^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01

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Also includes ^{122}Te(^{3}He,2nγ) from 1981Lu01 and ^{122}Te(α,3nγ) from 1997Sa09, 1970Ke01.

2001Ga25: ^{123}Te(^{3}He,3nγ), E=24 MeV ^{3}He beam was produced from the FN-tandem at the University of Cologne. Target was 15 mg/cm^2 self-supporting ^{123}Te (99.3% enriched). γ rays were detected with 6 Compton-suppressed Ge detectors. Measured Eγ, Iγ, $\gamma\gamma$-coin, $\gamma\gamma(\theta)$. Deduced levels, J, π, band structures, γ-ray multipolarities, mixing ratios, branching ratios. Comparisons with theoretical calculations.

1981Lu01: ^{122}Te(^{3}He,2nγ), ^{123}Te(^{3}He,3nγ), E=14-27 MeV ^{3}He beam was produced from the Jyvaskyla University MC-20 cyclotron. Targets were 7-10 mg/cm^2 self-supporting ^{122}Te (91% enriched) and ^{123}Te (67% enriched). γ rays were detected with planar HPGe detectors and coaxial Ge(Li) detectors; conversion electrons were detected with an intermediate-image magnetic-plus Si(Li) electron spectrometer (FWHM=3.0 keV at 1 MeV). Measured Eγ, Iγ, E(ce), I(ce), $\gamma\gamma$-coin, $\gamma(\theta)$, γ(t). Deduced levels, J, π, band structures, isomeric $T_{1/2}$, γ-ray multipolarities, mixing ratios, conversion coefficients. Comparisons with theoretical calculations. Most of the data are from (^{3}He,2nγ) measurement.

1997Sa09: ^{122}Te(α,3nγ), E=40 MeV α beam was produced from the Variable Energy Cyclotron, Calcutta. γ rays were detected with coaxial HPGe detectors. Measured Eγ, Iγ, $\gamma\gamma$-coin, $\gamma(\theta)$. Deduced levels, J, π, γ-ray multipolarities, mixing ratios, branching ratios. Comparisons with available data and theoretical calculations.

Others: ^{122}Te(α,3nγ), 1970Ke01 (1970KeZV,1970KeZO), 1978Gi16.

^{123}Xe Levels

Band assignments are from 2001Ga25.

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	Comments
0[a]	1/2$^{(+)}$		
97.34[&] *8*	3/2$^{(+)}$		
180.61[c] *8*	5/2$^{(+)}$		
185.27 *17*	7/2$^{(-)}$	5.8 μs *3*	E(level): the position of this isomeric state is proposed by 1981Lu01 based on their observation of the 66.7γ in coincidence with 266.4γ and 515.7γ both feeding the 252 level. J$^\pi$: other: 1970Ke01 tentatively assign J^π=9/2$^-$ and E<250 keV to this isomer and proposed that this isomer feeds the 181 level by a M2 transition. $T_{1/2}$: weighted average of 5.6 μs *3* from γ(t) of 97.3γ, 83.2γ and 180.6γ in 1981Lu01, and 6.3 μs *5* from 97.3γ(t) and 83.2γ(t) in 1970Ke01.
206.35[g] *19*	(9/2$^-$)		
251.99[#] *13*	(7/2$^+$)		
263.35[e] *18*	(11/2$^-$)		
307.02[a] *13*	5/2$^{(+)}$		Additional information 1.
437.57[&] *15*	7/2$^{(+)}$		
442.59 *15*	(1/2$^+$,3/2$^+$)		
466.91[b] *14*	(7/2$^+$)		
518.47[@] *15*	(9/2$^+$)		
567.7 *3*	(7/2$^-$,9/2$^-$,11/2$^-$)		
585.71 *24*	(3/2$^+$)		
614.2 *3*	(3/2$^+$,5/2,7/2$^+$)		
662.10[d] *19*	(13/2$^-$)		
719.19[e] *20*	(15/2$^-$)		Additional information 2.
731.29[c] *14*	(9/2$^+$)		
750.7 *3*	(9/2$^-$,11/2$^-$)		
759.7 *4*			
767.63[#] *17*	(11/2$^+$)		

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^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

^{123}Xe Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	Comments
776.66 *22*	(5/2,7/2,9/2$^+$)	
797.87[a] *16*	(9/2$^+$)	
847.9 *5*	(1/2$^+$,3/2)	
848.5 *4*	(1/2$^+$,3/2)	
863.9 *3*	(5/2$^+$,7/2$^+$)	
867.8 *4*	(11/2$^-$)	
877.27[g] *20*	(13/2$^-$)	
918.5 *4*	(3/2$^+$)	
934.85[&] *21*	(11/2$^+$)	
971.0 *3*	(11/2$^-$)	
1041.5 *3*	(11/2$^-$)	
1046.31 *23*	(7/2$^+$)	
1051.16[b] *19*	(9/2$^+$,11/2$^+$)	
1054.5 *6*		
1082.17[@] *19*	(13/2$^+$)	
1145.2 *3*		
1260.29 *25*	(13/2$^-$)	
1270.02[f] *21*	(15/2$^-$)	
1278.0 *4*		
1293.97[d] *21*	(17/2$^-$)	
1325.4 *4*		
1336.21[e] *24*	(19/2$^-$)	
1338.9[c] *3*		
1384.3 *6*		
1397.79[#] *22*	(15/2$^+$)	
1430.8[a] *3*	(13/2$^+$)	
1519.9 *4*		
1521.91[g] *23*	(17/2$^-$)	
1541.11 *23*	(15/2$^-$)	
1554.2[&] *3*	(15/2$^+$)	
1580.6 *3*		
1618.5 *6*		
1696.4 *6*		
1733.1[b] *4*		
1758.0[@] *4*	(17/2$^+$)	Additional information 3.
1759.0 *6*		
1827.8 *3*	(17/2$^-$)	
1841.6 *3*		
1947.6 *6*	(15/2$^-$)	Additional information 4.
1949.3 *4*		
1953.5[f] *4*		
2063.1[d] *3*	(21/2$^-$)	
2089.6[e] *3*	(23/2$^-$)	
2112.7[#] *3*	(19/2$^+$)	
2144.7[a] *5*		
2197.0 *4*		
2209.9 *4*		
2226.0 *4*		
2230.8[&] *3*	(19/2$^+$)	
2248.8 *4*		
2284.3[g] *4*		

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^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

^{123}Xe Levels (continued)

E(level)[†]	Jπ[‡]	E(level)[†]	Jπ[‡]	E(level)[†]	Jπ[‡]	E(level)[†]	Jπ[‡]
2416.4? *3*		2770.4[f] *6*		2964.5[&] *4*	(23/2$^+$)	3210.8[@] *4*	(25/2$^+$)
2422.6 *4*	(19/2$^+$)	2822.5 *4*	(23/2$^+$)	2965.7[e] *6*	(27/2$^-$)	3349.9 *4*	(27/2$^+$)
2497.8[@] *4*	(21/2$^+$)	2882.8[#] *4*	(23/2$^+$)	3152.5[g] *5*		3479.5 *7*	(27/2$^+$)
2689.5 *4*	(21/2$^+$)	2951.5[d] *5*		3169.5 *3*	(25/2$^+$)		

[†] From a least-squares fit to γ-ray energies, assuming $\Delta E\gamma$=0.5 keV if not given.
[‡] From Adopted Levels. Assignments by 2001Ga25 are based on their $\gamma\gamma(\theta)$ data and assignments in 1981Lu01 as starting basis, with the latter from $\gamma(\theta)$ and ce data in 1981Lu01.
[#] Band(A): Band based on (7/2$^+$).
[@] Band(B): Band based on (9/2$^+$).
[&] Band(C): Band based on 3/2$^{(+)}$.
[a] Band(D): Band based on 1/2$^{(+)}$.
[b] Band(E): Band based on (7/2$^+$).
[c] Band(F): Band based on 5/2$^{(+)}$.
[d] Band(G): Band based on (13/2$^-$).
[e] Band(H): Band based on (11/2$^-$).
[f] Band(I): Band based on (15/2$^-$).
[g] Band(J): Band based on (9/2$^-$).

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	α[b]	Comments
97.34	$3/2^{(+)}$	97.3 *1*	100	0	$1/2^{(+)}$	D(+Q)		1.4 *6*	E_γ: weighted average of 97.3 *1* (1970Ke01) and 97.4 *2* (1981Lu01). Other: 97.5 (2001Ga25). Relative Iγ=100 (1981Lu01 and 1997Sa09), 100 *8* (1970Ke01). δ: all possible solutions: 0.00 *15*, +0.23 *12*, or −2.2 *+6−10* from 340.3γ-97.5$\gamma(\theta)$ (2001Ga25). Isotropic from $\gamma(\theta)$ in 1997Sa09. A_2=−0.02 (1981Lu01); A_2=0.00 *2* (1997Sa09).
180.61	$5/2^{(+)}$	83.2 *1*	100 *10*	97.34	$3/2^{(+)}$				E_γ: weighted average of 83.2 *1* (1970Ke01) and 83.4 *2* (1981Lu01). Other: 83.4 (2001Ga25). I_γ: other: 100 *10* (1981Lu01). Mult.: Isotropic from $\gamma(\theta)$ in 1997Sa09. Relative Iγ=67 *7* (1981Lu01), 81 *7* (1970Ke01), 77.3 (1997Sa09). A_2=−0.02 *2* (1981Lu01); A_2=−0.02 *3* (1997Sa09).
		180.6 *1*	16 *3*	0	$1/2^{(+)}$				E_γ: weighted average of 180.5 *1* (1970Ke01) and 180.8 *2* (1981Lu01). Other: 180.8 (2001Ga25). I_γ: weighted average of 11 *3* from 2001Ga25 and 17.2 *18* from 1981Lu01. Relative Iγ=11.5 *12* (1981Lu01), 15 *2* (1970Ke01).
185.27	$7/2^{(-)}$	(4.6)	100	180.61	$5/2^{(+)}$	[E1]		39.0	α(M)=29.3 E_γ: from level-energy difference; not observed. This transition is inferred by 1981Lu01 from the fact that decay curves of the 180.8γ and 83.4γ from 180.6 level and the 97.3γ from 97.3 level were observed to follow the isomeric decay. Mult.: If E1, hindrance factor=7.2×10^4 is consistent with observed values in cerium and barium.
206.35	$(9/2^-)$	21.1 *2*	100	185.27	$7/2^{(-)}$	(M1)			E_γ: other: 21.1 (2001Ga25). Mult.: 1981Lu01 states the intensity balance require the same character for the 21γ as the 57γ, which is proposed to be pure M1 from $\gamma(\theta)$ in 1981Lu01. Relative Iγ=9.0 *9* (1981Lu01).
251.99	$(7/2^+)$	66.7 *2*	11 *3*	185.27	$7/2^{(-)}$				E_γ: other: 66.8 (2001Ga25). I_γ: from 1981Lu01. Other: <20 (2001Ga25). Relative Iγ=1.0 *3* (1981Lu01).
		71.3 *2*	100 *10*	180.61	$5/2^{(+)}$	D+Q[a]	−0.02[a] *5*		E_γ: other: 71.4 (2001Ga25). I_γ: from 2001Ga25 and 1981Lu01. A_2=−0.17 *4*, A_4=−0.04 *6* (1981Lu01). Relative Iγ=9.0 *9* (1981Lu01).
263.35	$(11/2^-)$	57.0 *2*	100 *10*	206.35	$(9/2^-)$	D+Q[a]	0.06[a] *+2−3*		E_γ: other: 57.0 (2001Ga25). I_γ: from relative Iγ in 1981Lu01. δ: other: −0.15 *10* from $\gamma(\theta)$ in 1997Sa09. A_2=−0.12 *3*, A_4=−0.02 *4* (1981Lu01); A_2=−0.36 *4* (1997Sa09). Relative Iγ=18.0 *18* (1981Lu01), 23.9 (1997Sa09).

From ENSDF

$^{123}_{54}Xe_{69}$-4

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	α[b]	Comments
263.35	$(11/2^-)$	78.1 *2*	3.3 *10*	185.27	$7/2^{(-)}$				E_γ: other: 77.9 (2001Ga25). I_γ: from relative Iγ in 1981Lu01. Relative Iγ=0.60 *18* (1981Lu01).
307.02	$5/2^{(+)}$	209.9	5 *1*	97.34	$3/2^{(+)}$				
		307.2 *2*	100 *10*	0	$1/2^{(+)}$	E2[a]		0.0389	E_γ: other: 307.2 (2001Ga25). Mult.: α(K)exp=0.026 *4* (1981Lu01). A_2=+0.13 *1*, A_4=−0.01 *1* (1981Lu01); A_2=+0.31 *15* (1997Sa09). Relative Iγ=9.6 *10* (1981Lu01), 3.6 (1997Sa09).
437.57	$7/2^{(+)}$	130.5 *2*	14 *1*	307.02	$5/2^{(+)}$	D+Q	0.06 *4*		E_γ: other: 130.6 (2001Ga25). I_γ: other: 15 *5* (1981Lu01). δ: weighted average of 0.05 *4* (1981Lu01) and 0.07 *5* from 130.5γ-307.2$\gamma(\theta)$ (2001Ga25). Other: 0.02 *+6−13* or −5 *+2−11* from 497.1γ-130.5$\gamma(\theta)$ in 2001Ga25. A_2=−0.10 *1*, A_4=+0.02 *1* (1981Lu01). Relative Iγ=1.8 *6* (1981Lu01).
		185.6[d]	2 *1*	251.99	$(7/2^+)$				E_γ: only from 2001Ga25, but not seen in any other studies.
		340.2 *2*	100 *10*	97.34	$3/2^{(+)}$	E2[a]		0.0282	E_γ: other: 340.3 (2001Ga25). I_γ: from 2001Ga25 and 1981Lu01. Mult.: α(K)exp=0.018 *3* (1981Lu01). A_2=+0.21 *1*, A_4=−0.02 *1* (1981Lu01); A_2=+0.32 *3* (1997Sa09). Relative Iγ=11.8 *12* (1981Lu01), 41.0 (1997Sa09).
442.59	$(1/2^+,3/2^+)$	261.9 *2*	100 *10*	180.61	$5/2^{(+)}$				E_γ: other: 261.9 (2001Ga25). I_γ: other: 100 *27* (1981Lu01). Relative Iγ=1.1 *3* (1981Lu01).
		345.3 *2*	21 *5*	97.34	$3/2^{(+)}$				E_γ: other: 345.3 (2001Ga25). I_γ: weighted average of 20 *3* from 2001Ga25 and 45 *14* from 1981Lu01. Relative Iγ=0.50 *15* (1981Lu01).
		442.8	32 *4*	0	$1/2^{(+)}$				E_γ: from 2001Ga25. Not reported in 1981Lu01, but an unlabelled apparent peak can be seen at this energy in the γ-ray spectrum in Fig.1.
466.91	$(7/2^+)$	215.0 *2*	17 *2*	251.99	$(7/2^+)$	D(+Q)[a]	0.5[a] *+16−8*		E_γ: other: 215.1 (2001Ga25). I_γ: other: 18 *6* (1981Lu01). A_2=+0.27 *9*, A_4=−0.06 *3* (1981Lu01). Relative Iγ=1.3 *4* (1981Lu01).
		286.3 *2*	100 *10*	180.61	$5/2^{(+)}$	M1+E2[a]	−1.9[a] *3*	0.0483	E_γ: other: 286.5 (2001Ga25). I_γ: from 2001Ga25 and 1981Lu01. Mult.: α(K)exp=0.026 *4* (1981Lu01).

From ENSDF

$^{123}_{54}Xe_{69}$-5

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	α[b]	Comments
									δ: others: −0.31 *7*, −1.80 *+24−30* from 584.0γ-286.5$\gamma(\theta)$, −1.62 *11*, −0.36 *3*, −0.22 *2*, −2.13 *+11−3* from 264.4γ-286.5$\gamma(\theta)$, in 2001Ga25, none of them adopted by the authors. A_2=−0.33 *1*, A_4=+0.04 *2* (1981Lu01). Relative Iγ=7.3 *7* (1981Lu01).
518.47	(9/2$^+$)	255.1 *2*	25 *3*	263.35	(11/2$^-$)	D(+Q)	0.02 *6*		E_γ: other: 255.2 (2001Ga25). I_γ: weighted average of 26 *3* from 2001Ga25 and 22 *6* from 1981Lu01. δ: other: <−8 also from 2001Ga25. Relative Iγ=1.4 *4* (1981Lu01).
		266.4 *2*	100 *10*	251.99	(7/2$^+$)	M1+E2	−0.9 *2*	0.0587 *11*	E_γ: other: 266.5 (2001Ga25). I_γ: 100 *11* from 1981Lu01. Mult.: α(K)exp=0.046 *5* (1981Lu01). δ: from 563.7γ-266.4$\gamma(\theta)$ in 2001Ga25; −0.9 *3* from $\gamma(\theta)$ in 1981Lu01. Others: −0.61 *8*, −0.47 *3*, −1.14 *7*, −1.33 *6* from 249.3γ-266.4$\gamma(\theta)$ in 2001Ga25. A_2=−0.59 *1*, A_4=+0.07 *1* (1981Lu01). Relative Iγ=6.5 *7* (1981Lu01).
		312.2	23 *2*	206.35	(9/2$^-$)				
		333.3	29 *3*	185.27	7/2$^{(-)}$				
		337.8	25 *3*	180.61	5/2$^{(+)}$				
567.7	(7/2$^-$,9/2$^-$,11/2$^-$)	304.5	6 *1*	263.35	(11/2$^-$)				
		361.3	100 *10*	206.35	(9/2$^-$)				
		382.4	12 *1*	185.27	7/2$^{(-)}$				
585.71	(3/2$^+$)	278.6	22 *5*	307.02	5/2$^{(+)}$				
		333.8	77 *10*	251.99	(7/2$^+$)				
		405.1	100 *12*	180.61	5/2$^{(+)}$				
		488.4	74 *11*	97.34	3/2$^{(+)}$				
614.2	(3/2$^+$,5/2,7/2$^+$)	307.1[d]	<32	307.02	5/2$^{(+)}$				
		362.2[d]	32 *5*	251.99	(7/2$^+$)				
		433.5	64 *8*	180.61	5/2$^{(+)}$				
		516.9	100 *12*	97.34	3/2$^{(+)}$				
662.10	(13/2$^-$)	398.7 *2*	100 *10*	263.35	(11/2$^-$)	M1+E2[a]	−0.55[a] *5*	0.0192	E_γ: other: 398.9 (2001Ga25). I_γ: from 2001Ga25 and 1981Lu01. Mult.: α(K)exp=0.013 *7* (1981Lu01). δ: others: −0.62 *9*, −1.3 *2* from 631.7γ-398.7$\gamma(\theta)$ in 2001Ga25; −0.8 *+4−9* from $\gamma(\theta)$ in 1997Sa09. A_2=−0.69 *1*, A_4=+0.04 *1* (1981Lu01); A_2=−0.82 *5* (1997Sa09). Relative Iγ=18.0 *18* (1981Lu01), 21.2 (1997Sa09).

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
662.10	(13/2$^-$)	455.8[c] *2*	50[c] *5*	206.35	(9/2$^-$)			E_γ: other: 455.8 (2001Ga25). I_γ: other: 11 *3* (1981Lu01). Relative Iγ=2.0 *6* (1981Lu01).
719.19	(15/2$^-$)	455.8[c] *2*	100[c]	263.35	(11/2$^-$)	(Q)[a]		E_γ: other: 455.8 (2001Ga25). Mult.: A_2=+0.30 *1*, A_4=−0.06 *1* (1981Lu01); A_2=+0.29 *5*, A_4=−0.14 *6* for the doublet (1997Sa09). Relative Iγ=47 *5* (1981Lu01), 86.6 for the doublet (1997Sa09).
731.29	(9/2$^+$)	213.0	48 *5*	518.47	(9/2$^+$)			
		264.3 *2*	53 *6*	466.91	(7/2$^+$)	D+Q[a]	−0.3[a] *+2−5*	E_γ: other: 264.4 (2001Ga25). δ: others: −0.34 *4*, −3.2 *3* from 264.3γ-286.5$\gamma(\theta)$ (2001Ga25). I_γ: other: 140 *40* (1981Lu01). A_2=−0.44 *5*, A_4=−0.09 *9* (1981Lu01). Relative Iγ=1.4 *4* (1981Lu01).
		294.0	16 *3*	437.57	7/2$^{(+)}$			
		424.4	40 *5*	307.02	5/2$^{(+)}$	Q(+O)	−0.05 *+6−3*	δ: other: 1.80 *+30−24* also from 424.4γ-307.2$\gamma(\theta)$ in 2001Ga25.
		468.2[d]	12 *3*	263.35	(11/2$^-$)			
		479.3 *2*	69 *8*	251.99	(7/2$^+$)			E_γ: other: 479.5 (2001Ga25). I_γ: other: 100 *30* (1981Lu01). Relative Iγ=1.0 *3* (1981Lu01).
		550.6 *2*	100 *11*	180.61	5/2$^{(+)}$			E_γ: other: 550.8 (2001Ga25). I_γ: other: 100 *30* (1981Lu01). Relative Iγ=1.0 *3* (1981Lu01).
750.7	(9/2$^-$,11/2$^-$)	183.0	8 *2*	567.7	(7/2$^-$,9/2$^-$,11/2$^-$)			
		487.4	100 *11*	263.35	(11/2$^-$)			
		544.3	43 *6*	206.35	(9/2$^-$)			
		565.3	25 *5*	185.27	7/2$^{(-)}$			
759.7		192.0	100 *12*	567.7	(7/2$^-$,9/2$^-$,11/2$^-$)			
		553.4	51 *7*	206.35	(9/2$^-$)			
		574.3	92 *12*	185.27	7/2$^{(-)}$			
767.63	(11/2$^+$)	249.2 *2*	15 *2*	518.47	(9/2$^+$)	D+Q	−0.62 *3*	E_γ: other: 249.3 (2001Ga25). I_γ: weighted average of 16.0 *20* from 2001Ga25 and 12 *4* from 1981Lu01. δ: others: −0.64 *3*, −1.35 *15*, −1.6 *1* also from 249.2γ-266.5$\gamma(\theta)$, −1.9 *5*, −0.46 *+11−21* from 630.2γ-249.2$\gamma(\theta)$, −0.46 *+15−30*, −2.5 *+11−14* from 249.2γ-333.3$\gamma(\theta)$ in 2001Ga25, and −0.4 *+3−31* from $\gamma(\theta)$ in 1981Lu01. A_2=−0.54 *2*, A_4=−0.07 *20* (1981Lu01). Relative Iγ=1.2 *4* (1981Lu01).
		515.6 *2*	100 *10*	251.99	(7/2$^+$)	Q[a]		E_γ: other: 517.2 (2001Ga25). Mult.: A_2=+0.29 *4*, A_4=−0.03 *5* (1981Lu01). Relative Iγ=10.3 *10* (1981Lu01).

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
776.66	(5/2,7/2,9/2$^+$)	309.7	29 *3*	466.91	(7/2$^+$)			
		339.1	100 *11*	437.57	7/2$^{(+)}$			
		469.7	31 *4*	307.02	5/2$^{(+)}$			
		524.7	32 *5*	251.99	(7/2$^+$)			
		591.4	57 *6*	185.27	7/2$^{(-)}$			
		596.0	76 *8*	180.61	5/2$^{(+)}$			
797.87	(9/2$^+$)	278.9	7 *1*	518.47	(9/2$^+$)			
		331.2 *2*	46 *5*	466.91	(7/2$^+$)	D+Q	−0.28 *2*	E_γ: other: 330.2 (2001Ga25). Relative Iγ=1.5 *5* (1981Lu01).
		359.9	<4	437.57	7/2$^{(+)}$			
		491.1 *2*	100 *10*	307.02	5/2$^{(+)}$	Q(+O)	−0.05 *+6−3*	E_γ: other: 490.4 (2001Ga25). δ: other: 1.80 *+30−24* also from 2001Ga25. Relative Iγ=1.0 *3* (1981Lu01).
		545.5	41 *4*	251.99	(7/2$^+$)			
847.9	(1/2$^+$,3/2)	750.6	100	97.34	3/2$^{(+)}$			
848.5	(1/2$^+$,3/2)	541.5		307.02	5/2$^{(+)}$			
		667.8		180.61	5/2$^{(+)}$			
863.9	(5/2$^+$,7/2$^+$)	249.7	40 *8*	614.2	(3/2$^+$,5/2,7/2$^+$)			
		278.2[d]	27 *6*	585.71	(3/2$^+$)			
		345.4	47 *10*	518.47	(9/2$^+$)			
		396.9	26 *8*	466.91	(7/2$^+$)			
		421.3	100 *15*	442.59	(1/2$^+$,3/2$^+$)			
		678.8[d]	149 *20*	185.27	7/2$^{(-)}$			
867.8	(11/2$^-$)	661.5	33 *4*	206.35	(9/2$^-$)			
		682.5	100 *11*	185.27	7/2$^{(-)}$			
877.27	(13/2$^-$)	614.0 *2*	100 *10*	263.35	(11/2$^-$)	D+Q[a]	14[a] *+5−3*	E_γ: other: 613.8 (2001Ga25). I_γ: 100 *11* (1981Lu01). δ: others: >+16, +0.08 *3* from 644.5γ-613.8$\gamma(\theta)$ (2001Ga25). A_2=+0.06 *1*, A_4=+0.13 *1* (1981Lu01). Relative Iγ=8.5 *9* (1981Lu01).
		670.9 *2*	64 *7*	206.35	(9/2$^-$)	Q		E_γ: other: 670.7 (2001Ga25). I_γ: other: 106 *11* (1981Lu01). Mult.: from $\gamma(\theta)$ in 1997Sa09. A_2=+0.30 *4* (1997Sa09). Relative Iγ=9.0 *9* (1981Lu01), 43.1 (1997Sa09).
918.5	(3/2$^+$)	481.0		437.57	7/2$^{(+)}$			
		611.4		307.02	5/2$^{(+)}$			
934.85	(11/2$^+$)	137.5	1 *1*	797.87	(9/2$^+$)			
		416.5	2 *1*	518.47	(9/2$^+$)			
		497.2 *2*	100 *10*	437.57	7/2$^{(+)}$	Q[a]		E_γ: other: 497.1 (2001Ga25).

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
								Mult.: A_2=+0.30 *2*, A_4=−0.06 *3*. Relative Iγ=8.0 *8* (1981Lu01).
971.0	(11/2$^-$)	308.9	26 *3*	662.10	(13/2$^-$)	D+Q		δ: −0.3 *1*, or −4 *+1−2* from 308.9γ-455.8γ(θ) (2001Ga25).
		403.4	13 *2*	567.7	(7/2$^-$,9/2$^-$,11/2$^-$)			
		707.6	43 *5*	263.35	(11/2$^-$)			
		764.6	100 *10*	206.35	(9/2$^-$)	D+Q	−1.05 *+34−51*	
1041.5	(11/2$^-$)	290.9	9 *2*	750.7	(9/2$^-$,11/2$^-$)			
		379.4	25 *3*	662.10	(13/2$^-$)	D(+Q)	−0.05 *+6−3*	
		778.3	35 *5*	263.35	(11/2$^-$)			
		835.0	100 *11*	206.35	(9/2$^-$)			
1046.31	(7/2$^+$)	249.0	34 *5*	797.87	(9/2$^+$)			
		432.1	52 *7*	614.2	(3/2$^+$,5/2,7/2$^+$)			
		460.6	64 *8*	585.71	(3/2$^+$)			
		527.8	45 *7*	518.47	(9/2$^+$)			
		579.2	82 *10*	466.91	(7/2$^+$)			
		839.8	100 *13*	206.35	(9/2$^-$)			
		860.9	84 *11*	185.27	7/2$^{(-)}$			
1051.16	(9/2$^+$,11/2$^+$)	253.7	12 *2*	797.87	(9/2$^+$)			
		283.6	8 *1*	767.63	(11/2$^+$)			
		319.7	25 *3*	731.29	(9/2$^+$)			
		532.7 *2*	97 *10*	518.47	(9/2$^+$)	D+Q		E_γ: other: 532.7 (2001Ga25). δ: −5.04 *+57−73*, or −0.26 *2* from 532.7γ-266.5γ(θ) (2001Ga25). Relative Iγ=2.0 *6* (1981Lu01).
		584.0	100 *11*	466.91	(7/2$^+$)			
		844.8	37 *6*	206.35	(9/2$^-$)			
1054.5		294.8	100	759.7				
1082.17	(13/2$^+$)	314.5 *2*	18 *2*	767.63	(11/2$^+$)	D+Q[a]	−0.9[a] *+5−9*	E_γ: other: 314.6 (2001Ga25). δ: others: −0.46 *+11−16*, −2.1 *7* from 314.5γ-515.7γ(θ) (2001Ga25). A_2=−0.89 *8*, A_4=+0.10 *5* (1981Lu01). Relative Iγ=0.70 *21* (1981Lu01).
		363.3	6 *1*	719.19	(15/2$^-$)	D(+Q)	+0.05 *+10−6*	δ: other: 11 *+21−5* also from 2001Ga25.
		563.6 *2*	100 *10*	518.47	(9/2$^+$)			E_γ: other: 563.7 (2001Ga25). Relative Iγ=3.0 *9* (1981Lu01).
		818.9	35 *4*	263.35	(11/2$^-$)	D(+Q)	+0.05 *6*	E_γ: 802.6 in Table 3 of 2001Ga25 is a misprint. δ: other: <−16 also from 2001Ga25.
1145.2		626.8	77 *10*	518.47	(9/2$^+$)			
		893.3	100 *12*	251.99	(7/2$^+$)			
1260.29	(13/2$^-$)	218.8	14 *2*	1041.5	(11/2$^-$)			
		289.3	23 *3*	971.0	(11/2$^-$)	D+Q		δ: −0.14 *3*, −8 *+2−4* from 289.3γ-764.6γ(θ) (2001Ga25).
		509.6	42 *6*	750.7	(9/2$^-$,11/2$^-$)			

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
1260.29	(13/2$^-$)	541.1	100 *11*	719.19	(15/2$^-$)	D+Q		δ: −0.08 *+3−6*, +11 *+5−3* from 541.1γ-455.8$\gamma(\theta)$ (2001Ga25).
		598.0	38 *6*	662.10	(13/2$^-$)			
		997.0	21 *4*	263.35	(11/2$^-$)			
1270.02	(15/2$^-$)	392.7 *2*	24 *3*	877.27	(13/2$^-$)	(D+Q)		E_γ: other: 392.7 (2001Ga25). I_γ: weighted average of 23 *3* from 2001Ga25 and 28 *8* from 1981Lu01. A_2<0 (1981Lu01). Relative Iγ=1.4 *4* (1981Lu01).
		550.9 *2*	27 *4*	719.19	(15/2$^-$)	D+Q	−3.4 *+9−18*	E_γ: other: 550.6 (2001Ga25). I_γ: weighted average of 26 *3* from 2001Ga25 and 50 *16* from 1981Lu01. δ: other: 0.98 *+29−17* also from 2001Ga25. Relative Iγ=2.5 *8* (1981Lu01).
		608.0 *2*	100 *10*	662.10	(13/2$^-$)	D+Q	−2.04 *11*	E_γ: other: 607.6 (2001Ga25). I_γ: from 2001Ga25 and 1981Lu01. δ: others: −2.9 *+9−18* from $\gamma(\theta)$ in 1981Lu01, −2.62 from $\gamma(\theta)$ in 1997Sa09. A_2=−0.48 *7*, A_4=+0.17 *11* (1981Lu01); A_2=−0.68 *12* (1997Sa09). Relative Iγ=5.0 *5* (1981Lu01), 15.0 (1997Sa09).
1278.0		501.3		776.66	(5/2,7/2,9/2$^+$)			
		546.7		731.29	(9/2$^+$)			
1293.97	(17/2$^-$)	574.7 *2*	73 *7*	719.19	(15/2$^-$)	D+Q	−0.41 *18*	E_γ: other: 574.8 (2001Ga25). 547.8 in Table 3 of 2001Ga25 is a misprint. I_γ: weighted average of 79 *8* from 2001Ga25 and 68 *7* from 1981Lu01. δ: unweighted average of −0.58 *4* (2001Ga25) and −0.23 6 (1981Lu01). Other: −1.94 *+27−16* in 2001Ga25. A_2=−0.52 *1*, A_4=+0.06 *2* (1981Lu01). Relative Iγ=5.0 *5* (1981Lu01).
		631.9 *2*	100 *10*	662.10	(13/2$^-$)	E2(+M3)[a]	−0.05 *+6−3*	E_γ: other: 631.7 (2001Ga25). I_γ: other: 100 *11* from 1981Lu01. Mult.: α(K)exp=0.0042 *9* for 630.2γ+631.9γ (1981Lu01). δ: other: −3.05 *+81−55* also from 2001Ga25. A_2=+0.31 *1*, A_4=−0.07 *1* (1981Lu01). Relative Iγ=7.4 *8* (1981Lu01).
1325.4		448.3		877.27	(13/2$^-$)			
		663.2		662.10	(13/2$^-$)			
1336.21	(19/2$^-$)	617.0 *2*	100	719.19	(15/2$^-$)	Q(+O)	−0.05 *6*	E_γ: other: 616.9 (2001Ga25). Mult.: other: mult=Q from $\gamma(\theta)$ in 1981Lu01. δ: other: 2.8 *3* also from 2001Ga25. A_2=+0.27 *4*, A_4=−0.07 *1* (1981Lu01); A_2=+0.33 *3* (1997Sa09). Relative Iγ=18.0 *18* (1981Lu01), 56.7 (1997Sa09).
1338.9		287.9		1051.16	(9/2$^+$,11/2$^+$)			
		571.3		767.63	(11/2$^+$)			

From ENSDF

$^{123}_{54}Xe_{69}$-10

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
1338.9		607.5		731.29	$(9/2^+)$			
		820.5		518.47	$(9/2^+)$			
1384.3		520.4	100	863.9	$(5/2^+,7/2^+)$			
1397.79	$(15/2^+)$	315.5	6 *1*	1082.17	$(13/2^+)$			
		630.2 *2*	100 *10*	767.63	$(11/2^+)$	E2[a]		E_γ: other: 630.0 (2001Ga25). Mult.: α(K)exp=0.0042 *9* for 630.2γ +631.9γ (1981Lu01). A_2=+0.33 *1*, A_4=−0.02 *1* (1981Lu01); A_2=+0.26 *5* for 630γ+632γ (1997Sa09). Relative Iγ=5.5 *6* (1981Lu01), 23.0 for 630γ+632γ (1997Sa09).
		735.6	22 *2*	662.10	$(13/2^-)$			
1430.8	$(13/2^+)$	379.5	25 *4*	1051.16	$(9/2^+,11/2^+)$			
		633.2	100 *12*	797.87	$(9/2^+)$	Q(+O)	−0.02 *+6−10*	δ: 2.10 *+65−43* also from 2001Ga25.
		663.0	40 *5*	767.63	$(11/2^+)$			
1519.9		374.7		1145.2				
		752.2		767.63	$(11/2^+)$			
		1001.4		518.47	$(9/2^+)$			
1521.91	$(17/2^-)$	251.9	6 *1*	1270.02	$(15/2^-)$			
		644.7 *2*	100 *11*	877.27	$(13/2^-)$			E_γ: other: 644.5 (2001Ga25). I_γ: other: 100 *30* (1981Lu01). Relative Iγ=4.7 *14* (1981Lu01).
		802.7 *2*	49 *15*	719.19	$(15/2^-)$	D+Q	<−16	E_γ: other: 802.6 (2001Ga25). I_γ: unweighted average of 63 *7* from 2001Ga25 and 34 *11* from 1981Lu01. δ: other: −0.02 *3* also from 2001Ga25. Relative Iγ=1.6 *5* (1981Lu01).
1541.11	$(15/2^-)$	247.1[d]	17 *10*	1293.97	$(17/2^-)$			
		499.6	8 *5*	1041.5	$(11/2^-)$			
		570.1	80 *11*	971.0	$(11/2^-)$			
		664.0	45 *7*	877.27	$(13/2^-)$			
		673.2	19 *8*	867.8	$(11/2^-)$			
		821.9	37 *7*	719.19	$(15/2^-)$			
		879.0 *2*	100 *12*	662.10	$(13/2^-)$	D+Q[a]	−2.2[a] *+6−7*	E_γ: other: 878.9 (2001Ga25). δ: others: −1.67 *6* or −0.58 *11* from $\gamma\gamma(\theta)$ in 2001Ga25. A_2=−0.58 *5*, A_4=+0.11 *8* (1981Lu01). Relative Iγ=1.4 *4* (1981Lu01).
1554.2	$(15/2^+)$	619.4 *2*	100	934.85	$(11/2^+)$	Q[a]		E_γ: other: 619.2 (2001Ga25). A_2=+0.22 *4*, A_4=−0.10 *5* (1981Lu01). Relative Iγ=3.5 *11* (1981Lu01).
1580.6		320.3	<30	1260.29	$(13/2^-)$			
		539.0	33 *9*	1041.5	$(11/2^-)$			
		861.4	46 *11*	719.19	$(15/2^-)$			

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[&]	δ[&]	Comments
1580.6		918.2	100 *15*	662.10	(13/2$^-$)			
1618.5		572.2	100	1046.31	(7/2$^+$)			
1696.4		1034.3	100	662.10	(13/2$^-$)			
1733.1		650.9		1082.17	(13/2$^+$)			
		682.0		1051.16	(9/2$^+$,11/2$^+$)			
1758.0	(17/2$^+$)	675.7	100 *11*	1082.17	(13/2$^+$)			
		1038.9	37 *4*	719.19	(15/2$^-$)	D(+Q)	0.05 *6*	δ: other: >8 also from 2001Ga25.
1759.0		1321.4	100	437.57	7/2$^{(+)}$			
1827.8	(17/2$^-$)	491.6		1336.21	(19/2$^-$)			
		533.7		1293.97	(17/2$^-$)			
		557.9		1270.02	(15/2$^-$)	D+Q		δ: −0.52 *11* or −1.56 *21* (2001Ga25).
		567.4		1260.29	(13/2$^-$)			
		950.6		877.27	(13/2$^-$)			
		1108.4		719.19	(15/2$^-$)			
1841.6		443.9		1397.79	(15/2$^+$)			
		696.4		1145.2				
		759.3		1082.17	(13/2$^+$)			
		1179.5		662.10	(13/2$^-$)			
1947.6	(15/2$^-$)	1285.5	100	662.10	(13/2$^-$)	D(+Q)	−0.02 *3*	
1949.3		368.7		1580.6				
		427.5		1521.91	(17/2$^-$)			
		679.4		1270.02	(15/2$^-$)			
		689.0		1260.29	(13/2$^-$)			
1953.5		431.6	14 *3*	1521.91	(17/2$^-$)			
		617.3	<57	1336.21	(19/2$^-$)			
		659.4	30 *4*	1293.97	(17/2$^-$)			
		683.6	100 *11*	1270.02	(15/2$^-$)			
2063.1	(21/2$^-$)	727.1	69 *10*	1336.21	(19/2$^-$)	D+Q	−0.38 *+7−11*	δ: other: −2.50 *+40−55* also in 2001Ga25.
		769.1 *2*	100 *13*	1293.97	(17/2$^-$)	Q[a]		E_γ: other: 769.0 (2001Ga25). A_2=+0.26 *3*, A_4=−0.01 *4* (1981Lu01). Relative Iγ=2.5 *8* (1981Lu01).
2089.6	(23/2$^-$)	753.3 *2*	100	1336.21	(19/2$^-$)	E2[a]		E_γ: other: 753.4 (2001Ga25). Mult.: α(K)exp=0.0024 *5* (1981Lu01). A_2=+0.24 *6*, A_4=−0.12 *8* (1981Lu01); A_2=+0.12 *4* (1997Sa09). Relative Iγ=3.0 *9* (1981Lu01), 45.5 (1997Sa09).
2112.7	(19/2$^+$)	714.9 *2*	100	1397.79	(15/2$^+$)	(Q)[a]		E_γ: other: 714.7 (2001Ga25). Mult.: A_2=+0.25 *2*, A_4=−0.09 *3*, half of the intensity from 715.2γ in ^{122}Xe (1981Lu01). Relative Iγ=2.0 *6* (1981Lu01).
		818.7		1293.97	(17/2$^-$)			
2144.7		714.0		1430.8	(13/2$^+$)			

From ENSDF

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

$\gamma(^{123}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π
2144.7		746.8		1397.79	(15/2$^+$)
2197.0		927.2		1270.02	(15/2$^-$)
		1477.6		719.19	(15/2$^-$)
2209.9		668.9		1541.11	(15/2$^-$)
		873.8		1336.21	(19/2$^-$)
		915.9		1293.97	(17/2$^-$)
		1490.7		719.19	(15/2$^-$)
2226.0		684.9		1541.11	(15/2$^-$)
		932.0		1293.97	(17/2$^-$)
2230.8	(19/2$^+$)	676.7	100[#] *11*	1554.2	(15/2$^+$)
		936.8	24[#] *4*	1293.97	(17/2$^-$)
2248.8		668.1		1580.6	
		954.9		1293.97	(17/2$^-$)
		1529.6		719.19	(15/2$^-$)
2284.3		762.6	100[#] *11*	1521.91	(17/2$^-$)
		948.1	32[#] *8*	1336.21	(19/2$^-$)
2416.4?		1080.2[d]	100	1336.21	(19/2$^-$)
2422.6	(19/2$^+$)	1128.7	100	1293.97	(17/2$^-$)
2497.8	(21/2$^+$)	739.7	100[#] *10*	1758.0	(17/2$^+$)
		1161.5	48[#] *5*	1336.21	(19/2$^-$)
2689.5	(21/2$^+$)	267.1	19[#] *3*	2422.6	(19/2$^+$)
		1353.4	100[#] *11*	1336.21	(19/2$^-$)
2770.4		816.9	100	1953.5	
2822.5	(23/2$^+$)	591.8[@]	21[#] *2*	2230.8	(19/2$^+$)
		709.8	100[#] *10*	2112.7	(19/2$^+$)
2882.8	(23/2$^+$)	652.1[@]	50[#] *6*	2230.8	(19/2$^+$)
		770.2	100[#] *11*	2112.7	(19/2$^+$)
		819.6	77[#] *9*	2063.1	(21/2$^-$)
2951.5		861.8	39[#] *5*	2089.6	(23/2$^-$)
		888.5	100[#] *11*	2063.1	(21/2$^-$)
2964.5	(23/2$^+$)	275.0[@]	29[#] *3*	2689.5	(21/2$^+$)
		541.9	75[#] *8*	2422.6	(19/2$^+$)
		733.7	100[#] *11*	2230.8	(19/2$^+$)
2965.7	(27/2$^-$)	876.1	100	2089.6	(23/2$^-$)
3152.5		868.3	100[#] *3*	2284.3	
		1062.7[@]	21[#] *5*	2089.6	(23/2$^-$)
3169.5	(25/2$^+$)	205.1[@]	20[#] *2*	2964.5	(23/2$^+$)
		286.8[@]	13[#] *1*	2882.8	(23/2$^+$)
		347.1[@]	3[#] *1*	2822.5	(23/2$^+$)
		480.2[@]	16[#] *2*	2689.5	(21/2$^+$)
		671.6[@]	76[#] *8*	2497.8	(21/2$^+$)
		1079.9	100[#] *10*	2089.6	(23/2$^-$)
3210.8	(25/2$^+$)	713.0	100[#] *12*	2497.8	(21/2$^+$)
		1121.1	50[#] *7*	2089.6	(23/2$^-$)
3349.9	(27/2$^+$)	139.0	15[#] *2*	3210.8	(25/2$^+$)
		180.5	100[#] *10*	3169.5	(25/2$^+$)
		385.5	14[#] *1*	2964.5	(23/2$^+$)
		467.0	10[#] *1*	2882.8	(23/2$^+$)
3479.5	(27/2$^+$)	657.0	100[#]	2822.5	(23/2$^+$)

[†] Values are mostly from 2001Ga25 with no uncertainties, and values with uncertainties are from 1998Sc23, unless otherwise noted.

[‡] Quoted values are branching ratios from 2001Ga25, unless otherwise noted. Relative intensities to Iγ(97γ)=1000 are available with uncertainties in 1981Lu01 and without uncertainties in 1997Sa09, and given under comments (renormalized to Iγ(97γ)=100 by the evaluator). Where available, weighted average are taken from values in 2001Ga25 and values converted from relative intensities in 1981Lu01. The uncertainties of relative intensities in 1981Lu01 are assigned as follows by the evaluator based on a general statement of 10% for larger peaks and 30% for small peaks: 10% for I$\gamma\geq$5 and 30% for Iγ<5, relative to Iγ=100 for 97γ.

[#] 2001Ga25 state that the value is from 1998Sc23. But no intensity data are quoted by 1998Sc23.

[@] 2001Ga25 state that the value (quoted as nearest tenth of a keV) is from 1998Sc23. However, the values of Eγ are the nearest keV in 1998Sc23.

From ENSDF

$^{123}_{54}Xe_{69}$-13

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)

γ(^{123}Xe) (continued)

[&] From $\gamma\gamma(\theta)$ in 2001Ga25 with $\Delta J=1$ for D+Q and $\Delta J=2$ for Q, unless otherwise noted. For some transitions, α(K)exp data in 1981Lu01 are used to determine the electric or magnetic nature. $\gamma(\theta)$ data are also available in 1981Lu01 with A_2 and A_4 values given under comments. No A_2 and A_4 values of $\gamma\gamma(\theta)$ are given in 2001Ga25. Other δ values from 2001Ga25 given under comments are those not adopted by the authors.

[a] From $\gamma(\theta)$ in 1981Lu01, with $\Delta J=1$ (except for 0 for 215γ) for D+Q and $\Delta J=2$ for Q. Where available, α(K)exp data in 1981Lu01 are used to determine the electric or magnetic nature.

[b] 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.

[c] Multiply placed with intensity suitably divided.

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

From ENSDF

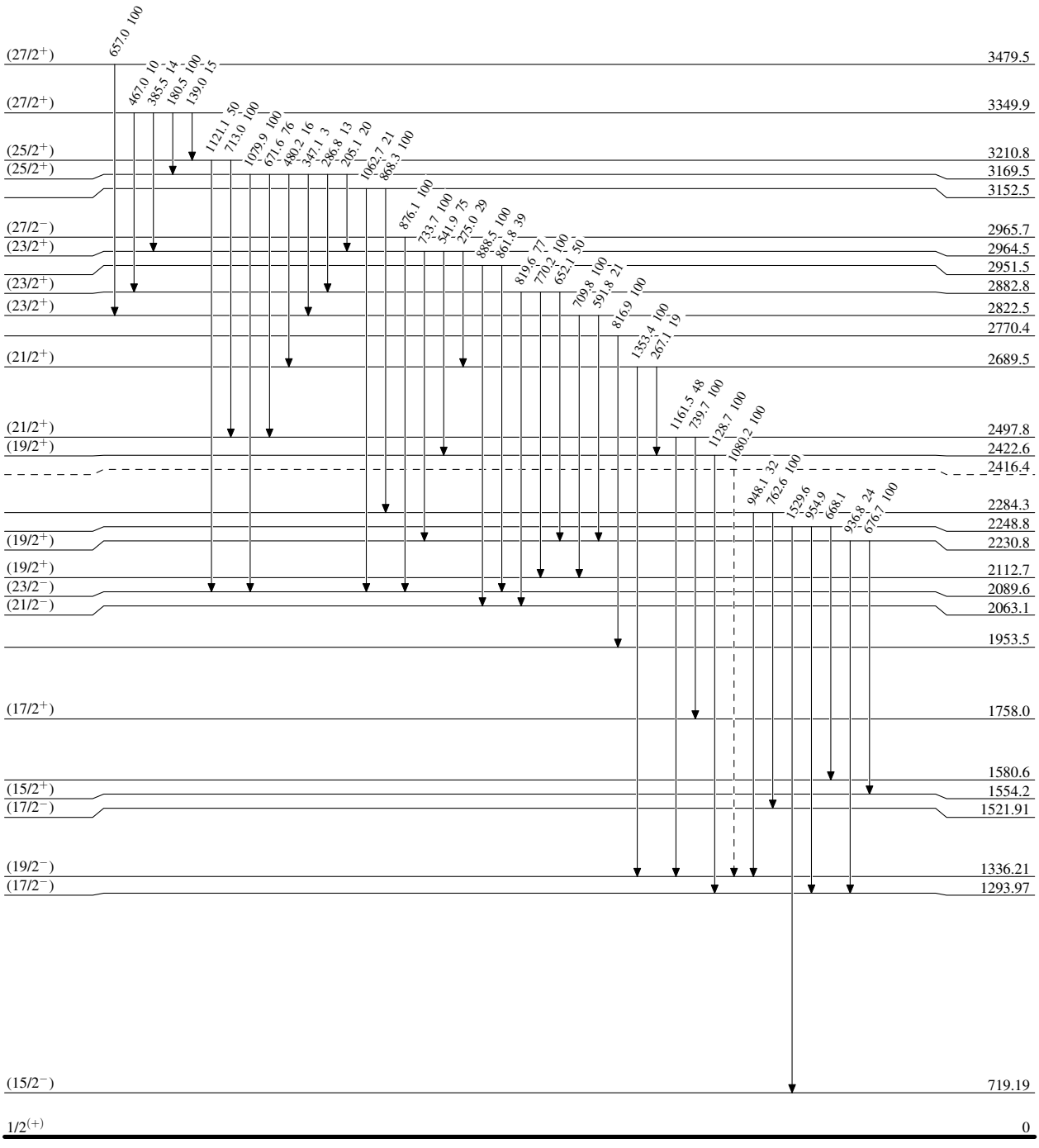
$^{123}_{54}Xe_{69}$-14

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

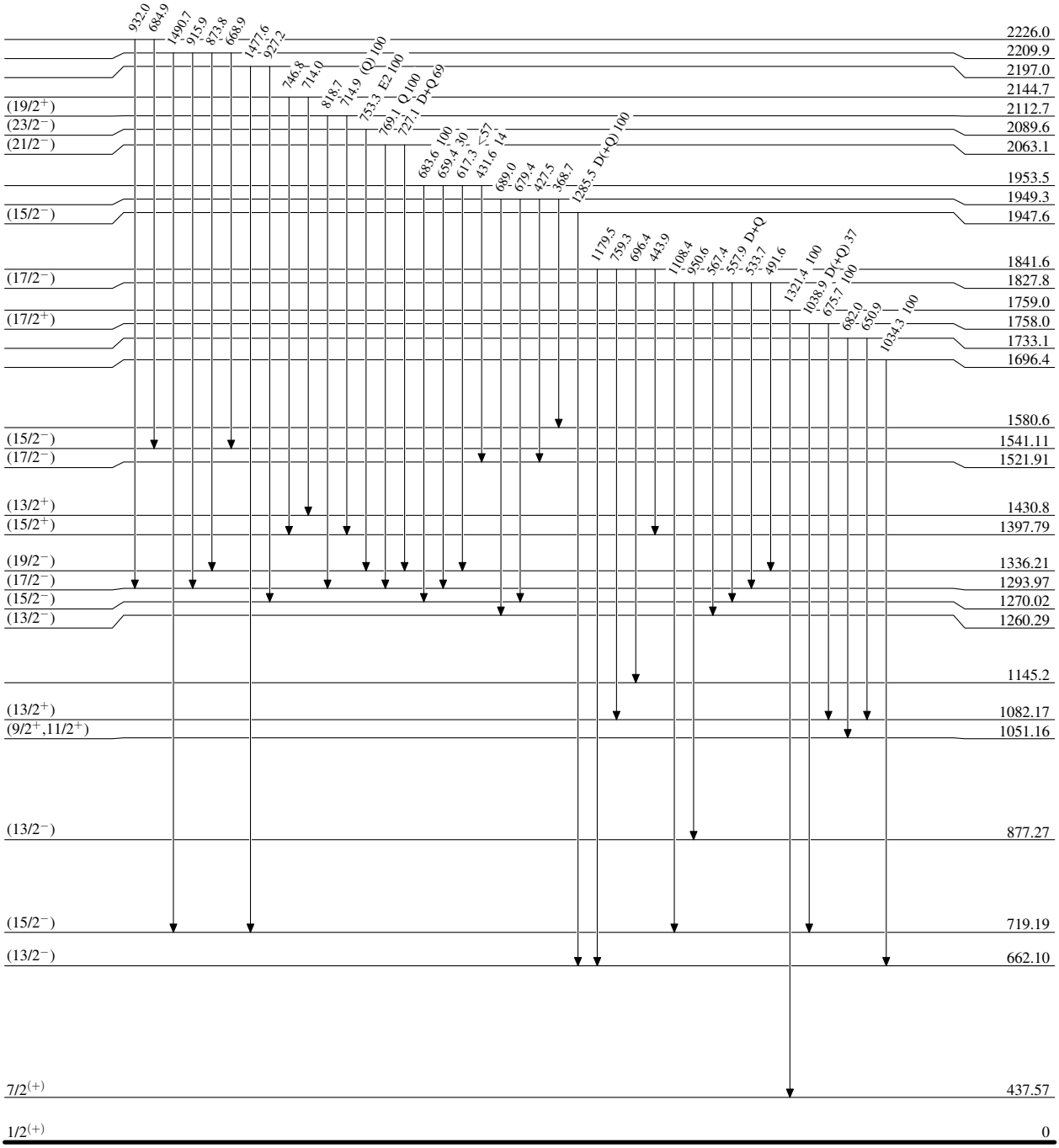


$^{123}_{54}Xe_{69}$

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01

Level Scheme (continued)

Intensities: Relative photon branching from each level



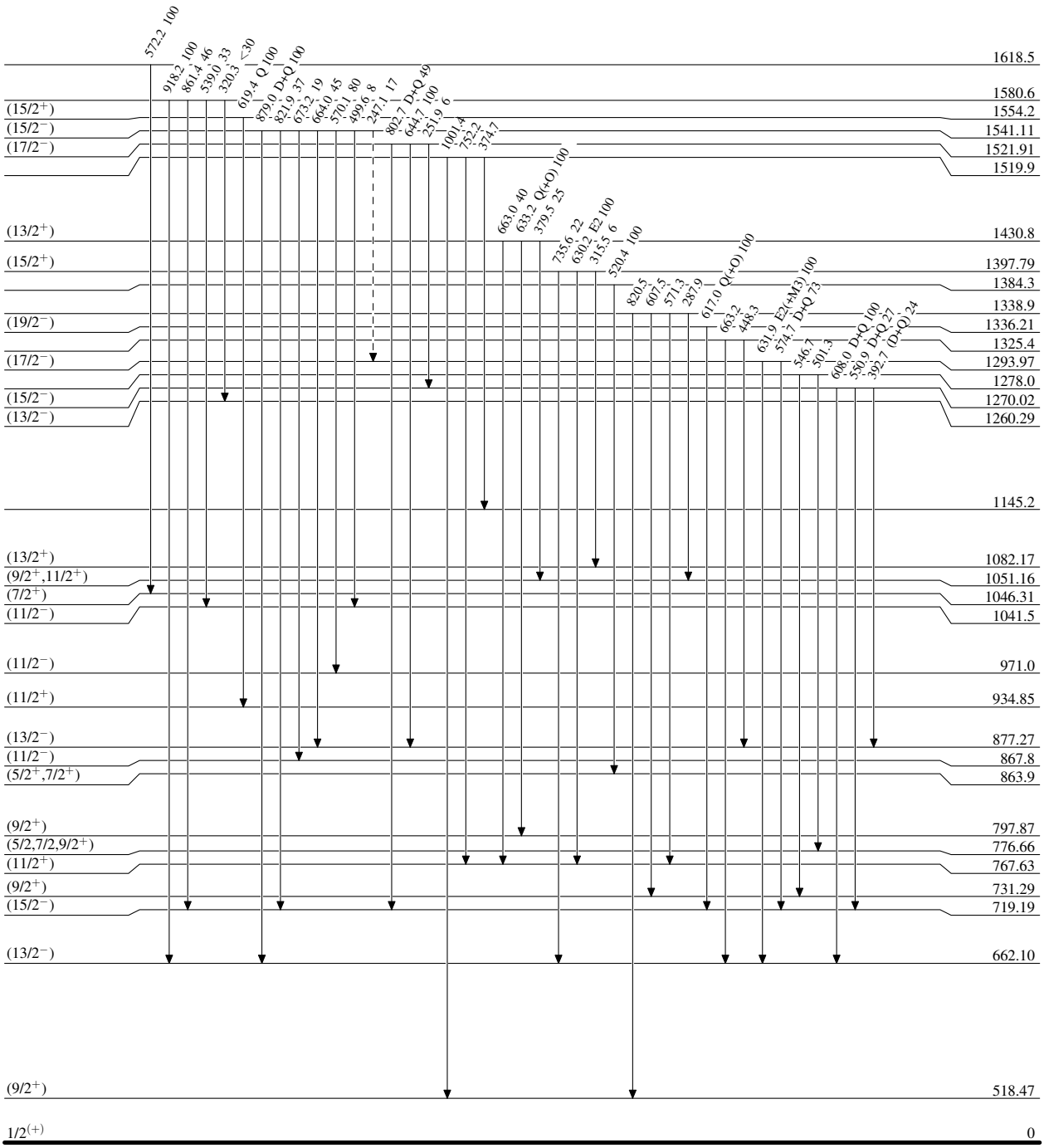
$^{123}_{54}Xe_{69}$

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)

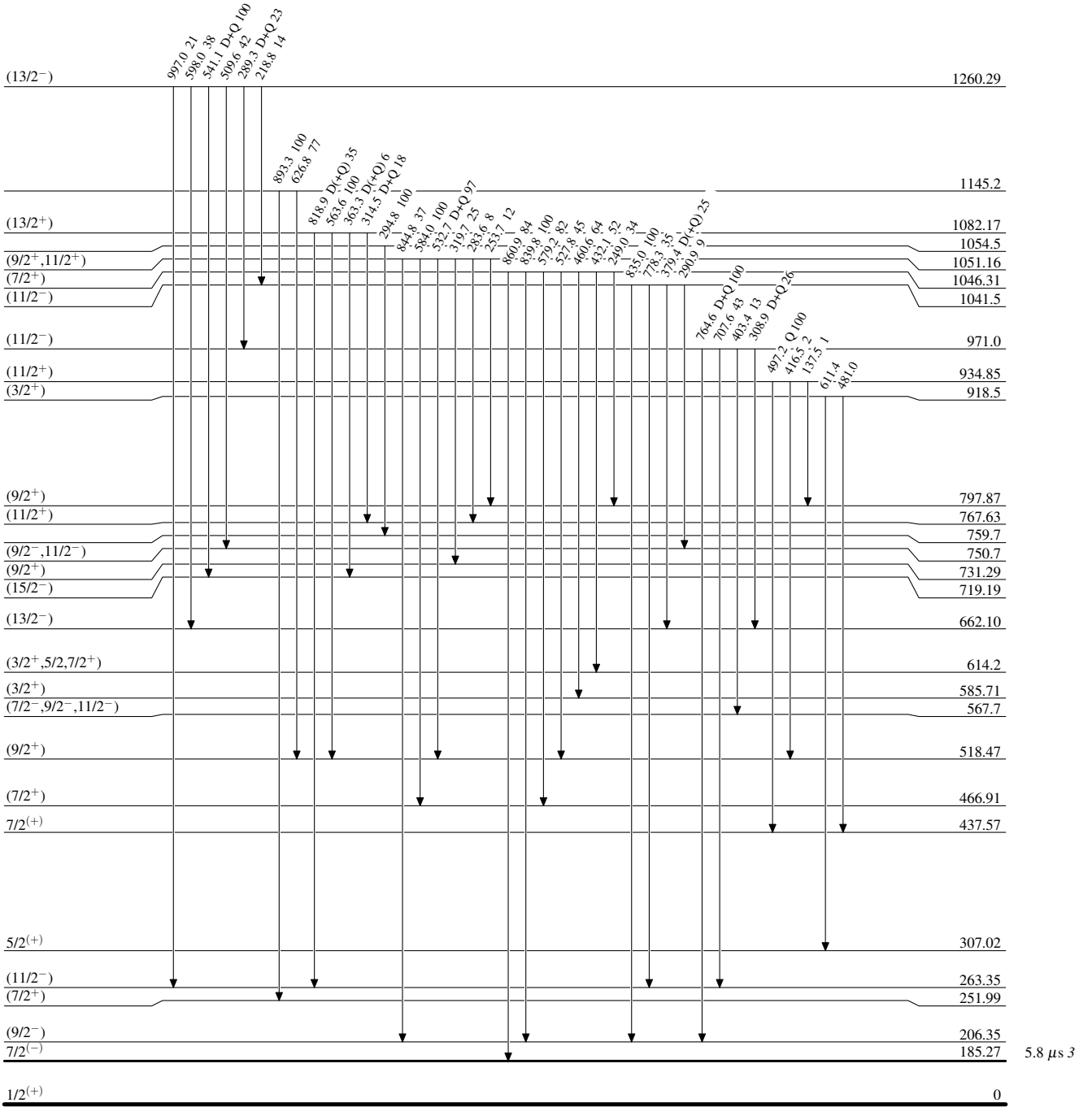


$^{123}_{54}Xe_{69}$

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{123}_{54}Xe_{69}$

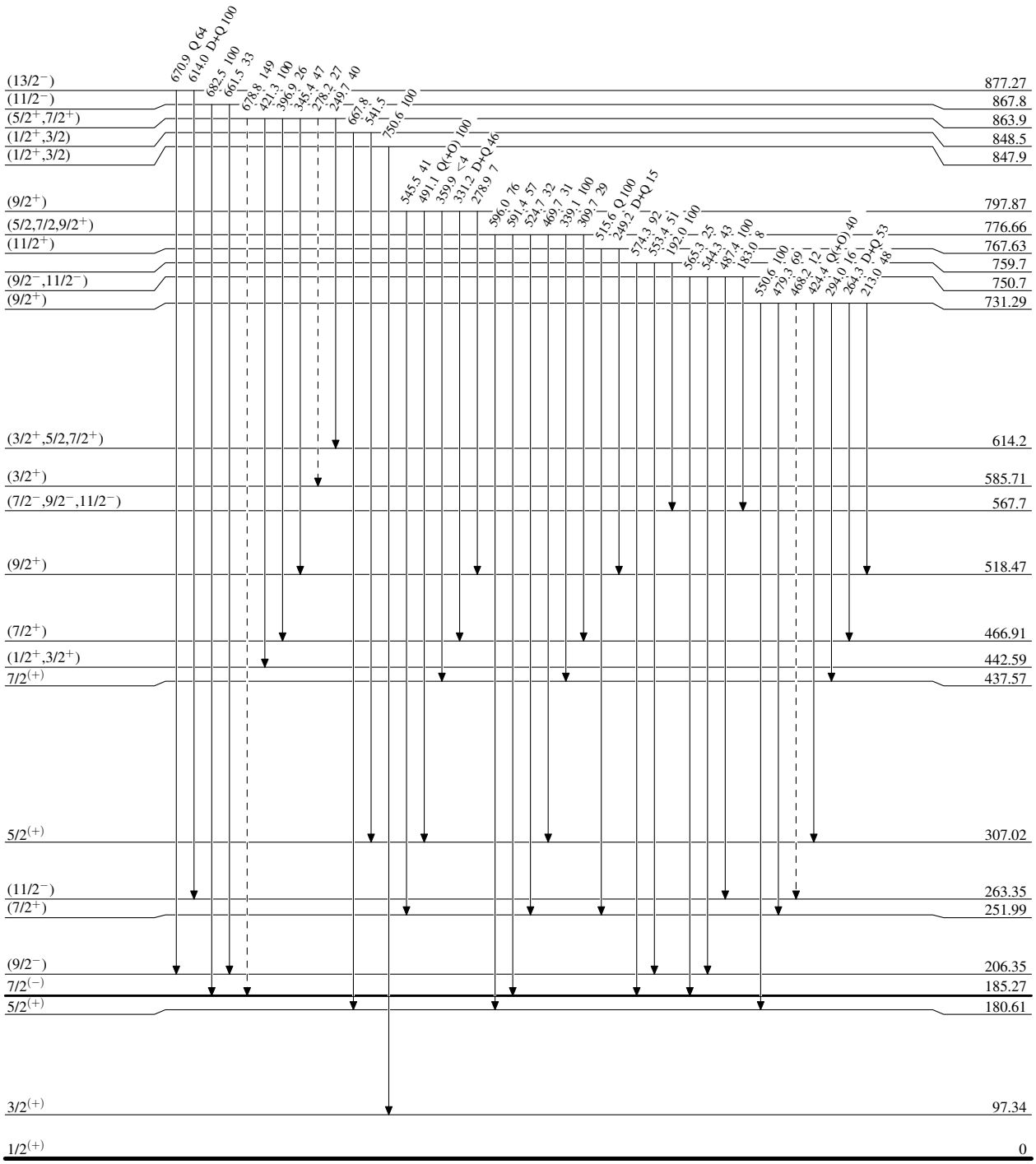
^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{123}_{54}Xe_{69}$

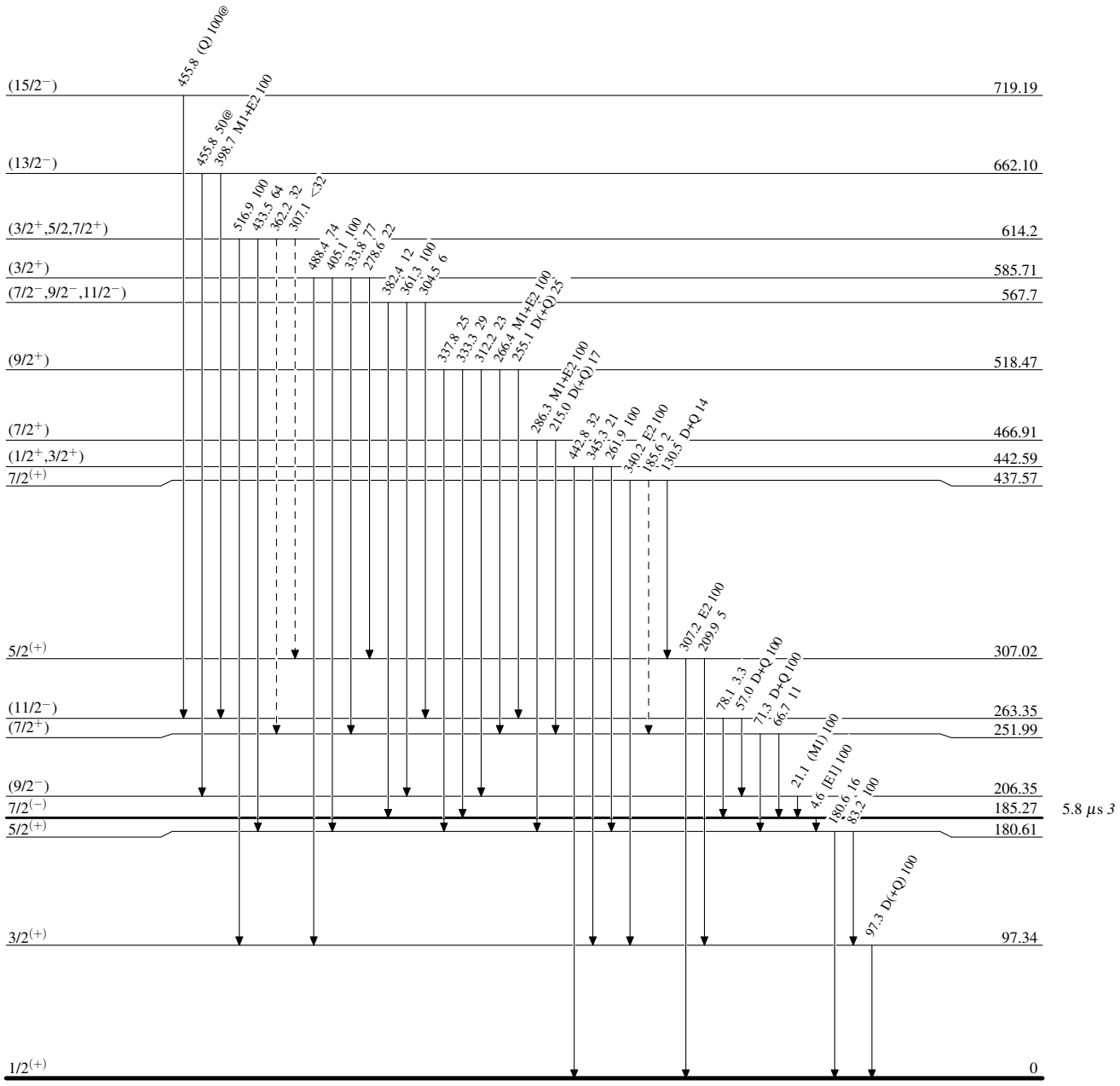
^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01

Legend

Level Scheme (continued)

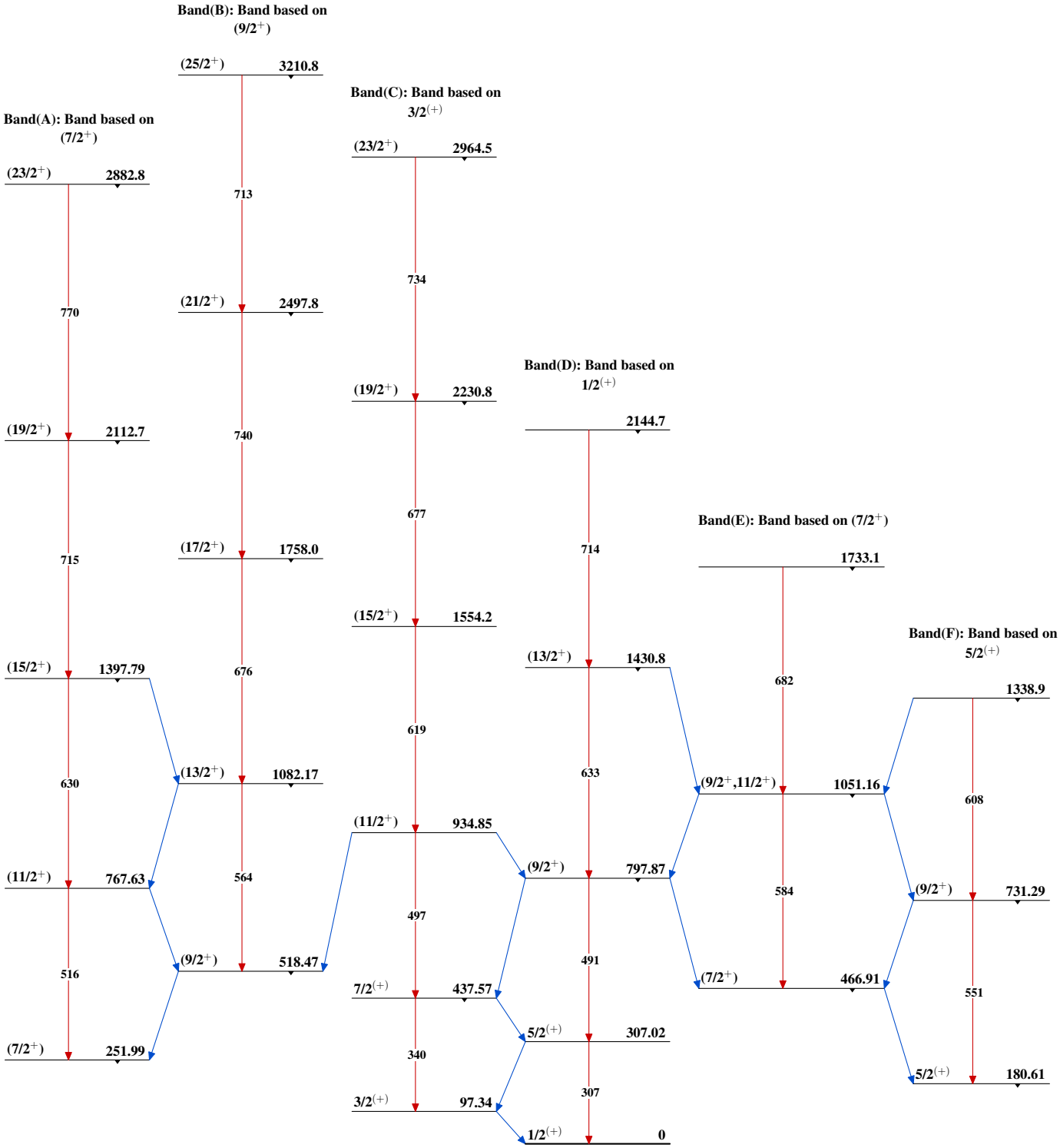
Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

– – – – – – ► γ Decay (Uncertain)



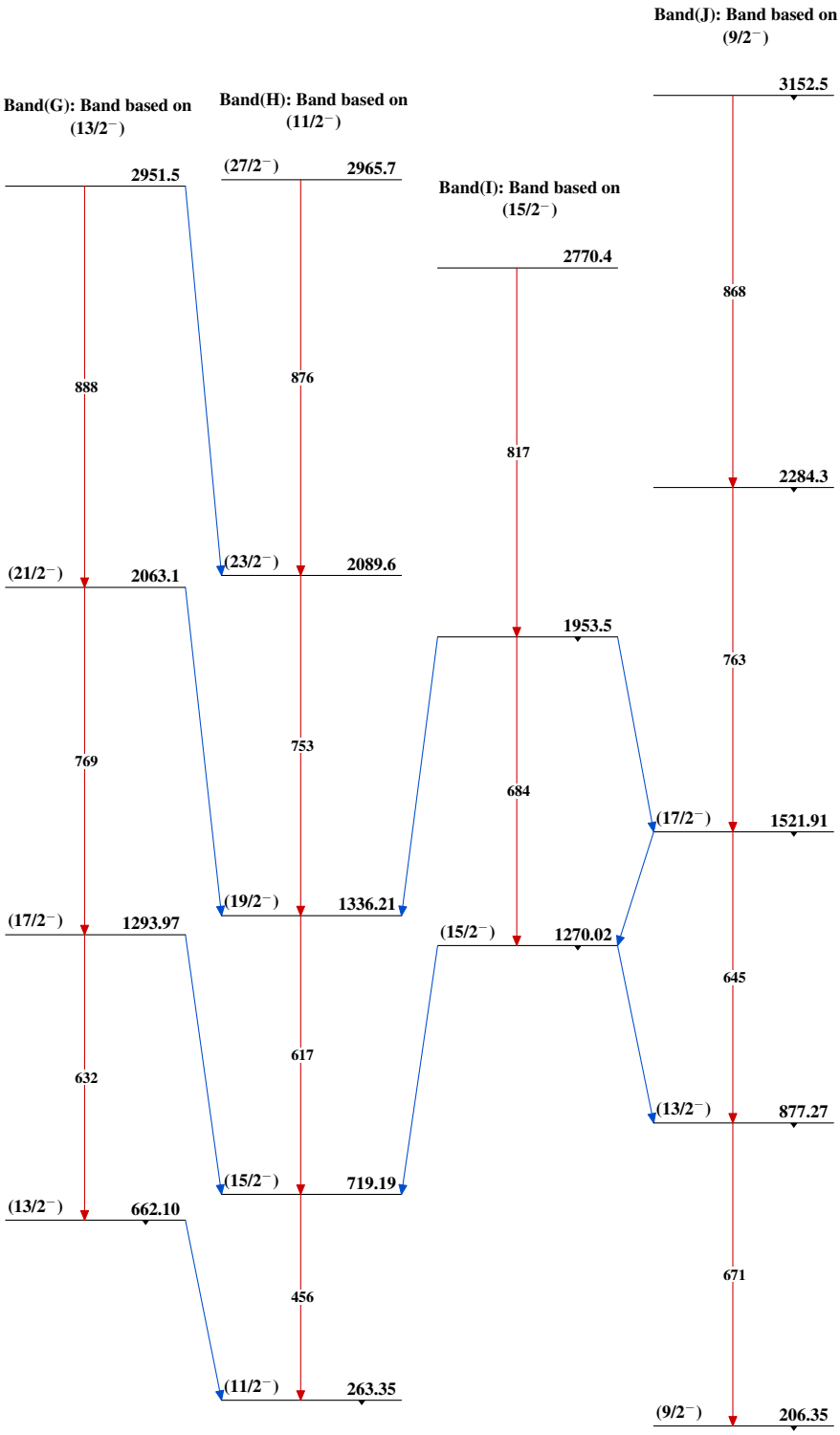
$^{123}_{54}Xe_{69}$

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01



$^{123}_{54}Xe_{69}$

^{123}Te(^{3}He,3nγ) 2001Ga25,1981Lu01 (continued)



$^{123}_{54}Xe_{69}$