2 ⁻ ,7/2,9/2)	764.6 7	7.3 25	786.13	7/2 ⁻
		919.5 2	24 5	631.40	7/2 ⁻
		1209.7 2	100 5	340.87	(9/2 ⁻)
1555.7	5/2 ⁺	1053.8 6	100.0	501.928	3/2 ⁺
1568.13	5/2 ⁺	493.5 4	87 13	1075.01	3/2 ⁺
		883.0 1	57 18	685.09	7/2 ⁺
		1094.9 3	1.0×10 ² 3	473.26	5/2 ⁺
		1568.5 6	9.×10 ¹ 3	0.0	3/2 ⁺
1608.20	(5/2 ⁻ ,7/2,9/2)	822.1 2	47 3	786.13	7/2 ⁻
		976.8 8	100.0 20	631.40	7/2 ⁻
		1268.1 7	7.1 20	340.87	(9/2 ⁻)
1612.2	7/2 ⁺ ,9/2 ⁺	1138.9 5	100.0	473.26	5/2 ⁺
1616.29	(15/2 ⁺)	263.2 [#] 1	100.0	1353.09	(11/2 ⁺)
1683.5	3/2 ⁺ ,5/2 ⁺	1210.2 5	100.0	473.26	5/2 ⁺
1687.54	3/2 ⁻	504.50 13	64 8	1183.07	(5/2 ⁻ ,7/2,9/2)
		612.4 3	28 6	1075.01	3/2 ⁺
		901.1 6	49 8	786.13	7/2 ⁻
		1055.8 7	44 8	631.40	7/2 ⁻
		1064.1 6	100 13	622.963	1/2 ⁺
1704.29	3/2 ⁺ ,5/2 ⁺	941.9 6	100 14	762.64	3/2 ⁺
		1081.3 4	40 14	622.963	1/2 ⁺
		1231.0 2	100 14	473.26	5/2 ⁺
1758.19	(3/2 ⁺ ,5/2,7/2 ⁻)	575.7 4	55 19	1183.07	(5/2 ⁻ ,7/2,9/2)
		971.9 4	73 19	786.13	7/2 ⁻
		1416.9 4	100 19	340.87	(9/2 ⁻)
1773.09	3/2 ⁺ ,5/2 ⁺	990.5 3	12 3	782.62	5/2 ⁺
		1010.2 4	2.4 6	762.64	3/2 ⁺
		1271.1 1	100 7	501.928	3/2 ⁺
		1299.8 3	7.9 19	473.26	5/2 ⁺
		1711.8 6	4.3 19	61.161	1/2 ⁺
		1773.1 4	23 5	0.0	3/2 ⁺
1778.97	(5/2 ⁻ ,7/2 ⁺)	992.9 3	30.4 22	786.13	7/2 ⁻
		996.5 3	26 7	782.62	5/2 ⁺
		1147.4 1	100 4	631.40	7/2 ⁻
		1277.3 6	9 4	501.928	3/2 ⁺
		1306.3 5	6.5 22	473.26	5/2 ⁺
		1438.7 6	5.4 22	340.87	(9/2 ⁻)
1803.49	7/2 ⁺ ,9/2 ⁺	1118.4 2	100.0	685.09	7/2 ⁺
1805.54		237.3 4	0.000	1568.13	5/2 ⁺
		1023.3 5	36 7	782.62	5/2 ⁺
		1043.4 10	26 7	762.64	3/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
1805.54		1332.3 1	100 11	473.26	5/2 ⁺
1815.3	(3/2 ⁺ ,5/2,7/2 ⁻)	1028.7 4	1.0×10 ² 3	786.13	7/2 ⁻
		1131.0 5	43 15	685.09	7/2 ⁺
1844.80	5/2 ⁻	704.6 2	100.0	1140.20	5/2 ⁺
1846.74	(5/2 ⁺)	1064.00 17	9.×10 ¹ 4	782.62	5/2 ⁺
		1083.8 3	19.1 22	762.64	3/2 ⁺
		1161.8 4	8.5 22	685.09	7/2 ⁺
		1215.5 5	11 5	631.40	7/2 ⁻
		1224.2 4	17 5	622.963	1/2 ⁺
		1344.7 2	100 9	501.928	3/2 ⁺
		1373.8 4	17 5	473.26	5/2 ⁺
1856.34		392.3 [#] 1	100.0	1464.02	19/2 ⁻
1868.58	1/2,3/2,5/2 ⁺	794.5 5	27 12	1075.01	3/2 ⁺
		1105.7 5	12 4	762.64	3/2 ⁺
		1238.3 5	19 8	631.40	7/2 ⁻
		1245.1 5	23 8	622.963	1/2 ⁺
		1394.5 5	100 12	473.26	5/2 ⁺
1877.96	3/2 ⁺ ,5/2 ⁺	1115.9 3	13 3	762.64	3/2 ⁺
		1254.1 4	26 6	622.963	1/2 ⁺
		1376.0 2	100 11	501.928	3/2 ⁺
		1404.9 4	21 8	473.26	5/2 ⁺
		1877.9 3	69 8	0.0	3/2 ⁺
1883.78		700.0 6	25 13	1183.07	(5/2 ⁻ ,7/2,9/2)
		1097.7 2	100 13	786.13	7/2 ⁻
		1252.5 5	44 13	631.40	7/2 ⁻
1888.68	1/2 ⁺	1126.4 11	16 6	762.64	3/2 ⁺
		1265.9 2	100 6	622.963	1/2 ⁺
		1386.6 10	26 6	501.928	3/2 ⁺
		1827.7 2	60 7	61.161	1/2 ⁺
		1888.1 3	47 7	0.0	3/2 ⁺
1915.7?	3/2 ⁺ ,5/2 ⁺	1292.7 4	100.0	622.963	1/2 ⁺
1919.57	7/2 ⁻	1579.1 4	30 7	340.87	(9/2 ⁻)
		1831.1 3	100 14	88.23	11/2 ⁻
1955.68		411.0 [#] 1	80 8	1544.86	
		491.5 [#] 1	100 12	1464.02	19/2 ⁻
1956.27	(3/2 ⁺ ,5/2 ⁺)	1173.5 3	33 9	782.62	5/2 ⁺
		1194.1 5	35 7	762.64	3/2 ⁺
		1271.4 12	32 6	685.09	7/2 ⁺
		1333.2 1	100 11	622.963	1/2 ⁺
		1454.4 4	44 6	501.928	3/2 ⁺
		1483.4 3	79 4	473.26	5/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J^π_i</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J^π_f</u>
1956.27	(3/2 ⁺ ,5/2 ⁺)	1895.4 6	12 4	61.161	1/2 ⁺
		1956.6 4	53 11	0.0	3/2 ⁺
1959.26	(3/2 ⁻ ,5/2,7/2 ⁺)	775.9 4	52 13	1183.07	(5/2 ⁻ ,7/2,9/2)
		1173.0 2	87 9	786.13	7/2 ⁻
		1328.6 6	22 9	631.40	7/2 ⁻
		1458.0 5	100 9	501.928	3/2 ⁺
1975.5	(3/2 ⁺ ,5/2,7/2 ⁻)	792.7 5	55 19	1183.07	(5/2 ⁻ ,7/2,9/2)
		1193.0 6	6.×10 ¹ 3	782.62	5/2 ⁺
		1291.2 6	45 19	685.09	7/2 ⁺
		1473.1 4	1.0×10 ² 3	501.928	3/2 ⁺
1992.67	1/2,3/2,5/2 ⁺	1230.1 6	10.0 25	762.64	3/2 ⁺
		1370.0 9	40 8	622.963	1/2 ⁺
		1490.5 12	1.0×10 ² 3	501.928	3/2 ⁺
		1519.40 25	4.×10 ¹ 4	473.26	5/2 ⁺
		1992.8 3	18 18	0.0	3/2 ⁺
2009.81	3/2 ⁻	655.9 5	2.5 11	1353.80	3/2 ⁻
		826.7 3	4.0 11	1183.07	(5/2 ⁻ ,7/2,9/2)
		1227.4 7	3.5 16	782.62	5/2 ⁺
		1247.3 5	1.5 5	762.64	3/2 ⁺
		1386.4 3	6.1 11	622.963	1/2 ⁺
		1508.1 3	17 3	501.928	3/2 ⁺
		1536.7 3	18 3	473.26	5/2 ⁺
		1948.7 1	100 3	61.161	1/2 ⁺
		2009.9 6	11 4	0.0	3/2 ⁺
2025.8	7/2 ⁻	1239.7 5	100.0	786.13	7/2 ⁻
2029.99	(3/2 ⁻ ,5/2,7/2 ⁺)	479.4 2	53 20	1550.71	(5/2 ⁻ ,7/2,9/2)
		846.4 5	23 7	1183.07	(5/2 ⁻ ,7/2,9/2)
		1243.8 3	50 7	786.13	7/2 ⁻
		1398.7 3	40 7	631.40	7/2 ⁻
		1528.3 2	100 14	501.928	3/2 ⁺
		1556.1 4	37 7	473.26	5/2 ⁺
2048.58	(3/2 ⁺ ,5/2 ⁺)	1266.3 3	32 9	782.62	5/2 ⁺
		1286.0 3	13.6 23	762.64	3/2 ⁺
		1425.20 14	57 7	622.963	1/2 ⁺
		1546.9 2	100 9	501.928	3/2 ⁺
		1575.7 2	41 7	473.26	5/2 ⁺
2056.28	(3/2 ⁺ ,5/2,7/2 ⁺)	1274.0 7	40 7	782.62	5/2 ⁺
		1371.2 3	14.6 21	685.09	7/2 ⁺
		1554.30 13	100 9	501.928	3/2 ⁺
		1583.7 6	13 5	473.26	5/2 ⁺
2101.88?		1416.9 2	100 11	685.09	7/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
2101.88?		1598.9 6	47 16	501.928	3/2 ⁺
2109.14	1/2,3/2,5/2 ⁺	1486.2 3	25 4	622.963	1/2 ⁺
		1607.3 1	100 8	501.928	3/2 ⁺
		1635.5 3	72 12	473.26	5/2 ⁺
2120.00	1/2 ⁺	1043.9 6	13 5	1077.13	5/2,7/2,9/2
		1357.3 4	9.8 17	762.64	3/2 ⁺
		1646.0 3	18 4	473.26	5/2 ⁺
		2058.9 2	100 7	61.161	1/2 ⁺
2138.10	1/2,3/2,5/2 ⁺	1515.5 3	57 10	622.963	1/2 ⁺
		1635.9 6	43 15	501.928	3/2 ⁺
		1664.9 3	76 15	473.26	5/2 ⁺
		2136.8 6	100 24	0.0	3/2 ⁺
2144.17	3/2 ⁻	364.7 5	4.3 9	1778.97	(5/2 ⁻ ,7/2 ⁺)
		456.5 3	1.7 5	1687.54	3/2 ⁻
		535.90 13	12.4 13	1608.20	(5/2 ⁻ ,7/2,9/2)
		834.6 4	3.4 9	1309.25	3/2 ⁺ ,5/2 ⁺
		961.20 10	6.0 13	1183.07	(5/2 ⁻ ,7/2,9/2)
		1358.6 4	4.7 13	786.13	7/2 ⁻
		2083.0 1	100 6	61.161	1/2 ⁺
2156.82?	1/2,3/2,5/2 ⁺	1394.2 2	100 19	762.64	3/2 ⁺
		1533.8 7	45 19	622.963	1/2 ⁺
2167.1?	7/2 ⁻	283.3 3	100.0	1883.78	
2175.66	3/2 ⁺ ,5/2 ⁺	1552.9 3	100 16	622.963	1/2 ⁺
		2175.4 5	94 22	0.0	3/2 ⁺
2189.6		638.9 3	100 20	1550.71	(5/2 ⁻ ,7/2,9/2)
		1403.6 9	75 15	786.13	7/2 ⁻
		1558 4	90 20	631.40	7/2 ⁻
2206.752	3/2 ⁻	598.5 3	0.65 11	1608.20	(5/2 ⁻ ,7/2,9/2)
		852.9 4	2.1 4	1353.80	3/2 ⁻
		1024 4	0.65 22	1183.07	(5/2 ⁻ ,7/2,9/2)
		1420.3 13	0.9 4	786.13	7/2 ⁻
		1424.10 11	2.17 22	782.62	5/2 ⁺
		1443.9 2	5.5 4	762.64	3/2 ⁺
		1583.8 1	6.0 4	622.963	1/2 ⁺
		1704.8 8	7.9 13	501.928	3/2 ⁺
		1733.1 4	1.08 22	473.26	5/2 ⁺
		2145.57 1	100.0 10	61.161	1/2 ⁺
		2206.8 1	26 6	0.0	3/2 ⁺
2224.93	1/2 ⁺	1442.2 4	95 24	782.62	5/2 ⁺
		1462.30 22	52 10	762.64	3/2 ⁺
		1601.5 4	1.0×10 ² 4	622.963	1/2 ⁺
		1723.1 3	95 15	501.928	3/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
2224.93	1/2 ⁺	1752.0 4	43 10	473.26	5/2 ⁺
2243.83	(7/2 ⁺ ,9/2 ⁺)	1461.2 2	88 13	782.62	5/2 ⁺
		1770.6 5	100 25	473.26	5/2 ⁺
2246.05	3/2 ⁻	467.2 3	40 14	1778.97	(5/2 ⁻ ,7/2 ⁺)
		637.9 3	23 4	1608.20	(5/2 ⁻ ,7/2,9/2)
		892.3 6	73 14	1353.80	3/2 ⁻
		1062.3 7	100 17	1183.07	(5/2 ⁻ ,7/2,9/2)
		1744.2 3	73 14	501.928	3/2 ⁺
2254.06	3/2 ⁺ ,5/2 ⁺	646.6 4	11 6	1608.20	(5/2 ⁻ ,7/2,9/2)
		703.1 4	47 12	1550.71	(5/2 ⁻ ,7/2,9/2)
		1751.8 4	39 9	501.928	3/2 ⁺
		1780.6 4	100 17	473.26	5/2 ⁺
2278.34	5/2 ⁻	1515.2 4	11.1 19	762.64	3/2 ⁺
		1647.3 4	33 8	631.40	7/2 ⁻
		1776.6 5	100 8	501.928	3/2 ⁺
2299.2	(3/2 ⁺ ,5/2,7/2 ⁻)	611.2 4	1.0×10 ² 3	1687.54	3/2 ⁻
		1116.9 5	9.×10 ¹ 3	1183.07	(5/2 ⁻ ,7/2,9/2)
2304.7?		1542.1 3	1.0×10 ² 3	762.64	3/2 ⁺
		1801.9 9	41 14	501.928	3/2 ⁺
2314.26		358.6 [#] 1	40 4	1955.68	
		457.9 [#] 1	100 10	1856.34	
2317.91	3/2 ⁻	539.0 3	19 7	1778.97	(5/2 ⁻ ,7/2 ⁺)
		709.7 4	35 7	1608.20	(5/2 ⁻ ,7/2,9/2)
		939.5 3	56 4	1378.58	5/2 ⁺
		964.0 8	25 7	1353.80	3/2 ⁻
		1009.3 6	29 5	1309.25	3/2 ⁺ ,5/2 ⁺
		1134.9 3	52 5	1183.07	(5/2 ⁻ ,7/2,9/2)
		1177.8 6	43 10	1140.20	5/2 ⁺
		1555.2 3	14 4	762.64	3/2 ⁺
		1686.4 4	32 7	631.40	7/2 ⁻
		1694.7 2	75 7	622.963	1/2 ⁺
		1816.1 2	51 5	501.928	3/2 ⁺
		1844.5 1	100 16	473.26	5/2 ⁺
		2318.1 6	22 7	0.0	3/2 ⁺
2327.35?		1564.7 2	100.0	762.64	3/2 ⁺
2328.30	1/2 ⁺ ,3/2,5/2 ⁺	1188.4 4	48 16	1140.20	5/2 ⁺
		1545.7 2	100 19	782.62	5/2 ⁺
		1704.9 3	33 6	622.963	1/2 ⁺
		1855.2 3	45 6	473.26	5/2 ⁺
2338.01	(3/2 ⁻)	558.6 4	3.7 10	1778.97	(5/2 ⁻ ,7/2 ⁺)
		729.9 4	1.4 5	1608.20	(5/2 ⁻ ,7/2,9/2)

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ	E _f	J ^π _f
2338.01	(3/2 ⁻)	1154.5	5 8.8	1183.07	(5/2 ⁻ ,7/2,9/2)
		1555.4	6 4.1	782.62	5/2 ⁺
		1706.4	3 100	631.40	7/2 ⁻
		1835.6	7 3.7	501.928	3/2 ⁺
		1865.0	3 9.2	473.26	5/2 ⁺
2339.68	(1/2,3/2,5/2 ⁺)	2338.6	4 11	0.0	3/2 ⁺
		1265.0	4 21	1075.01	3/2 ⁺
		1577.0	4 56	762.64	3/2 ⁺
		2278.5	2 100	61.161	1/2 ⁺
		2339.5	3 72	0.0	3/2 ⁺
2357.90		1574.7	4 96	782.62	5/2 ⁺
		1856.1	3 100	501.928	3/2 ⁺
		1885.1	5 38	473.26	5/2 ⁺
2359.57	3/2 ⁻	580.6	3 46	1778.97	(5/2 ⁻ ,7/2 ⁺)
		751.5	3 50	1608.20	(5/2 ⁻ ,7/2,9/2)
		1175.7	5 42	1183.07	(5/2 ⁻ ,7/2,9/2)
		1578.3	5 50	782.62	5/2 ⁺
		2359.4	3 100	0.0	3/2 ⁺
2391.38		612.0	4 60	1778.97	(5/2 ⁻ ,7/2 ⁺)
		1208.2	6 50	1183.07	(5/2 ⁻ ,7/2,9/2)
		1605.6	5 80	786.13	7/2 ⁻
		1760.2	4 100	631.40	7/2 ⁻
		2417.22	953.2 [#]	100.0	1464.02
2429.14	(3/2 ⁺ ,5/2 ⁺)	1288.5	5 49	1140.20	5/2 ⁺
		1743.4	6 10	685.09	7/2 ⁺
		1806.5	2 100	622.963	1/2 ⁺
		2428.4	3 72	0.0	3/2 ⁺
		2438.36	(3/2 ⁻)	1655.4	3 85
1675.7	2 50			762.64	3/2 ⁺
1936.7	3 81			501.928	3/2 ⁺
2377.2	2 100			61.161	1/2 ⁺
2438.4	3 23			0.0	3/2 ⁺
2458.41	(1/2 ⁺)			1149.1	6 27
		1676.0	3 100	782.62	5/2 ⁺
		1836.1	7 23	622.963	1/2 ⁺
		1984.8	3 59	473.26	5/2 ⁺
2468.90	1/2 ⁻	459.6	5 1.7	2009.81	3/2 ⁻
		1062.9	3 3.4	1405.89	1/2 ⁺
		1394.1	5 2.1	1075.01	3/2 ⁺
		1706.4	5 3.4	762.64	3/2 ⁺
		1845.9	3 7.6	622.963	1/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
2468.90	1/2 ⁻	1966.9 5	2.1 5	501.928	3/2 ⁺
		2407.9 1	35.2 13	61.161	1/2 ⁺
		2469.0 1	100.0 22	0.0	3/2 ⁺
2492.7	(1/2,3/2,5/2 ⁺)	1869.5 3	100 16	622.963	1/2 ⁺
		1991.5 6	53 16	501.928	3/2 ⁺
2496.88	3/2 ⁺ ,5/2 ⁺	717.9 4	22 5	1778.97	(5/2 ⁻ ,7/2 ⁺)
		889.1 2	9 5	1608.20	(5/2 ⁻ ,7/2,9/2)
		1313.2 3	25 5	1183.07	(5/2 ⁻ ,7/2,9/2)
		2435.5 2	1.0×10 ² 3	61.161	1/2 ⁺
2519.6	(5/2,7/2 ⁻)	911.1 5	33 12	1608.20	(5/2 ⁻ ,7/2,9/2)
		1888.3 4	100 23	631.40	7/2 ⁻
2554.2?		2080.9 3	100.0	473.26	5/2 ⁺
2561.29	(1/2 ⁻ ,3/2,5/2 ⁺)	243.1 3	21 6	2317.91	3/2 ⁻
		354.1 10	1.0×10 ² 4	2206.752	3/2 ⁻
		952.9 7	35 6	1608.20	(5/2 ⁻ ,7/2,9/2)
		1207.4 4	24 6	1353.80	3/2 ⁻
		1378.0 3	41 9	1183.07	(5/2 ⁻ ,7/2,9/2)
		2500.2 6	32 9	61.161	1/2 ⁺
		2561.8 3	68 9	0.0	3/2 ⁺
		403.2 7	23 5	2189.6	
		813.4 3	38 10	1778.97	(5/2 ⁻ ,7/2 ⁺)
		984.1 4	80 10	1608.20	(5/2 ⁻ ,7/2,9/2)
2592.63	(3/2 ⁻)	1187.2 8	33 5	1405.89	1/2 ⁺
		1238.6 8	35 10	1353.80	3/2 ⁻
		1283.5 6	15.0 25	1309.25	3/2 ⁺ ,5/2 ⁺
		1409.0 9	38 8	1183.07	(5/2 ⁻ ,7/2,9/2)
		1805.2 6	20 5	786.13	7/2 ⁻
		1969.6 5	23 5	622.963	1/2 ⁺
		2090.7 2	90 10	501.928	3/2 ⁺
		2592.5 3	100 10	0.0	3/2 ⁺
		475.2 5	6.6 17	2144.17	3/2 ⁻
		1265.8 5	5.0 17	1353.80	3/2 ⁻
2619.22	1/2 ⁻	2117.3 2	47.9 25	501.928	3/2 ⁺
		2557.9 1	100 4	61.161	1/2 ⁺
		2619.2 3	21 4	0.0	3/2 ⁺
		1313.8 3	19 7	1353.80	3/2 ⁻
2667.25	1/2 ⁻	2044.5 5	22 7	622.963	1/2 ⁺
		2606.9 8	9 4	61.161	1/2 ⁺
		2667.1 3	100 16	0.0	3/2 ⁺
2690.38	1/2,3/2,5/2 ⁺	1507.6 4	27 9	1183.07	(5/2 ⁻ ,7/2,9/2)
		2059.1 3	27 9	631.40	7/2 ⁻

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J^π_i</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J^π_f</u>
2690.38	1/2,3/2,5/2 ⁺	2067.1 7	27 9	622.963	1/2 ⁺
		2187.5 7	41 14	501.928	3/2 ⁺
		2217.2 5	41 9	473.26	5/2 ⁺
		2629.2 4	100 23	61.161	1/2 ⁺
		2690.5 6	45 14	0.0	3/2 ⁺
2700.71	1/2,3/2,5/2 ⁺	2700.5 3	100.0	0.0	3/2 ⁺
2729.72	3/2 ⁺	1546.8 2	100 10	1183.07	(5/2 ⁻ ,7/2,9/2)
		1967.0 1	1.0×10 ² 4	762.64	3/2 ⁺
		2668.9 4	100 25	61.161	1/2 ⁺
		2729.5 4	100 25	0.0	3/2 ⁺
2759.1	3/2 ⁺	2759.0 3	100.0	0.0	3/2 ⁺
2762.8?		2289.4 7	40 20	473.26	5/2 ⁺
		2762.2 7	1.0×10 ² 4	0.0	3/2 ⁺
2772.96	(3/2 ⁻ ,5/2 ⁺)	885.6 7	100 16	1888.68	1/2 ⁺
		993.9 3	6.×10 ¹ 4	1778.97	(5/2 ⁻ ,7/2 ⁺)
		1164.5 2	47 6	1608.20	(5/2 ⁻ ,7/2,9/2)
		1698.7 7	16 6	1075.01	3/2 ⁺
		1987.3 6	42 11	786.13	7/2 ⁻
		2150.2 6	42 16	622.963	1/2 ⁺
		2299.4 7	47 16	473.26	5/2 ⁺
		2711.7 4	53 21	61.161	1/2 ⁺
		2773.7 5	37 16	0.0	3/2 ⁺
2856.45	1/2 ⁻	1502.6 3	63 10	1353.80	3/2 ⁻
		2795.4 3	1.0×10 ² 3	61.161	1/2 ⁺
2878.02	1/2,3/2,5/2 ⁺	1588.5 4	70 20	1289.79	5/2 ⁺
		1693.9 6	30 10	1183.07	(5/2 ⁻ ,7/2,9/2)
		2115.8 6	40 15	762.64	3/2 ⁺
		2376.4 4	55 20	501.928	3/2 ⁺
		2404.9 6	35 15	473.26	5/2 ⁺
		2816.7 3	1.0×10 ² 4	61.161	1/2 ⁺
		2877.7 8	20 10	0.0	3/2 ⁺
2904.86		2122.1 2	100 8	782.62	5/2 ⁺
		2404.0 5	34 8	501.928	3/2 ⁺
		2430.1 7	21 6	473.26	5/2 ⁺
2912.97	(1/2 ⁻ ,3/2 ⁻)	1225.2 3	100 23	1687.54	3/2 ⁻
		1559.9 4	54 23	1353.80	3/2 ⁻
		1730.0 7	38 16	1183.07	(5/2 ⁻ ,7/2,9/2)
		2151.0 5	62 23	762.64	3/2 ⁺
		2289.4 6	62 16	622.963	1/2 ⁺
		2851.7 6	69.23	61.161	1/2 ⁺
2915.93	1/2,3/2,5/2 ⁺	1561.6 4	28 12	1353.80	3/2 ⁻

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>		
2915.93	1/2,3/2,5/2 ⁺	1733.6 4	28 6	1183.07	(5/2 ⁻ ,7/2,9/2)		
		2292.9 4	64 12	622.963	1/2 ⁺		
		2442.1 5	42 12	473.26	5/2 ⁺		
		2916.5 3	100 12	0.0	3/2 ⁺		
2932.01	1/2 ⁺ ,3/2,5/2 ⁺	1323.1 6	25 9	1608.20	(5/2 ⁻ ,7/2,9/2)		
		1623.7 5	67 17	1309.25	3/2 ⁺ ,5/2 ⁺		
		1748.6 7	1.0×10 ² 4	1183.07	(5/2 ⁻ ,7/2,9/2)		
		2309.2 5	75 17	622.963	1/2 ⁺		
		2458.6 7	67 25	473.26	5/2 ⁺		
2954.75	(3/2 ⁻)	945.3 3	32 5	2009.81	3/2 ⁻		
		1066.4 7	86 14	1888.68	1/2 ⁺		
		1346.6 3	32 9	1608.20	(5/2 ⁻ ,7/2,9/2)		
		1770.7 7	1.0×10 ² 4	1183.07	(5/2 ⁻ ,7/2,9/2)		
		2192.5 5	59 19	762.64	3/2 ⁺		
		2331.5 6	36 9	622.963	1/2 ⁺		
		2454.5 12	36 14	501.928	3/2 ⁺		
		2481.4 3	64 14	473.26	5/2 ⁺		
		2955.2 9	59 23	0.0	3/2 ⁺		
		2978.9?		1625.3 5	88 25	1353.80	3/2 ⁻
				2505.5 5	100 25	473.26	5/2 ⁺
2994.4	(3/2 ⁻ ,5/2,7/2 ⁺)	2363.3 5	67 20	631.40	7/2 ⁻		
		2492.1 5	1.0×10 ² 3	501.928	3/2 ⁺		
3131.26		817.0 1	100.0	2314.26			
3131.6?		1948.6 5	1.0×10 ² 3	1183.07	(5/2 ⁻ ,7/2,9/2)		
		2348.8 7	70 20	782.62	5/2 ⁺		
3153.8	(3/2 ⁻)	1306.2 5	0.000	1846.74	(5/2 ⁺)		
		2371.4 8	8.×10 ¹ 4	782.62	5/2 ⁺		
		2680.1 6	58 17	473.26	5/2 ⁺		
		3093.9 7	66.67	61.161	1/2 ⁺		
		3154.5 7	100 25	0.0	3/2 ⁺		
		3254.8		2115.6 7	1.0×10 ² 4	1140.20	5/2 ⁺
2491.7 4	64 22			762.64	3/2 ⁺		
2781.8 5	79 15			473.26	5/2 ⁺		
3286.8?	(1/2,3/2,5/2 ⁺)			2523.4 6	75 25	762.64	3/2 ⁺
3375.4?	(1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻)	2664.6 6	100 25	622.963	1/2 ⁺		
		2873.4 3	100.0	501.928	3/2 ⁺		
3392.2	3/2 ⁻	2209.0 5	65 18	1183.07	(5/2 ⁻ ,7/2,9/2)		
		2630.7 8	29.41	762.64	3/2 ⁺		
		2769.6 6	6.×10 ¹ 3	622.963	1/2 ⁺		
		2918.6 4	100 18	473.26	5/2 ⁺		
		3392.2 9	29 12	0.0	3/2 ⁺		

Adopted Levels, Gammas (continued)

$\gamma(^{127}\text{Te})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ	E_f	J_f^π
3415.97	3/2 ⁻	1637.2 5	65 24	1778.97	(5/2 ⁻ ,7/2 ⁺)
		2233.4 6	100 24	1183.07	(5/2 ⁻ ,7/2,9/2)
		2653.2 6	94 24	762.64	3/2 ⁺
		2793.3 5	94 12	622.963	1/2 ⁺
		2912.7 5	94 18	501.928	3/2 ⁺
		2943.6 8	65 18	473.26	5/2 ⁺
3545.46	(1/2 ⁻ ,3/2 ⁻)	3484.4 3	78 9	61.161	1/2 ⁺
		3545.5 3	100 13	0.0	3/2 ⁺
3567.37	1/2,3/2,5/2 ⁺	2804.3 8	16 4	762.64	3/2 ⁺
		2943.3 6	32 12	622.963	1/2 ⁺
		3094.9 5	100 16	473.26	5/2 ⁺
		3506.6 4	44 20	61.161	1/2 ⁺
		3567.6 5	40 20	0.0	3/2 ⁺
		3572.3?	(3/2 ⁻)	3099.0 6	100.0
3595.8		3093.8 6	100.0	501.928	3/2 ⁺
3679.05	1/2,3/2,5/2 ⁺	1649.4 3		2029.99	(3/2 ⁻ ,5/2,7/2 ⁺)
		2496.4 6		1183.07	(5/2 ⁻ ,7/2,9/2)
		3617.3 11		61.161	1/2 ⁺
		3679.0 6		0.0	3/2 ⁺
3719.6	(1/2,3/2,5/2 ⁺)	2956.1 7	1.0×10 ² 5	762.64	3/2 ⁺
		3218.5 7	1.0×10 ² 5	501.928	3/2 ⁺
		3658.9 7	1.0×10 ² 5	61.161	1/2 ⁺
		3718.9 9	8.×10 ¹ 5	0.0	3/2 ⁺
		3764.54	1/2,3/2,5/2 ⁺	2077.2 3	68 24
3836.3	1/2,3/2,5/2 ⁺	2580.8 8	32 12	1183.07	(5/2 ⁻ ,7/2,9/2)
		2624.2 6	9.×10 ¹ 4	1140.20	5/2 ⁺
		3704.1 9	1.0×10 ² 3	61.161	1/2 ⁺
		3334.6 6	57 18	501.928	3/2 ⁺
		3776.3 8	48 13	61.161	1/2 ⁺
		3835.9 6	1.0×10 ² 3	0.0	3/2 ⁺
3852.88	1/2,3/2,5/2 ⁺	2669.9 3	69 23	1183.07	(5/2 ⁻ ,7/2,9/2)
		3350.2 6	1.0×10 ² 5	501.928	3/2 ⁺
		3380.1 5	7.×10 ¹ 3	473.26	5/2 ⁺
		3865.73	(3/2 ⁻ ,5/2 ⁺)	2061.0 5	6.×10 ¹ 3
3883.52	1/2 ⁺ ,3/2,5/2 ⁺	2683.1 9	1.0×10 ² 5	1183.07	(5/2 ⁻ ,7/2,9/2)
		3235.2 8	1.0×10 ² 3	631.40	7/2 ⁻
		3363.3 4	1.0×10 ² 5	501.928	3/2 ⁺
		3804.9 5	4.×10 ¹ 3	61.161	1/2 ⁺
		2529.8 7	25 9	1353.80	3/2 ⁻
		3409.5 5	23 6	473.26	5/2 ⁺

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult. @</u>	<u>α&</u>	<u>Comments</u>
3883.52	1/2 ⁺ ,3/2,5/2 ⁺	3821.8 4	72 18	61.161	1/2 ⁺			
		3883.9 3	100 23	0.0	3/2 ⁺			
3922.25	1/2,3/2,5/2 ⁺	2568.7 6	56 15	1353.80	3/2 ⁻			
		3860.9 2	100 23	61.161	1/2 ⁺			
		3922.7 6	22 8	0.0	3/2 ⁺			
3954.1?		3480.6 6	25 13	473.26	5/2 ⁺			
		3954.5 9	100 4	0.0	3/2 ⁺			
3973.73	1/2,3/2,5/2 ⁺	2680.1 6	26 8	1293.21	(3/2 ⁺ ,5/2,7/2 ⁺)			
		3912.7 5	1.0×10 ² 6	61.161	1/2 ⁺			
		3974.3 8	5.×10 ¹ 3	0.0	3/2 ⁺			
4036.59	1/2,3/2,5/2 ⁺	3975.3 4		61.161	1/2 ⁺			
		4036.2 8		0.0	3/2 ⁺			
4057.33	1/2,3/2,5/2 ⁺	3584.0 5	7.×10 ¹ 4	473.26	5/2 ⁺			
		3996.4 4	1.0×10 ² 5	61.161	1/2 ⁺			
6287.59	1/2 ⁺	2230.4 3	3.1 6	4057.33	1/2,3/2,5/2 ⁺			
		2250.9 3	1.7	4036.59	1/2,3/2,5/2 ⁺			
		2313.9 3	3 3	3973.73	1/2,3/2,5/2 ⁺			
		2365.3 1	7.3 3	3922.25	1/2,3/2,5/2 ⁺			
		2404.0 2	3.7 3	3883.52	1/2 ⁺ ,3/2,5/2 ⁺			
		2422.0 2	4 3	3865.73	(3/2 ⁻ ,5/2 ⁺)			
		2434.7 1	5.1 4	3852.88	1/2,3/2,5/2 ⁺			
		2451.5 4	2.5 4	3836.3	1/2,3/2,5/2 ⁺			
		2523.1 2	6.3 4	3764.54	1/2,3/2,5/2 ⁺			
		2608.7 2	4.5 3	3679.05	1/2,3/2,5/2 ⁺			
		2720.5 3	2.5 4	3567.37	1/2,3/2,5/2 ⁺			
		2742.2 2	5.2 3	3545.46	(1/2 ⁻ ,3/2 ⁻)	(E1)	0.001190 17	α(K)=0.0001012 15; α(L)=1.179×10 ⁻⁵ 17; α(M)=2.33×10 ⁻⁶ 4; α(N+..)=0.001075 α(N)=4.61×10 ⁻⁷ 7; α(O)=5.07×10 ⁻⁸ 7; α(IPF)=0.001074 15
		2871.5 4	2.7 3	3415.97	3/2 ⁻	(E1)	0.001253 18	α(K)=9.47×10 ⁻⁵ 14; α(L)=1.102×10 ⁻⁵ 16; α(M)=2.18×10 ⁻⁶ 3; α(N+..)=0.001145 1 α(N)=4.31×10 ⁻⁷ 6; α(O)=4.74×10 ⁻⁸ 7; α(IPF)=0.001144 16
		2896 2	4.2 3	3392.2	3/2 ⁻	(E1)	0.001264 18	α(K)=9.35×10 ⁻⁵ 14; α(L)=1.089×10 ⁻⁵ 16; α(M)=2.15×10 ⁻⁶ 3; α(N+..)=0.001157 1 α(N)=4.26×10 ⁻⁷ 6; α(O)=4.68×10 ⁻⁸ 7; α(IPF)=0.001157 17
		3332.90 14	6.6 4	2954.75	(3/2 ⁻)	(E1)	0.001464 21	α(K)=7.67×10 ⁻⁵ 11; α(L)=8.91×10 ⁻⁶ 13; α(M)=1.760×10 ⁻⁶ 25; α(N+..)=0.001376

Adopted Levels, Gammas (continued)

γ(¹²⁷Te) (continued)

<u>E_i(level)</u>	<u>E_γ[†]</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[@]</u>	<u>α&</u>	<u>Comments</u>
							α(K)=7.67×10 ⁻⁵ 11; α(L)=8.91×10 ⁻⁶ 13; α(M)=1.760×10 ⁻⁶ 25; α(N+..)=0.001376 α(N)=3.49×10 ⁻⁷ 5; α(O)=3.83×10 ⁻⁸ 6; α(IPF)=0.001376 20
6287.59	3355.8 4	2 4	2932.01	1/2 ⁺ ,3/2,5/2 ⁺			
	3372.1 3	7.1 5	2915.93	1/2,3/2,5/2 ⁺			
	3374.2 6	3.3 5	2912.97	(1/2 ⁻ ,3/2 ⁻)			
	3382.3 5	3.7 12	2904.86				
	3409.6 3	3.2 4	2878.02	1/2,3/2,5/2 ⁺			
	3431.5 6	1.5 4	2856.45	1/2 ⁻	(E1)	0.001505 21	α(K)=7.37×10 ⁻⁵ 11; α(L)=8.56×10 ⁻⁶ 12; α(M)=1.690×10 ⁻⁶ 24; α(N+..)=0.001421 α(N)=3.35×10 ⁻⁷ 5; α(O)=3.68×10 ⁻⁸ 6; α(IPF)=0.001420 20
	3514.6 2	4.4 4	2772.96	(3/2 ⁻ ,5/2 ⁺)			
	3524.2 6	1.2 1	2762.8?				
	3528.4 5	3.2 5	2759.1	3/2 ⁺			
	3557.6 3	4.5 6	2729.72	3/2 ⁺			
	3586.5 4	1.4 3	2700.71	1/2,3/2,5/2 ⁺			
	3597.6 5	1.6 3	2690.38	1/2,3/2,5/2 ⁺			
	3620.50 21	4.6 4	2667.25	1/2 ⁻	(E1)	0.001574 22	α(K)=6.84×10 ⁻⁵ 10; α(L)=7.94×10 ⁻⁶ 12; α(M)=1.568×10 ⁻⁶ 22; α(N+..)=0.001496 α(N)=3.11×10 ⁻⁷ 5; α(O)=3.42×10 ⁻⁸ 5; α(IPF)=0.001496 21
	3668.2 1	11.3 3	2619.22	1/2 ⁻	(E1)	0.001594 23	α(K)=6.72×10 ⁻⁵ 10; α(L)=7.80×10 ⁻⁶ 11; α(M)=1.540×10 ⁻⁶ 22; α(N+..)=0.001518 α(N)=3.05×10 ⁻⁷ 5; α(O)=3.36×10 ⁻⁸ 5; α(IPF)=0.001517 22
	3694.8 1	11 5	2592.63	(3/2 ⁻)			
	3726.2 3	3.2 3	2561.29	(1/2 ⁻ ,3/2,5/2 ⁺)			
	3790.6 2	4.9 3	2496.88	3/2 ⁺ ,5/2 ⁺			
	3818.66 3	49 7	2468.90	1/2 ⁻	(E1)	0.001659 24	α(K)=6.36×10 ⁻⁵ 9; α(L)=7.38×10 ⁻⁶ 11; α(M)=1.457×10 ⁻⁶ 21; α(N+..)=0.001586 2 α(N)=2.89×10 ⁻⁷ 4; α(O)=3.18×10 ⁻⁸ 5; α(IPF)=0.001586 23
	3849.2 3	4.1 4	2438.36	(3/2 ⁻)			
	3857.9 4	3.3 5	2429.14	(3/2 ⁺ ,5/2 ⁺)			
	3928.7 6	1.8 4	2359.57	3/2 ⁻			
	3949.5 3	2.4 3	2338.01	(3/2 ⁻)			
	3959.1 6	2.5 9	2328.30	1/2 ⁺ ,3/2,5/2 ⁺			
	3969.58 6	18.4 4	2317.91	3/2 ⁻	(E1)	0.001715 24	α(K)=6.04×10 ⁻⁵ 9; α(L)=7.00×10 ⁻⁶ 10; α(M)=1.382×10 ⁻⁶ 20; α(N+..)=0.001646 2 α(N)=2.74×10 ⁻⁷ 4; α(O)=3.01×10 ⁻⁸ 5; α(IPF)=0.001646 23
	4041.6 3	4.2 5	2246.05	3/2 ⁻	(E1)	0.001742 25	α(K)=5.89×10 ⁻⁵ 9; α(L)=6.83×10 ⁻⁶ 10; α(M)=1.349×10 ⁻⁶ 19; α(N+..)=0.001675 2 α(N)=2.67×10 ⁻⁷ 4; α(O)=2.94×10 ⁻⁸ 5; α(IPF)=0.001675 24

Adopted Levels, Gammas (continued)

$\gamma(^{127}\text{Te})$ (continued)						
$E_i(\text{level})$	E_γ^\dagger	I_γ	E_f	J_f^π	Mult. [@]	$\alpha\&$ Comments
6287.59	4080.75 3	100 10	2206.752	3/2 ⁻	(E1)	0.001757 25 $\alpha(\text{K})=5.82\times 10^{-5}$ 9; $\alpha(\text{L})=6.75\times 10^{-6}$ 10; $\alpha(\text{M})=1.332\times 10^{-6}$ 19; $\alpha(\text{N+..})=0.001690$ 2 $\alpha(\text{N})=2.64\times 10^{-7}$ 4; $\alpha(\text{O})=2.90\times 10^{-8}$ 4; $\alpha(\text{IPF})=0.001690$ 24
4112.2 5	2.1 4	2175.66	3/2 ⁺ , 5/2 ⁺			
4131.1 10		2156.82?	1/2, 3/2, 5/2 ⁺			
4143.4 1	18.0 4	2144.17	3/2 ⁻	(E1)	0.001780 25 $\alpha(\text{K})=5.70\times 10^{-5}$ 8; $\alpha(\text{L})=6.61\times 10^{-6}$ 10; $\alpha(\text{M})=1.305\times 10^{-6}$ 19; $\alpha(\text{N+..})=0.001715$ 2 $\alpha(\text{N})=2.59\times 10^{-7}$ 4; $\alpha(\text{O})=2.84\times 10^{-8}$ 4; $\alpha(\text{IPF})=0.001715$ 24	
4149.6 5	1.9 9	2138.10	1/2, 3/2, 5/2 ⁺			
4167.2 3	1.6 3	2120.00	1/2 ⁺			
4178.9 3	2.4 4	2109.14	1/2, 3/2, 5/2 ⁺			
4277.7 7	16.5 4	2009.81	3/2 ⁻	(E1)	0.00183 3 $\alpha(\text{K})=5.46\times 10^{-5}$ 8; $\alpha(\text{L})=6.33\times 10^{-6}$ 9; $\alpha(\text{M})=1.250\times 10^{-6}$ 18; $\alpha(\text{N+..})=0.001766$ 25 $\alpha(\text{N})=2.48\times 10^{-7}$ 4; $\alpha(\text{O})=2.72\times 10^{-8}$ 4; $\alpha(\text{IPF})=0.001765$ 25	
4295.0 3	3.5 4	1992.67	1/2, 3/2, 5/2 ⁺			
4331.1 3	3.4 4	1956.27	(3/2 ⁺ , 5/2 ⁺)			
4399 4	3 4	1888.68	1/2 ⁺			
4410.2 9		1877.96	3/2 ⁺ , 5/2 ⁺			
4419.9 7	2.2 15	1868.58	1/2, 3/2, 5/2 ⁺			
4482.2 6	1.8 4	1805.54				
4514.1 2	6.5 4	1773.09	3/2 ⁺ , 5/2 ⁺			
4600.7 7		1687.54	3/2 ⁻	(E1)	0.00194 3 $\alpha(\text{K})=4.96\times 10^{-5}$ 7; $\alpha(\text{L})=5.75\times 10^{-6}$ 8; $\alpha(\text{M})=1.135\times 10^{-6}$ 16; $\alpha(\text{N+..})=0.00188$ 3 $\alpha(\text{N})=2.25\times 10^{-7}$ 4; $\alpha(\text{O})=2.47\times 10^{-8}$ 4; $\alpha(\text{IPF})=0.00188$ 3	
4933.9 2	14.2 10	1353.80	3/2 ⁻	(E1)	0.00204 3 $\alpha(\text{K})=4.53\times 10^{-5}$ 7; $\alpha(\text{L})=5.24\times 10^{-6}$ 8; $\alpha(\text{M})=1.035\times 10^{-6}$ 15; $\alpha(\text{N+..})=0.00199$ 3 $\alpha(\text{N})=2.05\times 10^{-7}$ 3; $\alpha(\text{O})=2.26\times 10^{-8}$ 4; $\alpha(\text{IPF})=0.00199$ 3	
4977.8 3	1.7 5	1309.25	3/2 ⁺ , 5/2 ⁺			
5212.2 7	1.5 4	1075.01	3/2 ⁺			
5664.0 3	7.5 4	622.963	1/2 ⁺			
5785.3 3	6.7 5	501.928	3/2 ⁺			
5814.0 3	3.7 5	473.26	5/2 ⁺			
6226.5 5	5.9 9	61.161	1/2 ⁺			
6287.2 1	21.2 7	0.0	3/2 ⁺			

[†] From 2005Ho15 in (n, γ), if not otherwise noted.

[‡] From ¹²⁷Sb β^- decay (3.85 d).

[#] From ¹³⁰Te (⁶⁴Ni, ⁶⁷Ni γ).

[@] From ¹²⁷Sb β^- decay (3.85 d).

Adopted Levels, Gammas (continued)

$\gamma(^{127}\text{Te})$ (continued)

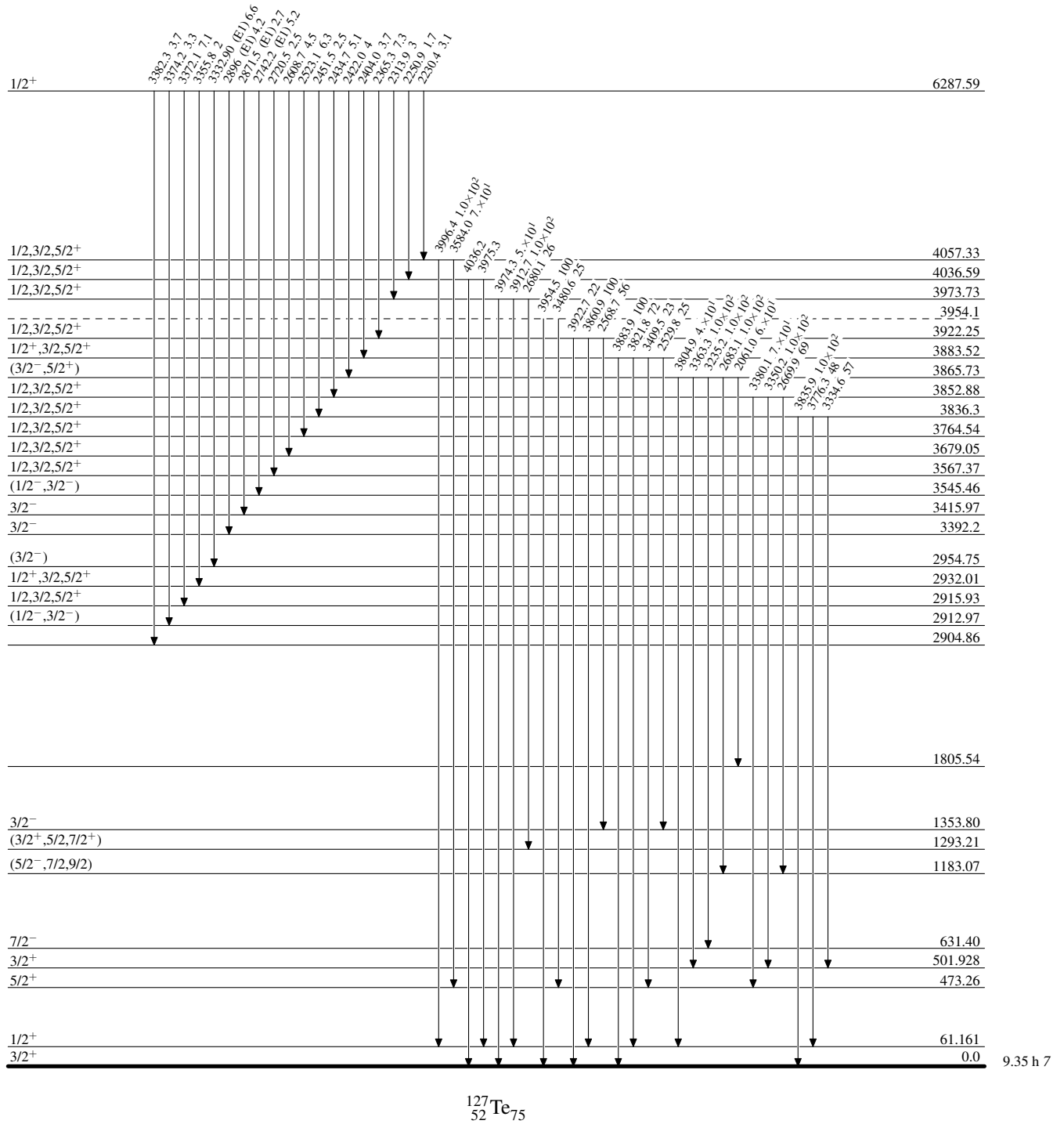
& Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

^a Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

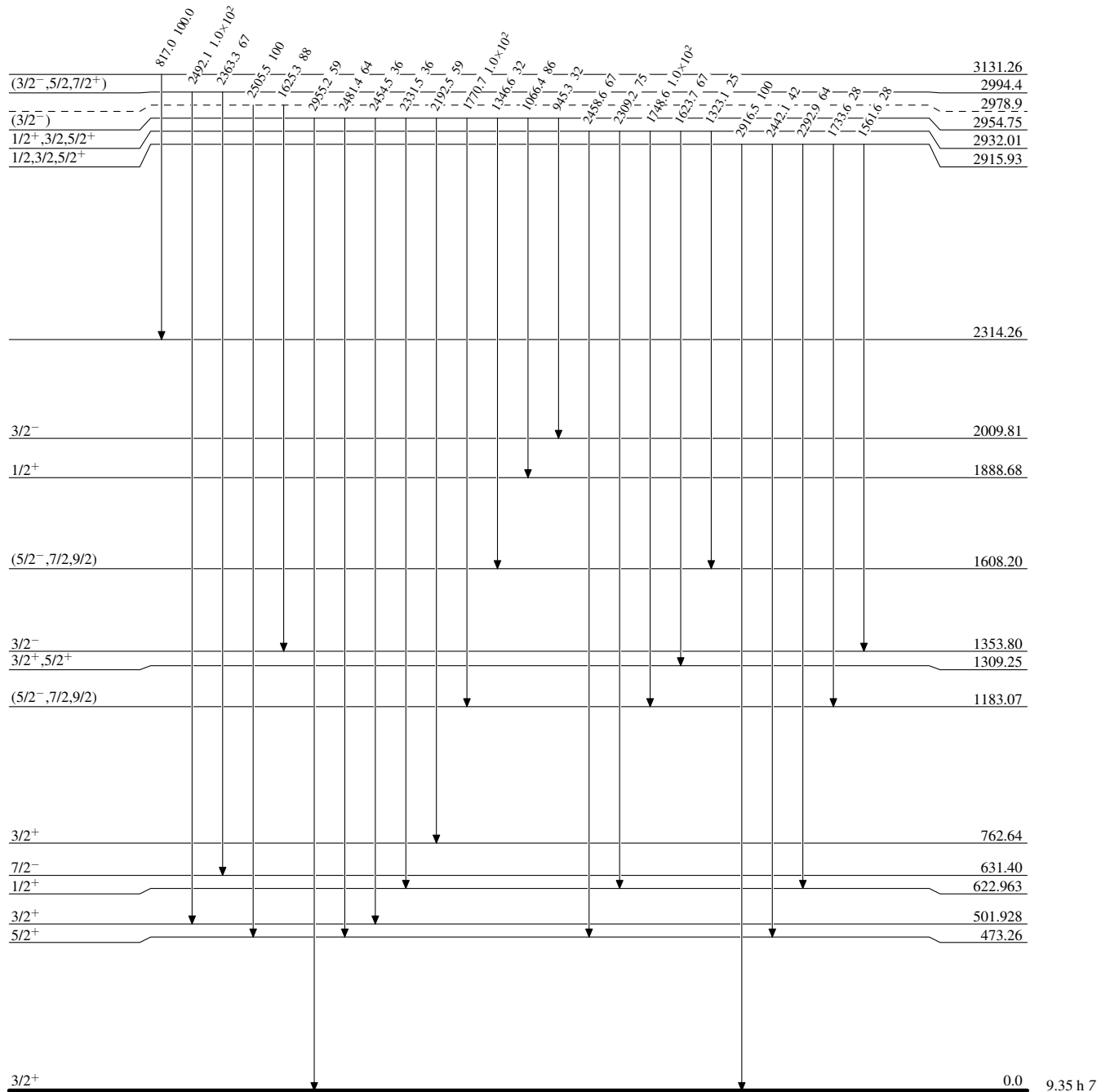


$^{127}_{52}\text{Te}_{75}$

9.35 h 7

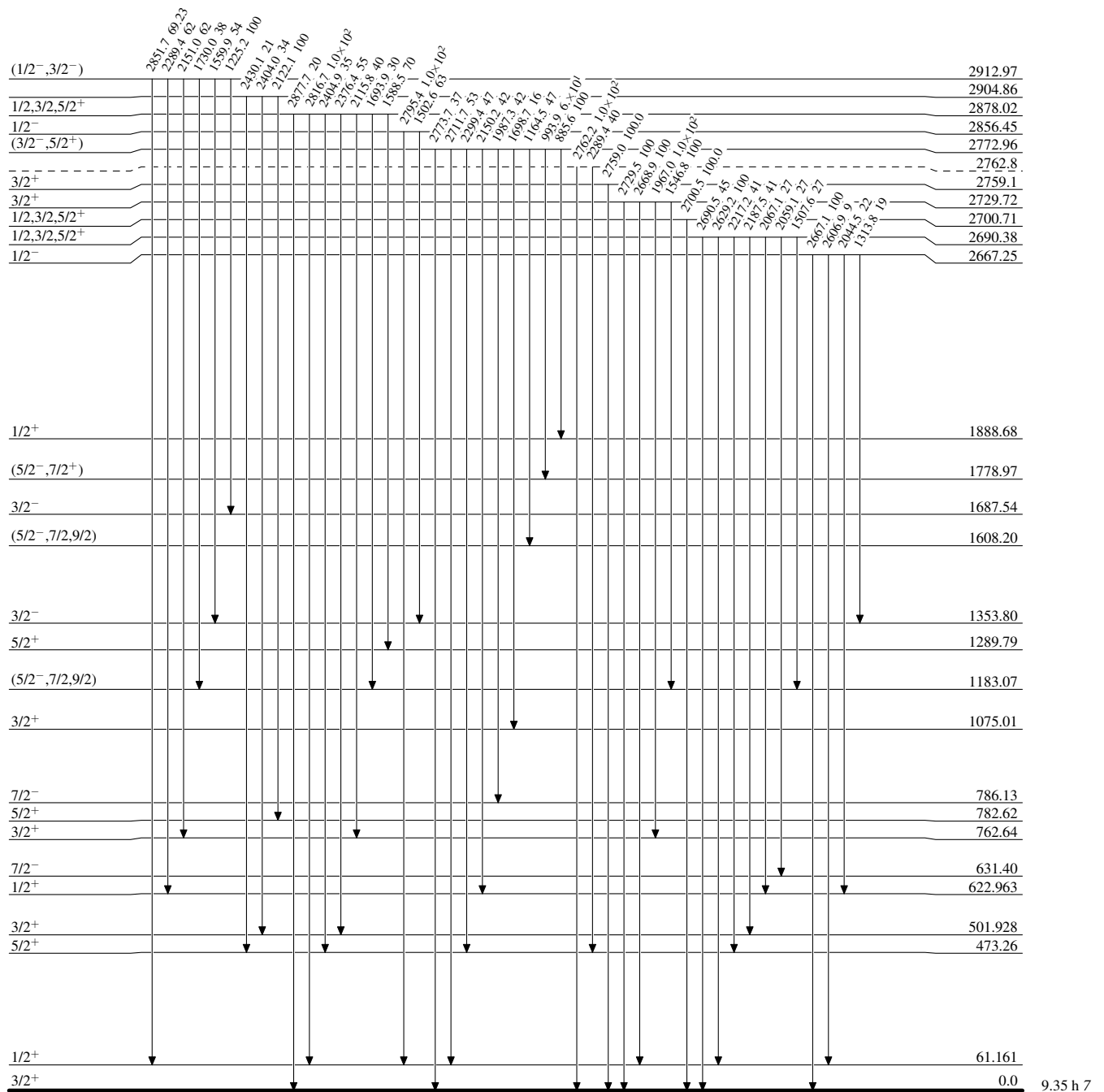
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

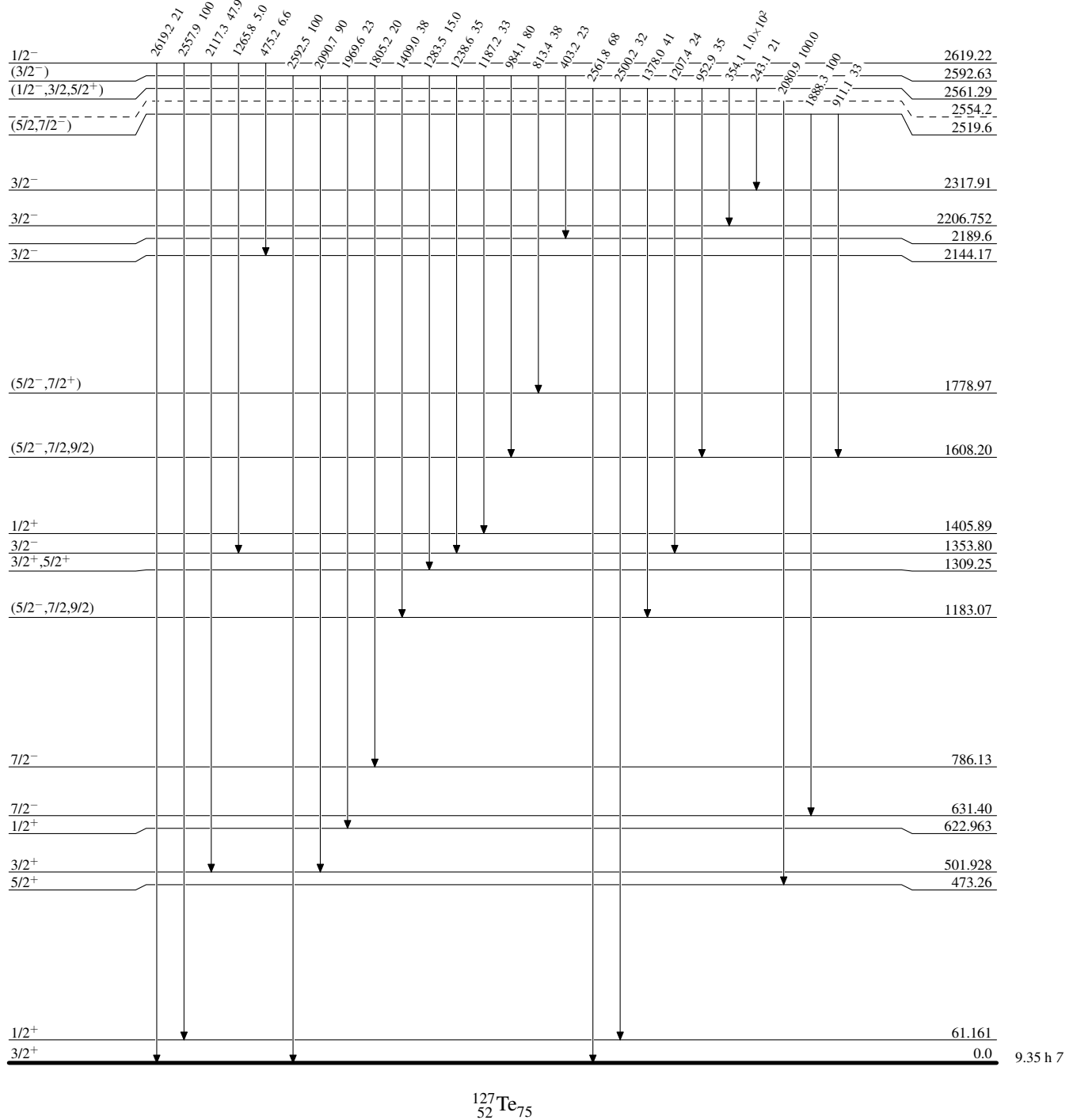
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

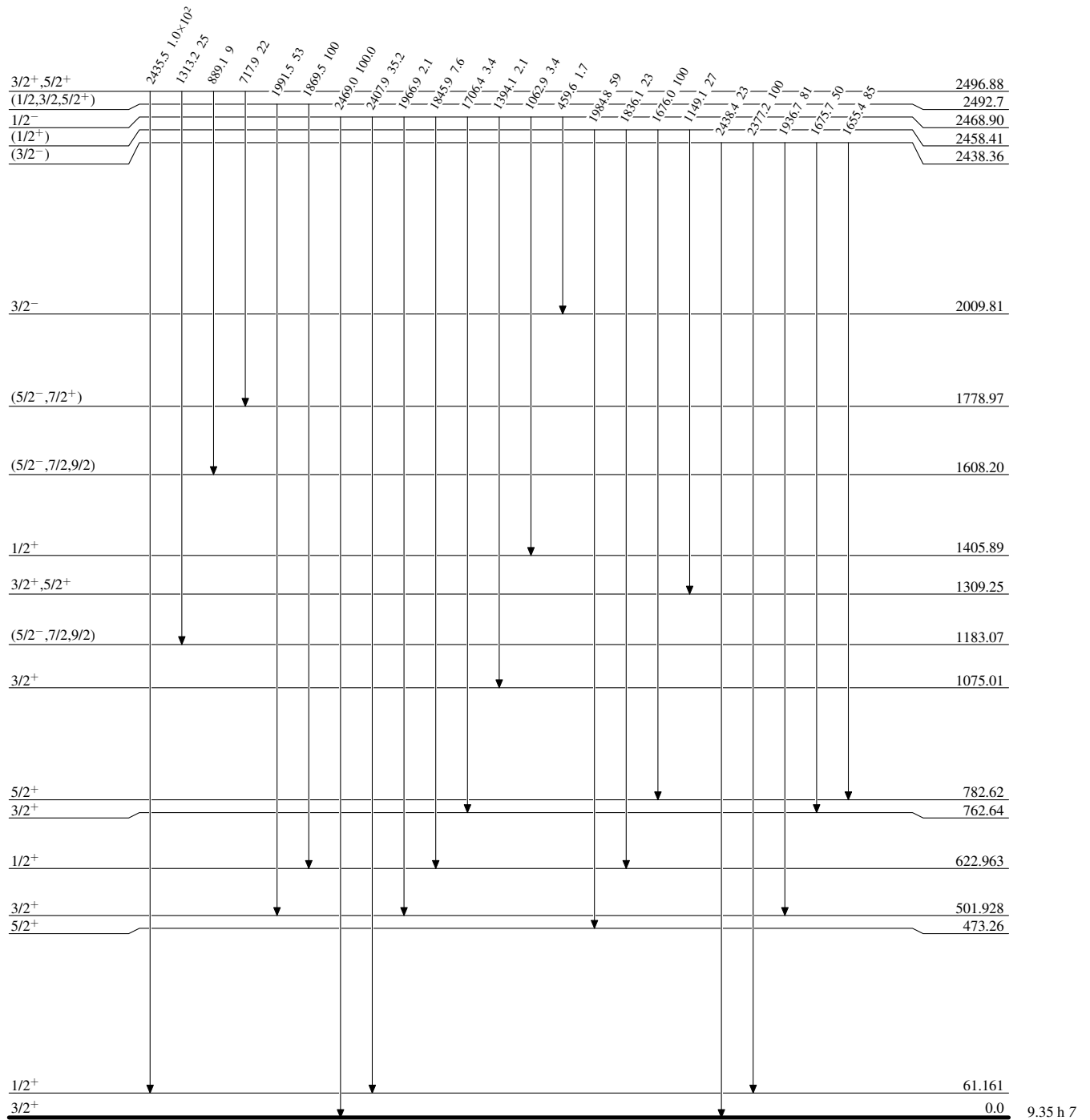
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



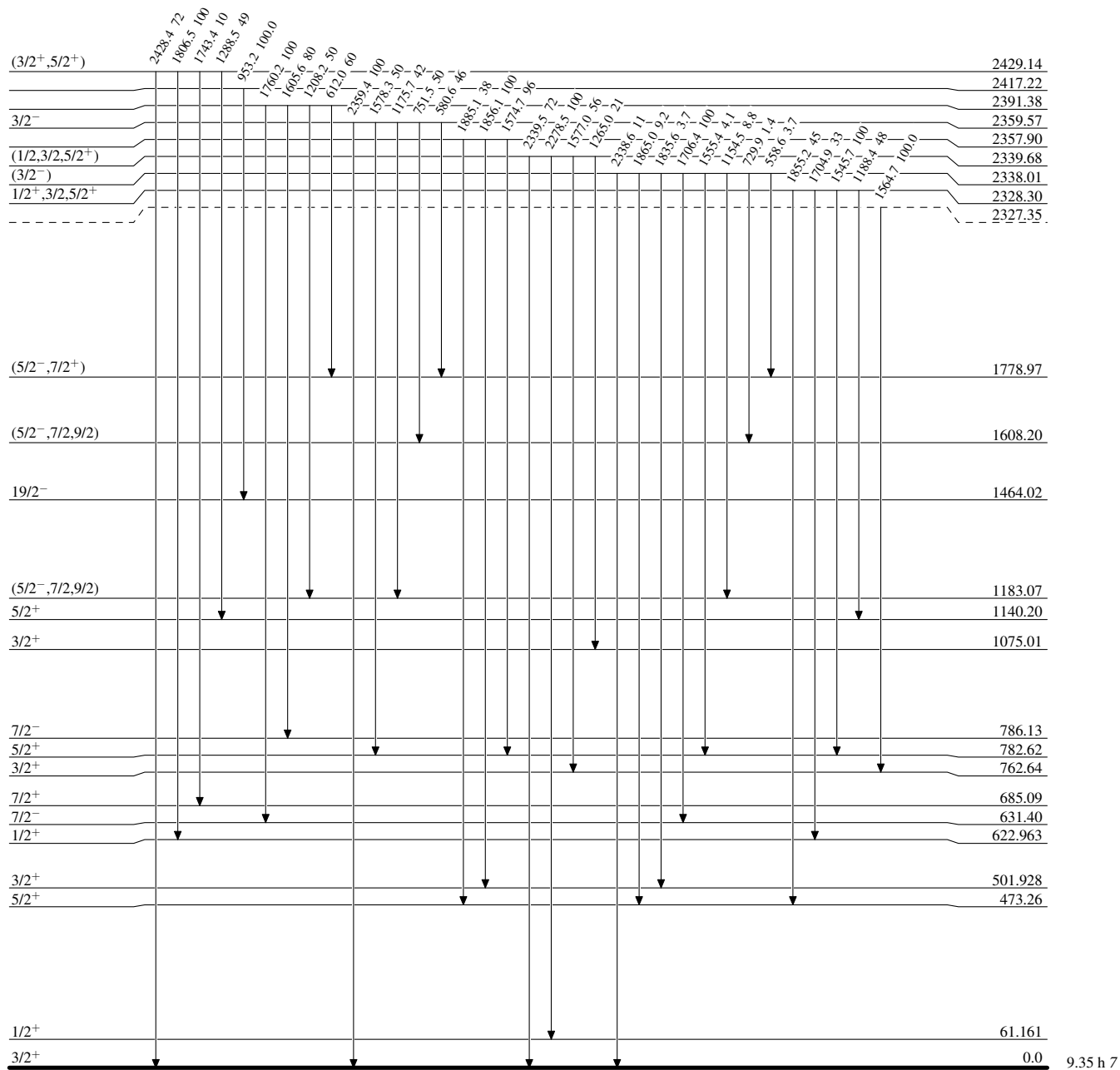
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}$

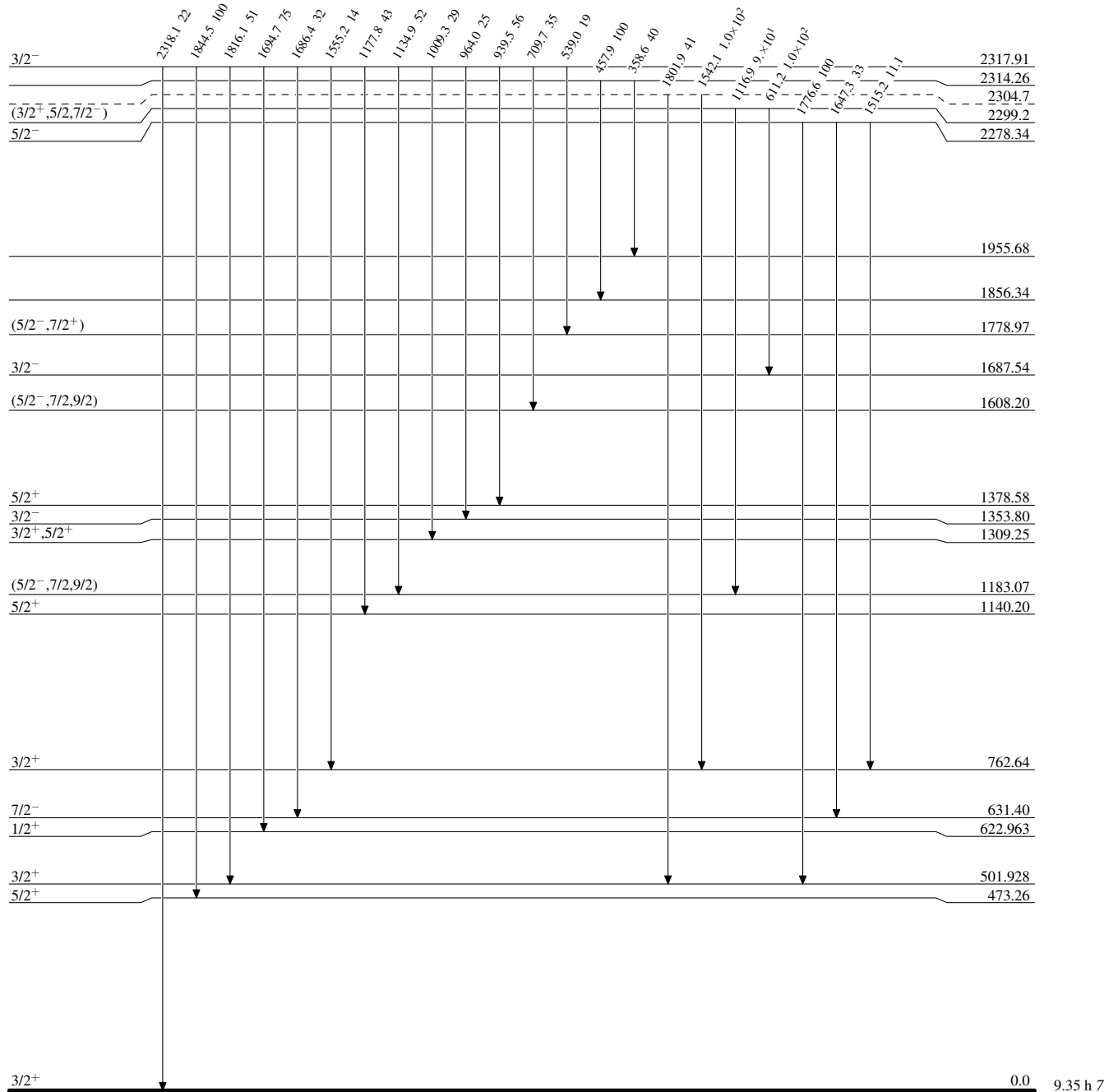
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

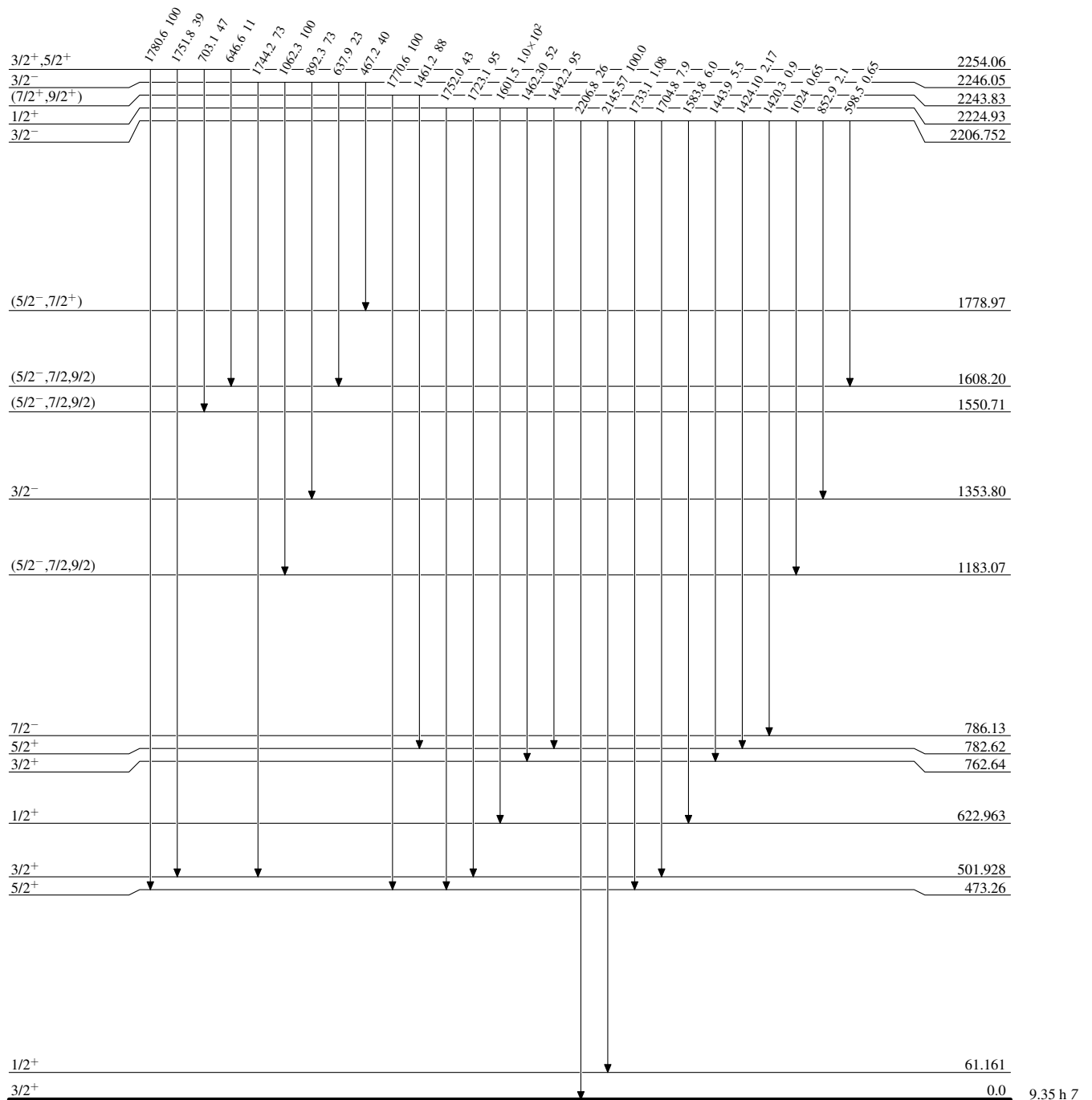
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level



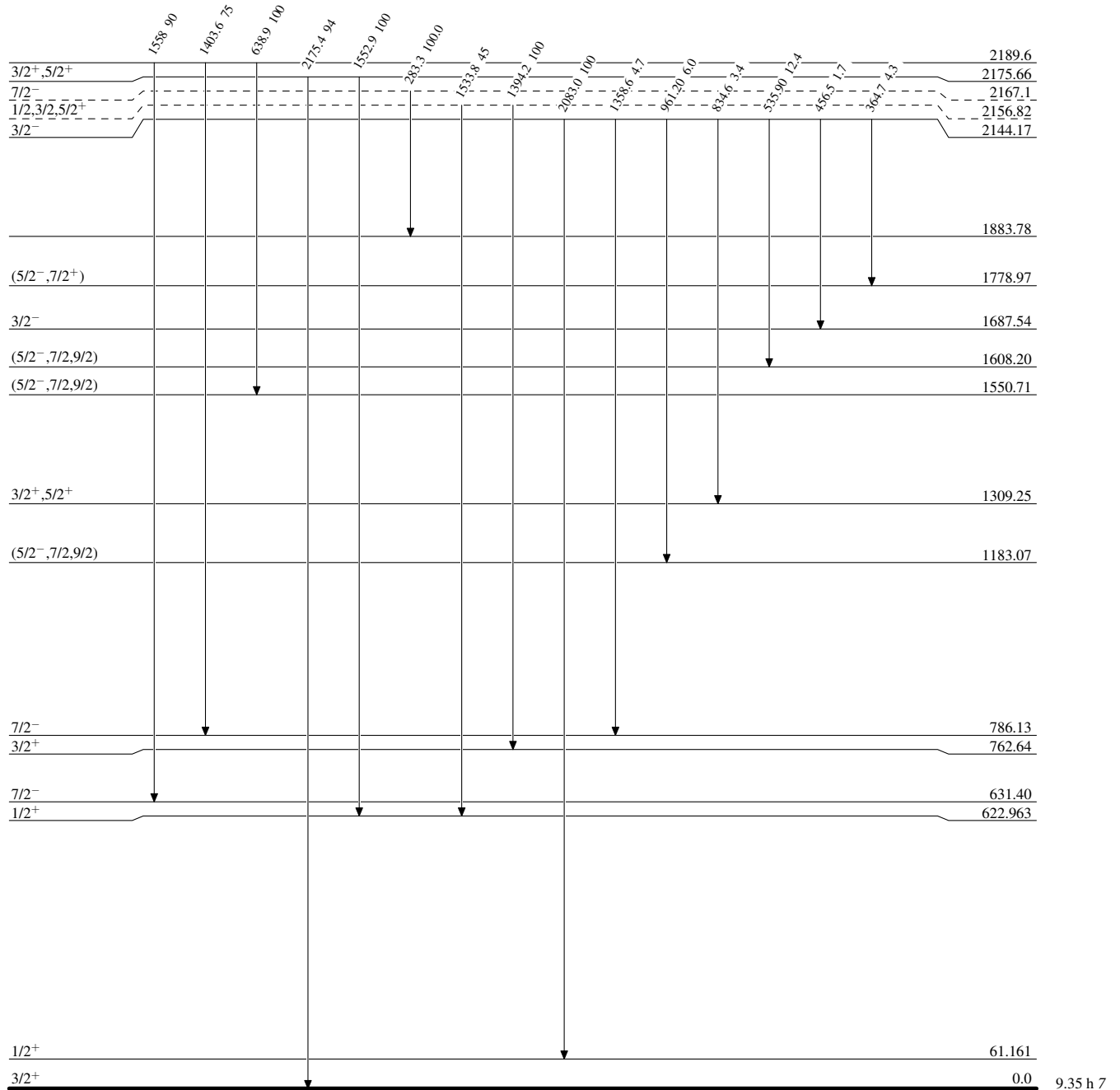
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

Adopted Levels, GammasLevel Scheme (continued)

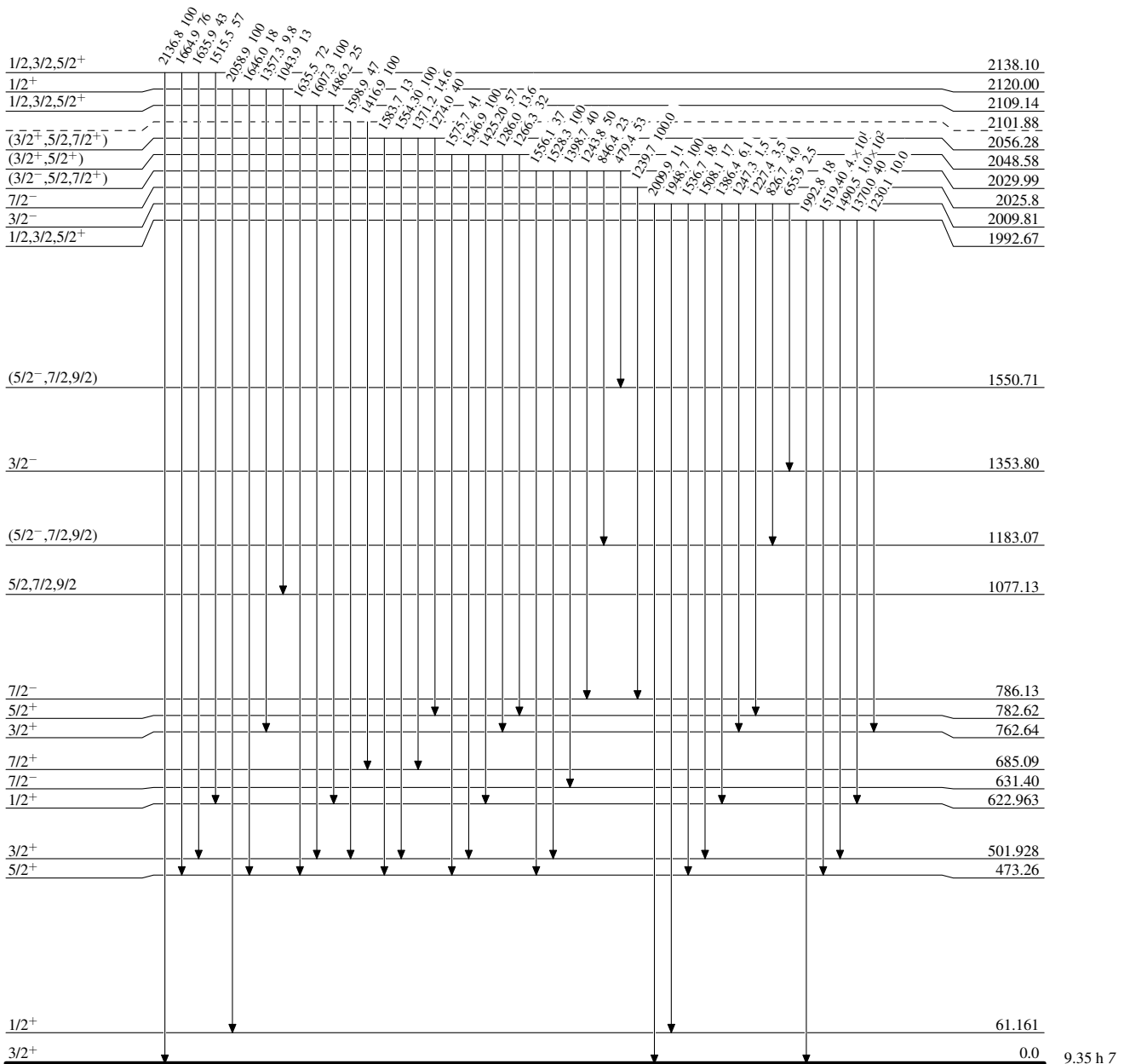
Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

Adopted Levels, Gammas

Level Scheme (continued)

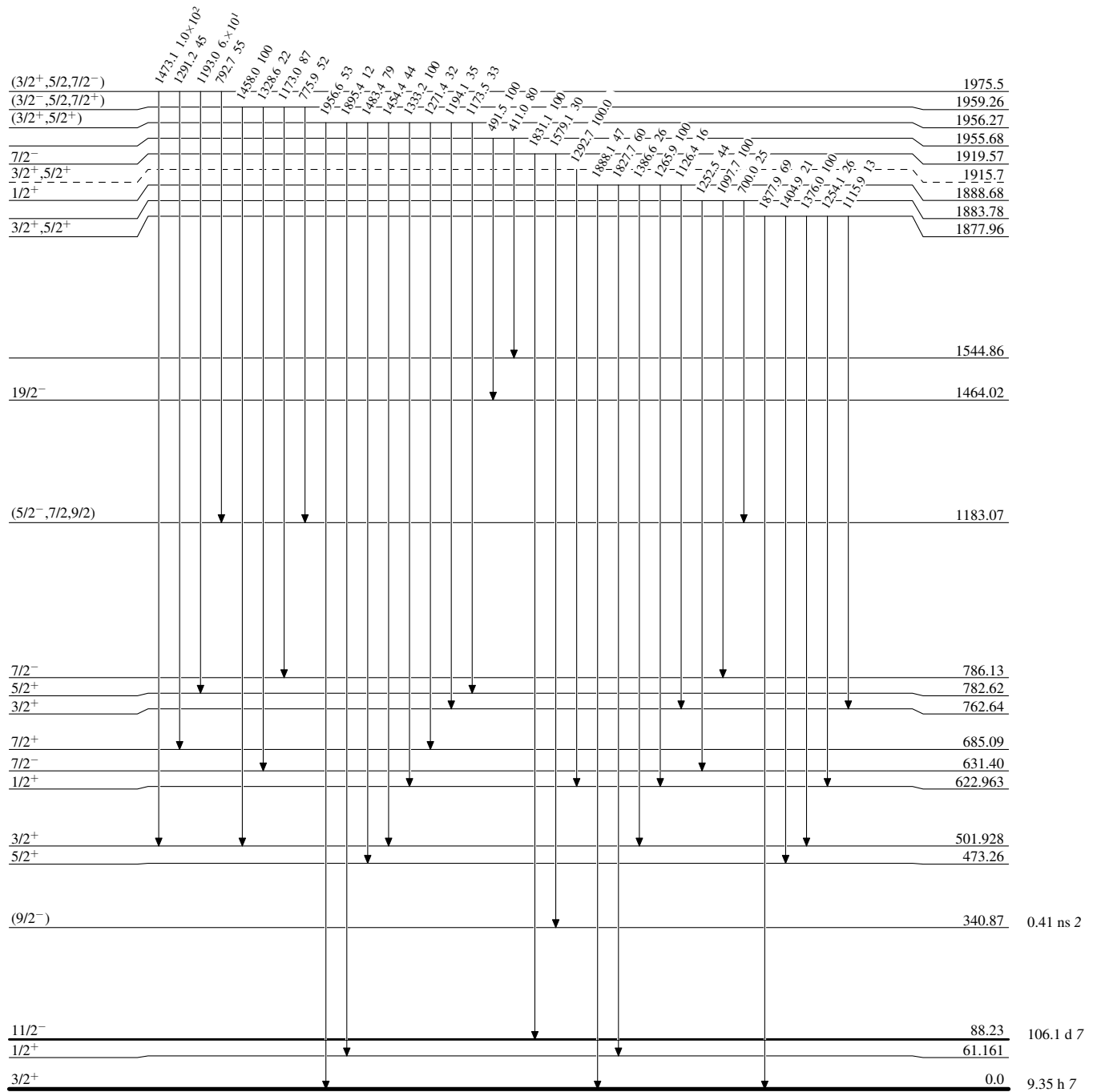
Intensities: Relative photon branching from each level



$^{127}_{52}\text{Te}_{75}$

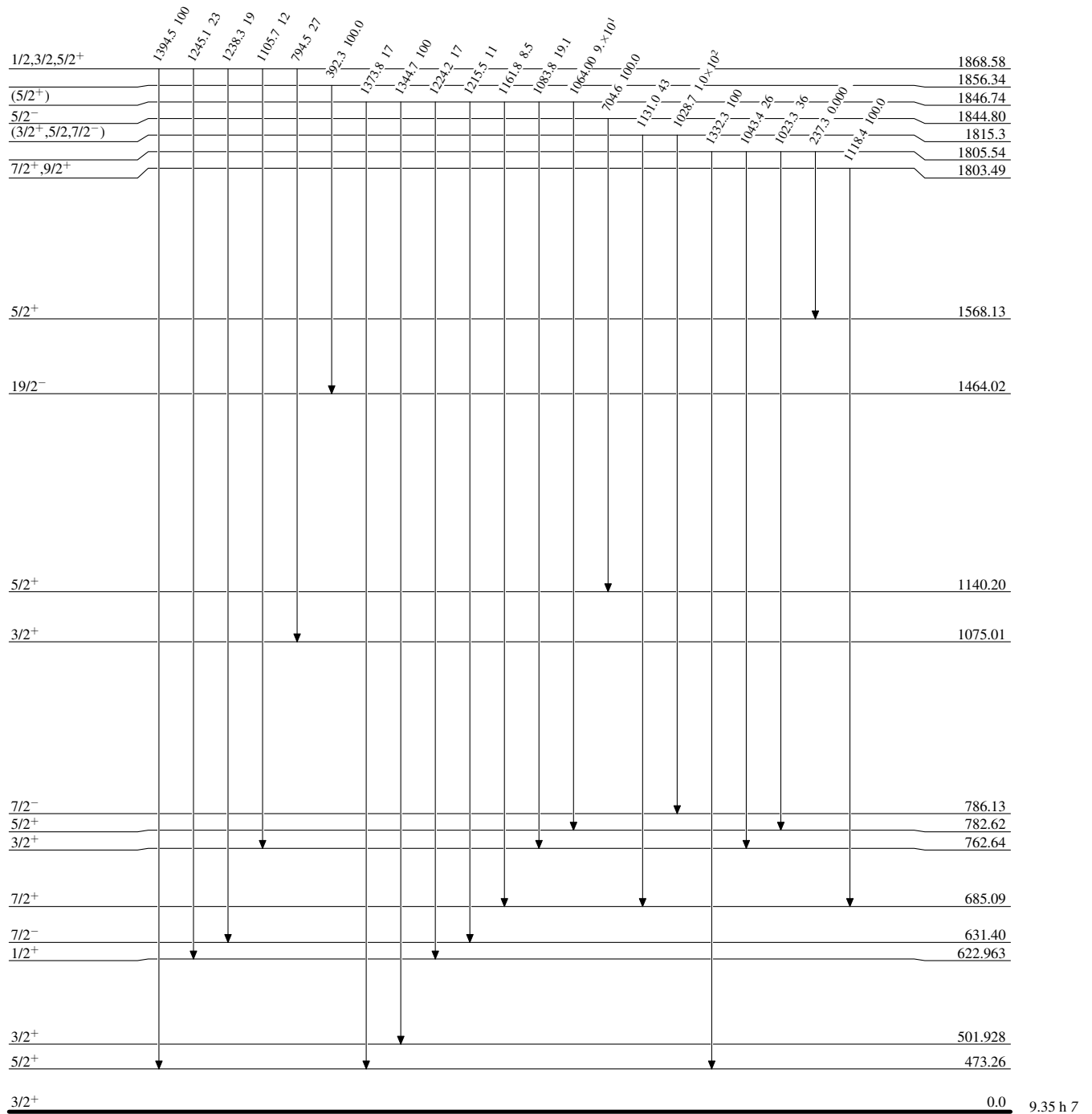
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

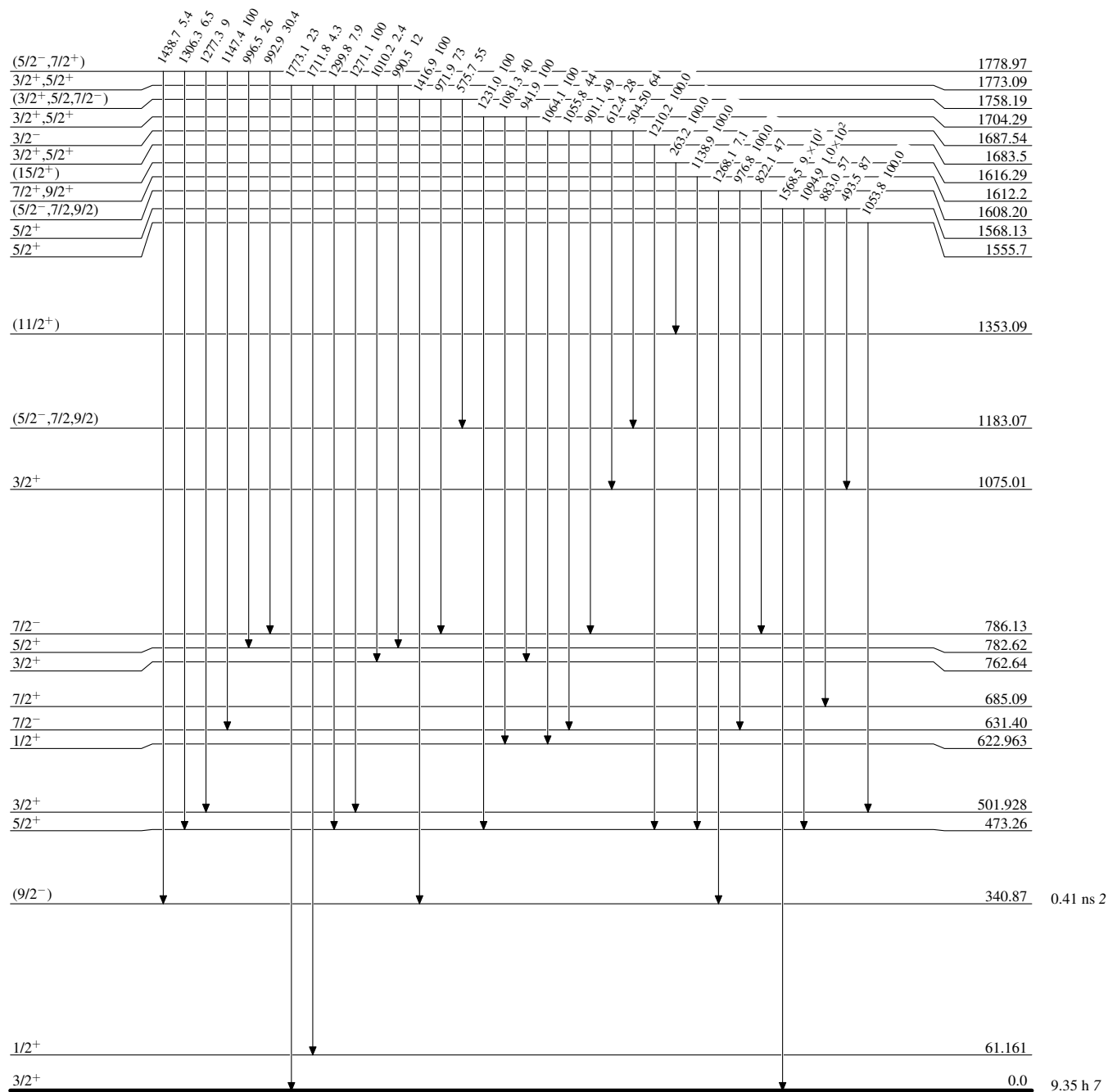
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



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

Intensities: Relative photon branching from each level

 $^{127}_{52}\text{Te}_{75}$

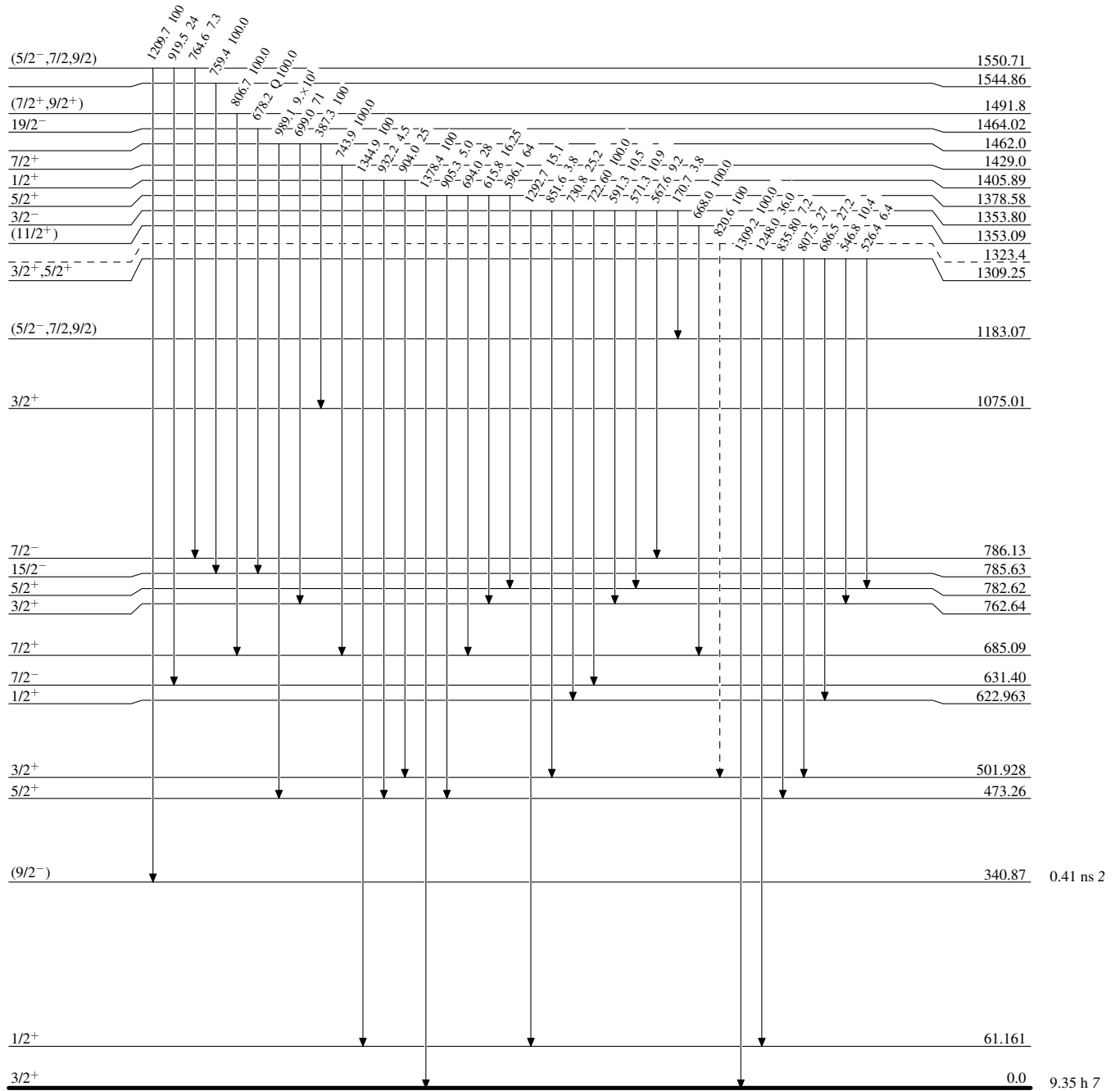
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{127}_{52}\text{Te}_{75}$

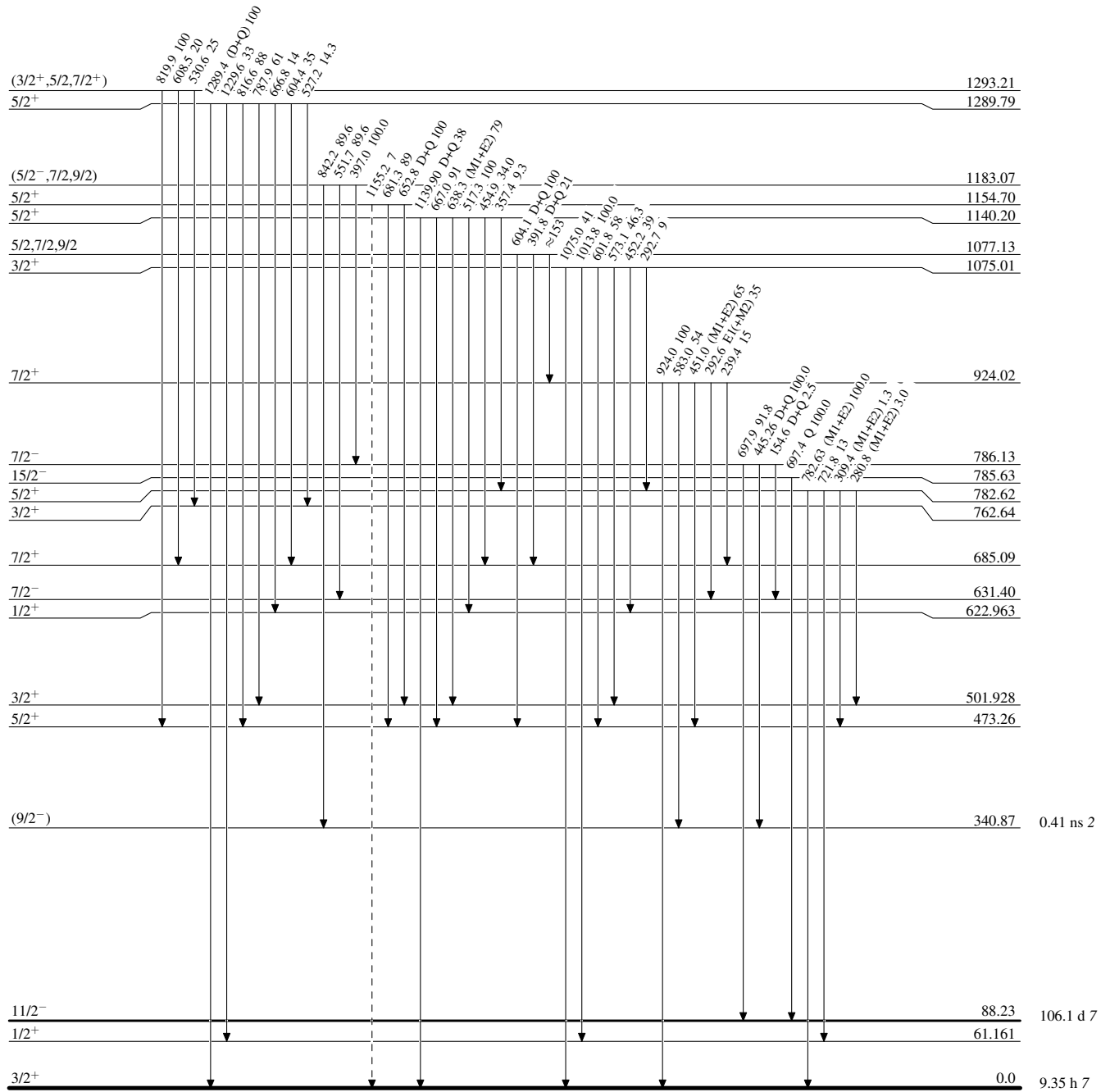
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{127}_{52}\text{Te}_{75}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----► γ Decay (Uncertain)