Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu	NDS 109,1655 (2008)	1-Apr-2008

Q(β^-)=−3159.6 *19*; S(n)=9424.48 *9*; S(p)=8589.5 *16*; Q(α)=−1851.6 *17* 2012Wa38
Note: Current evaluation has used the following Q record −3159.6 199423.97 *178589.4 15*−1844.4 *24* 2003Au03.

^{124}Te Levels

Cross Reference (XREF) Flags

A	^{124}Sb β^- decay (60.20 d)	G	^{124}Te(n,n′γ)	M	^{125}Te(p,d)
B	^{124}Sb β^- decay (93 s)	H	^{124}Te(γ,γ),(γ,γ')	N	^{126}Te(p,t)
C	^{124}I ε decay	I	^{123}Sb(^{3}He,d)	O	^{124}Te(d,d′)
D	^{122}Sn(α,2nγ)	J	^{123}Te(d,p)	P	^{124}Te(α,α')
E	^{123}Te(n,γ) E=thermal	K	^{124}Te(p,p′)	Q	Coulomb excitation
F	^{123}Te(n,γ) E=res: av	L	^{125}Te(d,t)	R	^{127}I(μ,xnγ)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
0.0	0^+	stable	ABCDEFGHIJKLMNOPQR	<r^2>$^{1/2}$=4.7178 fm *17* (2004An14, evaluation).
602.7271 *21*	2^+	6.2 ps *1*	ABCDEFGHIJKLMNOPQR	μ=+0.74 *6*; Q=−0.45 *5* Jπ: E2 γ to 0^+. $T_{1/2}$: from Coul. ex. Other: 4.5 ps *5* ((γ,γ)) B(E2)=0.567 *5*. 2001Ra27 evaluation gives 6.23 ps *7*. μ: from transient field integral perturbed angular correlation (2007St24); other: +0.56 *6*, +0.62 *8* from ion implantation perturbed correlations, +0.66 *6*, +0.52 *6* from transient field integral perturbed angular correlations (1988Du10,1985ThZx,1989Ra17,1981Sh15). See also 2005St24 compilation. Q: from Coulomb excitation reorientation, weighted average of −0.46 *10*(1974Ba45),−0.49 *8*(1974La05) and −0.41 *8* (1975Kl07) (1989Ra17). See also 2005St24 compilation.
1248.5811 *25*	4^+	1.4 ps *+14−5*	ABCDE G IJKLMNOP R	Jπ: L=0+2 in (^{3}He,d) from $7/2^+$; $\gamma\gamma(\theta)$ in ^{124}Sb β^- decay (60.20 d) and (n,γ).
1325.5131 *24*	2^+	1.04 ps *+21−14*	A CDEFG IJKLMNO QR	B(E2)↑=0.019 *5* Jπ: L=2 in (p,t); Coulomb excitation; $\gamma\gamma(\theta)$ in ^{124}Sb β^- decay (60.20 d) and (n,γ). $T_{1/2}$: Other: 0.4 ps *2*(Coul. ex.).
1657.283 *22*	0^+	0.55 ps *+14−7*	A CDEFG JKLMNO	Jπ: L=0 in (d,p) from $1/2^+$; $\gamma\gamma(\theta)$ in (n,γ) E=thermal.
1746.958 *11*	6^+		B DEFG I K O R	Jπ: log *ft*=4.3 from 5^+; $\gamma(\theta)$ in (α,2nγ).
1882.92 *3*	0^+	0.76 ps *+21−14*	CDEFG IJKLMN	Jπ: L=0 in (d,p) from $1/2^+$; $\gamma\gamma(\theta)$ in (n,γ) E=thermal.
1957.902 *8*	4^+		A CDEFG IJKLMNO R	Jπ: L=4 in (p,p′); $\gamma\gamma(\theta)$ in ^{124}Sb β^- decay (60.20 d) and (n,γ) E=thermal.
2039.293 *3*	3^+	0.55 ps *+14−7*	a cdEfG ijklmno r	XREF: m(2032)n(2037)o(2037). Jπ: $\gamma(\theta)$ in (n,n′γ) and M1+E2 γ to 2^+.
2039.421 *3*	2^+	0.49 ps *+14−7*	a cdEfG ijklmno r	XREF: m(2032)n(2037)o(2037). Jπ: E2 γ to 0^+.
2091.603 *17*	2^+	0.28 ps *7*	A C EFG IJKLM R	Jπ: L=2 in (^{3}He,d) from $7/2^+$; $\gamma\gamma(\theta)$ in ^{124}Sb β^- decay (60.20 d) and (n,γ) E=thermal.
2153.29 *3*	0^+		EFG J	Jπ: L=0 in (d,p) from $1/2^+$; $\gamma(\theta)$ in (n,n′γ).
2182.41 *4*	2^+		A EFG IJ M	XREF: M(2205). Jπ: L=2 in (^{3}He,d) from $7/2^+$; $\gamma(\theta)$ in (n,n′γ) and $\gamma\gamma(\theta)$ and α(exp) in (n,γ) and.
2224.954 *15*	4^+		A CDE G IJKLMNO	XREF: M(2217). Jπ: $\gamma(\theta)$ in (n,n′γ) and M1+E2 γ to 4^+.

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
2273.97 *15*			LM	XREF: M(2264).
2282.43 *17*			K M	XREF: M(2283).
2293.711 *3*	3^-	0.17 ps *6*	A CDE G JKLMNOPQ	B(E3)↑=0.09 *3* XREF: J(2294)L(2294)M(2300)N(2292)O(2291)P(2300)Q(2300). Jπ: L=3 in (α,α′), (p,p′) and γγ(θ) in ^{124}Sb β^- decay (60.20 d). $T_{1/2}$: from Coul. ex.: others 100 ps *5* from β-γ(centroid shift) (1971BeWP). B(E3) from $T_{1/2}$. B(E3)=0.12 *4* (2002Ki06, evaluation).
2308.42 *9*	0^+	<0.25 ns	C EF IJKLM	XREF: I(2312)J(2309)K(2307)M(2311). Jπ: E0 transitions to 0^+ states. $T_{1/2}$: from centroid shift in (n,γ) E=thermal (1988Pe06).
2321.719 *20*	(6^+)		D	Jπ: γ(θ) in (α,2nγ); (Q) γ to 4^+.
2322.95 *3*	2^+		A CDEFG iJKL n	XREF: n(2329). Jπ: γγ(θ) in (n,γ) E=thermal; M1(+E2) γ to 2^+.
2326.6 *5*			iJ no	XREF: n(2329)o(2330).
2335.030 *10*	5^-		A CDE G JKL no	XREF: n(2329)o(2330). Jπ: From γ(θ) in (α,2nγ) and E1 γ to 4^+.
2349.465 *17*	6^+		B DE IJK	Jπ: log*ft*=4.9 from 5^+; γ(θ) in (α,2nγ).
2454.069 *21*	2^+		A CDEFG IJKLM	XREF: M(2444). Jπ: L=2 in (d,p) from $1/2^+$; γ(θ) in (n,n′γ).
2483.362 *13*	4^+		A CDEFG K	Jπ: γ(θ) in (n,n′γ) and M1+E2 γ′s to 4^+.
2491.8 *3*			JK	
2496.9 *3*			JK	
2511.96 *5*	4		A DE IJKLmnO	XREF: m(2521)n(2520). Jπ: γ(θ) in (α,2nγ).
2521.33 *3*	2^+		A C EFG J Lmno	XREF: m(2521)n(2520)o(2525). Jπ: γ(θ) in (n,n′γ) and M1+E2 γ to 2^+.
2529.60 *10*	1^+		EFG iJ L o	XREF: i(2540)o(2525). Jπ: L=0 in (d,p) from $1/2^+$ and γ(θ) in (n,n′γ); 1989GoZK gave 2 or 3 to the spin from γ(θ) but the A_2 and A_4 values are consistent with ΔJ=0 or 1 to 2^+ state.
2534.31 *6*	$(3^+,4^+,5^+)$		i K	XREF: i(2540). Jπ: L=(4) in (p,p′).
2549.97 *5*	(4)		A D iJK NO	XREF: i(2540). Jπ: γ(θ) in (α,2nγ).
2578.9 *7*			KLM	XREF: M(2571).
2589.61 *9*	(6)		D m	XREF: m(2593). Jπ: γ(θ) in (α,2nγ).
2594.46 *5*	5		DE m	XREF: m(2593). Jπ: γ(θ) in (α,2nγ).
2600.95 *5*	1^+		EFG JKLm	XREF: m(2593). Jπ: L=2 in (d,p) from $1/2^+$; γ(θ) in (n,n′γ).
2618.63 *7*	(3)		A DEFG I K	Jπ: γ(θ) in (n,n′γ).
2629.14 *14*			K	
2641.15 *7*	2^+		C EFG Ij L	XREF: j(2644.4). Jπ: E2 γ to 0^+ and 4^+.
2647.20 *10*			jK m	XREF: j(2644.4)m(2653).
2655.88 *25*			J m	XREF: m(2653).
2664.373 *15*	6		D jkLmn	XREF: j(2665)k(2664)m(2670)n(2670). Jπ: γ(θ) in (α,2nγ).
2664.43 *3*	8^+		D jkLmn	XREF: j(2665)k(2664)m(2670)n(2670). Jπ: γ(θ) in (α,2nγ); E2 γ to 6^+.
2673.771 *13*	$7^{(-)}$		D G JK mn	XREF: m(2670)n(2670). Jπ: γ(θ) in (α,2nγ); systematics.

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
2681.46 *4*	2^+		A C EFG IJKL	Jπ: γ(θ) in (n,n′γ); M1+E2 γ to 2^+.
2693.679 *5*	3^-		A CDE G IJKL OP	Jπ: γγ(θ) in ^{124}Sb β⁻ decay (60.20 d); E2 γ to 3^-.
2701.61 *3*	2^-		A CDE G JK M	Jπ: E1(+M2) γ to 2^+; log *ft*=8.115 from 3^-; log *ft*=7.05 from 2^-; nuclear orientation.
2710.64 *4*	4^+		A DE G J L	Jπ: γ(θ) in (α,2nγ); γ to 2^+.
2713.77 *12*	(5,7)		D	Jπ: γ(θ) in (α,2nγ).
2721.7 *6*	3^+,4^+		I mno	XREF: m(2727)n(2730)o(2727). Jπ: L=0+2 in (^{3}He,d) from $7/2^+$.
2730.6 *5*	$(0^+,1^+)$		Jk mno	XREF: k(2734)m(2727)n(2730)o(2727). Jπ: L=(0) in (d,p) from $1/2^+$.
2733.9 *3*	2^+ to 6^+		E k mno	XREF: k(2734)m(2727)n(2730)o(2727). Jπ: γ to 4^+.
2737.90 *5*	$6^{(+)}$		D J Lmn	XREF: m(2727)n(2730). Jπ: γ(θ) in (α,2nγ); Q γ to 4^+.
2747.04 *4*	$1^{(-)}$	27 fs *3*	C EFGH JK m	XREF: m(2758). Jπ: log *ft*=7.49 from 2^-; γ(θ) in (n,n′γ); probable E1 γ from capture state suggests negative parity. $T_{1/2}$: from (γ,γ′).
2766.93 *9*	1^+ to 4^+		E KLm	XREF: m(2758). Jπ: γ′s to 2^+ and 3^+.
2773.89 *3*	$6^{(+)}$		D	Jπ: γ(θ) in (α,2nγ) ; Q γ to 4^+.
2774.968 *25*	3^-,4^-		A E G I KLM	Jπ: log *ft*=7.491 from 3^-; E1 γ to 4^+.
2783.21 *7*	1^+,2^+		E H JKLm	XREF: m(2796). Jπ: L=2 in (d,p) from $1/2^+$; γ to g.s.; γ-excitation from 0^+. $T_{1/2}$=0.23 ps *7* if J=1, $T_{1/2}$=0.21 ps *7* if J=2 from (γ,γ′).
2790.41 *9*	0^+ to 4^+		E m	XREF: m(2796). Jπ: γ′s to 2^+.
2808.66 *8*	2^+		A EFG IJK m	XREF: m(2796). Jπ: γ(θ) in (n,n′γ); γ to g.s.
2814.53 *8*	2^+ to 5^+		A E K	XREF: K(2816). Jπ: γ′s to 3^+ and 4^+.
2817.48 *11*	2^+		EFG JKL	XREF: K(2820). Jπ: γ(θ) in (n,n′γ); γ to 0^+.
2834.898 *20*	3^-		CDE G K M	XREF: M(2834). Jπ: γ(θ) in (n,n′γ); E1 γ to 2^+.
2839.039 *17*	6		D L p	XREF: p(2840). Jπ: γ(θ) in (α,2nγ).
2841.7 *3*	$(0^-,1^-,2^-)$		JK p	XREF: p(2840). Jπ: L=(1) in (d,p) from $1/2^+$.
2844.498 *22*	(5)		D	Jπ: γ(θ) in (α,2nγ).
2853.2 *6*			J m	XREF: m(2850).
2858.90 *15*	2,3		EFG J L	Jπ: γ(θ) in (n,n′γ).
2865.262 *18*	3^-		A DE K	Jπ: γ′s to 3^- and 5^-; Q γ to 5^-; γ(θ) in (α,2nγ) suggests 7, but conflicts γ transition to 3^-.
2872.88 *5*	3^+,4^+,5^+		D I n	XREF: n(2870). Jπ: γ(θ) in (α,2nγ); L=2+4 in (^{3}He,d) from $7/2^+$.
2873.53 *6*	7		D	Jπ: γ(θ) in (α,2nγ).
2880.33 *6*	$5^{(+)}$		D	Jπ: γ(θ) in (α,2nγ).
2884.2 *10*	$1,2^+$		Hi	XREF: i(2884.9). Jπ: γ-excitation from 0^+. $T_{1/2}$=0.25 ps *9* if J=1, $T_{1/2}$=0.23 ps *8* if J=2 from (γ,γ′).
2886.05 *3*	3^-		A C E G iJK m	XREF: i(2884.9)m(2894). Jπ: γ(θ) in (n,n′γ); E1+M2 γ to 2^+.
2897.3 *10*	$1,2^+$		H m	XREF: m(2894).

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
				Jπ: γ-excitation from 0^+.
				$T_{1/2}$=0.25 ps *9* if J=1, $T_{1/2}$=0.22 ps *8* if J=2 from (γ,γ′).
2902.71 *3*	(5)		D JKL	Jπ: γ(θ) in (α,2nγ).
2911.180 *14*	$7^{(-)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to $5^{(-)}$.
2920.69 *4*	(3,4)		DE K	Jπ: γ(θ) in (α,2nγ).
2933.77 *6*	6		DEF K m	XREF: m(2938).
				Jπ: γ(θ) in (α,2nγ).
2939.75 *9*			jK m	XREF: j(2942)m(2938).
2945.59 *6*	2^+		E IjK	XREF: j(2942).
				Jπ: γ′s to 0^+ and 4^+.
2947.72 *12*	0^+ to 3^+		EF L n	XREF: n(2950).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
2954.249 *16*	6		D	Jπ: γ(θ) in (α,2nγ).
2957.55 *7*	3^-,4^+		E Lmn	XREF: m(2959)n(2950).
				Jπ: γ′s to 2^+ and 5^-.
2963.1 *7*	0^+ to 3^+		E JK mn	XREF: m(2959)n(2950).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
2965.18 *3*	(7^-)		D	Jπ: γ(θ) in (α,2nγ); (Q) to $5^{(-)}$.
2966.98 *6*	(5,6)		D I	XREF: I(2968).
				Jπ: γ(θ) in (α,2nγ).
2973.256 *24*	(5,6)		D k	XREF: k(2973.5).
				Jπ: γ(θ) in (α,2nγ).
2975.48 *11*	1	65 fs *9*	EFGH Jk n	XREF: k(2973.5)n(2980).
				Jπ: γ(θ) in (n,n′γ).
				$T_{1/2}$: in the case of J=2, 60 fs *8*.
2982.71 *9*	2^+,3^+		E n	XREF: n(2980).
				Jπ: γ′s to 2^+ and 4^+ and γ from 0^+,1^+ capture state.
2986.70 *19*	(5,6)		D L n	XREF: n(2980).
				Jπ: γ(θ) in (α,2nγ).
2988.24 *5*	1,2^+		C EFG JKLM	XREF: L(2991.3).
				Jπ: log *ft*=8.08 from 2^-; γ to g.s.
3001.12 *3*	2^+,3		CDE JKL N P	Jπ: log *ft*=6.79 from 2^-; γ′s to 2^+ and 4^+.
3011.7 *3*			L	
3018.11 *27*			L	
3030.7 *3*			K	
3032.839 *16*	7		D	Jπ: γ(θ) in (α,2nγ).
3036.3 *8*			JKL	
3038.29 *3*	$8^{(+)}$		D	Jπ: γ(θ) in (α,2nγ) ; Q γ to 6^+.
3039.9 *12*	0^+ to 3^+		E m	XREF: m(3041).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3045.37 *6*	2^+		EF I m	XREF: m(3041).
				Jπ: L=2+4 in (^{3}He,d) from $7/2^+$; γ′s to 0^+ and 3^-.
3048.9 *3*	1,2^+		E L n	XREF: n(3050).
				Jπ: γ′s to 0^+ and 2^+.
3054.62 *9*	3^-,4^+		E L n	XREF: L(3055)n(3050).
				Jπ: γ′g to 2^+ and 5^-.
3056.50 *10*	2^+,3,4^+		E J L	XREF: L(3060).
				Jπ: γ′s to 2^+ and 4^+.
3069.27 *10*	$6^{(+)}$		D mn	XREF: m(3079)n(3070).
				Jπ: γ(θ) in (α,2nγ); (Q) γ to 4^+.
3082.77 *10*	2^+ to 6^+		E J Lmn	XREF: m(3079)n(3070).
				Jπ: γ to 4^+.
3088.57 *7*	2^+		Ef ij l	XREF: f(3090)i(3091)j(3091)l(3091).
				Jπ: γ′s to 0^+ and 4^+.
3091.86 *8*	1,2^+		Ef Hij l	XREF: f(3090)i(3091)j(3090)l(3091).

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
				Jπ: γ's to 0^+ and 2^+.
3095.07 *6*	1^- to 4^+		E J L	Jπ: γ's 2^+ and 3^-.
3100.67 *4*	$1,2^+$	1.04 ps *14*	EF m	XREF: m(3106). Jπ: γ to 0^+.
3107.60 *6*	$2^+,3,4^+$		E m	XREF: m(3106). Jπ: γ's to 2^+ and 4^+.
3109.38 *11*	$2^+,3,4^-$		E m	XREF: m(3106). Jπ: γ's to 2^- and 4^+.
3113.7 *11*			J	
3118.52 *15*	$2^+,3^+$		E L n	XREF: n(3120). Jπ: γ's to 2^+ and 4^+ and γ from $0^+,1^+$ capture state.
3125.1 *5*			iJ mn	XREF: i(3130)m(3133)n(3120).
3136.76 *4*	$8^{(+)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to 6^+.
3139.4 *5*			iJ m	XREF: i(3130)m(3133).
3143.22 *11*	0^+ to 3^+		E	Jπ: γ's to 2^+ and γ from $0^+,1^+$ capture state.
3149.5 *7*			J M	XREF: M(3153).
3154.37 *3*	$10^{(+)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to 8^+.
3162.92 *17*	$2^+,3,4^+$		E	Jπ: γ's to 2^+ and 4^+.
3167.94 *8*	$2^+,3,4^+$		E J M	XREF: M(3169). Jπ: γ's to 2^+ and 4^+.
3181.4 *7*			iJ l n	XREF: i(3200)l(3200)n(3190).
3206.6 *6*			iJ l n	XREF: i(3200)l(3200)n(3190).
3210.9 *4*	2^+ to 6^+		E lm	XREF: l(3200)m(3212). Jπ: γ to 4^+.
3212.23 *7*	$1^-,2^+$		E mn	XREF: m(3212)n(3220). Jπ: γ's to 0^+ and 3^-.
3217.60 *11*	2^+		E mn	XREF: m(3212)n(3220). Jπ: γ's to 0^+ and 4^+.
3220.50 *8*	2^+	0.12 ps *3*	E GH mn	XREF: m(3212)n(3220). Jπ: γ's to 0^+ and 4^+. $T_{1/2}$: from (γ,γ').
3231.2 *7*			J	
3235.4 *3*	0^+ to 4^+		E	Jπ: γ to 2^+.
3238.24 *8*	$1,2^+$		E HiJ	XREF: i(3240). Jπ: γ's to 0^+ and 2^+.
3240.88 *21*	$2^+,3,4^+$		E i	XREF: i(3240). Jπ: γ's to 2^+ and 4^+.
3257.98 *10*	$2^+,3,4^+$		E IJ N	Jπ: γ's to 2^+ and 4^+.
3260.84 *6*	(6)		D	Jπ: γ(θ) in (α,2nγ).
3272.299 *22*	8		D	Jπ: γ(θ) in (α,2nγ).
3279.94 *7*	$2^+,3,4^+$		E lm	XREF: l(3280)m(3282). Jπ: γ's to 2^+ and 4^+.
3284.22 *6*	2^+		E lm	XREF: l(3280)m(3282). Jπ: γ's to 0^+, 3^+ and 3^-.
3288.91 *9*	$1,2^+$		E J	Jπ: γ's to 0^+ and 2^+.
3290.763 *23*	$9^{(-)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to $7^{(-)}$.
3302.0 *10*	$1,2^+$		H N	XREF: N(3300). Jπ: γ-excitation from 0^+. $T_{1/2}$=0.30 ps *14* if J=1, $T_{1/2}$=0.28 ps *13* if J=2 from (γ,γ').
3307.37 *6*	7		D	Jπ: γ(θ) in (α,2nγ).
3308.5 *5*	2^+ to 6^+		E	Jπ: γ to 4^+.
3318.98 *15*	0^+ to 4^+		E	Jπ: γ to 2^+.
3336.22 *4*	8		D	Jπ: γ(θ) in (α,2nγ).
3336.51 *13*	$2^+,3^+,4^+$		E IJ	XREF: I(3330). Jπ: L=2 in (d,p); γ to 2^+ and 4^+.

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	XREF	Comments
3348.68 *25*	1,2$^+$	E	Jπ: γ's to 0$^+$ and 2$^+$.
3350.958 *16*	9$^{(-)}$	D	Jπ: γ(θ) in (α,2nγ) ; Q γ to 7$^{(-)}$.
3355.2 *3*	2$^+$ to 6$^+$	E	Jπ: γ to 4$^+$.
3365.43 *7*	(7)	D	Jπ: γ(θ) in (α,2nγ).
3367.98 *3*	9	D	Jπ: γ(θ) in (α,2nγ).
3370.15 *5*	8	D	Jπ: γ(θ) in (α,2nγ).
3370.45 *12*	0$^+$ to 4$^+$	E	Jπ: γ to 2$^+$.
3382.932 *18*	(7)	D	Jπ: γ(θ) in (α,2nγ).
3393.63 *13*	1$^+$,2$^+$	E J M	XREF: M(3390). Jπ: γ's to 0$^+$ and 3$^+$.
3399.67 *9*	2$^+$,3$^+$	E I	XREF: I(3400). Jπ: γ's to 2$^+$ and 4$^+$ and γ from 0$^+$,1$^+$ capture state.
3409.04 *4*	9	D	Jπ: γ(θ) in (α,2nγ).
3422.60 *4*	6$^{(+)}$	D m	XREF: m(3427). Jπ: γ(θ) in (α,2nγ) ; Q γ to 8$^+$.
3430.04 *18*	1$^-$,2,3$^+$	E J Lm	XREF: m(3427). Jπ: γ's to 1 and 3$^-$ and γ from 0$^+$,1$^+$ capture state.
3438.70 *21*	0$^+$ to 4$^+$	E n	XREF: n(3440). Jπ: γ to 2$^+$.
3443.05 *6*	1,2$^+$	E n	XREF: n(3440). Jπ: γ's to 0$^+$.
3444.03 *3*	(5,6)	D	Jπ: γ(θ) in (α,2nγ).
3450.78 *9*	1$^-$,2$^+$	E	Jπ: γ to 0$^+$ and 3$^-$.
3452.69 *3*	(6)	D	Jπ: γ(θ) in (α,2nγ).
3456.61 *13*	2$^+$,3,4$^+$	E m	XREF: m(3457). Jπ: γ's to 2$^+$ and 4$^+$.
3460.35 *21*	1,2$^+$	E m	XREF: m(3457). Jπ: γ to 0$^+$.
3474.64 *12*	0$^+$ to 4$^+$	E m	XREF: m(3476). Jπ: γ to 2$^+$.
3475.54 *8*	(6,7)	D	Jπ: γ(θ) in (α,2nγ).
3479.37 *9*	0$^+$ to 3$^+$	E J mN	XREF: m(3476). Jπ: γ' to 2$^+$ and 1$^+$,(2$^+$).
3479.56 *4*	6$^{(+)}$	D	Jπ: γ(θ) in (α,2nγ) ; Q γ to 8$^+$.
3487.16 *22*	1,2$^+$	E	Jπ: γ to 0$^+$.
3490.25 *11*	0$^+$ to 3$^+$	E	Jπ: γ's to 1$^+$ and 2$^+$.
3497.54 *23*	2$^+$ to 6$^+$	E	Jπ: γ to 4$^+$.
3513.44 *10*	5,6,7	D i n	XREF: i(3520)n(3520). Jπ: γ(θ) in (α,2nγ).
3526.692 *23*	(7,8)	D	Jπ: γ(θ) in (α,2nγ).
3530.04 *10*	1$^-$,2$^+$	E G IJ MN	XREF: I(3520)M(3526)N(3520). Jπ: γ to 0$^+$ and 3$^-$.
3537.68 *14*	1,2$^+$	E	Jπ: γ to 0$^+$.
3543.09 *10*	1$^-$,2$^+$	E H	Jπ: γ-excitation from 0$^+$; γ to 3$^-$. $T_{1/2}$=33 fs *5* if J=1, $T_{1/2}$=30 fs *5* if J=2 from (γ,γ').
3550.00 *3*	10$^{(+)}$	D	Jπ: γ(θ) in (α,2nγ); Q γ to 8$^+$.
3554.45 *10*	7	D	Jπ: γ(θ) in (α,2nγ).
3576.03 *20*	2$^+$,3$^+$,4$^+$	E I lMN	XREF: I(3560)l(3580)M(3567)N(3570). Jπ: γ's to 2$^+$ and 4$^+$; L=0+2 in (^{3}He,d) from 7/2$^+$.
3588.3 *3*	0$^+$ to 4$^+$	E l n	XREF: l(3580)n(3590). Jπ: γ to 2$^+$.
3598.975 *21*	9$^{(-)}$	D	Jπ: γ(θ) in (α,2nγ); Q γ to 7$^{(-)}$.
3599.3 *3*	2$^+$,3,4$^+$	E n	XREF: n(3590). Jπ: γ's to 2$^+$ and 4$^+$.
3622.07 *8*	1$^-$,2$^+$	E m	XREF: m(3626).

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	$T_{1/2}$‡	XREF	Comments
				Jπ: γ′s to 0^+ and 3^-.
3628.53 *9*	1,2+		E m	XREF: m(3626).
				Jπ: γ to 0^+.
3652.13 *6*	(7)		D	Jπ: γ(θ) in (α,2nγ).
3652.81 *10*	1,2+		E m	XREF: m(3653).
				Jπ: γ to 0^+.
3654.4 *4*	2^+	39 fs *9*	E H m	XREF: m(3653).
				Jπ: γ to 0^+ and 4^+.
3662.00 *13*	2+,3,4+		E	Jπ: γ to 2^+ and 4^+.
3666.90 *10*	1+ to 3+		E LM	XREF: L(3670)M(3669).
				Jπ: γ′s to 2^+ and 3^+ and γ from 0^+,1^+ capture state.
3685.70 *13*	0^+ to 4^+		E M	XREF: M(3690).
				Jπ: γ to 2^+.
3703.487 *23*	8		D	Jπ: γ(θ) in (α,2nγ).
3709.72 *8*	2^+		E I	XREF: I(3710).
				Jπ: γ′s to 0^+, 3^+ and 3^-.
3713.99 *7*	(8,9)		D	Jπ: γ(θ) in (α,2nγ).
3723.63 *16*	2+,3,4+		E lM	XREF: l(3750)M(3730).
				Jπ: γ′s to 2^+ and 4^+.
3755.65 *6*	1,2+		E lM	XREF: l(3750)M(3754).
				Jπ: γ to 0^+.
3774.1 *5*	1,2+		E i n	XREF: i(3780)n(3790).
				Jπ: γ to 0^+.
3805.40 *15*	0^+ to 3^+		E i lm	XREF: i(3780)l(3810)m(3807).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3810.07 *11*	0^+ to 3^+		E lMn	XREF: l(3810)M(3829)n(3790).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3836.46 *10*	(9)		D	Jπ: γ(θ) in (α,2nγ).
3845.22 *11*	8		D M	Jπ: γ(θ) in (α,2nγ).
3850.54 *5*	11		D	Jπ: γ(θ) in (α,2nγ).
3853.57 *13*	0^+ to 3^+		E M	XREF: M(3855).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3862.6 *3*	0^+ to 3^+		E m	XREF: m(3871).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3872.32 *5*	(9,10)		D	Jπ: γ(θ) in (α,2nγ).
3880.20 *17*	1,2+		E m	XREF: m(3871).
				Jπ: γ to 0^+.
3884.87 *11*	1,2+		E lM	XREF: l(3890)M(3887).
				Jπ: γ to 0^+.
3904.12 *16*	0^+ to 3^+		E l	XREF: l(3890).
				Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3929.47 *12*	1,2+		E	Jπ: γ to 0^+.
3931.57 *3*	10		D	Jπ: γ(θ) in (α,2nγ).
3945.22 *22*	1,2+		E	Jπ: γ to 0^+.
3946.40 *18*	1,2+		E	Jπ: γ to 0^+.
3967.34 *16*	1−,2+		E	Jπ: γ′s to 0^+ and 3^-.
3984.78 *10*	(8)		D	Jπ: γ(θ) in (α,2nγ).
3988.593 *24*	$11^{(-)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to $9^{(-)}$.
3989.1 *9*	0^+ to 3^+		E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
3996.33 *14*	0^+ to 4^+		E	Jπ: γ to 2^+.
3998.3 *5*	1,2+		E	Jπ: γ to 0^+.
4010.8 *4*	1,2+		E	Jπ: γ to 0^+.
4030.3 *3*	0^+ to 3^+		E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4032.76 *3*	$11^{(-)}$		D	Jπ: γ(θ) in (α,2nγ); Q γ to $9^{(-)}$.
4034.43 *3*	(10)		D	Jπ: γ(θ) in (α,2nγ).

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)†	Jπ	XREF	Comments
4043.80 *14*	0^+ to $3^{(-)}$	E	Jπ: γ's to 2^+ and $1^{(-)}$.
4051.40 *5*	11	D	Jπ: γ(θ) in (α,2nγ).
4051.51 *12*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4057.22 *18*	0^+ to 4^+	E	Jπ: γ to 2^+.
4090.23 *15*	$1,2^+$	E H	Jπ: γ to 0^+. $T_{1/2}$=35 fs *7* if J=1, $T_{1/2}$=32 fs *6* if J=2 in (γ,γ').
4099.2 *4*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4114.08 *4*	(9,10)	D	Jπ: γ(θ) in (α,2nγ).
4114.37 *13*	0^+ to 4^+	E	Jπ: γ to 2^+.
4118.1 *10*	$1,2^+$	H	Jπ: γ to 0^+.
4128.1 *4*	$1,2^+$	E	Jπ: γ to 0^+.
4142.20 *13*	2^+,3,4^+	E	Jπ: γ's to 2^+ and 4^+.
4144.48 *14*	0^+ to $3^{(-)}$	E	Jπ: γ's to 2^+ and $1^{(-)}$.
4146.51 *16*	$1,2^+$	E	Jπ: γ to 0^+.
4155.38 *13*	2^+ to 6^+	E	Jπ: γ to 4^+.
4170.7 *3*	$1,2^+$	E	Jπ: γ to 0^+.
4173.68 *4*		D	
4177.79 *22*	$1,2^+$	E	Jπ: γ to 0^+.
4195.06 *20*	1,2	E	Jπ: γ's to 1^+, 2^+, 2^- and $1^{(-)}$.
4215.4 *4*	$1,2^+$	E	Jπ: γ to 0^+.
4229.22 *21*	$1,2^+$	E	Jπ: γ to 0^+.
4238.39 *5*		D	
4241.0 *15*	0^+ to 4^+	E	Jπ: γ to 2^+.
4244.8 *5*	0^+ to 3^+	E	Jπ: γ's to 1^+ and 2^+.
4270.3 *5*	$1,2^+$	E	Jπ: γ to 0^+.
4286.07 *3*		D	
4289.40 *11*	2^+	E	Jπ: γ's to 0^+ and 4^+.
4302.61 *21*	0 to 3^+	E	Jπ: γ to 1^+.
4324.4 *3*	$1,2^+$	E	Jπ: γ to 0^+.
4327.4 *4*	$1,2^+$	E	Jπ: γ to 0^+.
4375.47 *15*	0^+ to 4^+	E	Jπ: γ to 2^+.
4379.47 *10*	0^+ to 3^+	E	Jπ: γ's to 1^+ and 2^+.
4415.32 *16*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4439.4 *5*	0^+ to $3^{(-)}$	E	Jπ: γ to $1^{(-)}$ and 2^+.
4444.8 *5*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4453.7 *3*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4487.3 *5*	$1,2^+$	E	Jπ: γ to 0^+.
4501.24 *16*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4504.3 *7*	0 to 2	E	Jπ: γ to $1^{(-)}$ and γ from 0^+,1^+ capture state.
4524.4 *3*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4528.1 *3*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4551.5 *3*	$1,2^+$	E	Jπ: γ to 0^+.
4568.9 *3*	$1,2^+$	E	Jπ: γ to 0^+.
4580.97 *21*	$1,2^+$	E H	Jπ: γ to 0^+.
4598.5 *3*	$1,2^+$	E	Jπ: γ to 0^+.
4630.1 *6*	$1,2^+$	E	Jπ: γ to 0^+.
4643.46 *25*	$1,2^+$	E	Jπ: γ to 0^+.
4698.0 *6*	$1,2^+$	E	Jπ: γ to 0^+.
4701.95 *21*	0^+ to 4^+	E	Jπ: γ to 2^+.
4712.90 *17*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4723.5 *4*	0^+ to 3^+	E	Jπ: γ to 2^+ and γ from 0^+,1^+ capture state.
4737.28 *21*	0^+ to 4^+	E	Jπ: γ to 2^+.
4739.63 *13*	$1,2^+$	E	Jπ: γ to 0^+.
4754.71 *18*	$1,2^+$	E	Jπ: γ to 0^+.
4764.4 *4*	$1,2^+$	E	Jπ: γ to 0^+.

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Adopted Levels, Gammas (continued)

^{124}Te Levels (continued)

E(level)[†]	J^π	XREF	Comments
4811.2 *15*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4818.3 *5*	0^+ to 3^+	E	J^π: γ's to 1^+ and 2^+.
4883.27 *21*	$1,2^+$	E	J^π: γ to 0^+.
4889.30 *16*	$1,2^+$	E	J^π: γ to 0^+.
4897.6 *4*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4911.41 *22*	$2^+,3^+$	E	J^π: γ's to 2^+ and 4^+ and γ from 0^+,1^+ capture state.
4915.7 *3*	$1,2^+$	E	J^π: γ to 0^+.
4932.0 *5*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4941.8 *4*	$1,2^+$	E	J^π: γ to 0^+.
4962.51 *16*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4979.58 *17*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4984.7 *8*	0^+ to 3^+	E	J^π: γ to $1,2^+$ and γ from 0^+,1^+ capture state.
4990.4 *3*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
4993.51 *21*	$1,2^+$	E	J^π: γ to 0^+.
5036.9 *5*	$1,2^+$	E	J^π: γ to 0^+.
5050.72 *25*	$1,2^+$	E	J^π: γ to 0^+.
5075.83 *23*	$1,2^+$	E	J^π: γ to 0^+.
5127.29 *19*	0^+ to 4^+	E	J^π: γ to 2^+.
5132.3 *7*	$1,2^+$	E	J^π: γ to 0^+.
5155.94 *13*	$1,2^+$	E	J^π: γ to 0^+.
5169.7 *4*	$1,2^+$	E	J^π: γ to 0^+.
5285.5 *6*	0^+ to 4^+	E	J^π: γ to 2^+.
5319.2 *7*	0^+ to 3^+	E	J^π: γ to $1,2^+$ and γ from 0^+,1^+ capture state.
5423.9 *4*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.
5445.4 *4*	$1,2^+$	E	J^π: γ to 0^+.
5488.5 *6*	$1,2^+$	E	J^π: γ to 0^+.
5751.40 *23*	0^+ to 3^+	E	J^π: γ to 2^+ and γ from 0^+,1^+ capture state.

[†] From a least-squares fit to the adopted Eγ's. Others are average of reaction data.
[‡] From Doppler broadening (GRID technique) in (n,γ) E=thermal, unless otherwise noted.

Adopted Levels, Gammas (continued)

γ(^{124}Te)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	$I_{(\gamma+ce)}$	Comments
602.7271	2^+	602.7260 *23*	100.0	0.0	0^+	E2		0.00490		B(E2)(W.u.)=31.1 *5* α(K)=0.00420 *6*; α(L)=0.000566 *8*; α(M)=0.0001132 *16*; α(N+..)=2.45×10^{-5} *4* α(N)=2.22×10^{-5} *4*; α(O)=2.33×10^{-6} *4* Mult.: from K/L ratio in ^{124}I ε decay. E_γ: from 2000He14.
1248.5811	4^+	645.8520 *19*	100.0	602.7271	2^+	E2		0.00409		B(E2)(W.u.)=(97.529 *4*) α(K)=0.00351 *5*; α(L)=0.000467 *7*; α(M)=9.35×10^{-5} *13*; α(N+..)=2.03×10^{-5} *3* α(N)=1.84×10^{-5} *3*; α(O)=1.94×10^{-6} *3* E_γ: from 2000He14. Mult.: γγ(θ) and α(K)exp in ^{124}Sb β^- decay.
1325.5131	2^+	722.782 *3*	100.0 *3*	602.7271	2^+	M1+E2(+E0)	−3.4 *3*	0.00314		B(M1)(W.u.)=0.0467 *7* α(K)=0.00271 *4*; α(L)=0.000352 *5*; α(M)=7.02×10^{-5} *10*; α(N+..)=1.529×10^{-5} *22* α(N)=1.382×10^{-5} *20*; α(O)=1.471×10^{-6} *22* E_γ: from 2000He14.
		1325.504 *4*	16.1 *5*	0.0	0^+	E2		8.27×10^{-4}		B(E2)(W.u.)=0.49 *+5−10* α(K)=0.000693 *10*; α(L)=8.48×10^{-5} *12*; α(M)=1.685×10^{-5} *24*; α(N+..)=3.16×10^{-5} *5* α(N)=3.33×10^{-6} *5*; α(O)=3.62×10^{-7} *5*; α(IPF)=2.79×10^{-5} *4* E_γ: from 2000He14. Mult.: α(K)exp in (n,γ) and γ(θ) in (n,n′γ).
1657.283	0^+	1054.551 *22*	100.0 *8*	602.7271	2^+	E2		1.29×10^{-3}		B(E2)(W.u.)=20 *4* α(K)=0.001115 *16*; α(L)=0.0001392 *20*; α(M)=2.77×10^{-5} *4*; α(N+..)=6.05×10^{-6} *9* α(N)=5.46×10^{-6} *8*; α(O)=5.90×10^{-7} *9* Mult.: γγ(θ) and α(K)exp in (n,γ) E=thermal.
		1658.1 *12*		0.0	0^+	E0			0.016 *3*	Mult.: from (n,γ). q^2_K(E0/E2)=0.087 *23*, X(E0/E2)=0.014 *4*, ρ^2(E0)=0.012 *3* (2005Ki02, evaluation).
1746.958	6^+	498.369 *12*	100	1248.5811	4^+	E2		0.00823		α(K)=0.00701 *10*; α(L)=0.000982 *14*; α(M)=0.000197 *3*; α(N+..)=4.25×10^{-5} *6* α(N)=3.85×10^{-5} *6*; α(O)=3.99×10^{-6} *6* Mult.: from γ(θ) in (α,2nγ) and J^π′s of relevant levels.

$^{124}_{52}Te_{72}$-10

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	$I_{(\gamma+ce)}$	Comments
1882.92	0^+	226.4		1657.283	0^+	E0			0.070 *11*	Mult.: from (n,γ).
		557.43 *3*	100.0 *10*	1325.5131	2^+	E2		0.00604		B(E2)(W.u.)=3.5×10^2 *+7−10* α(K)=0.00516 *8*; α(L)=0.000706 *10*; α(M)=0.0001415 *20*; α(N+..)=3.06×10^{-5} *5* α(N)=2.77×10^{-5} *4*; α(O)=2.90×10^{-6} *4* Mult.: from γγ(θ) in (n,γ) E=thermal and J^π of relevant levels.
		1883.3		0.0	0^+	E0			0.317 *11*	Mult.: from (n,γ) E=thermal.
1957.902	4^+	632.38 *5*	7.65 *20*	1325.5131	2^+					
		709.303 *13*	100.0 *7*	1248.5811	4^+	M1+E2(+E0)	−0.18 *5*	0.00402		α(K)=0.00349 *5*; α(L)=0.000429 *7*; α(M)=8.53×10^{-5} *13*; α(N+..)=1.87×10^{-5} *3* α(N)=1.689×10^{-5} *25*; α(O)=1.85×10^{-6} *3* γγ(θ) and ce(K) in ^{124}Sb β^- decay. I_γ: Average of B- decay, ε decay, (n,γ) E=thermal and (n,n′γ).
		1355.169 *11*	78.5 *19*	602.7271	2^+	E2(+M3)	−0.32 *+25−18*	0.0011 *4*		α(K)=0.0009 *3*; α(L)=0.00011 *4*; α(M)=2.3×10^{-5} *8*; α(N+..)=3.72×10^{-5} *19* α(N)=4.5×10^{-6} *16*; α(O)=4.9×10^{-7} *17*; α(IPF)=3.2×10^{-5} *4* I_γ: Average of B- decay, ε decay, (n,γ) E=thermal and (n,n′γ). γγ(θ) and α(K)exp in ^{124}Sb β^- decay. δ: from 1993Go10.
2039.293	3^+	713.776[#] *2*	100.0[&] *18*	1325.5131	2^+	M1+E2	−3.9 *2*	0.00323		B(M1)(W.u.)=0.0028 *6*; B(E2)(W.u.)=59 *10* α(K)=0.00278 *4*; α(L)=0.000362 *5*; α(M)=7.23×10^{-5} *11*; α(N+..)=1.574×10^{-5} *23* α(N)=1.422×10^{-5} *20*; α(O)=1.513×10^{-6} *22* E_γ,I_γ: from (n,γ) E=thermal. Mult.,δ: From γ(θ) and linear polarization in 1989GoZK.
		790.711[#] *3*	31.7[&] *24*	1248.5811	4^+	M1+E2	−4.3 *3*			E_γ,I_γ: from (n,γ) E=thermal. Mult.,δ: From γ(θ) in 1989GoZK and J^π's of relevant levels.
		1436.559[#] *5*	54.3[&] *24*	602.7271	2^+	M1+E2	+3 *+15−2*			E_γ,I_γ: from (n,γ) E=thermal. Mult.,δ: From γ(θ) 1990Be50 and relevant levels.

$^{124}_{52}Te_{72}$-11

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
2039.421	2+	382.00 *16*	1.57 *11*	1657.283	0+				E_γ,I_γ: from (n,γ) E=thermal.
		713.906[#] *2*	3.7[&] *21*	1325.5131	2+				E_γ,I_γ: from (n,γ) E=thermal.
		790.837[#] *3*	3.7[&] *21*	1248.5811	4+				E_γ,I_γ: from (n,γ) E=thermal.
		1436.689[#] *5*	100.0[&] *21*	602.7271	2+	M1+E2	+0.13 *4*		E_γ,I_γ: from (n,γ) E=thermal. Mult.,δ: from γ(θ) in 1990Be50 and J^π's of relevant levels.
		2039.36[#] *3*	56.8[&] *6*	0.0	0+	E2		6.67×10^{-4}	B(E2)(W.u.)=0.31 *7* α(K)=0.000305 *5*; α(L)=3.64×10^{-5} *5*; α(M)=7.21×10^{-6} *10*; α(N+..)=0.000319 *5* α(N)=1.427×10^{-6} *20*; α(O)=1.562×10^{-7} *22*; α(IPF)=0.000317 *5* Mult.: From γ(θ) and α(K)exp in (n,γ) E=thermal.
2091.603	2+	766.01 *12*	1.80 *3*	1325.5131	2+	E0+E2,M1		0.0030 *4*	α(K)=0.0026 *4*; α(L)=0.00033 *3*; α(M)=6.5×10^{-5} *6*; α(N+..)=1.43×10^{-5} *14* α(N)=1.29×10^{-5} *13*; α(O)=1.40×10^{-6} *15* Mult.: from α(K)exp in ^{124}Sb β^- decay.
		843.7 *6*	0.28 *8*	1248.5811	4+				
		1488.886 *18*	100.0 *6*	602.7271	2+	M1(+E2)	+0.10 *23*	8.29×10^{-4} *16*	B(M1)(W.u.)=(0.022 *8*); B(E2)(W.u.)=(0.1 *+4−10*) α(K)=0.000659 *14*; α(L)=7.92×10^{-5} *16*; α(M)=1.57×10^{-5} *3*; α(N+..)=7.51×10^{-5} *12* α(N)=3.11×10^{-6} *7*; α(O)=3.42×10^{-7} *7*; α(IPF)=7.17×10^{-5} *11* Mult.: from α(K)exp in ^{124}Sb β^- decay and (n,γ) E=thermal.
		2091.19 *10*	29.4 *3*	0.0	0+				Reported in (n,γ) E=thermal only; not reported in ^{124}Sb β^- decay (60.20 d), ^{124}I ε decay and (n,n′γ).
2153.29	0+	827.78 *3*	100.0 *10*	1325.5131	2+	E2		0.00222	α(K)=0.00192 *3*; α(L)=0.000246 *4*; α(M)=4.90×10^{-5} *7*; α(N+..)=1.069×10^{-5} *15* α(N)=9.65×10^{-6} *14*; α(O)=1.032×10^{-6} *15* Mult.: from α(K)exp in (n,γ) ^{124}Sb β^- and γ(θ) in (n,n′γ).
		1550.44 *8*	23.9 *5*	602.7271	2+				
2182.41	2+	856.84 *6*	9.2 *9*	1325.5131	2+	M1,E2		0.0023 *3*	α(K)=0.00202 *25*; α(L)=0.00025 *3*; α(M)=5.0×10^{-5} *5*; α(N+..)=1.09×10^{-5} *12* α(N)=9.9×10^{-6} *10*; α(O)=1.07×10^{-6} *12*
		1579.70 *4*	100.0 *10*	602.7271	2+	M1+E2(+E0)	−0.17 *7*	7.71×10^{-4}	From α(K)exp in (n,γ) E=thermal. α(K)=0.000579 *9*; α(L)=6.95×10^{-5} *11*; α(M)=1.379×10^{-5} *20*; α(N+..)=0.0001079 *16*

$^{124}_{52}Te_{72}$-12

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
									α(K)=0.000579 *9*; α(L)=6.95×10^{-5} *11*; α(M)=1.379×10^{-5} *20*; α(N+..)=0.0001079 *16* α(N)=2.73×10^{-6} *4*; α(O)=3.00×10^{-7} *5*; α(IPF)=0.0001048 *15* Mult.,δ: from γγ(θ) and α(K)exp in (n,γ).
2182.41	2$^+$	2182.41 *12*	11.5 *18*	0.0	0$^+$				
2224.954	4$^+$	899.48 *3*	21.3 *5*	1325.5131	2$^+$	(E2)			Mult.: from γ(θ) in (α,2nγ) and J^π's of relevant levels. Not observed in (n,n′γ) and (n,γ) E=thermal.
		976.352 *25*	100.0 *11*	1248.5811	4$^+$	M1+E2	+0.68 *6*	0.00180	α(K)=0.00156 *3*; α(L)=0.000192 *3*; α(M)=3.81×10^{-5} *6*; α(N+..)=8.37×10^{-6} *14* α(N)=7.54×10^{-6} *12*; α(O)=8.23×10^{-7} *14* Mult.: from γ(θ) in (n,n′γ) and α(K)exp in (n,γ). δ: from 1989GoZK.
		1622.240 *25*	49.2 *8*	602.7271	2$^+$	E2		6.64×10^{-4}	α(K)=0.000467 *7*; α(L)=5.64×10^{-5} *8*; α(M)=1.118×10^{-5} *16*; α(N+..)=0.0001293 *19* α(N)=2.21×10^{-6} *3*; α(O)=2.41×10^{-7} *4*; α(IPF)=0.0001269 *18* Mult.: from γ(θ) in (n,n′γ) and J^π's of relevant levels.
2293.711	3$^-$	254.39 *9*	0.034 *2*	2039.293	3$^+$	E1		0.01465	B(E1)(W.u.)=3.0×10^{-5} *11* α(K)=0.01270 *18*; α(L)=0.001575 *23*; α(M)=0.000312 *5*; α(N+..)=6.78×10^{-5} *10* α(N)=6.13×10^{-5} *9*; α(O)=6.51×10^{-6} *10* Mult.: From α(K)exp in ^{124}Sb β$^-$ decay (60.20 d). Fl: E1 γ from 3$^-$.
		335.80 *9*	0.160 *9*	1957.902	4$^+$	E1		0.00706	B(E1)(W.u.)=6.2×10^{-5} *23* α(K)=0.00612 *9*; α(L)=0.000754 *11*; α(M)=0.0001495 *21*; α(N+..)=3.26×10^{-5} *5* α(N)=2.94×10^{-5} *5*; α(O)=3.15×10^{-6} *5* Mult.: From α(K)exp in ^{124}Sb β$^-$ decay (60.20 d).
		968.195 *4*	3.963 *17*	1325.5131	2$^+$	E1(+M2)	−0.02 *2*	6.53×10^{-4} *11*	B(E1)(W.u.)=(6.4×10^{-5} *23*); B(M2)(W.u.)=(0.13 *+26−13*) α(K)=0.000569 *9*; α(L)=6.78×10^{-5} *11*; α(M)=1.343×10^{-5} *22*; α(N+..)=2.94×10^{-6} *5* α(N)=2.65×10^{-6} *5*; α(O)=2.89×10^{-7} *5* E_γ: from 2000He14. Mult.,δ: From γγ(θ) and α(K)exp in ^{124}Sb β$^-$ decay (60.20 d).
		1045.125 *4*	3.87 *4*	1248.5811	4$^+$	E1(+M2)	−0.03 *2*	5.67×10^{-4} *10*	B(E1)(W.u.)=(5.0×10^{-5} *18*); B(M2)(W.u.)=(0.19 *+26−19*) α(K)=0.000494 *9*; α(L)=5.87×10^{-5} *11*; α(M)=1.163×10^{-5} *21*; α(N+..)=2.55×10^{-6} *5*

$^{124}_{52}Te_{72}$-13

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	$I_{(\gamma+ce)}$	Comments
										B(E1)(W.u.)=(5.0×10^{-5} *18*); B(M2)(W.u.)=(0.19 *+26−19*) α(K)=0.000494 *9*; α(L)=5.87×10^{-5} *11*; α(M)=1.163×10^{-5} *21*; α(N+..)=2.55×10^{-6} *5* α(N)=2.30×10^{-6} *4*; α(O)=2.51×10^{-7} *5* E_γ: from 2000He14. Mult.,δ: From γγ(θ) and α(K)exp in ^{124}Sb β$^-$ decay (60.20 d).
2293.711	3$^-$	1690.971 *4*	100.0 *3*	602.7271	2$^+$	E1+M2	+0.010 *+3−4*	6.15×10^{-4}		B(E1)(W.u.)=0.00030 *11*; B(M2)(W.u.)=0.05 *4* α(K)=0.000213 *3*; α(L)=2.50×10^{-5} *4*; α(M)=4.94×10^{-6} *7*; α(N+..)=0.000372 *6* α(N)=9.78×10^{-7} *14*; α(O)=1.071×10^{-7} *15*; α(IPF)=0.000371 *6* E_γ: from 2000He14. Mult.: From γγ(θ) and α(K)exp in ^{124}Sb β$^-$ decay (60.20 d). δ: from averaged A_2 and A_4 values of γγ(θ) in ^{124}Sb β$^-$ decay (60.20 d).
		2293.72 *7*	0.070 *3*	0.0	0$^+$	[E3]		7.45×10^{-4}		B(E3)(W.u.)=1.5×10^2 *6* α(K)=0.000412 *6*; α(L)=5.03×10^{-5} *7*; α(M)=1.000×10^{-5} *14*; α(N+..)=0.000272 *4* α(N)=1.98×10^{-6} *3*; α(O)=2.16×10^{-7} *3*; α(IPF)=0.000270 *4*
2308.42	0$^+$	426.2		1882.92	0$^+$	E0			0.036 *13*	Mult.: From ce in (n,γ) E=thermal. q_K^2(E0/E2)=0.8 *4*, X(E0/E2)=2.1 *10*, ρ^2(E0)>0.3 (2005Ki02, evaluation).
		652.2		1657.283	0$^+$	E0			<0.007	Mult.: From ce in (n,γ) E=thermal. q_K^2(E0/E2)<0.2, X(E0/E2)<0.4, (2005Ki02, evaluation).
		1705.65 *9*	100.0 *11*	602.7271	2$^+$	E2		6.50×10^{-4}		α(K)=0.000424 *6*; α(L)=5.11×10^{-5} *8*; α(M)=1.013×10^{-5} *15*; α(N+..)=0.0001643 *23* α(N)=2.01×10^{-6} *3*; α(O)=2.19×10^{-7} *3*; α(IPF)=0.0001621 *23*
		2309.5		0.0	0$^+$	E0			<0.007	Mult.: From ce in (n,γ) E=thermal. q_K^2(E0/E2)<0.2, X(E0/E2)<0.07 (2005Ki02, evaluation).
2321.719	(6$^+$)	1073.133 *19*	100	1248.5811	4$^+$	(Q)				Mult.: from γ(θ) in (α,2nγ).
2322.95	2$^+$	997.26 *9*	5.0 *13*	1325.5131	2$^+$					

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
2322.95	2^+	1720.24 *3*	100.0 *8*	602.7271	2^+	M1(+E2)	+0.18 *20*	7.18×10^{-4} *13*	α(K)=0.000484 *10*; α(L)=5.79×10^{-5} *11*; α(M)=1.148×10^{-5} *22*; α(N+..)=0.0001648 *24* α(N)=2.28×10^{-6} *5*; α(O)=2.50×10^{-7} *5*; α(IPF)=0.0001622 *24* Mult.,δ: from γγ(θ) and α(K)exp in (n,γ) E=thermal.
		2323.04 *13*	3.1 *15*	0.0	0^+				
2335.030	5^-	377.17 *3*	3.8 *14*	1957.902	4^+				
		1086.450 *11*	100.0 *8*	1248.5811	4^+	E1		5.24×10^{-4}	α(K)=0.000457 *7*; α(L)=5.43×10^{-5} *8*; α(M)=1.074×10^{-5} *15*; α(N+..)=2.36×10^{-6} *4* α(N)=2.13×10^{-6} *3*; α(O)=2.32×10^{-7} *4* Mult.: from γ(θ) in (α,2nγ) and linear polarization in (n,n′γ).
2349.465	6^+	602.70 *20*	100 *26*	1746.958	6^+				Not reported in ^{124}Sb β^- decay and (n,γ) E=thermal.
		1100.84 *5*	77.9 *13*	1248.5811	4^+	E2		1.18×10^{-3}	α(K)=0.001018 *15*; α(L)=0.0001264 *18*; α(M)=2.51×10^{-5} *4*; α(N+..)=5.96×10^{-6} *9* α(N)=4.96×10^{-6} *7*; α(O)=5.36×10^{-7} *8*; α(IPF)=4.61×10^{-7} *7* Mult.: from γ(θ) in (α,2nγ) and J^π's of relevant levels.
2454.069	2^+	571.0 *10*	2.3 *11*	1882.92	0^+				
		1128.57 *5*	18.5 *9*	1325.5131	2^+				
		1205.44 *3*	10.4 *13*	1248.5811	4^+				
		1851.38 *4*	100.0 *12*	602.7271	2^+	M1+E2	+0.039 *1*	0.00067 *3*	α(K)=0.00039 *3*; α(L)=4.7×10^{-5} *4*; α(M)=9.3×10^{-6} *7*; α(N+..)=0.000227 *5* α(N)=1.83×10^{-6} *13*; α(O)=2.01×10^{-7} *15*; α(IPF)=0.000225 *5* Mult.: from γ(θ) in (n,n′γ) and J^π's of relevant levels. δ: from γ(θ) in (α,2nγ). others: −0.02 *4* or +2.1 *3* (1989GoZK).
		2454.12 *8*	23 *3*	0.0	0^+	E2		7.68×10^{-4}	α(K)=0.000219 *3*; α(L)=2.59×10^{-5} *4*; α(M)=5.13×10^{-6} *8*; α(N+..)=0.000518 *8* α(N)=1.017×10^{-6} *15*; α(O)=1.115×10^{-7} *16*; α(IPF)=0.000517 *8* Mult.: from γ(θ) in (n,n′γ) and J^π's of relevant levels.
2483.362	4^+	148.21 *10*	2.1 *4*	2335.030	5^-				
		189.61 *19*	3.4 *6*	2293.711	3^-				
		443.99[f] *10*	14[f] *10*	2039.421	2^+				E_γ,I_γ: from (n,γ) E=thermal.
		443.99[f] *10*	100.0[f] *9*	2039.293	3^+	M1+E2		0.0120 *6*	α(K)=0.0103 *7*; α(L)=0.00138 *3*; α(M)=0.000276 *7*; α(N+..)=6.00×10^{-5} *11*

$^{124}_{52}Te_{72}$-15

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult. [a]	δ [b]	α [c]	Comments
									α(K)=0.0103 *7*; α(L)=0.00138 *3*; α(M)=0.000276 *7*; α(N+..)=6.00×10^{-5} *11* α(N)=5.43×10^{-5} *11*; α(O)=5.75×10^{-6} *14* E_γ,I_γ: from (n,γ) E=thermal. Mult.: From α(K)exp in ^{124}Sb β^- decay (60.20 d).
2483.362	4$^+$	525.441 *13*	72 *3*	1957.902	4$^+$	M1+E2		0.0077 *7*	α(K)=0.0066 *6*; α(L)=0.00087 *3*; α(M)=0.000173 *6*; α(N+..)=3.77×10^{-5} *15* α(N)=3.41×10^{-5} *13*; α(O)=3.64×10^{-6} *22* Mult.: from γ(θ) in (n,n′γ) and α(K)exp in ^{124}Sb β^- decay (60.20 d). δ=−0.16 *6* or +13 *2* (1989GoZK).
		1234.2 *5*	45.5 *23*	1248.5811	4$^+$				E_γ,I_γ: From (n,γ) E=thermal. Not observed in ^{124}Sb β^- decay (60.20 d).
2511.96	4	1263.37 *5*	100	1248.5811	4$^+$	D			Mult.: from γ(θ) in (α,2nγ).
2521.33	2$^+$	1195.66 *12*	4.06 *20*	1325.5131	2$^+$				
		1918.60 *3*	100.0 *8*	602.7271	2$^+$	M1(+E2)	−0.02 *3*	6.98×10^{-4}	α(K)=0.000387 *6*; α(L)=4.62×10^{-5} *7*; α(M)=9.16×10^{-6} *13*; α(N+..)=0.000256 *4* α(N)=1.82×10^{-6} *3*; α(O)=2.00×10^{-7} *3*; α(IPF)=0.000254 *4* Mult.: from α(K)exp in (n,γ) and γ(θ) in (n,n′γ). δ: from 1989GoZK.
2529.60	1$^+$	1204.1 *3*	9 *3*	1325.5131	2$^+$				
		1926.86 *10*	100.0 *20*	602.7271	2$^+$	M1(+E2)	−0.14 *10*	6.97×10^{-4}	α(K)=0.000382 *6*; α(L)=4.57×10^{-5} *7*; α(M)=9.05×10^{-6} *14*; α(N+..)=0.000260 *4* α(N)=1.80×10^{-6} *3*; α(O)=1.97×10^{-7} *3*; α(IPF)=0.000258 *4* Mult.: from γ(θ) and J^π's of relevant levels. δ: from 1989GoZK.
2549.97	(4)	1301.38 *5*	100	1248.5811	4$^+$				
2589.61	(6)	842.65 *9*	100	1746.958	6$^+$				
2594.46	5	368.2 *5*	5 *4*	2224.954	4$^+$				
		636.58 *5*	21.8 *14*	1957.902	4$^+$	(D)			I_γ: from (α,2nγ). Mult.: from γ(θ) in (α,2nγ).
		847.43 *16*	21.0 *11*	1746.958	6$^+$				I_γ: from (α,2nγ).
		1345.939[g] *15*	100.0 *25*	1248.5811	4$^+$	D			Observed in (α,2nγ) only: transition is questionable. (n,γ) E=thermal reports 1346.05 keV γ as unplaced γ. E_γ,I_γ: from (α,2nγ). Mult.,δ: from γ(θ) in (α,2nγ).
2600.95	1$^+$	943.3 *3*	4.4 *3*	1657.283	0$^+$				
		1275.35 *11*	16.5 *4*	1325.5131	2$^+$				
		1998.15 *6*	100.0 *10*	602.7271	2$^+$				

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
2600.95	1^+	2601.16 *10*	50.4 *5*	0.0	0^+				
2618.63	(3)	527.7 *5*	5.6 *4*	2091.603	2^+				
		1370.08 *13*	100 *4*	1248.5811	4^+	D+Q			Mult.: from γ(θ) in (n,n′γ). δ=+0.32 *6* or +9 *+13−2* (1989GoZK).
		2015.85 *8*	35.2 *11*	602.7271	2^+	D+Q	−0.29 *12*		Mult.: from γ(θ) in (n,n′γ). δ: from 1989GoZK.
2641.15	2^+	984.4 *5*	4.0 *9*	1657.283	0^+				
		1315.66 *10*	8.1 *8*	1325.5131	2^+				
		1392.58 *16*	4.4 *4*	1248.5811	4^+				
		2038.33 *11*	100.0 *14*	602.7271	2^+	E2		6.67×10^{-4}	α(K)=0.000305 *5*; α(L)=3.64×10^{-5} *5*; α(M)=7.21×10^{-6} *10*; α(N+..)=0.000318 *5* α(N)=1.428×10^{-6} *20*; α(O)=1.563×10^{-7} *22*; α(IPF)=0.000317 *5*
2664.373	6	329.336 *12*	100	2335.030	5^-	D+Q	−0.19 *2*		Mult.: from γ(θ) in (α,2nγ). δ: from 1998Wa18.
2664.43	8^+	917.44 *5*	100	1746.958	6^+	E2		1.75×10^{-3}	α(K)=0.001515 *22*; α(L)=0.000192 *3*; α(M)=3.82×10^{-5} *6*; α(N+..)=8.34×10^{-6} *12* α(N)=7.53×10^{-6} *11*; α(O)=8.09×10^{-7} *12* Mult.: from γ(θ) and α(K)exp in (α,2nγ).
2673.771	$7^{(-)}$	338.754 *11*	2.86 *11*	2335.030	5^-				
		926.78 *4*	100.0 *13*	1746.958	6^+	D			Mult.: from γ(θ) in (α,2nγ).
2681.46	2^+	641.9[e] *3*	3.3[e] *26*	2039.421	2^+				E_γ,I_γ: from (n,γ) E=thermal.
		641.9[e] *3*	3.3[e] *26*	2039.293	3^+				E_γ,I_γ: from (n,γ).
		2078.71 *4*	100.0 *8*	602.7271	2^+	M1+E2	−0.14 *3*	7.07×10^{-4}	α(K)=0.000327 *5*; α(L)=3.90×10^{-5} *6*; α(M)=7.73×10^{-6} *11*; α(N+..)=0.000333 *5* α(N)=1.533×10^{-6} *22*; α(O)=1.685×10^{-7} *24*; α(IPF)=0.000331 *5* Mult.: from α(K)exp in ^{124}I ε decay. δ: from 1989GoZK.
		2681.53 *10*	11.4 *13*	0.0	0^+				
2693.679	3^-	209.86 *7*	0.10 *2*	2483.362	4^+				
		371.00 *11*	0.70 *9*	2322.95	2^+				
		400.30 *6*	2.53 *12*	2293.711	3^-	E2		0.01565	α(K)=0.01322 *19*; α(L)=0.00195 *3*; α(M)=0.000394 *6*; α(N+..)=8.45×10^{-5} *12* α(N)=7.67×10^{-5} *11*; α(O)=7.80×10^{-6} *11* Mult.: from α(K)exp in ^{124}Sb β^- decay (60.20 d).
		469.06 *7*	0.91 *5*	2224.954	4^+	E1		0.00309	α(K)=0.00269 *4*; α(L)=0.000327 *5*; α(M)=6.49×10^{-5} *9*; α(N+..)=1.417×10^{-5} *20* α(N)=1.279×10^{-5} *18*; α(O)=1.379×10^{-6} *20* Mult.: from α(K)exp in ^{124}Sb β^- decay (60.20 d).

$^{124}_{52}Te_{72}$-17

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
2693.679	3⁻	735.9[f] *7*	1.30[f] *12*	1957.902	4⁺	E1		1.13×10^{-3}	α(K)=0.000982 *14*; α(L)=0.0001180 *17*; α(M)=2.34×10^{-5} *4*; α(N+..)=5.12×10^{-6} *8* α(N)=4.62×10^{-6} *7*; α(O)=5.01×10^{-7} *7* Mult.: from α(K)exp in ^{124}Sb β⁻ decay (60.20 d).
		1368.157 *5*	47.7 *4*	1325.5131	2⁺	E1(+M2)	−0.02 *1*	4.78×10^{-4}	α(K)=0.000303 *5*; α(L)=3.58×10^{-5} *6*; α(M)=7.09×10^{-6} *10*; α(N+..)=0.0001314 *19* α(N)=1.403×10^{-6} *20*; α(O)=1.534×10^{-7} *22*; α(IPF)=0.0001298 *19* Mult.: from γγ(θ) and α(K)exp in ^{124}Sb β⁻ decay (60.20 d). E_γ: from 2000He14.
		1445.08 *4*	6.02 *7*	1248.5811	4⁺	E1(+M2)	+0.10 *9*	0.00052 *4*	α(K)=0.00029 *4*; α(L)=3.4×10^{-5} *4*; α(M)=6.7×10^{-6} *8*; α(N+..)=0.000186 *5* α(N)=1.34×10^{-6} *16*; α(O)=1.46×10^{-7} *18*; α(IPF)=0.000184 *5* Mult.: from γγ(θ) in ^{124}Sb β⁻ decay (60.20 d) and J^π's of relevant levels.
		2090.930 *7*	100.0 *5*	602.7271	2⁺	E1(+M2)	+0.03 *2*	8.38×10^{-4}	α(K)=0.0001522 *23*; α(L)=1.78×10^{-5} *3*; α(M)=3.52×10^{-6} *6*; α(N+..)=0.000664 *10* α(N)=6.97×10^{-7} *11*; α(O)=7.65×10^{-8} *12*; α(IPF)=0.000664 *10* E_γ: from 2000He14. Mult.,δ: from γγ(θ) and α(K)exp in ^{124}Sb β⁻ decay (60.20 d). I_γ: intensity ratios to 1368 keV γ are inconsistent between decay data and (n,γ) E=thermal data.
		2693.57 *6*	0.06 *1*	0.0	0⁺				
2701.61	2⁻	662.23[‡] *13*	3.3 *3*	2039.293	3⁺				
		743.2[g] *3*	0.95 *25*	1957.902	4⁺				Reported in ^{124}I ε decay; not observed in ^{124}Sb β⁻ decay (60.20 d), (n,n′γ) and (n,γ) E=thermal.
		1376.10 *3*	100.0 *6*	1325.5131	2⁺	E1(+M2)	−0.01 *3*	4.79×10^{-4}	α(K)=0.000300 *5*; α(L)=3.54×10^{-5} *6*; α(M)=7.01×10^{-6} *12*; α(N+..)=0.0001370 *20* α(N)=1.387×10^{-6} *23*; α(O)=1.517×10^{-7} *25*; α(IPF)=0.0001355 *19* Mult.,δ: from γγ(θ) and α(K)exp in ^{124}Sb β⁻ decay (60.20 d).
		2098.91 *10*	8.9 *3*	602.7271	2⁺				(n,γ) E=thermal places this γ from 3756-keV level.
2710.64	4⁺	619.07 *14*	3.47 *24*	2091.603	2⁺				
		962.78[g] *24*	168 *13*	1746.958	6⁺	Q			Reported in (α,2nγ) only; intensity too large not to be

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Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
									observed in other data sets. Mult.: from γ(θ) in (α,2nγ).
2710.64	4^+	1385.11 *4*	100 *4*	1325.5131	2^+				
		1462.0 *3*	13.8 *21*	1248.5811	4^+				
		2107.92 *13*	69.4 *20*	602.7271	2^+				I_γ: intensity ratios to 1385 keV γ are inconsistent between (n,γ) E=thermal and other data.
2713.77	(5,7)	966.81 *12*	100	1746.958	6^+	D			Mult.: from γ(θ) in (α,2nγ).
2733.9	2^+ to 6^+	1485.3 *3*	100	1248.5811	4^+				
2737.90	$6^{(+)}$	402.86 *7*	7.7 *7*	2335.030	5^-	D			Mult.: from γ(θ) in (α,2nγ).
		990.96 *7*	14.3 *17*	1746.958	6^+	D+Q	−0.73 *7*		Mult.,δ: from γ(θ) in (α,2nγ).
		1489.0 *3*	100.0 *22*	1248.5811	4^+	Q			Mult.: from γ(θ) in (α,2nγ).
2747.04	$1^{(-)}$	564.3 *5*	0.67 *4*	2182.41	2^+				
		2144.23 *6*	20.8 *4*	602.7271	2^+				
		2746.92 *7*	100.0 *9*	0.0	0^+				
2766.93	1^+ to 4^+	675.61 *18*	7.7 *8*	2091.603	2^+				
		727.0[e] *15*	8[e] *6*	2039.421	2^+				
		727.0[e] *15*	8[e] *6*	2039.293	3^+				
		2164.07 *10*	100.0 *12*	602.7271	2^+				
2773.89	$6^{(+)}$	1026.922 *25*	100.0 *3*	1746.958	6^+	D			Mult.: from γ(θ) in (α,2nγ).
		1526.0 *6*	64.6 *22*	1248.5811	4^+	Q			Mult.: from γ(θ) in (α,2nγ).
2774.968	3^-,4^-	291.4 *3*	2.13 *19*	2483.362	4^+				
		481.1 *4*	5.8 *5*	2293.711	3^-				
		735.74[f‡] *3*	13.6[f] *14*	2039.293	3^+				
		816.85 *11*	16.3 *20*	1957.902	4^+				
		1526.24 *5*	100.0 *10*	1248.5811	4^+	E1		5.35×10^{-4}	α(K)=0.000252 *4*; α(L)=2.96×10^{-5} *5*; α(M)=5.86×10^{-6} *9*; α(N+..)=0.000248 *4* α(N)=1.160×10^{-6} *17*; α(O)=1.270×10^{-7} *18*; α(IPF)=0.000247 *4* Mult.: from α(K)exp in ^{124}Sb β^- decay (60.20 d).
		2172.1 *5*	0.50 *10*	602.7271	2^+				
2783.21	1^+,2^+	629.70 *22*	2.5 *13*	2153.29	0^+				
		1125.81 *12*	5.93 *25*	1657.283	0^+				
		2783.26 *10*	100.0 *20*	0.0	0^+				
2790.41	0^+ to 4^+	751.5 *4*	9 *6*	2039.421	2^+				
		1464.66 *11*	100.0 *18*	1325.5131	2^+				
		2188.00 *15*	41 *4*	602.7271	2^+				
2808.66	2^+	717.3 *5*	10.2 *25*	2091.603	2^+				
		926.0 *5*	5.1 *22*	1882.92	0^+				
		2205.88 *10*	56 *7*	602.7271	2^+				
		2808.63 *12*	100.0 *20*	0.0	0^+	E2		8.78×10^{-4}	α(K)=0.0001729 *25*; α(L)=2.04×10^{-5} *3*; α(M)=4.04×10^{-6}

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
									6; α(N+..)=0.000681 10 α(N)=8.01×10^{-7} 12; α(O)=8.79×10^{-8} 13; α(IPF)=0.000680 10 Mult.: from γ(θ) in (n,n′γ) and J^π′s of relevant levels.
2814.53	2$^+$ to 5$^+$	775.25[‡] 11	77.5 22	2039.293	3$^+$				
		1565.93 11	100 3	1248.5811	4$^+$				
2817.48	2$^+$	934.79 14	4.6 3	1882.92	0$^+$				
		2214.43 16	100.0 10	602.7271	2$^+$				
2834.898	3$^-$	351.47 13	0.70 10	2483.362	4$^+$				
		541.21 5	6.9 7	2293.711	3$^-$				
		609.92 8	4.74 15	2224.954	4$^+$				
		743.18 11	0.39 18	2091.603	2$^+$				
		795.62[e] 7	1.2[e] 9	2039.421	2$^+$				
		795.62[e] 7	1.2[e] 9	2039.293	3$^+$				
		876.97 9	0.72 3	1957.902	4$^+$				
		1509.37 3	100.0 8	1325.5131	2$^+$	E1		5.28×10^{-4}	α(K)=0.000256 4; α(L)=3.02×10^{-5} 5; α(M)=5.97×10^{-6} 9; α(N+..)=0.000235 4 α(N)=1.182×10^{-6} 17; α(O)=1.294×10^{-7} 19; α(IPF)=0.000234 4 Mult.: from α(K)exp in (n,γ) E=thermal.
		1586.1 3	0.18 4	1248.5811	4$^+$				
		2232.06 7	17.1 3	602.7271	2$^+$	E1(+M2)	+0.03 8	9.17×10^{-4}	α(K)=0.000138 5; α(L)=1.61×10^{-5} 7; α(M)=3.18×10^{-6} 13; α(N+..)=0.000760 13 α(N)=6.30×10^{-7} 25; α(O)=6.9×10^{-8} 3; α(IPF)=0.000759 13 Mult.: from γ(θ) in (n,n′γ) and J^π′s of relevant levels. δ: from 1989GoZK.
2839.039	6	504.007 15	100	2335.030	5$^-$	D			Mult.: from γ(θ) in (α,2nγ).
2844.498	(5)	361.135[d] 18	100 4	2483.362	4$^+$	D			Mult.: from γ(θ) in (α,2nγ).
		1595.94 19	70 3	1248.5811	4$^+$				
2858.90	2,3	819.5 3	1.5 4	2039.293	3$^+$				
		2256.19 17	100.0 21	602.7271	2$^+$	D+Q	−0.05 4		Mult.: from γ(θ) in (n,n′γ). δ: from 1989GoZK.
2865.262	3$^-$	530.231 15	100.0 18	2335.030	5$^-$	Q			Mult.: from γ(θ) in (α,2nγ).
		571.41 22	45 3	2293.711	3$^-$				
2872.88	3$^+$,4$^+$,5$^+$	1624.29 5	100	1248.5811	4$^+$	D			Mult.: from γ(θ) in (α,2nγ).
2873.53	7	1126.57 5	100	1746.958	6$^+$	D+Q			Mult.: from γ(θ) in (α,2nγ). δ: −0.35 3 or 0.56 5; Other: −1.1 +5−9(1991Le16).
2880.33	5$^{(+)}$	1133.37 5	100	1746.958	6$^+$	D+Q	−0.47 3		Mult.,δ: from γ(θ) in (α,2nγ).
2884.2	1,2$^+$	2884.2	100	0.0	0$^+$				E_γ: from (γ,γ),(γ,γ′).
2886.05	3$^-$	402.80 20	2.7 6	2483.362	4$^+$				

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	α[c]	Comments
2886.05	3⁻	550.3 *4*	2.8 *4*	2335.030	5⁻				
		592.34 *4*	21.6 *5*	2293.711	3⁻				
		846.8[‡] *3*	1.1 *3*	2039.293	3⁺				
		928.0 *4*	0.42 *18*	1957.902	4⁺				
		1560.46 *13*	31.6 *5*	1325.5131	2⁺	E1(+M2)	−0.2 *2*	0.00059 *10*	α(K)=0.00028 *11*; α(L)=3.4×10^{-5} *13*; α(M)=7.E−6 *3*; α(N+..)=0.000265 *23* α(N)=1.3×10^{-6} *6*; α(O)=1.4×10^{-7} *6*; α(IPF)=0.000263 *24* Mult.: from γ(θ) in (n,n′γ) and $J^{\pi\prime}$s of relevant levels. δ: from 1989GoZK.
		1637.43 *6*	36.8 *22*	1248.5811	4⁺				
		2283.19 *9*	100.0 *14*	602.7271	2⁺	E1+M2	+0.06 *2*	9.45×10^{-4}	α(K)=0.0001342 *22*; α(L)=1.57×10^{-5} *3*; α(M)=3.10×10^{-6} *6*; α(N+..)=0.000792 *12* α(N)=6.14×10^{-7} *11*; α(O)=6.74×10^{-8} *12*; α(IPF)=0.000791 *12* Mult.: from γ(θ) in (n,n′γ) and α(K)exp in ^{124}I ε decay. δ: from 1989GoZK.
2897.3	1,2⁺	2897.3	100	0.0	0⁺				E_γ: from (γ,γ),(γ,γ′).
2902.71	(5)	1654.12 *3*	100	1248.5811	4⁺	D			Mult.: from γ(θ) in (α,2nγ).
2911.180	7$^{(-)}$	561.716 *11*	100 *3*	2349.465	6⁺	D			Mult.: from γ(θ) in (α,2nγ).
		576.147 *15*	99.4 *19*	2335.030	5⁻	Q			Mult.: from γ(θ) in (α,2nγ).
		1164.25 *5*	38.0 *13*	1746.958	6⁺	D			Mult.: from γ(θ) in (α,2nγ).
2920.69	(3,4)	585.71 *18*	50 *6*	2335.030	5⁻				
		626.87 *12*	100 *6*	2293.711	3⁻				
		1672.11 *4*	100 *60*	1248.5811	4⁺	(D)			Mult.: from γ(θ) in (α,2nγ).
2933.77	6	598.73 *6*	33 *3*	2335.030	5⁻	D			I_γ: from (α,2nγ). Mult.: from γ(θ) in (α,2nγ).
		974.7 *4*	6 *2*	1957.902	4⁺				I_γ: from (α,2nγ) and intensity ratio in (n,γ).
		1186.91 *11*	100 *4*	1746.958	6⁺	D			I_γ: from (α,2nγ). Mult.: from γ(θ) in (α,2nγ).
2945.59	2⁺	491.58 *11*	54.6 *16*	2454.069	2⁺				
		792.8 *4*	36.4 *18*	2153.29	0⁺				
		853.99 *13*	55 *3*	2091.603	2⁺				
		906.11[f] *12*	64[f] *19*	2039.421	2⁺				
		906.11[f] *12*	18[f] *12*	2039.293	3⁺				
		1063.06 *16*	27 *4*	1882.92	0⁺				
		1697.1 *12*	27 *15*	1248.5811	4⁺				
		2945.44 *14*	100 *36*	0.0	0⁺				

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Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult. [a]	δ [b]	Comments
2947.72	0^+ to 3^+	2344.97 *12*	100	602.7271	2^+			
2954.249	6	280.49 *3*	15.0 *16*	2673.771	$7^{(-)}$	D+Q	+0.13 *3*	Mult.,δ: from γ(θ) in (α,2nγ).
		470.863 *22*	61 *8*	2483.362	4^+			
		619.230 *20*	100 *4*	2335.030	5^-	D+Q	−0.15 *5*	Mult.,δ: from γ(θ) in (α,2nγ).
		1207.7 *4*	67 *3*	1746.958	6^+			
2957.55	3^-,4^+	622.32 *16*	5.6 *6*	2335.030	5^-			
		664.13 *22*	13.9 *4*	2293.711	3^-			
		999.70 *16*	11.1 *6*	1957.902	4^+			
		1708.87 *10*	100.0 *19*	1248.5811	4^+			
		2355.01 *16*	22 *3*	602.7271	2^+			
2963.1	0^+ to 3^+	2360.3 *7*	100	602.7271	2^+			
2965.18	(7^-)	615.66 *4*	100 *5*	2349.465	6^+	(D)		Mult.: from γ(θ) in (α,2nγ).
		630.18 *3*	72.7 *17*	2335.030	5^-	(Q)		Mult.: from γ(θ) in (α,2nγ).
2966.98	(5,6)	1220.02 *5*	100	1746.958	6^+	(D)		Mult.: from γ(θ) in (α,2nγ).
2973.256	(5,6)	134.19 *4*	11.4 *20*	2839.039	6	(D)		Mult.: from γ(θ) in (α,2nγ).
		299.52 *3*	100 *4*	2673.771	$7^{(-)}$			
		1226.22 *5*	81 *6*	1746.958	6^+			
2975.48	1	821.7 *4*	2.6 *7*	2153.29	0^+			
		1317.8 *8*	5.2 *14*	1657.283	0^+			
		1650.4 *3*	3.9 *7*	1325.5131	2^+			
		2372.71 *16*	26.0 *23*	602.7271	2^+			
		2975.21 *22*	100 *9*	0.0	0^+			
2982.71	2^+,3^+	891.1 *5*	16.0 *10*	2091.603	2^+			
		1024.2 *4*	8 *2*	1957.902	4^+			
		1657.11 *10*	100 *2*	1325.5131	2^+			
		1734.3 *3*	40 *4*	1248.5811	4^+			
		2380.33 *20*	100 *12*	602.7271	2^+			
2986.70	(5,6)	1738.11 *19*	100	1248.5811	4^+			
2988.24	1,2^+	694.6 *5*	0.9 *5*	2293.711	3^-			
		1105.31 *17*	3.57 *21*	1882.92	0^+			
		1330.4 *5*	8.9 *15*	1657.283	0^+			
		1662.94 *15*	9.8 *5*	1325.5131	2^+			
		2385.20 *13*	100.0 *9*	602.7271	2^+			
		2987.91 *23*	39 *5*	0.0	0^+			
3001.12	2^+,3	166.04 *24*	7 *3*	2834.898	3^-			
		307.35 *8*	13.5 *22*	2693.679	3^-			
		517.85 *7*	23.3 *19*	2483.362	4^+			
		546.99 *14*	12.5 *13*	2454.069	2^+			
		677.6 *5*	31.3 *13*	2322.95	2^+			
		707.46 *8*	81.6 *22*	2293.711	3^-			
		776.17 *26*	11.0 *8*	2224.954	4^+			
		961.80 *9*	16 *3*	2039.293	3^+			

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Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	Comments
3001.12	2⁺,3	1042.7 *10*	12.5 *25*	1957.902	4⁺			
		1675.58 *5*	100.0 *18*	1325.5131	2⁺			
		1752.42 *14*	51 *7*	1248.5811	4⁺			
3032.839	7	121.656 *17*	13.2 *3*	2911.180	7⁽⁻⁾	D		Mult.: from γ(θ) in (α,2nγ).
		359.070 *15*	100 *3*	2673.771	7⁽⁻⁾	D+Q	−0.16 *7*	Mult.,δ: from γ(θ) in (α,2nγ).
		368.38 *3*	5.6 *6*	2664.43	8⁺	(D)		Mult.: from γ(θ) in (α,2nγ).
3038.29	8⁽⁺⁾	373.851 *13*	100.0 *17*	2664.43	8⁺	D+Q	−0.18 *2*	Mult.,δ: from γ(θ) in (α,2nγ).
		1291.33 *10*	74.2 *20*	1746.958	6⁺	Q		Mult.: from γ(θ) in (α,2nγ).
3039.9	0⁺ to 3⁺	2437.1 *12*	100	602.7271	2⁺			
3045.37	2⁺	722.8 *3*	62 *25*	2322.95	2⁺			
		751.78 *11*	15.0 *5*	2293.711	3⁻			
		892.2 *5*	3.3 *22*	2153.29	0⁺			
		953.66 *16*	5.0 *4*	2091.603	2⁺			
		1005.80[f] *13*	5.0[f] *13*	2039.421	2⁺			
		1005.80[f] *13*	6.7[f] *12*	2039.293	3⁺			
		2442.74 *10*	100.0 *10*	602.7271	2⁺			
3048.9	1,2⁺	895.4 *3*	29 *9*	2153.29	0⁺			
		2446.9 *6*	100 *57*	602.7271	2⁺			
3054.62	3⁻,4⁺	719.6 *4*	59 *12*	2335.030	5⁻			
		760.90 *21*	17.7 *24*	2293.711	3⁻			
		963.45 *21*	29.4 *24*	2091.603	2⁺			
		1014.8 *4*	18 *3*	2039.293	3⁺			
		1096.67 *16*	23.5 *14*	1957.902	4⁺			
		1729.1 *3*	100.0 *24*	1325.5131	2⁺			
		1805.78 *23*	59 *18*	1248.5811	4⁺			
3056.50	2⁺,3,4⁺	1731.1 *11*	16 *8*	1325.5131	2⁺			
		1807.3 *3*	29 *6*	1248.5811	4⁺			
		2453.81 *10*	100.0 *21*	602.7271	2⁺			
3069.27	6⁽⁺⁾	1111.33 *10*	88 *10*	1957.902	4⁺	(Q)		Mult.: from γ(θ) in (α,2nγ).
		1322.6 *3*	100 *20*	1746.958	6⁺	D		Mult.: from γ(θ) in (α,2nγ).
3082.77	2⁺ to 6⁺	1834.17 *10*	100	1248.5811	4⁺			
3088.57	2⁺	567.24 *10*	54.6 *11*	2521.33	2⁺			
		634.42 *20*	18.2 *15*	2454.069	2⁺			
		765.8 *4*	18 *12*	2322.95	2⁺			
		996.9 *3*	36 *22*	2091.603	2⁺			
		1049.18[f] *20*	27[f] *9*	2039.293	3⁺			I_γ: from authors' table II, 0.070 *7* in authors' table I probably corresponds to total intensity for the doublet. Uncertainty is assigned by compilers.
		1049.18[f] *20*	36[f] *9*	2039.421	2⁺			I_γ: from authors' table II, 0.070 *7* in authors' table I probably corresponds to total intensity for the doublet. Uncertainty is assigned by compilers.

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Adopted Levels, Gammas (continued)

$\gamma(^{124}Te)$ (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	Comments
3088.57	2^+	1205.63 *16*	45 *27*	1882.92	0^+			
		1431.8 *5*	100 *17*	1657.283	0^+			
		1840.1 *4*	72 *15*	1248.5811	4^+			
3091.86	$1,2^+$	782.3 *6*	1.7 *4*	2308.42	0^+			
		1766.27 *12*	22.4 *9*	1325.5131	2^+			
		2488.2 *5*	28 *3*	602.7271	2^+			
		3091.96 *11*	100.0 *21*	0.0	0^+			
3095.07	1^- to 4^+	401.29 *22*	19.1 *6*	2693.679	3^-			
		1003.3 *5*	7.1 *7*	2091.603	2^+			
		1769.53 *10*	78.6 *7*	1325.5131	2^+			
		2492.14 *12*	100 *4*	602.7271	2^+			
3100.67	$1,2^+$	112.430 *19*	3.3 *12*	2988.24	$1,2^+$			
		353.58 *4*	100.0 *9*	2747.04	$1^{(-)}$			
		399.50 *16*	0.89 *7*	2701.61	2^-			
		499.92 *13*	2.38 *9*	2600.95	1^+			
		918.40 *22*	1.2 *9*	2182.41	2^+			
		2499.0 *10*	1.2 *5*	602.7271	2^+			
		3101.7 *5*	1.8 *3*	0.0	0^+			
3107.60	$2^+,3,4^+$	813.6 *3*	5.3 *16*	2293.711	3^-			
		1068.25[f] *13*	5[f] *3*	2039.421	2^+			
		1068.25[f] *13*	47[f] *16*	2039.293	3^+			
		1149.7 *4*	11 *3*	1957.902	4^+			
		1782.02 *11*	74 *3*	1325.5131	2^+			
		2505.01 *14*	100 *7*	602.7271	2^+			
3109.38	$2^+,3,4^-$	407.9 *6*	11.1 *11*	2701.61	2^-			
		1152.5 *4*	11.1 *22*	1957.902	4^+			
		1860.70 *11*	100.0 *22*	1248.5811	4^+			
3118.52	$2^+,3^+$	1792.99 *21*	15.8 *18*	1325.5131	2^+			
		1869.3 *5*	5.3 *16*	1248.5811	4^+			
		2515.90 *22*	100 *4*	602.7271	2^+			
3136.76	$8^{(+)}$	472.333 *24*	100 *9*	2664.43	8^+	D+Q	−0.12 *3*	Mult.,δ: from $\gamma(\theta)$ in $(\alpha,2n\gamma)$.
		1389.71 *10*	42.8 *19*	1746.958	6^+	Q		Mult.: from $\gamma(\theta)$ in $(\alpha,2n\gamma)$.
3143.22	0^+ to 3^+	1817.75 *13*	32.0 *20*	1325.5131	2^+			
		2540.32 *21*	100 *12*	602.7271	2^+			
3154.37	$10^{(+)}$	489.930 *11*	100	2664.43	8^+	Q		Mult.: from $\gamma(\theta)$ in $(\alpha,2n\gamma)$.
3162.92	$2^+,3,4^+$	869.1 *4*	29 *9*	2293.711	3^-			
		1837.7 *3*	50 *6*	1325.5131	2^+			
		1914.2 *3*	100 *16*	1248.5811	4^+			
3167.94	$2^+,3,4^+$	392.93 *14*	18.8 *6*	2774.968	$3^-,4^-$			
		874.41 *14*	9.4 *5*	2293.711	3^-			
		1842.24 *14*	100 *5*	1325.5131	2^+			

$^{124}_{52}Te_{72}$-24

Adopted Levels, Gammas (continued)

$\gamma(^{124}Te)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	Comments
3167.94	$2^+,3,4^+$	1920.2 *8*	6 *4*	1248.5811	4^+		
3210.9	2^+ to 6^+	1962.3 *4*	100	1248.5811	4^+		
3212.23	$1^-,2^+$	465.20 *13*	3.6 *3*	2747.04	$1^{(-)}$		
		918.50 *22*	6 *3*	2293.711	3^-		
		1886.52 *19*	14.3 *9*	1325.5131	2^+		
		2609.40 *10*	100.0 *10*	602.7271	2^+		
		3212.75 *22*	7.1 *6*	0.0	0^+		
3217.60	2^+	923.48 *21*	24.0 *20*	2293.711	3^-		
		1178.3 *7*	20.0 *24*	2039.293	3^+		
		1259.5 *5*	16 *6*	1957.902	4^+		
		1893.6 *10*	68 *16*	1325.5131	2^+		
		2615.21 *17*	100 *20*	602.7271	2^+		
		3217.35 *21*	32 *3*	0.0	0^+		
3220.50	2^+	926.4 *5*	5.5 *24*	2293.711	3^-		
		1180.86[f] *15*	9[f] *4*	2039.421	2^+		
		1180.86[f] *15*	9.1[f] *24*	2039.293	3^+		
		1895.14 *21*	16 *7*	1325.5131	2^+		I_γ: from (n,γ) E=thermal.
		1972.9 *7*	3.6 *15*	1248.5811	4^+		
		2617.80 *21*	100 *7*	602.7271	2^+		I_γ: from (n,γ) E=thermal.
		3221.05 *18*	92.7 *18*	0.0	0^+		I_γ: from (n,γ) E=thermal.
3235.4	0^+ to 4^+	2632.6 *3*	100	602.7271	2^+		
3238.24	$1,2^+$	1355.10 *14*	23 *13*	1882.92	0^+		
		2635.67 *12*	100 *3*	602.7271	2^+		
		3238.15 *14*	79.7 *16*	0.0	0^+		
3240.88	$2^+,3,4^+$	1914.8 *5*	31 *15*	1325.5131	2^+		
		1992.39 *22*	100 *31*	1248.5811	4^+		
3257.98	$2^+,3,4^+$	1166.4 *7*	26 *12*	2091.603	2^+		
		1218.77[f] *19*	16[f] *9*	2039.421	2^+		
		1218.77[f] *19*	11[f] *4*	2039.293	3^+		
		1932.33 *15*	100 *7*	1325.5131	2^+		
		2008.9 *4*	16 *8*	1248.5811	4^+		
3260.84	(6)	380.509 *15*	100	2880.33	$5^{(+)}$		
3272.299	8	361.135[d] *18*	52.2 *20*	2911.180	$7^{(-)}$	D	Mult.: from $\gamma(\theta)$ in (α,2nγ).
		433.08 *15*	3.7 *15*	2839.039	6		
		607.72 *7*	100 *4*	2664.373	6	Q	Mult.: from $\gamma(\theta)$ in (α,2nγ).
3279.94	$2^+,3,4^+$	1240.51[f] *11*	14[f] *14*	2039.421	2^+		
		1240.51[f] *11*	43[f] *10*	2039.293	3^+		
		1323.5 *6*	57 *21*	1957.902	4^+		
		2677.25 *12*	100 *4*	602.7271	2^+		
3284.22	2^+	990.38 *13*	55 *22*	2293.711	3^-		

$^{124}_{52}Te_{72}$-25

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	δ[b]	Comments
3284.22	2^+	1130.4 *3*	9.1 *15*	2153.29	0^+			
		1244.85[f] *11*	18[f] *9*	2039.421	2^+			
		1244.85[f] *11*	81[f] *12*	2039.293	3^+			
		1958.90 *12*	100 *3*	1325.5131	2^+			
3288.91	$1,2^+$	1963.43 *10*	100.0 *10*	1325.5131	2^+			
		2685.84 *22*	48 *3*	602.7271	2^+			
		3289.1 *5*	13 *5*	0.0	0^+			
3290.763	$9^{(-)}$	258.01 *9*	5.3 *4*	3032.839	7			
		617.03 *3*	100.0 *18*	2673.771	$7^{(-)}$	Q		Mult.: from γ(θ) in (α,2nγ).
3302.0	$1,2^+$	3302.0	100	0.0	0^+			E_γ: from (γ,γ),(γ,γ′).
3307.37	7	468.40 *6*	54 *10*	2839.039	6			
		1560.25 *9*	100 *5*	1746.958	6^+			
3308.5	2^+ to 6^+	2059.9 *5*	100	1248.5811	4^+			
3318.98	0^+ to 4^+	864.89 *20*	29 *3*	2454.069	2^+			
		1993.46 *22*	100 *29*	1325.5131	2^+			
3336.22	8	662.45 *3*	100	2673.771	$7^{(-)}$	D+Q	−2.73 *4*	Mult.,δ: from γ(θ) in (α,2nγ).
3336.51	$2^+,3^+,4^+$	2010.88 *20*	46 *6*	1325.5131	2^+			
		2087.98 *17*	100 *7*	1248.5811	4^+			
3348.68	$1,2^+$	242.6 *8*	3.3 *17*	3107.60	$2^+,3,4^+$			
		2022.8 *3*	43 *4*	1325.5131	2^+			
		3349.0 *5*	100.0 *20*	0.0	0^+			
3350.958	$9^{(-)}$	677.183 *10*	100	2673.771	$7^{(-)}$	Q		Mult.: from γ(θ) in (α,2nγ).
3355.2	2^+ to 6^+	2106.6 *3*	100	1248.5811	4^+			
3365.43	(7)	627.53 *4*	100	2737.90	$6^{(+)}$	(D)		Mult.: from γ(θ) in (α,2nγ).
3367.98	9	213.600 *15*	19.9 *12*	3154.37	$10^{(+)}$	D		Mult.: from γ(θ) in (α,2nγ).
		703.59 *3*	100.0 *21*	2664.43	8^+	D		Mult.: from γ(θ) in (α,2nγ).
3370.15	8	331.86 *4*	100	3038.29	$8^{(+)}$	D		Mult.: from γ(θ) in (α,2nγ).
3370.45	0^+ to 4^+	2767.69 *12*	100	602.7271	2^+			
3382.932	(7)	1635.962 *14*	100	1746.958	6^+			
3393.63	$1^+,2^+$	910.7 *5*	7.4 *15*	2483.362	4^+			
		940.0 *10*	19 *6*	2454.069	2^+			
		1301.5 *5*	100.0 *11*	2091.603	2^+			
		1353.4 *4*	37 *5*	2039.293	3^+			
		2068.0 *5*	44 *11*	1325.5131	2^+			
		2789.8 *6*	85 *5*	602.7271	2^+			
		3393.81 *16*	70 *5*	0.0	0^+			
3399.67	$2^+,3^+$	916.1 *3*	7.7 *10*	2483.362	4^+			
		1308.43 *19*	7.7 *8*	2091.603	2^+			
		2074.20 *23*	23.1 *18*	1325.5131	2^+			
		2796.80 *11*	100 *4*	602.7271	2^+			
3409.04	9	744.61 *3*	100	2664.43	8^+	D		Mult.: from γ(θ) in (α,2nγ).

$^{124}_{52}Te_{72}$-26

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult. a	Comments
3422.60	$6^{(+)}$	758.16 *3*	100	2664.43	8^+	Q	Mult.: from γ(θ) in (α,2nγ).
3430.04	1^-,2,3^+	454.46 *16*	33 *4*	2975.48	1		
		1136.9 *6*	50 *5*	2293.711	3^-		
		1339.0 *5*	100 *12*	2091.603	2^+		
3438.70	0^+ to 4^+	2835.94 *21*	100	602.7271	2^+		
3443.05	$1,2^+$	162.9 *3*	2.3 *11*	3279.94	2^+,3,4^+		
		741.25 *15*	13.6 *9*	2701.61	2^-		
		921.5 *3*	9.1 *16*	2521.33	2^+		
		1560.34 *11*	34.1 *7*	1882.92	0^+		
		2840.21 *10*	100.0 *21*	602.7271	2^+		
		3443.01 *15*	50 *3*	0.0	0^+		
3444.03	(5,6)	411.186 *24*	100	3032.839	7		
3450.78	1^-,2^+	449.37 *22*	16.7 *5*	3001.12	2^+,3		
		749.4 *9*	6 *4*	2701.61	2^-		
		1157.11 *16*	16.7 *11*	2293.711	3^-		
		2125.17 *22*	31 *11*	1325.5131	2^+		
		2848.13 *16*	100 *11*	602.7271	2^+		
		3451.2 *6*	11 *7*	0.0	0^+		
3452.69	(6)	1117.653 *24*	100	2335.030	5^-		
3456.61	2^+,3,4^+	2208.5 *4*	43 *19*	1248.5811	4^+		
		2853.80 *13*	100 *4*	602.7271	2^+		
3460.35	$1,2^+$	2134.78 *21*	100 *10*	1325.5131	2^+		
		3460.8 *8*	38 *23*	0.0	0^+		
3474.64	0^+ to 4^+	2871.88 *12*	100	602.7271	2^+		
3475.54	(6,7)	502.20 *11*	33 *8*	2973.256	(5,6)		
		1728.63 *10*	100 *8*	1746.958	6^+	(D)	Mult.: from γ(θ) in (α,2nγ).
3479.37	0^+ to 3^+	696.06 *18*	44 *4*	2783.21	1^+,2^+		
		1026.1 *3*	44 *4*	2454.069	2^+		
		2153.77 *14*	78 *7*	1325.5131	2^+		
		2876.56 *14*	100 *7*	602.7271	2^+		
3479.56	$6^{(+)}$	815.12 *3*	100	2664.43	8^+	Q	Mult.: from γ(θ) in (α,2nγ).
3487.16	$1,2^+$	2884.1 *3*	55 *10*	602.7271	2^+		
		3487.4 *3*	100 *4*	0.0	0^+		
3490.25	0^+ to 3^+	889.06 *15*	24.5 *18*	2600.95	1^+		
		2887.70 *14*	100 *6*	602.7271	2^+		
3497.54	2^+ to 6^+	2248.94 *23*	100	1248.5811	4^+		
3513.44	5,6,7	1766.47 *10*	100	1746.958	6^+	D	Mult.: from γ(θ) in (α,2nγ).
3526.692	(7,8)	852.918 *19*	100	2673.771	$7^{(-)}$		
3530.04	1^-,2^+	1236.23 *21*	10.6 *11*	2293.711	3^-		
		2205.0 *5*	15 *9*	1325.5131	2^+		
		2927.01 *16*	100 *10*	602.7271	2^+		

$^{124}_{52}Te_{72}$-27

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[@]	E_f	J_f^π	Mult.[a]	δ[b]	Comments
3530.04	1⁻,2⁺	3530.19 *14*	45 *9*	0.0	0⁺			I_γ: from (n,γ) E=thermal.
3537.68	1,2⁺	2934.92 *14*	100 *6*	602.7271	2⁺			
		3536.9 *15*	38 *7*	0.0	0⁺			
3543.09	1⁻,2⁺	380.3 *3*	2.0 *3*	3162.92	2⁺,3,4⁺			
		842.0 *4*	2.0 *5*	2701.61	2⁻			
		1248.3 *6*	12.00 *24*	2293.711	3⁻			
		2940.27 *11*	57.0 *11*	602.7271	2⁺			
		3543.20 *22*	100 *15*	0.0	0⁺			
3550.00	10⁽⁺⁾	395.641 *14*	46.1 *13*	3154.37	10⁽⁺⁾	D+Q	−0.34 *3*	Mult.,δ: from γ(θ) in (α,2nγ).
		885.53 *3*	100.0 *18*	2664.43	8⁺	Q		Mult.: from γ(θ) in (α,2nγ).
3554.45	7	1807.48 *10*	100	1746.958	6⁺	D		Mult.: from γ(θ) in (α,2nγ).
3576.03	2⁺,3⁺,4⁺	1280.8 *8*	50 *3*	2293.711	3⁻			
		1484.5 *3*	70 *40*	2091.603	2⁺			
		2328.2 *6*	40 *24*	1248.5811	4⁺			
		2973.2 *3*	100 *90*	602.7271	2⁺			
3588.3	0⁺ to 4⁺	2985.5 *3*	100	602.7271	2⁺			
3598.975	9⁽⁻⁾	189.97 *7*	12.1 *8*	3409.04	9	(D)		Mult.: from γ(θ) in (α,2nγ).
		687.792 *15*	100 *3*	2911.180	7⁽⁻⁾	Q		Mult.: from γ(θ) in (α,2nγ).
3599.3	2⁺,3,4⁺	2350.6 *4*	56 *13*	1248.5811	4⁺			
		2996.6 *4*	100 *18*	602.7271	2⁺			
3622.07	1⁻,2⁺	735.71 *12*	23.1 *12*	2886.05	3⁻			
		1469.0 *7*	35 *9*	2153.29	0⁺			
		2296.53 *14*	38.5 *27*	1325.5131	2⁺			
		3019.59 *12*	100 *12*	602.7271	2⁺			
		3623.0 *7*	19 *12*	0.0	0⁺			
3628.53	1,2⁺	1745.38 *18*	19.4 *16*	1882.92	0⁺			
		2303.11 *21*	19 *4*	1325.5131	2⁺			
		3025.82 *12*	100 *6*	602.7271	2⁺			
		3629.0 *10*	16 *10*	0.0	0⁺			
3652.13	(7)	778.59 *3*	100	2873.53	7			
3652.81	1,2⁺	1498.5 *6*	8.7 *22*	2153.29	0⁺			
		2327.32 *17*	48 *6*	1325.5131	2⁺			
		3050.06 *12*	100 *5*	602.7271	2⁺			
3654.4	2⁺	1562.8 *5*	100 *7*	2091.603	2⁺			
		2405.6 *8*	33 *18*	1248.5811	4⁺			
		3051.4 *10*	83 *50*	602.7271	2⁺			
		3655.0 *10*	83 *50*	0.0	0⁺			
3662.00	2⁺,3,4⁺	2413.5 *4*	38 *10*	1248.5811	4⁺			
		3059.22 *13*	100 *4*	602.7271	2⁺			
3666.90	1⁺ to 3⁺	1574.3 *6*	22 *11*	2091.603	2⁺			
		1626.5 *6*	38.9 *22*	2039.293	3⁺			

$^{124}_{52}Te_{72}$-28

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult. [a]	δ [b]	Comments
3666.90	1^+ to 3^+	2341.35 *15*	100 *7*	1325.5131	2^+			
		3064.26 *14*	50 *3*	602.7271	2^+			
3685.70	0^+ to 4^+	1594.7 *5*	24 *14*	2091.603	2^+			
		3082.89 *13*	100 *5*	602.7271	2^+			
3703.487	8	352.51 *7*	20.5 *15*	3350.958	$9^{(-)}$	D		Mult.: from γ(θ) in (α,2nγ).
		412.76 *3*	41.0 *22*	3290.763	$9^{(-)}$	D+Q	+1.9 *2*	Mult.,δ: from γ(θ) in (α,2nγ).
		670.628 *22*	100 *3*	3032.839	7	D+Q	+0.40 *3*	Mult.,δ: from γ(θ) in (α,2nγ).
3709.72	2^+	1008.24 *16*	13.8 *10*	2701.61	2^-			
		1108.5 *3*	6.9 *8*	2600.95	1^+			
		1386.6 *4*	3.5 *17*	2322.95	2^+			
		1415.90 *10*	55.2 *10*	2293.711	3^-			
		1670.8 *10*	28 *14*	2039.293	3^+			
		3107.22 *22*	100.0 *21*	602.7271	2^+			
		3710.5 *6*	17 *8*	0.0	0^+			
3713.99	(8,9)	1049.55 *6*	100	2664.43	8^+			
3723.63	2^+,3,4^+	2397.5 *5*	40 *5*	1325.5131	2^+			
		2475.08 *16*	100 *9*	1248.5811	4^+			
3755.65	$1,2^+$	654.80 *10*	9.09 *18*	3100.67	$1,2^+$			
		660.51 *15*	3.9 *5*	3095.07	1^- to 4^+			
		767.48 *17*	13.0 *10*	2988.24	$1,2^+$			
		988.1 *5*	3.9 *4*	2766.93	1^+ to 4^+			
		1154.65 *21*	7.8 *7*	2600.95	1^+			
		1447.8 *5*	5 *3*	2308.42	0^+			
		2098.62 *14*	52 *3*	1657.283	0^+			
		3152.93 *12*	100 *6*	602.7271	2^+			
		3756.0 *6*	9 *4*	0.0	0^+			
3774.1	$1,2^+$	1681.0 *10*	9 *8*	2091.603	2^+			
		2448.2 *10*	100 *3*	1325.5131	2^+			
		3172.0 *10*	23 *14*	602.7271	2^+			
		3775.4 *10*	23 *18*	0.0	0^+			
3805.40	0^+ to 3^+	2479.86 *15*	100	1325.5131	2^+			
3810.07	0^+ to 3^+	3207.30 *11*	100	602.7271	2^+			
3836.46	(9)	1172.02 *9*	100	2664.43	8^+	(D)		Mult.: from γ(θ) in (α,2nγ).
3845.22	8	812.38 *10*	100	3032.839	7	D		Mult.: from γ(θ) in (α,2nγ).
3850.54	11	696.17 *4*	100	3154.37	$10^{(+)}$	D		Mult.: from γ(θ) in (α,2nγ).
3853.57	0^+ to 3^+	3250.80 *13*	100	602.7271	2^+			
3862.6	0^+ to 3^+	1770.5 *5*	67 *40*	2091.603	2^+			
		2537.3 *5*	100 *67*	1325.5131	2^+			
		3260.0 *4*	67 *40*	602.7271	2^+			
3872.32	(9,10)	834.03 *4*	100	3038.29	$8^{(+)}$			
3880.20	$1,2^+$	2554.77 *20*	58 *5*	1325.5131	2^+			

$^{124}_{52}Te_{72}$-29

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult. [a]	δ [b]	Comments
3880.20	1,2$^+$	3879.9 *3*	100 *10*	0.0	0$^+$			
3884.87	1,2$^+$	1183.27 *16*	37.5 *25*	2701.61	2$^-$			
		3282.13 *16*	75 *5*	602.7271	2$^+$			
		3884.69 *25*	100 *12*	0.0	0$^+$			
3904.12	0$^+$ to 3$^+$	3301.35 *16*	100	602.7271	2$^+$			
3929.47	1,2$^+$	2045.6 *6*	23 *9*	1882.92	0$^+$			
		2603.6 *10*	46 *23*	1325.5131	2$^+$			
		3326.74 *12*	100 *6*	602.7271	2$^+$			
		3929.2 *10*	46 *23*	0.0	0$^+$			
3931.57	10	580.608 *22*	100 *8*	3350.958	9$^{(-)}$	D+Q	−0.51 *1*	Mult.,δ: from γ(θ) in (α,2nγ).
		640.84 *8*	95 *10*	3290.763	9$^{(-)}$	(D)		Mult.: from γ(θ) in (α,2nγ).
3945.22	1,2$^+$	2287.91 *21*	100	1657.283	0$^+$			
3946.40	1,2$^+$	3343.61 *19*	60 *5*	602.7271	2$^+$			
		3946.4 *4*	100 *50*	0.0	0$^+$			
3967.34	1$^-$,2$^+$	1272.4 *5*	57.9 *21*	2693.679	3$^-$			
		1645.9 *9*	5 *4*	2322.95	2$^+$			
		2311.2 *9*	11 *3*	1657.283	0$^+$			
		2641.60 *22*	79 *42*	1325.5131	2$^+$			
		3364.8 *5*	100 *42*	602.7271	2$^+$			
		3967.7 *3*	84 *26*	0.0	0$^+$			
3984.78	(8)	633.82 *9*	100	3350.958	9$^{(-)}$			
3988.593	11$^{(-)}$	637.96 *9*		3350.958	9$^{(-)}$			E_γ: The uncertainty of the weighted average γ energies was too small, the evaluator assumed an uncertainty of 3 times of that.
		697.826 *5*	100 *4*	3290.763	9$^{(-)}$	Q		Mult.: from γ(θ) in (α,2nγ).
3989.1	0$^+$ to 3$^+$	2664.8 *15*	60 *7*	1325.5131	2$^+$			
		3385.7 *10*	100 *14*	602.7271	2$^+$			
3996.33	0$^+$ to 4$^+$	2670.79 *14*	100	1325.5131	2$^+$			
3998.3	1,2$^+$	3395.7 *10*	71 *60*	602.7271	2$^+$			
		3998.2 *5*	100 *60*	0.0	0$^+$			
4010.8	1,2$^+$	1920.0 *5*	60 *30*	2091.603	2$^+$			
		2352.6 *9*	80 *50*	1657.283	0$^+$			
		4009.9 *6*	100 *40*	0.0	0$^+$			
4030.3	0$^+$ to 3$^+$	3427.5 *3*	100	602.7271	2$^+$			
4032.76	11$^{(-)}$	681.72 *4*	100 *6*	3350.958	9$^{(-)}$			
		742.16 *4*	72 *3*	3290.763	9$^{(-)}$	Q		E_γ: The uncertainty of the energy seems to be too small comparing with the energy difference of corresponding levels. The evaluator assumed 3 times larger uncertainty than reported one. Mult.: from γ(θ) in (α,2nγ).
4034.43	(10)	435.458 *15*	100	3598.975	9$^{(-)}$	D		Mult.: from γ(θ) in (α,2nγ).
4043.80	0$^+$ to 3$^{(-)}$	1296.72 *13*	100 *4*	2747.04	1$^{(-)}$			
		2719.6 *8*	14 *7*	1325.5131	2$^+$			

$^{124}_{52}Te_{72}$-30

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	Comments
4051.40	11	897.03 *4*	100	3154.37	$10^{(+)}$	D	Mult.: from γ(θ) in (α,2nγ).
4051.51	0^+ to 3^+	956.31 *25*	8.7 *13*	3095.07	1^- to 4^+		
		3448.77 *13*	100 *13*	602.7271	2^+		
4057.22	0^+ to 4^+	3454.44 *18*	100	602.7271	2^+		
4090.23	$1,2^+$	3487.2 *3*	92 *4*	602.7271	2^+		
		4090.24 *17*	100 *9*	0.0	0^+		E_γ,I_γ: from (n,γ) E=thermal.
4099.2	0^+ to 3^+	2006.8 *9*	80 *20*	2091.603	2^+		
		3496.6 *4*	100 *26*	602.7271	2^+		
4114.08	(9,10)	1449.639 *25*	100	2664.43	8^+	(D)	Mult.: from γ(θ) in (α,2nγ).
4114.37	0^+ to 4^+	3511.59 *13*	100 *30*	602.7271	2^+		
4118.1	$1,2^+$	4118.0	100	0.0	0^+		
4128.1	$1,2^+$	2803.2 *7*	67 *33*	1325.5131	2^+		
		3525.3 *9*	100 *80*	602.7271	2^+		
		4127.8 *4*	50 *25*	0.0	0^+		
4142.20	$2^+,3,4^+$	2049.7 *8*	6 *4*	2091.603	2^+		
		2816.7 *3*	38 *6*	1325.5131	2^+		
		2893.60 *14*	100 *3*	1248.5811	4^+		
4144.48	0^+ to $3^{(-)}$	1397.43 *16*	22.7 *18*	2747.04	$1^{(-)}$		
		2053.5 *6*	4.6 *23*	2091.603	2^+		
		2104.9 *3*	100 *23*	2039.421	2^+		
4146.51	$1,2^+$	2821.14 *24*	27 *4*	1325.5131	2^+		
		3543.60 *22*	100 *40*	602.7271	2^+		
		4145.6 *12*	5 *4*	0.0	0^+		
4155.38	2^+ to 6^+	2906.76 *13*	100	1248.5811	4^+		
4170.7	$1,2^+$	1074.3 *9*	15.4 *19*	3095.07	1^- to 4^+		
		2845.7 *4*	54 *30*	1325.5131	2^+		
		3566.8 *10*	100 *10*	602.7271	2^+		
		4170.5 *5*	69 *50*	0.0	0^+		
4173.68		822.72 *3*	100	3350.958	$9^{(-)}$	(D)	Mult.: from γ(θ) in (α,2nγ).
4177.79	$1,2^+$	1082.89 *24*	75 *13*	3095.07	1^- to 4^+		
		3574.6 *5*	75 *30*	602.7271	2^+		
		4176.3 *10*	100 *80*	0.0	0^+		
4195.06	1,2	1448.1 *3*	71 *16*	2747.04	$1^{(-)}$		
		1493.5 *5*	21 *11*	2701.61	2^-		
		1595.0 *5*	64 *16*	2600.95	1^+		
		2869.5 *7*	36 *21*	1325.5131	2^+		
		3591.1 *5*	100 *9*	602.7271	2^+		
4215.4	$1,2^+$	1614.3 *5*	100 *6*	2600.95	1^+		
		3613.1 *8*	31 *13*	602.7271	2^+		
		4215.2 *5*	69 *40*	0.0	0^+		
4229.22	$1,2^+$	1134.1 *3*	10.5 *12*	3095.07	1^- to 4^+		

$^{124}_{52}Te_{72}$-31

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Mult.[a]	Comments
4229.22	1,2$^+$	3626.4 *6*	68 *16*	602.7271	2$^+$		
		4229.2 *3*	100 *60*	0.0	0$^+$		
4238.39		387.855 *13*	100	3850.54	11	(D)	Mult.: from γ(θ) in (α,2nγ).
4241.0	0$^+$ to 4$^+$	3638.2 *15*	100	602.7271	2$^+$		
4244.8	0$^+$ to 3$^+$	2062.8 *8*	36 *5*	2182.41	2$^+$		
		2918.9 *6*	100 *18*	1325.5131	2$^+$		
		3642.3 *8*	18 *14*	602.7271	2$^+$		
4270.3	1,2$^+$	3665.4 *12*	100 *60*	602.7271	2$^+$		
		4270.6 *5*	100 *60*	0.0	0$^+$		
4286.07		253.337 *23*	38.0 *21*	4032.76	11$^{(-)}$	D	Mult.: from γ(θ) in (α,2nγ).
		297.465 *13*	100.0 *23*	3988.593	11$^{(-)}$	D	Mult.: from γ(θ) in (α,2nγ).
4289.40	2$^+$	2963.59 *13*	67 *5*	1325.5131	2$^+$		
		3042.0 *9*	50 *15*	1248.5811	4$^+$		
		3687.00 *18*	100 *10*	602.7271	2$^+$		
		4290.8 *10*	50 *25*	0.0	0$^+$		
4302.61	0 to 3$^+$	2120.18 *20*	100	2182.41	2$^+$		
4324.4	1,2$^+$	3721.5 *3*	100 *20*	602.7271	2$^+$		
		4324.5 *5*	73 *9*	0.0	0$^+$		
4327.4	1,2$^+$	3723.9 *5*	100 *50*	602.7271	2$^+$		
		4328.0 *5*	100 *50*	0.0	0$^+$		
4375.47	0$^+$ to 4$^+$	3772.68 *15*	100	602.7271	2$^+$		
4379.47	0$^+$ to 3$^+$	1283.65 *25*	5.9 *9*	3095.07	1$^-$ to 4$^+$		
		2195.1 *10*	24 *3*	2182.41	2$^+$		
		3053.98 *12*	76.5 *24*	1325.5131	2$^+$		E_γ: poor fit. Level-energy difference=3053.60.
		3776.96 *17*	100 *9*	602.7271	2$^+$		E_γ: poor fit. Level-energy difference=3776.36.
4415.32	0$^+$ to 3$^+$	3812.53 *16*	100	602.7271	2$^+$		
4439.4	0$^+$ to 3$^{(-)}$	1693.0 *10*	50 *25*	2747.04	1$^{(-)}$		
		3836.4 *5*	100 *7*	602.7271	2$^+$		
4444.8	0$^+$ to 3$^+$	3842.0 *5*	100	602.7271	2$^+$		
4453.7	0$^+$ to 3$^+$	3850.9 *3*	100	602.7271	2$^+$		
4487.3	1,2$^+$	3160.8 *10*	100 *20*	1325.5131	2$^+$		
		4487.4 *5*	86 *40*	0.0	0$^+$		
4501.24	0$^+$ to 3$^+$	3175.71 *16*	100 *11*	1325.5131	2$^+$		
		3898.0 *6*	58 *30*	602.7271	2$^+$		
4504.3	0 to 2	1757.3 *7*	100	2747.04	1$^{(-)}$		
4524.4	0$^+$ to 3$^+$	3921.6 *3*	100	602.7271	2$^+$		
4528.1	0$^+$ to 3$^+$	3202.7 *3*	24 *6*	1325.5131	2$^+$		
		3924.5 *7*	100 *50*	602.7271	2$^+$		
4551.5	1,2$^+$	4551.4 *3*	100	0.0	0$^+$		
4568.9	1,2$^+$	1967.2 *8*	37.5 *25*	2600.95	1$^+$		
		3243.8 *5*	100 *25*	1325.5131	2$^+$		

$^{124}_{52}Te_{72}$-32

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π	Comments
4568.9	1,2$^+$	3966.1 *5*	44 *25*	602.7271	2$^+$	
		4568.8 *5*	31 *25*	0.0	0$^+$	
4580.97	1,2$^+$	2489.6 *5*	26 *17*	2091.603	2$^+$	
		4580.83 *22*	100 *5*	0.0	0$^+$	
4598.5	1,2$^+$	3995.8 *3*	100 *60*	602.7271	2$^+$	
		4598.2 *5*	100 *60*	0.0	0$^+$	
4630.1	1,2$^+$	4027.8 *7*	100 *50*	602.7271	2$^+$	
		4629.1 *10*	67 *50*	0.0	0$^+$	
4643.46	1,2$^+$	2319.2 *9*	18 *15*	2322.95	2$^+$	
		2551.5 *4*	45 *10*	2091.603	2$^+$	
		3318.2 *5*	45 *8*	1325.5131	2$^+$	
		4042.7 *8*	100 *50*	602.7271	2$^+$	
		4643.2 *5*	36 *30*	0.0	0$^+$	
4698.0	1,2$^+$	4094.4 *8*	100 *60*	602.7271	2$^+$	
		4698.5 *7*	100 *50*	0.0	0$^+$	I_γ: uncertainty of 0% in table I of 2006Vo09 seems a misprint, compilers assign 50% for a weak γ ray.
4701.95	0$^+$ to 4$^+$	4099.15 *21*	100	602.7271	2$^+$	
4712.90	0$^+$ to 3$^+$	4110.10 *17*	100	602.7271	2$^+$	
4723.5	0$^+$ to 3$^+$	3398.3 *5*	60 *30*	1325.5131	2$^+$	
		4120.4 *4*	100 *30*	602.7271	2$^+$	
4737.28	0$^+$ to 4$^+$	3411.72 *21*	100	1325.5131	2$^+$	
4739.63	1,2$^+$	3413.6 *8*	16 *12*	1325.5131	2$^+$	
		4136.87 *15*	100 *5*	602.7271	2$^+$	
		4739.48 *22*	72 *30*	0.0	0$^+$	
4754.71	1,2$^+$	4152.6 *3*	100 *17*	602.7271	2$^+$	
		4754.28 *21*	67 *6*	0.0	0$^+$	
4764.4	1,2$^+$	1321.0 *5*	24 *6*	3443.05	1,2$^+$	
		2581.6 *5*	100 *6*	2182.41	2$^+$	
		4766.8 *9*	33 *19*	0.0	0$^+$	
4811.2	0$^+$ to 3$^+$	3485.6 *15*	100	1325.5131	2$^+$	
4818.3	0$^+$ to 3$^+$	2636.2 *5*	100 *50*	2182.41	2$^+$	
		3489.8 *14*	80 *80*	1325.5131	2$^+$	
4883.27	1,2$^+$	4281.4 *5*	31 *6*	602.7271	2$^+$	
		4882.99 *22*	100 *4*	0.0	0$^+$	
4889.30	1,2$^+$	4286.33 *16*	100 *6*	602.7271	2$^+$	
		4890.8 *5*	79 *6*	0.0	0$^+$	E_γ: poor fit. Level-energy difference=4889.3.
4897.6	0$^+$ to 3$^+$	4294.8 *4*	100	602.7271	2$^+$	
4911.41	2$^+$,3$^+$	1811.0 *4*	50 *10*	3100.67	1,2$^+$	
		3586.0 *3*	100 *16*	1325.5131	2$^+$	
		3661.9 *5*	88 *50*	1248.5811	4$^+$	
4915.7	1,2$^+$	3034.0 *6*	71 *40*	1882.92	0$^+$	
		4313.0 *7*	24 *12*	602.7271	2$^+$	

$^{124}_{52}Te_{72}$-33

Adopted Levels, Gammas (continued)

γ(^{124}Te) (continued)

E_i(level)	J_i^π	E_γ †	I_γ @	E_f	J_f^π
4915.7	1,2$^+$	4915.2 *3*	100 *24*	0.0	0$^+$
4932.0	0$^+$ to 3$^+$	4329.2 *5*	100	602.7271	2$^+$
4941.8	1,2$^+$	4941.7 *4*	100	0.0	0$^+$
4962.51	0$^+$ to 3$^+$	4359.70 *16*	100	602.7271	2$^+$
4979.58	0$^+$ to 3$^+$	4376.77 *17*	100	602.7271	2$^+$
4984.7	0$^+$ to 3$^+$	1884.0 *8*	100	3100.67	1,2$^+$
4990.4	0$^+$ to 3$^+$	3664.8 *3*	100	1325.5131	2$^+$
4993.51	1,2$^+$	4993.40 *21*	100	0.0	0$^+$
5036.9	1,2$^+$	4434.4 *5*	100 *40*	602.7271	2$^+$
		5035.6 *10*	11 *4*	0.0	0$^+$
5050.72	1,2$^+$	5050.61 *25*	100	0.0	0$^+$
5075.83	1,2$^+$	3750.1 *5*	64 *40*	1325.5131	2$^+$
		4472.1 *5*	100 *40*	602.7271	2$^+$
		5076.1 *3*	45 *9*	0.0	0$^+$
5127.29	0$^+$ to 4$^+$	3801.71 *19*	100	1325.5131	2$^+$
5132.3	1,2$^+$	4529.3 *10*	100 *50*	602.7271	2$^+$
5132.3	1,2$^+$	5132.4 *10*	100 *50*	0.0	0$^+$
5155.94	1,2$^+$	2409.1 *5*	53 *9*	2747.04	1$^{(-)}$
		2701.78 *14*	67 *4*	2454.069	2$^+$
		3831.3 *5*	100 *50*	1325.5131	2$^+$
		4553.0 *5*	47 *30*	602.7271	2$^+$
		5154.3 *11*	27 *16*	0.0	0$^+$
5169.7	1,2$^+$	4567.3 *5*	100 *8*	602.7271	2$^+$
		5169.1 *5*	47 *30*	0.0	0$^+$
5285.5	0$^+$ to 4$^+$	3959.9 *6*	100	1325.5131	2$^+$
5319.2	0$^+$ to 3$^+$	831.9 *5*	100	4487.3	1,2$^+$
5423.9	0$^+$ to 3$^+$	4821.1 *4*	100	602.7271	2$^+$
5445.4	1,2$^+$	4119.6 *4*	100 *40*	1325.5131	2$^+$
		5447.7 *15*	29 *21*	0.0	0$^+$
5488.5	1,2$^+$	5488.4 *6*	100	0.0	0$^+$
5751.40	0$^+$ to 3$^+$	5148.56 *23*	100	602.7271	2$^+$

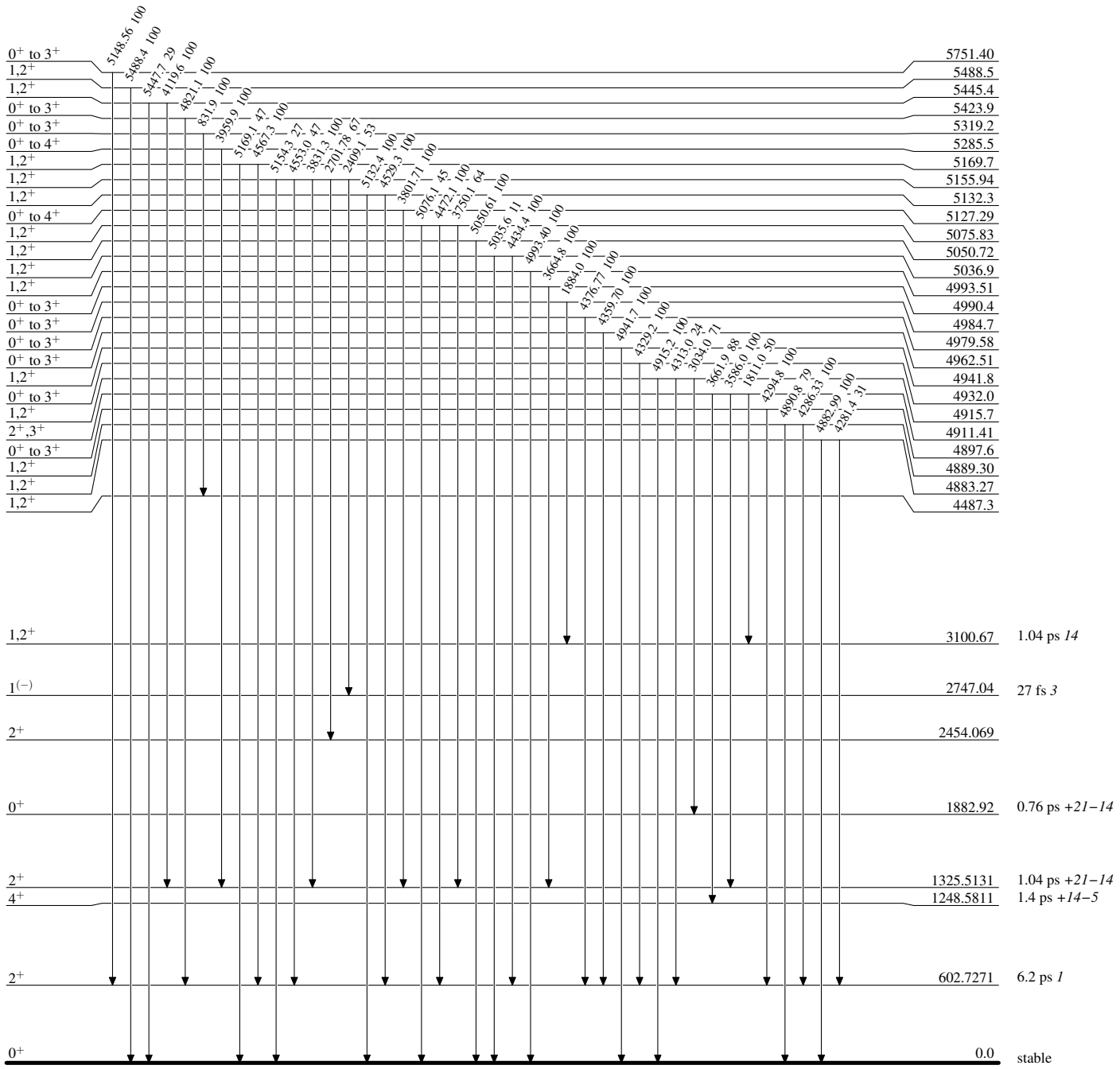
† Average from ^{124}Sb β^- decays (60.20 d, 93 s), ^{124}I ε decay and (n,γ), (α,2nγ) and (n,n′γ), unless otherwise noted.
‡ The final level of the transition was just assumed by evaluator. And it should be one of the 2039[2$^+$] or 2039[3$^+$] level.
# From (n,γ) E=thermal. Energy values are recalculated because 2000Do11 gives them as relative to the transition from the first 2$^+$ state to the ground state.
@ Average from ^{124}Sb β^- decays (60.20 d, 93 s), ^{124}I ε decay and (n,γ), (α,2nγ) and (n,n′γ), unless otherwise noted.
& From (n,γ).
[a] From γγ(θ) and α(K)exp in ^{124}Sb β^- decay (60.20 d), α(K)exp in ^{124}I ε decay and (n,γ), and γ(θ) in (α,2nγ), unless otherwise indicated.
[b] From nuclear orientation in ^{124}Sb β^- decay (60.20 d), unless otherwise indicated.
[c] 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.
[d] Multiply placed.
[e] Multiply placed with undivided intensity.
[f] Multiply placed with intensity suitably divided.
[g] Placement of transition in the level scheme is uncertain.

$^{124}_{52}Te_{72}$-34

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

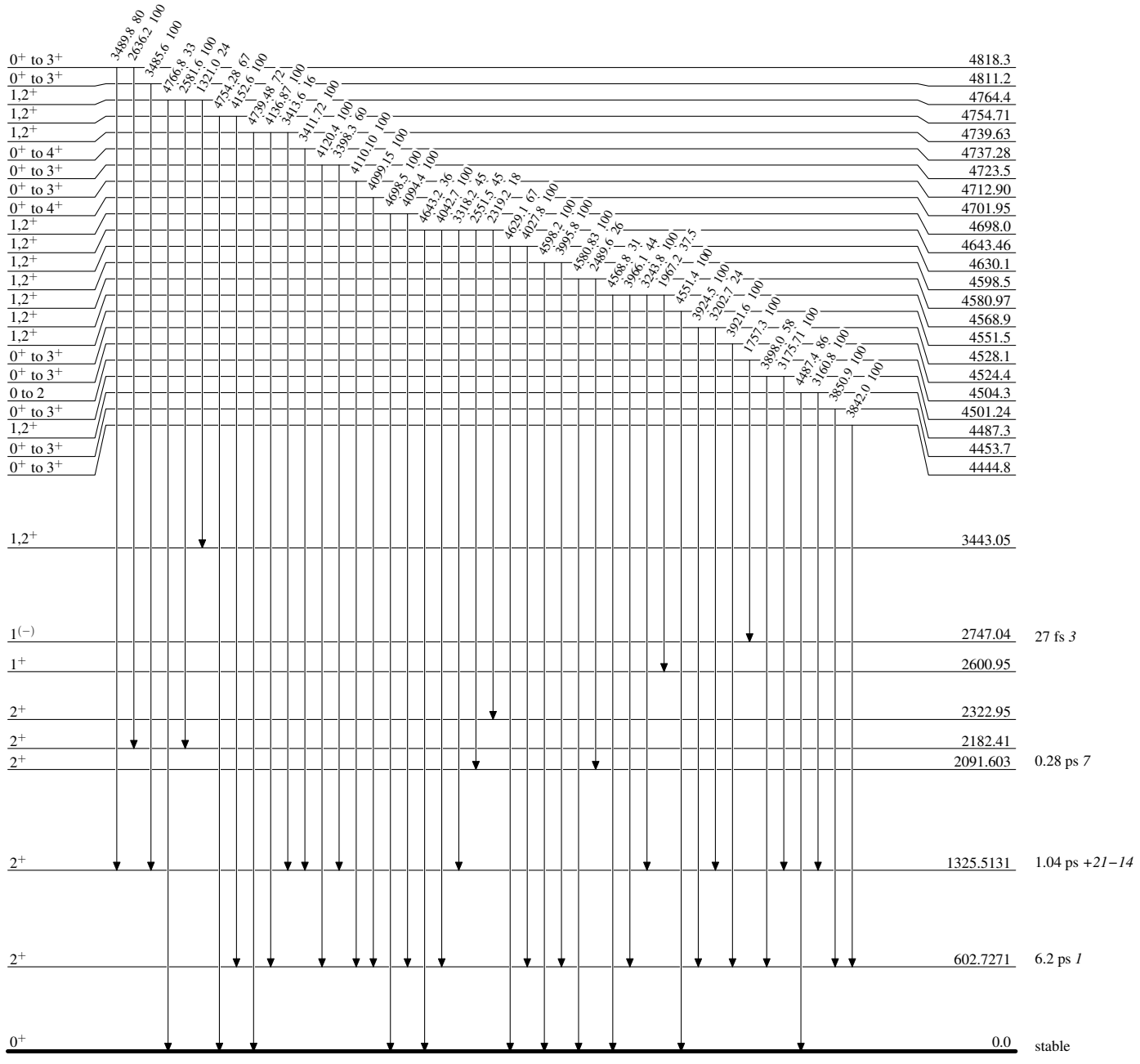


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

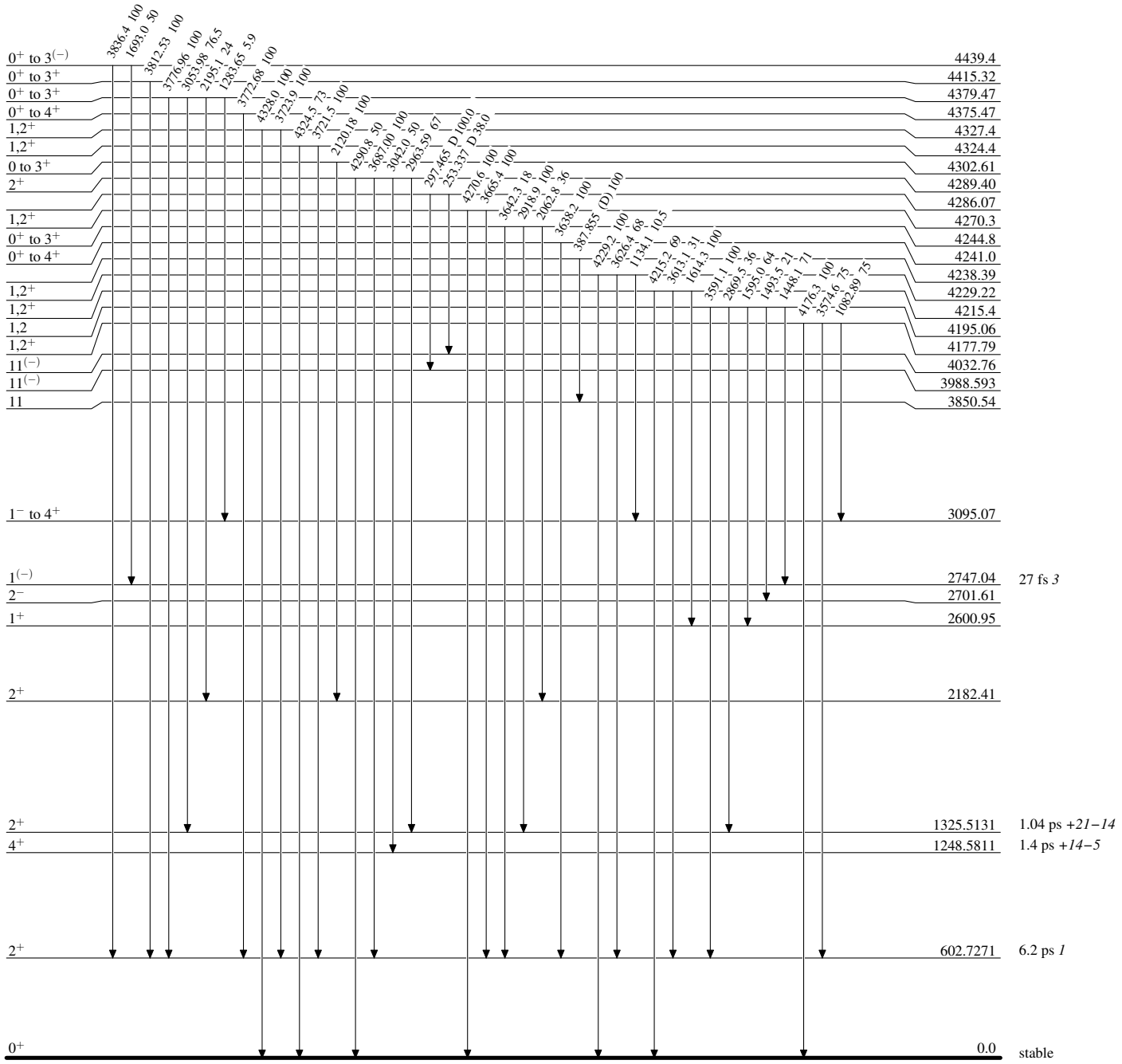


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

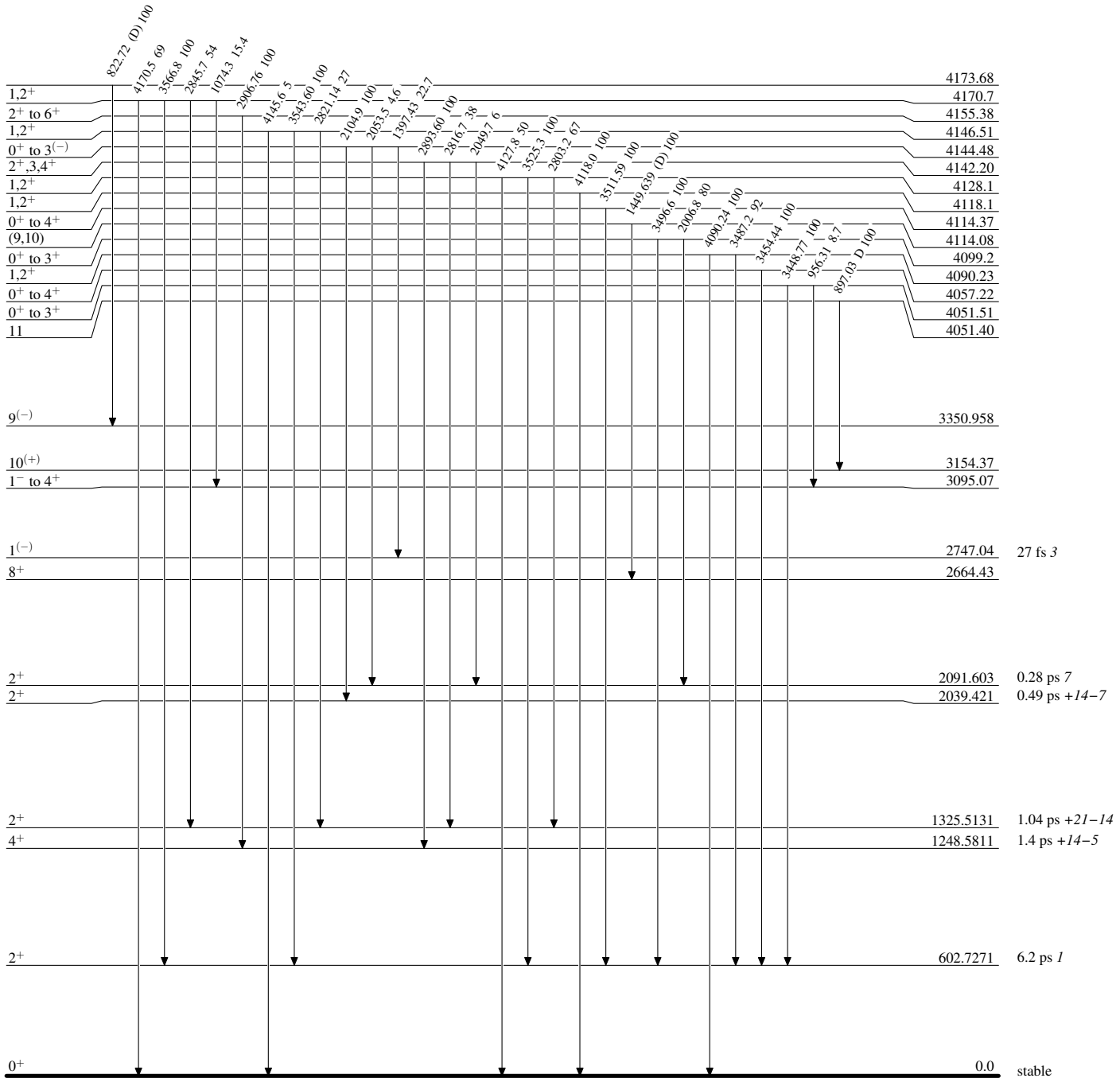


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

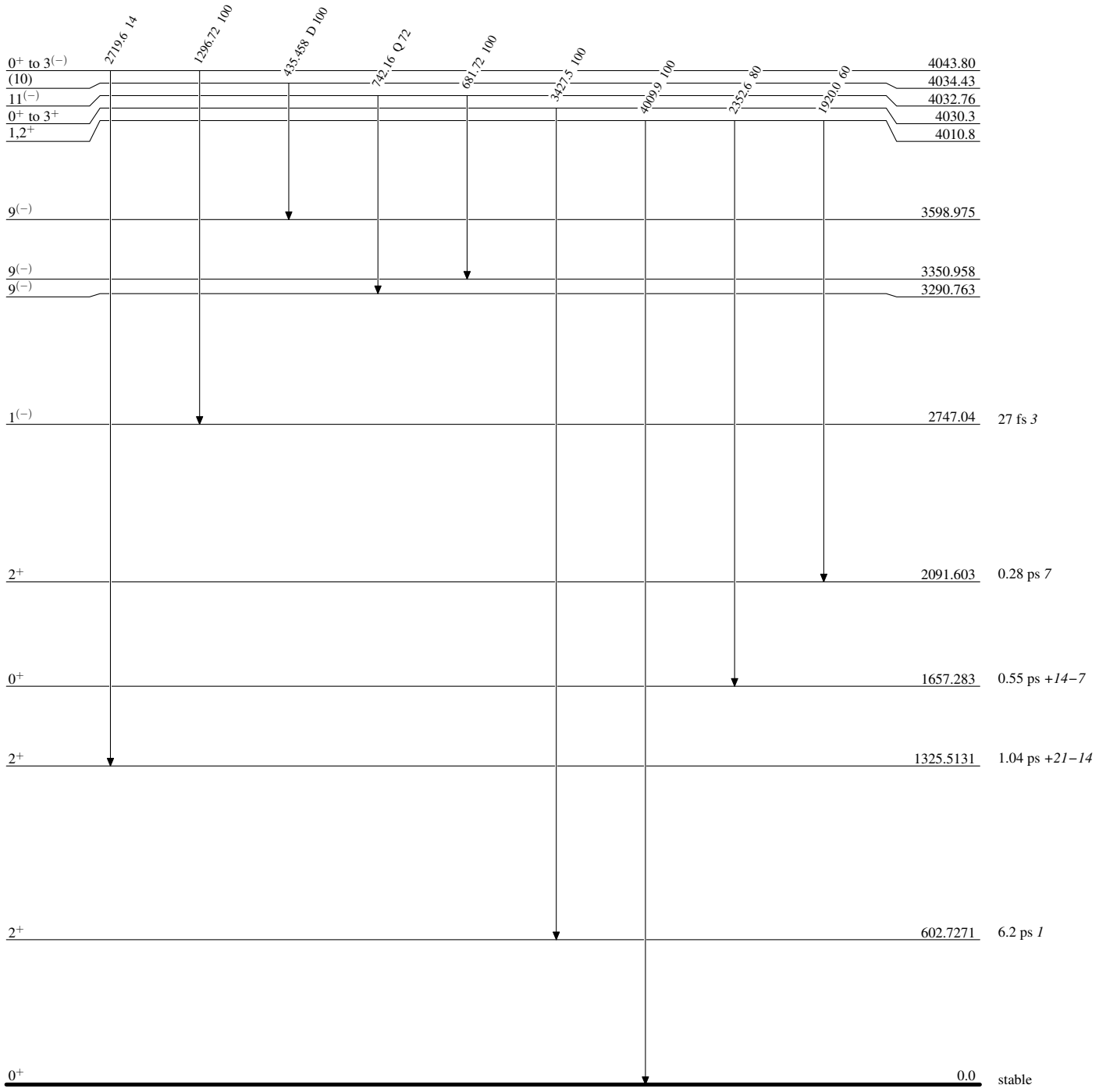


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

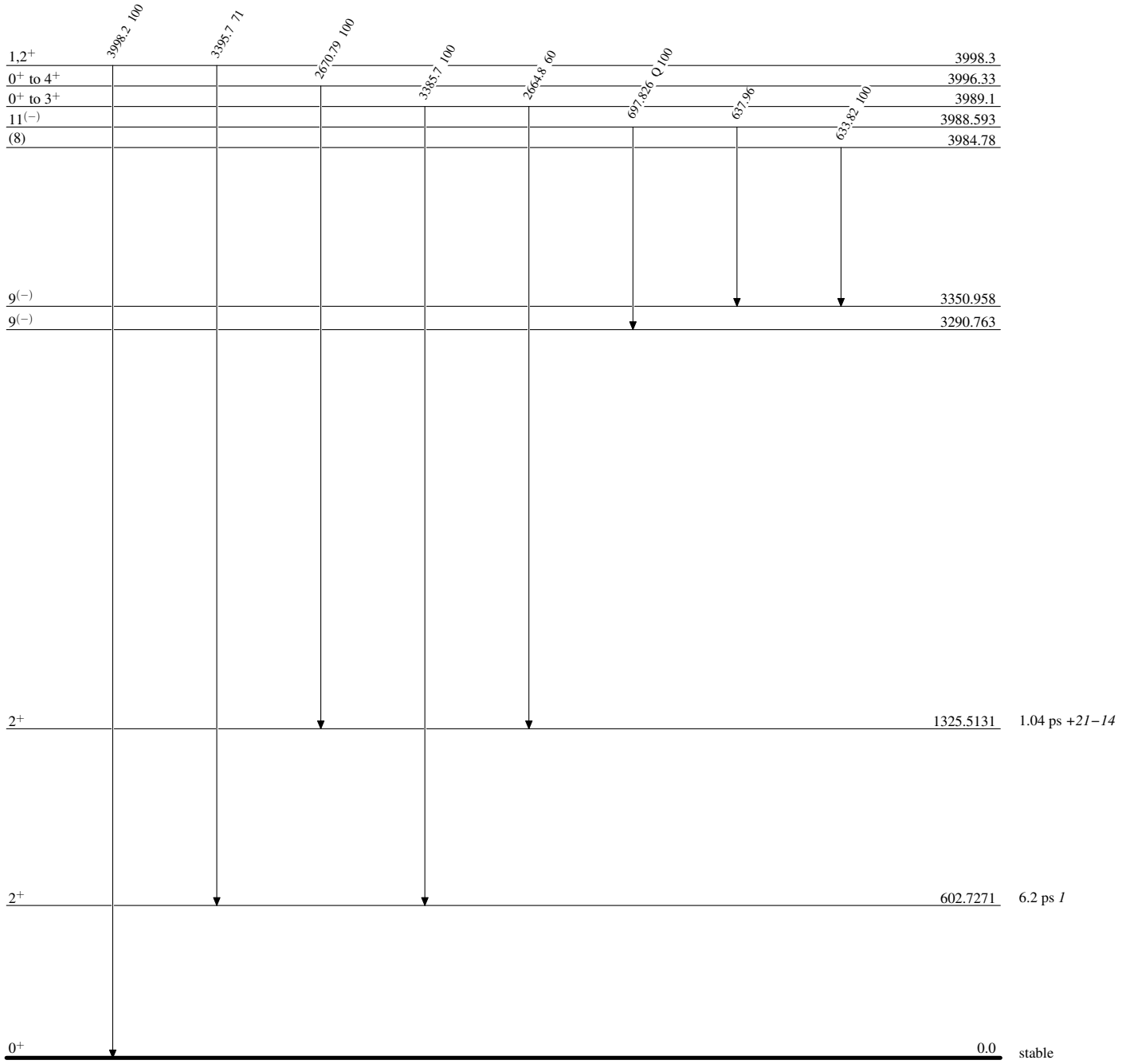


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

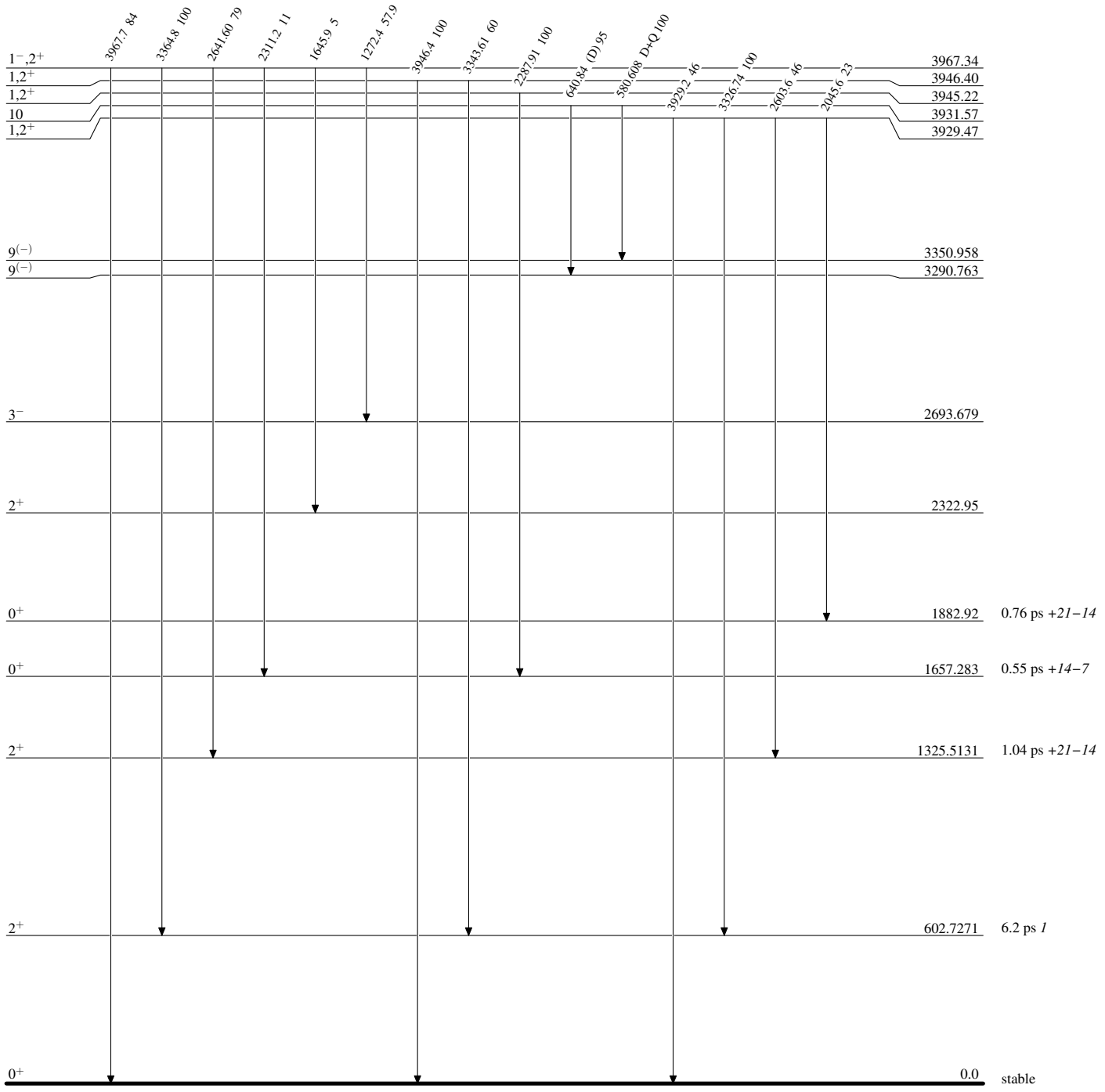


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

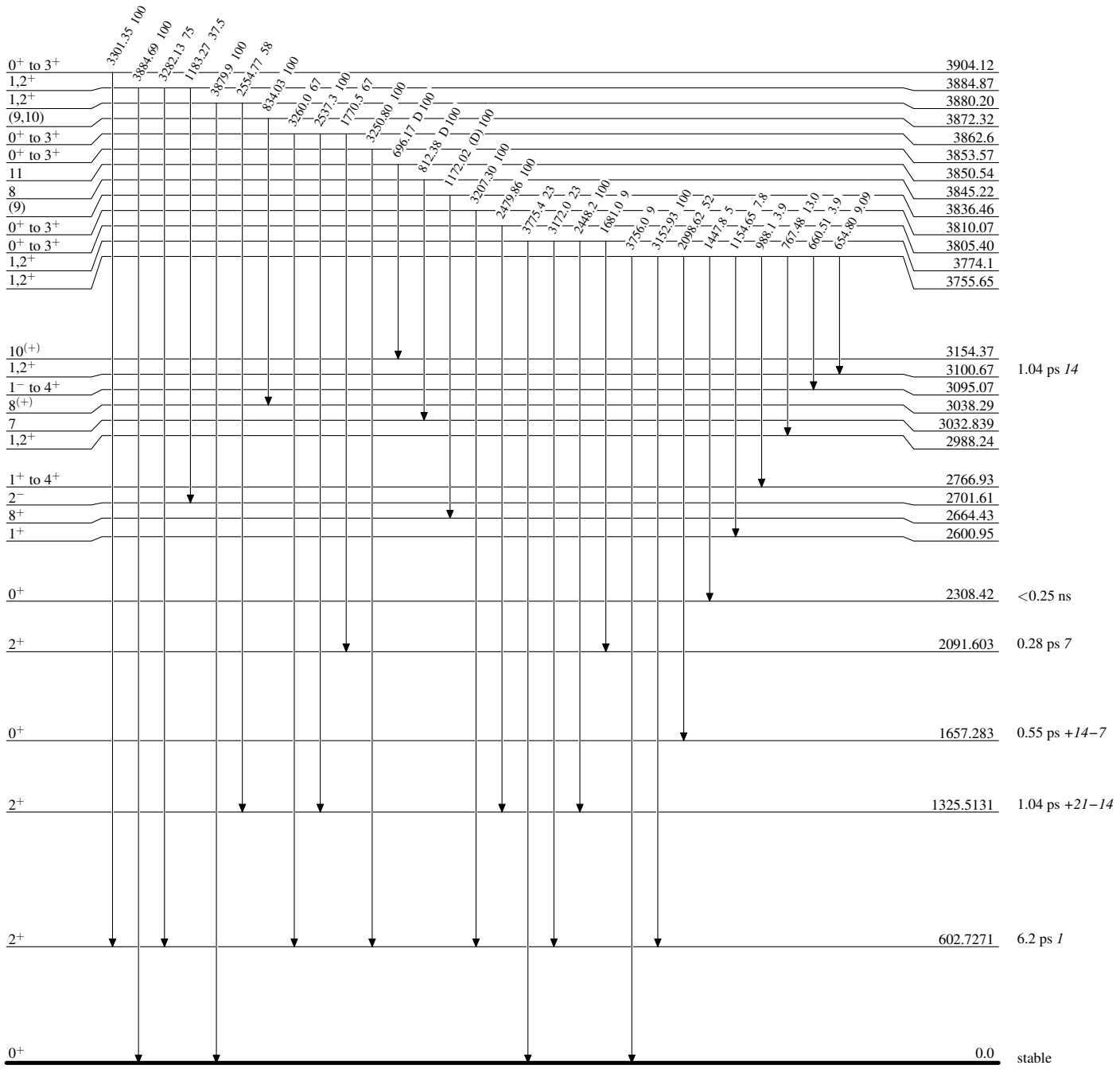


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

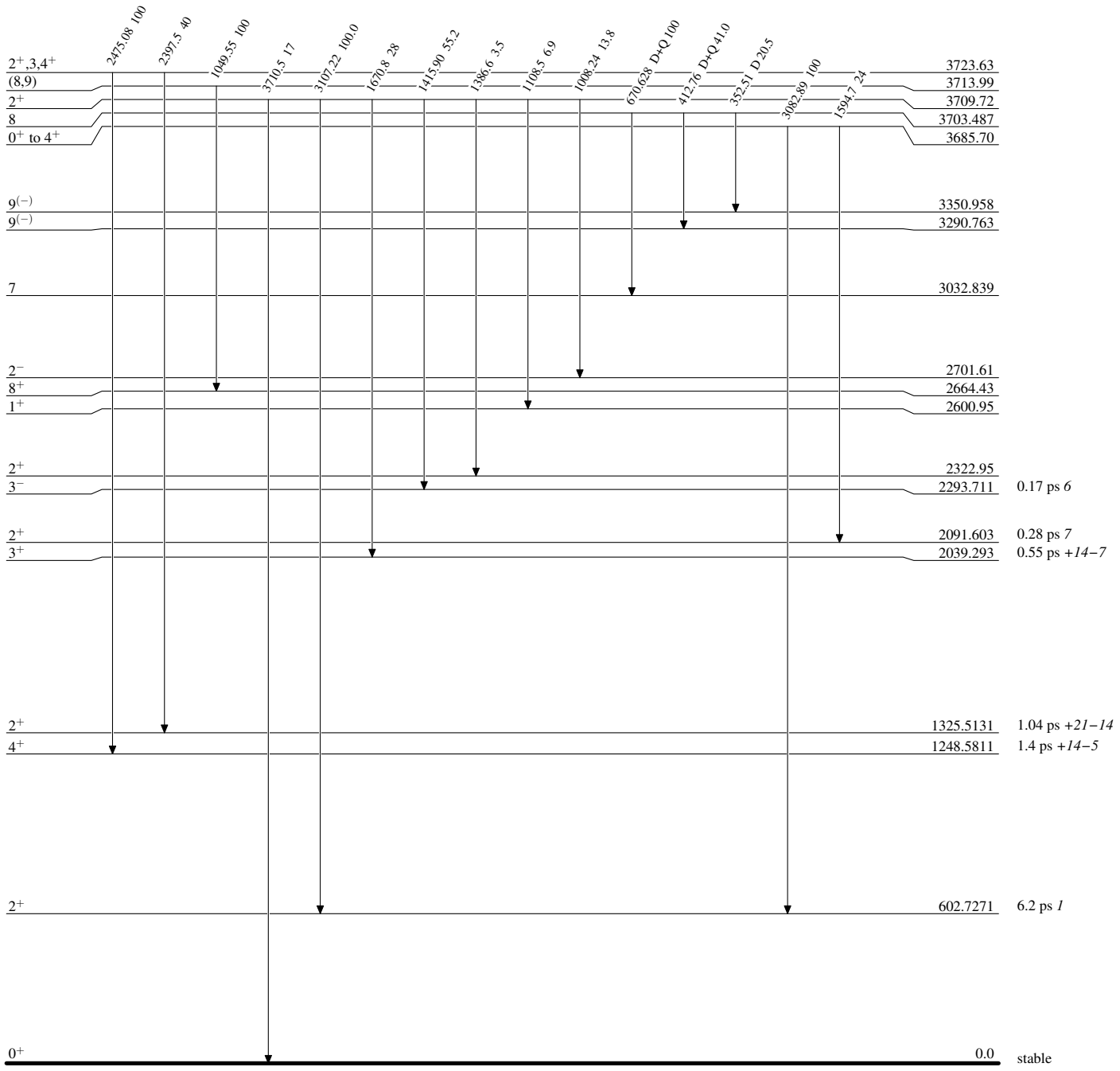


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

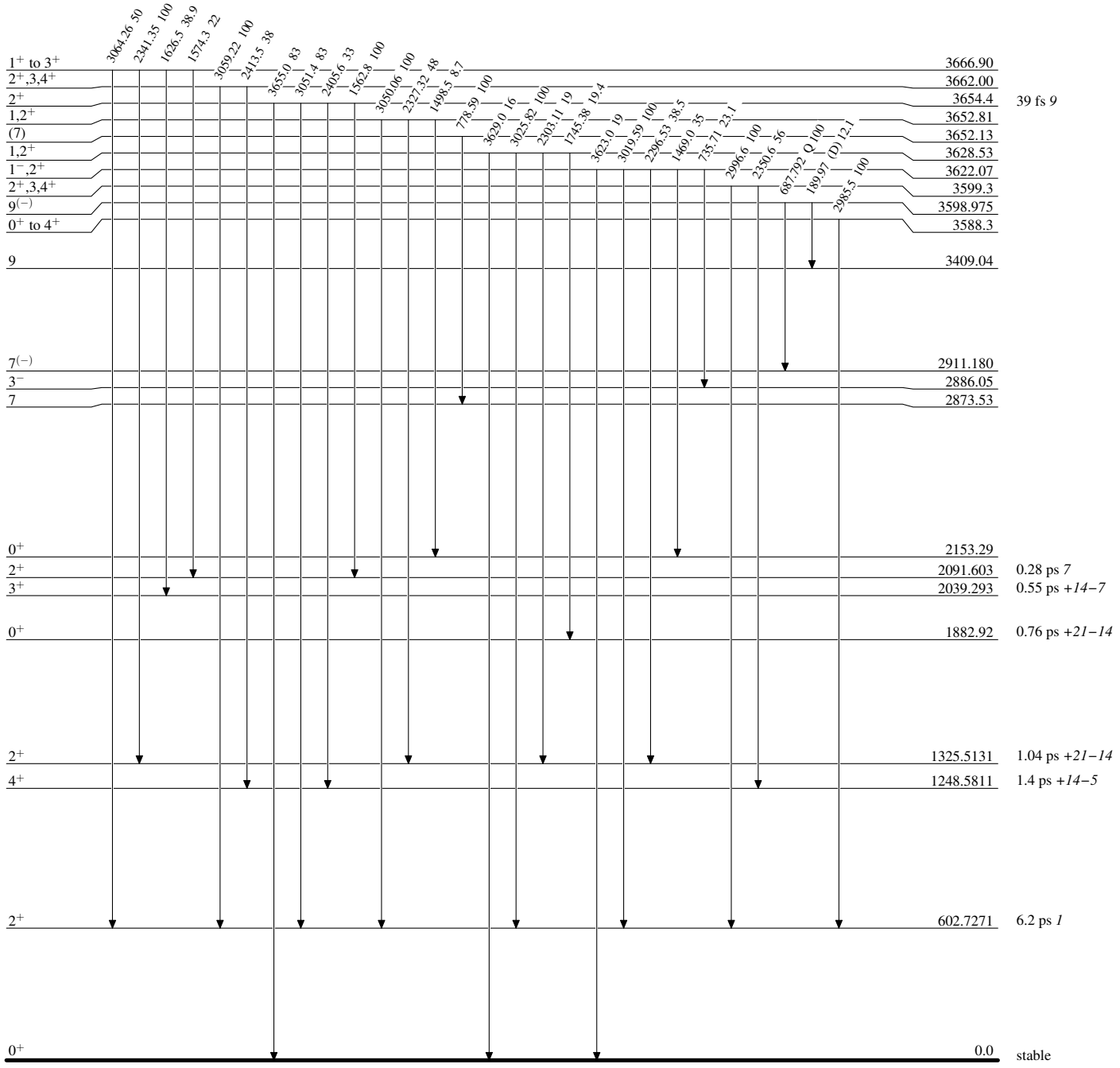


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

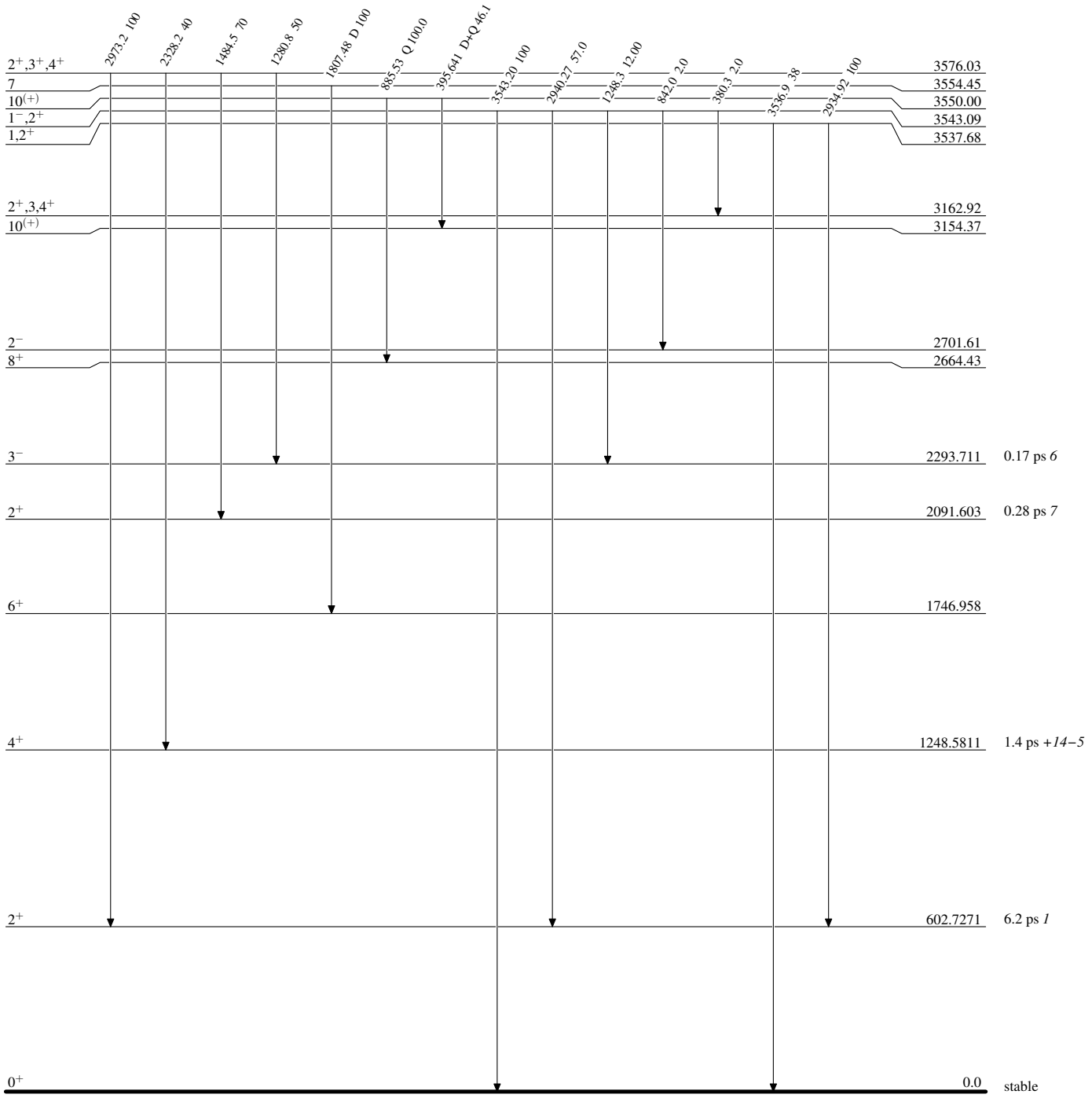


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

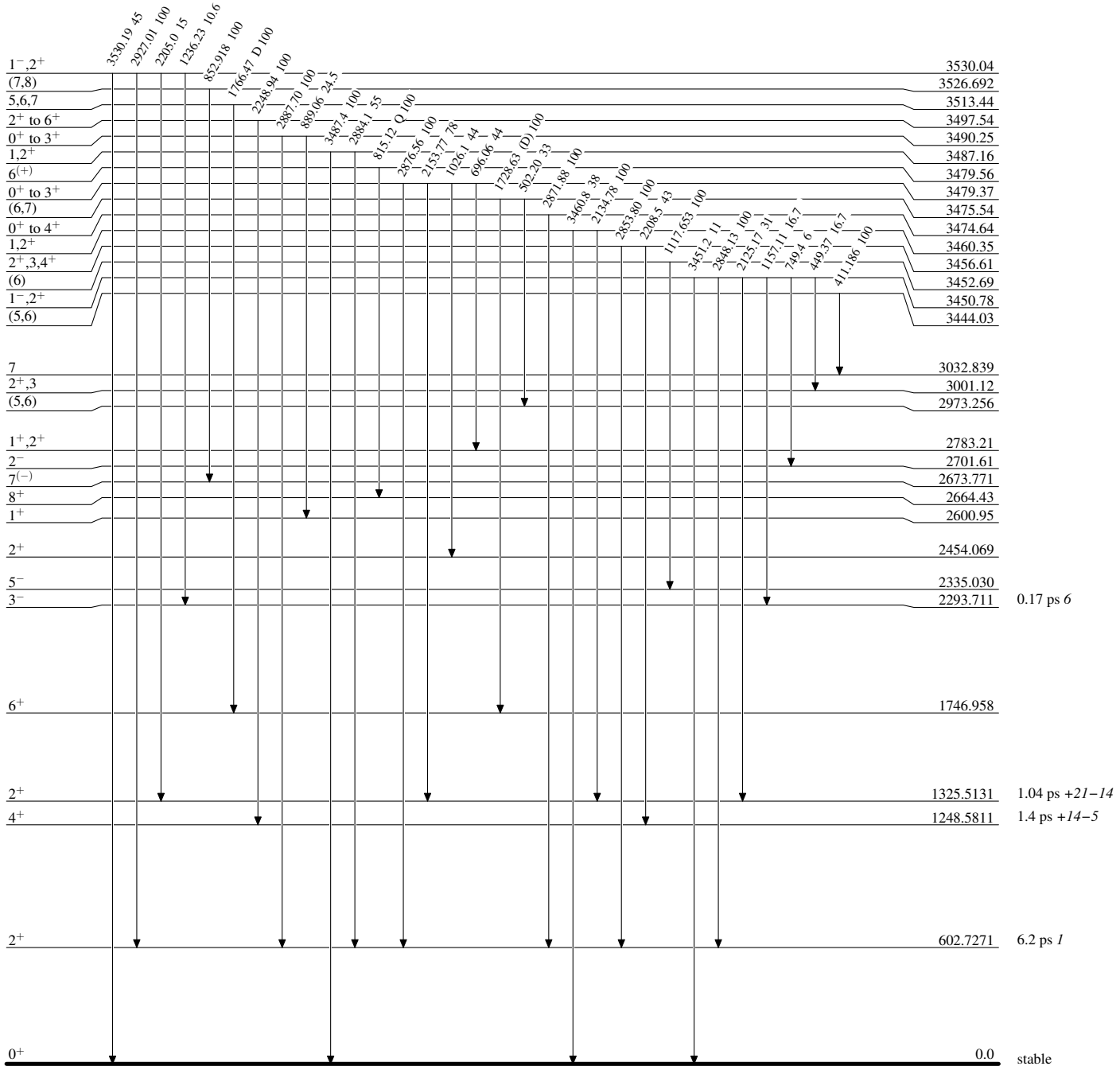


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

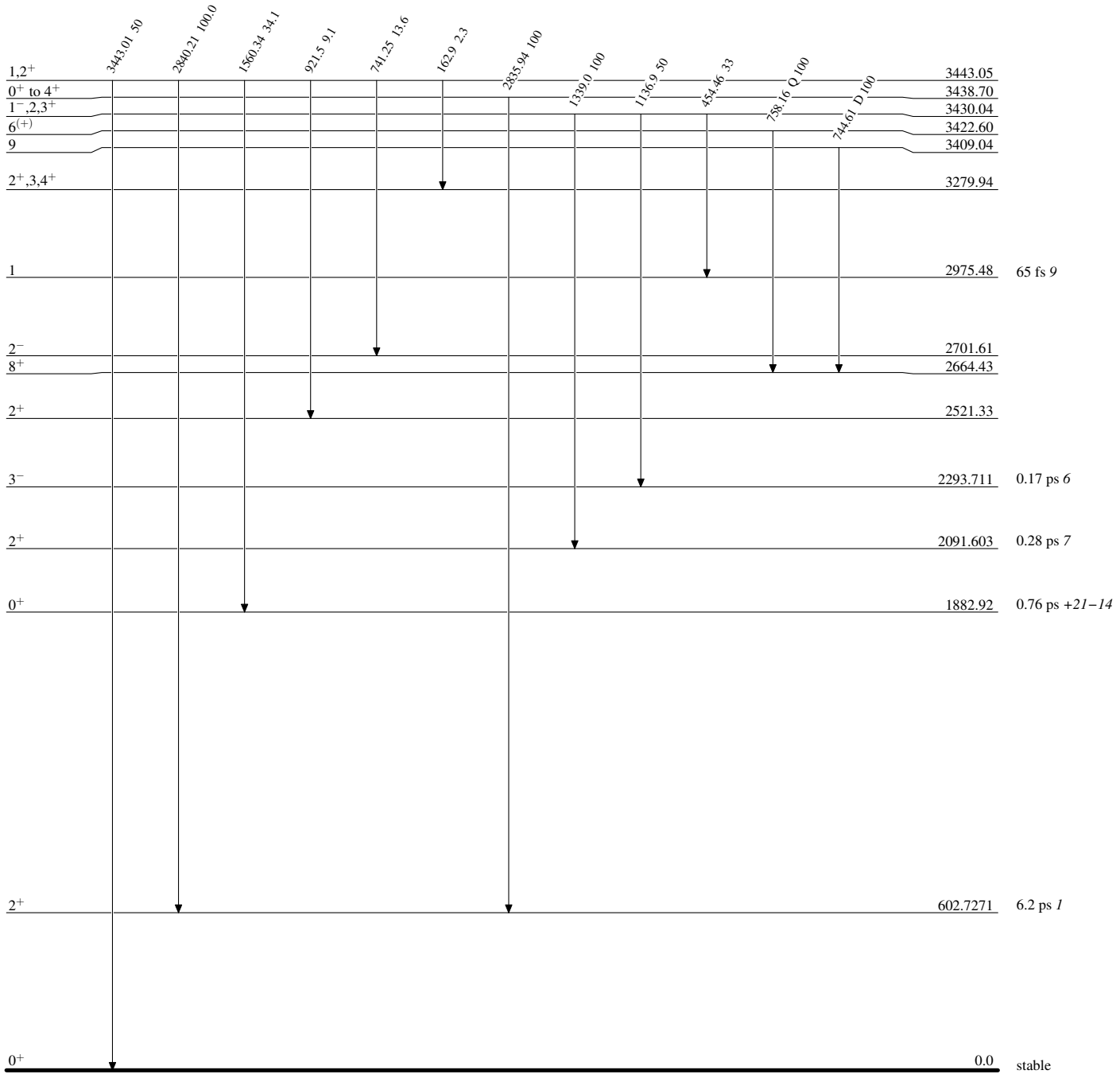


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

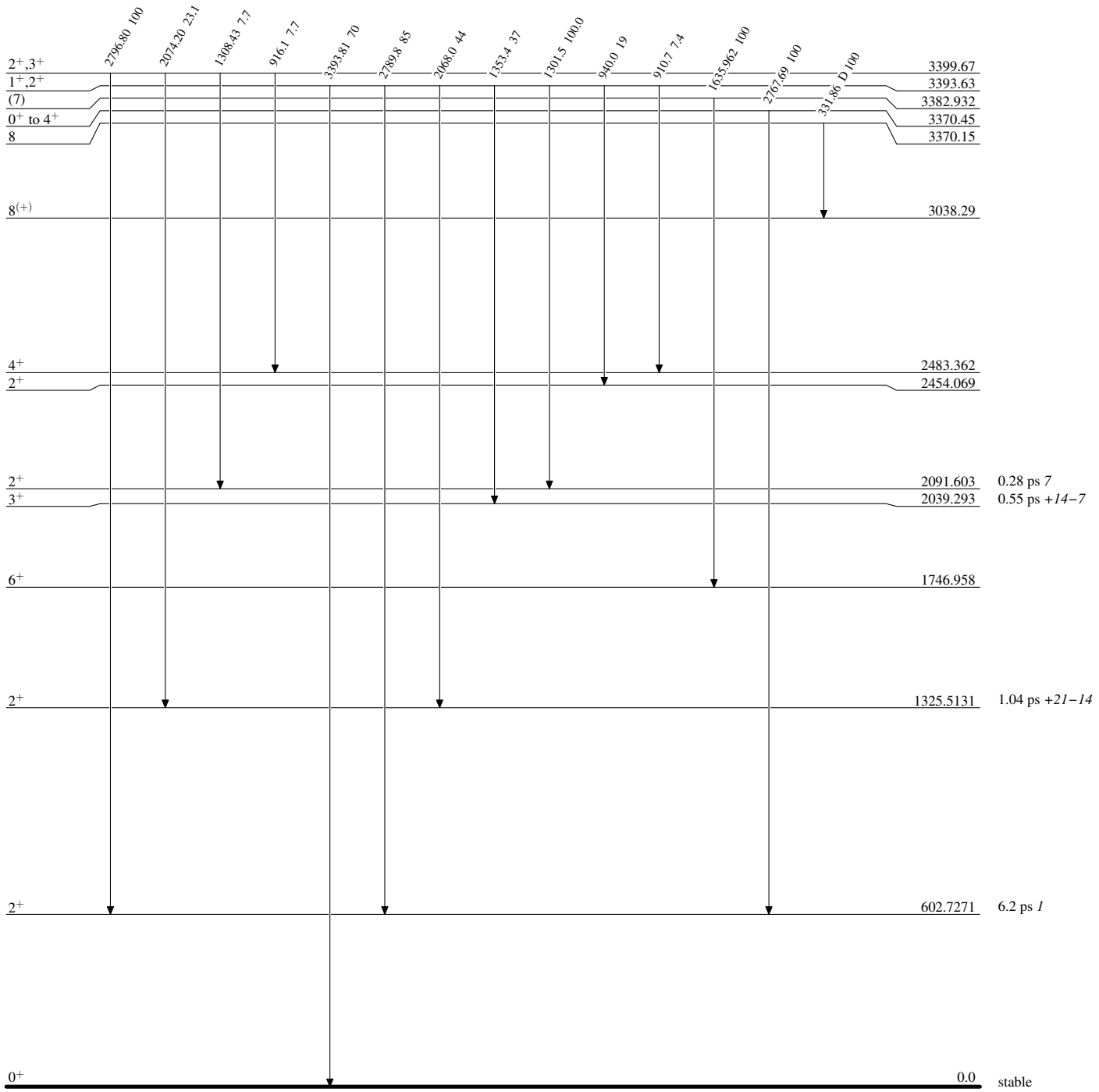


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

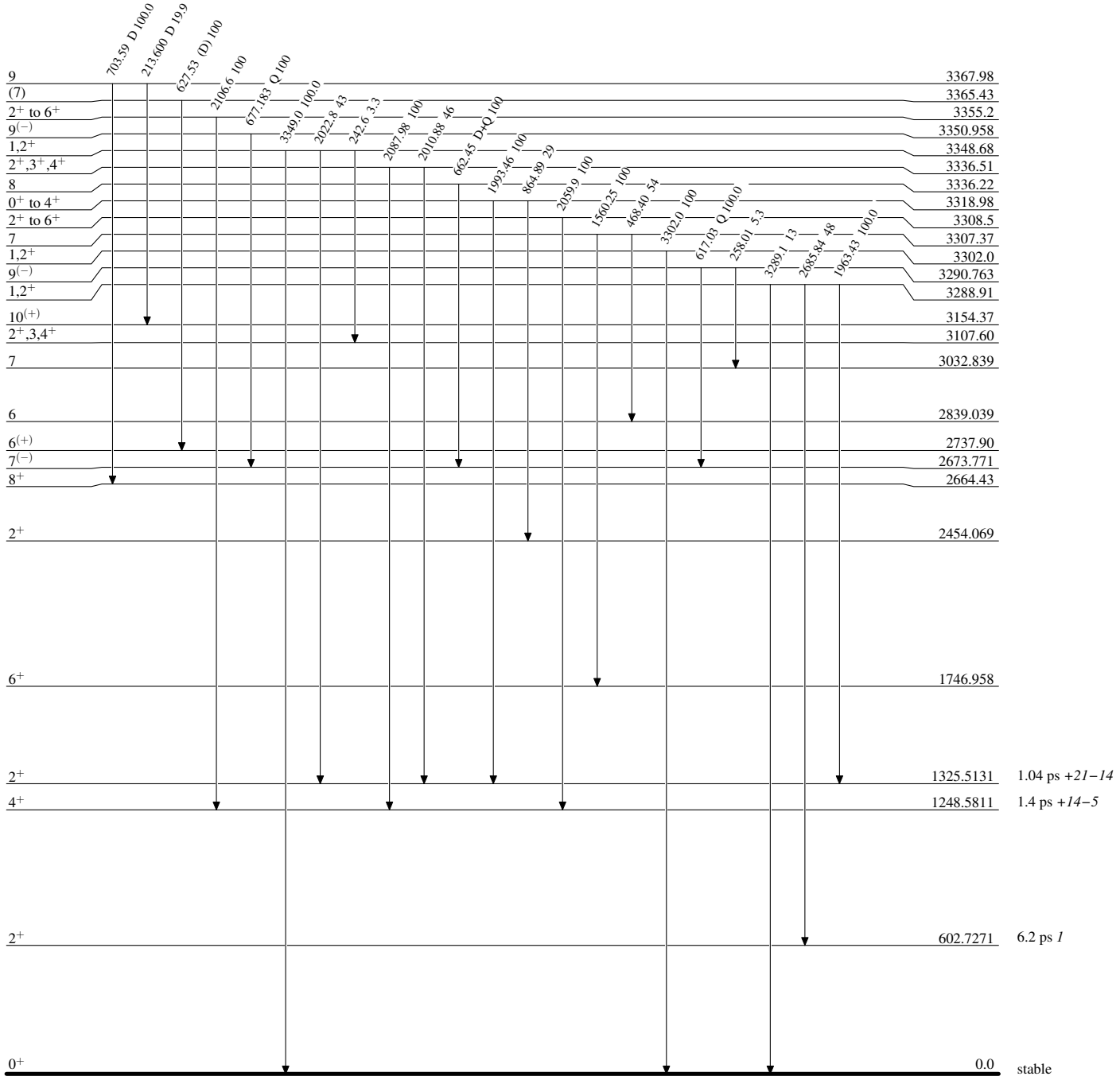


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

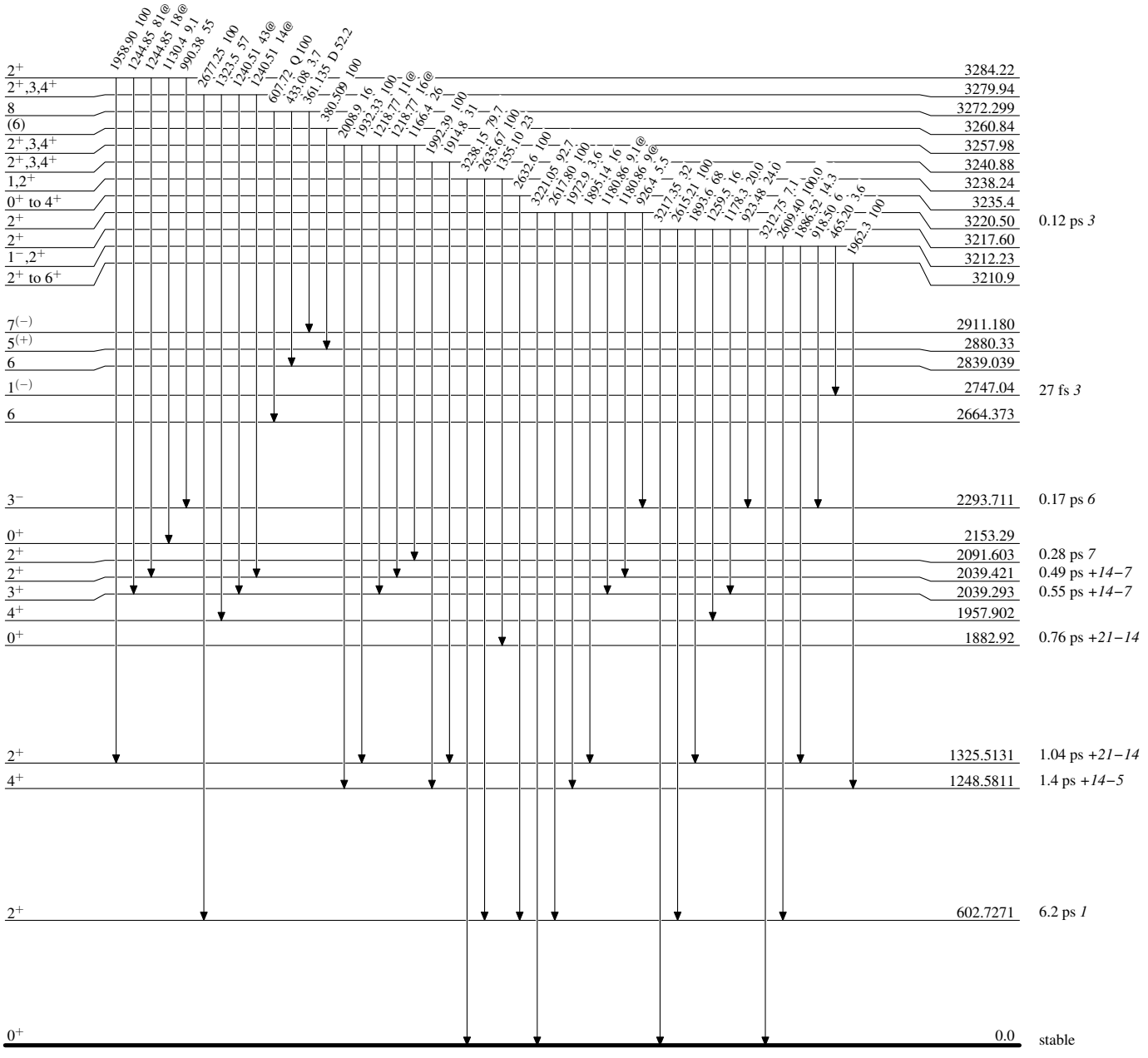


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

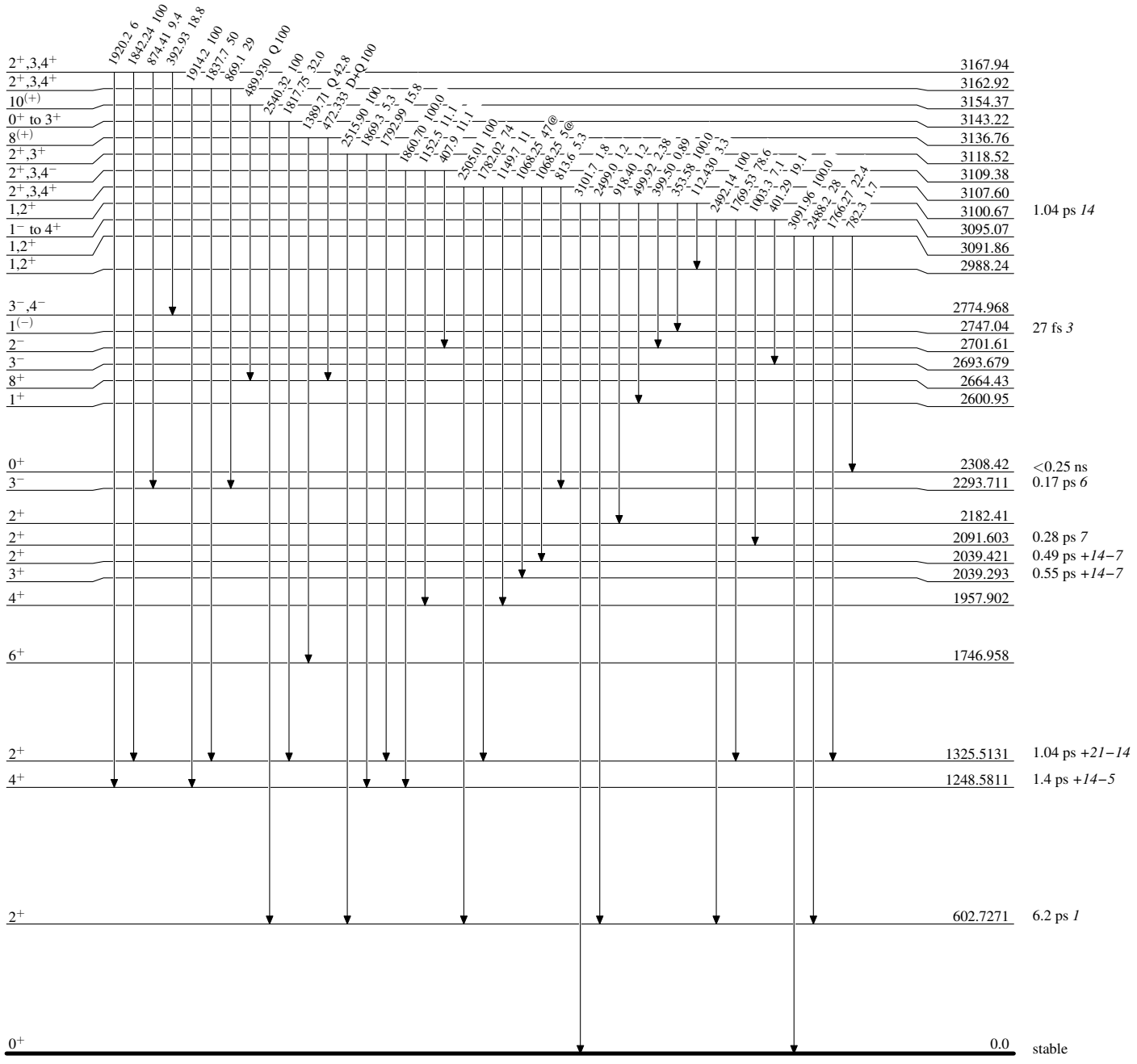


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

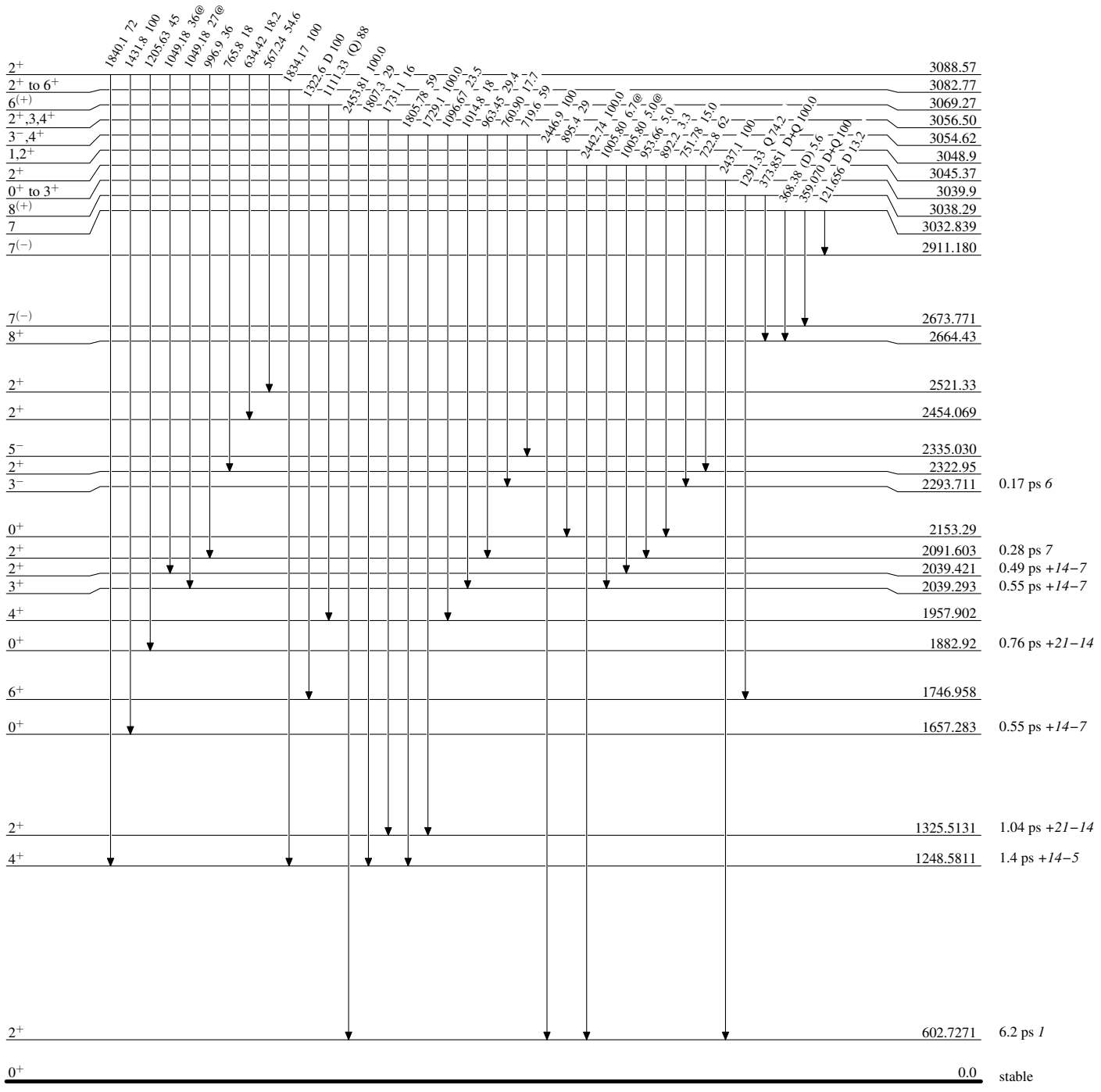


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

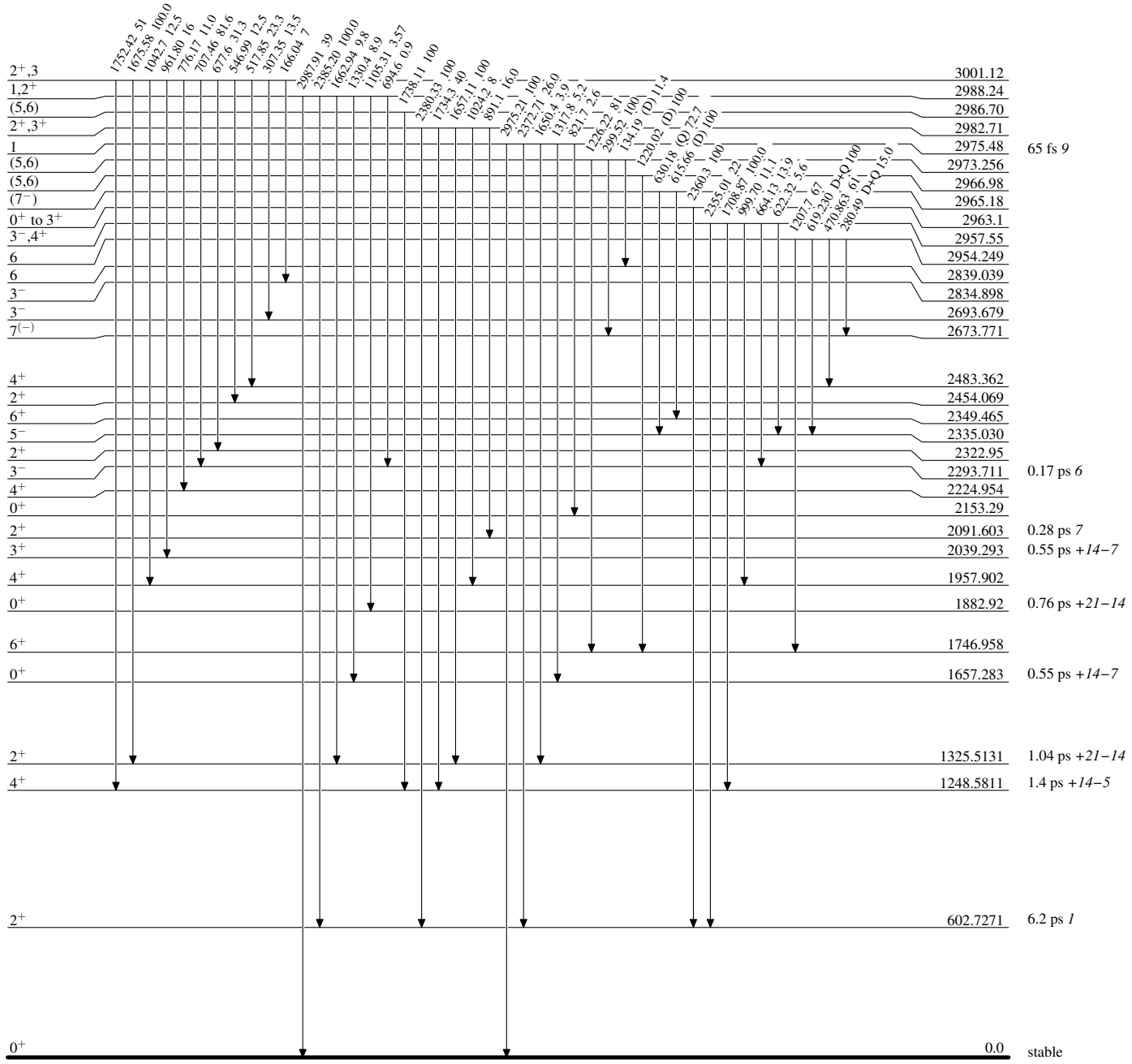


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

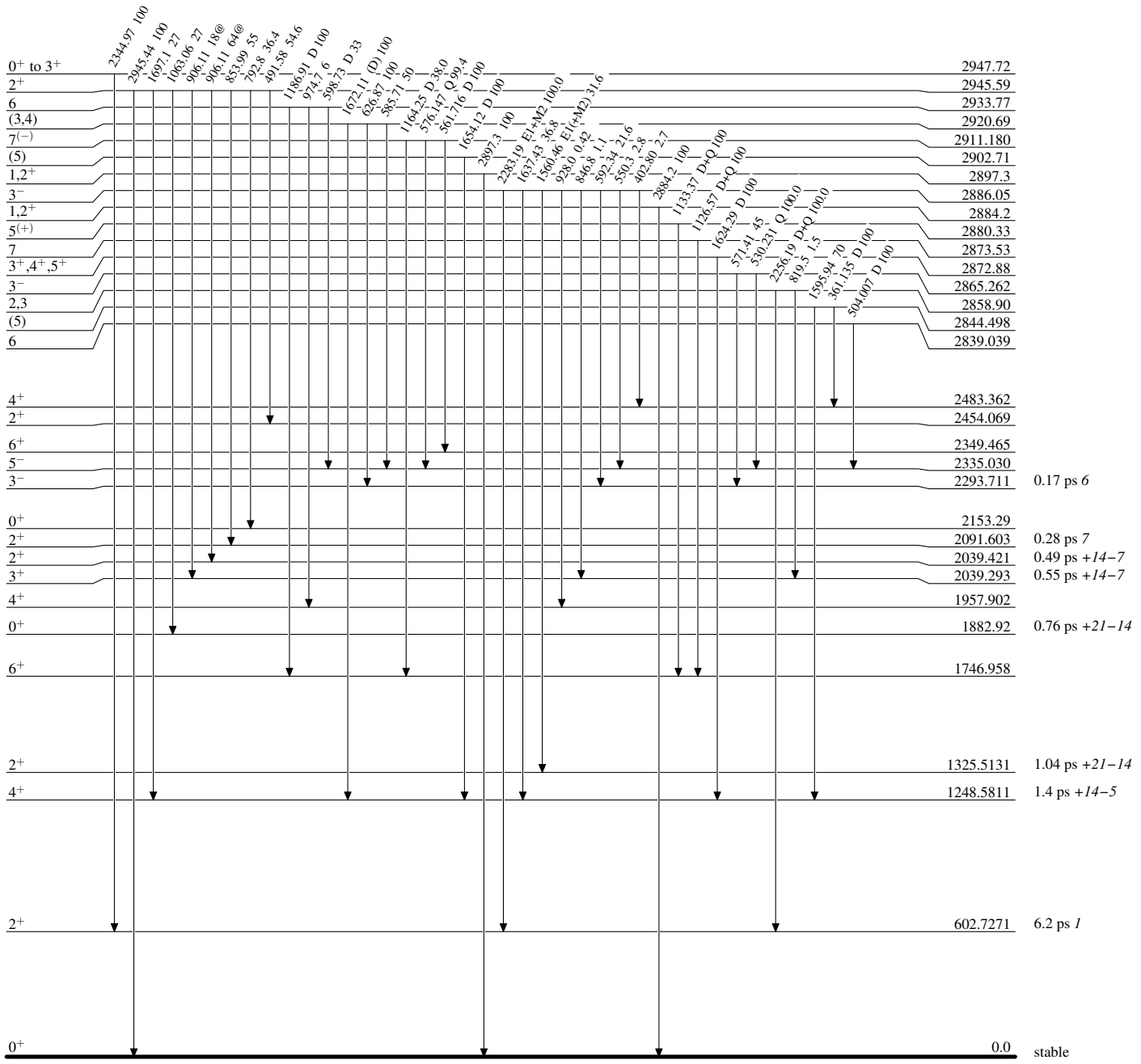


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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



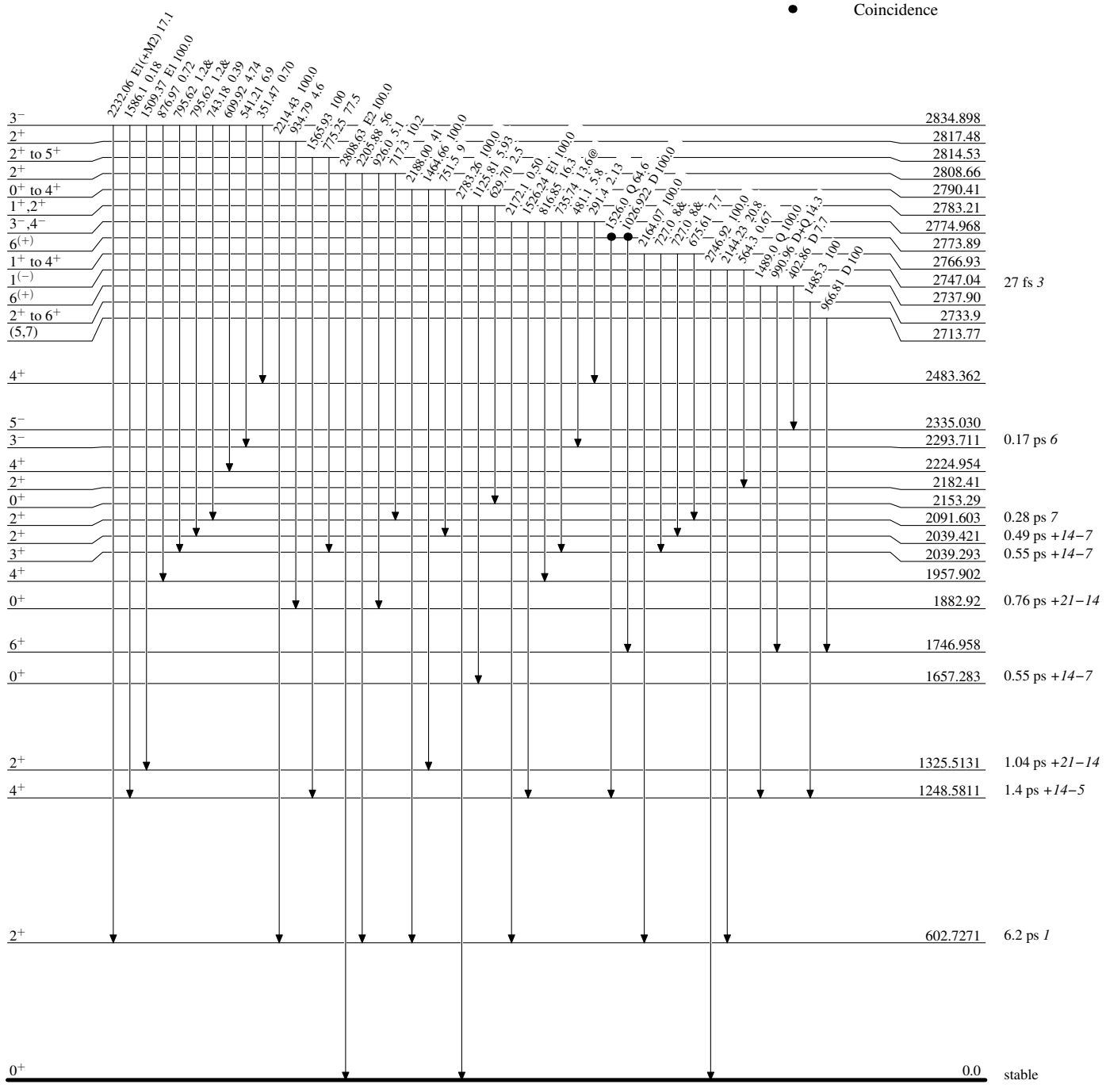
$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

Legend
● Coincidence



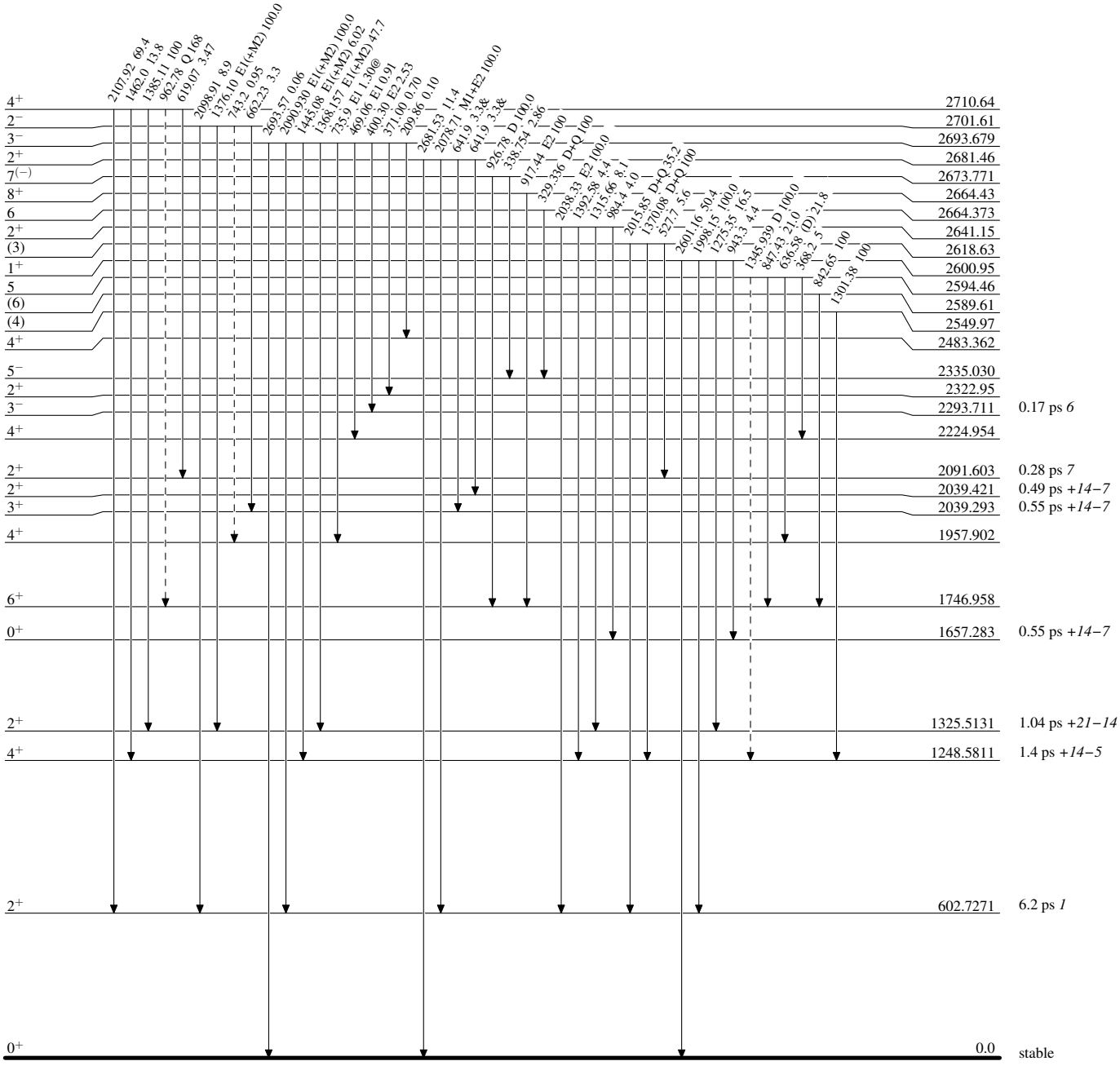
$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

Legend
γ Decay (Uncertain)

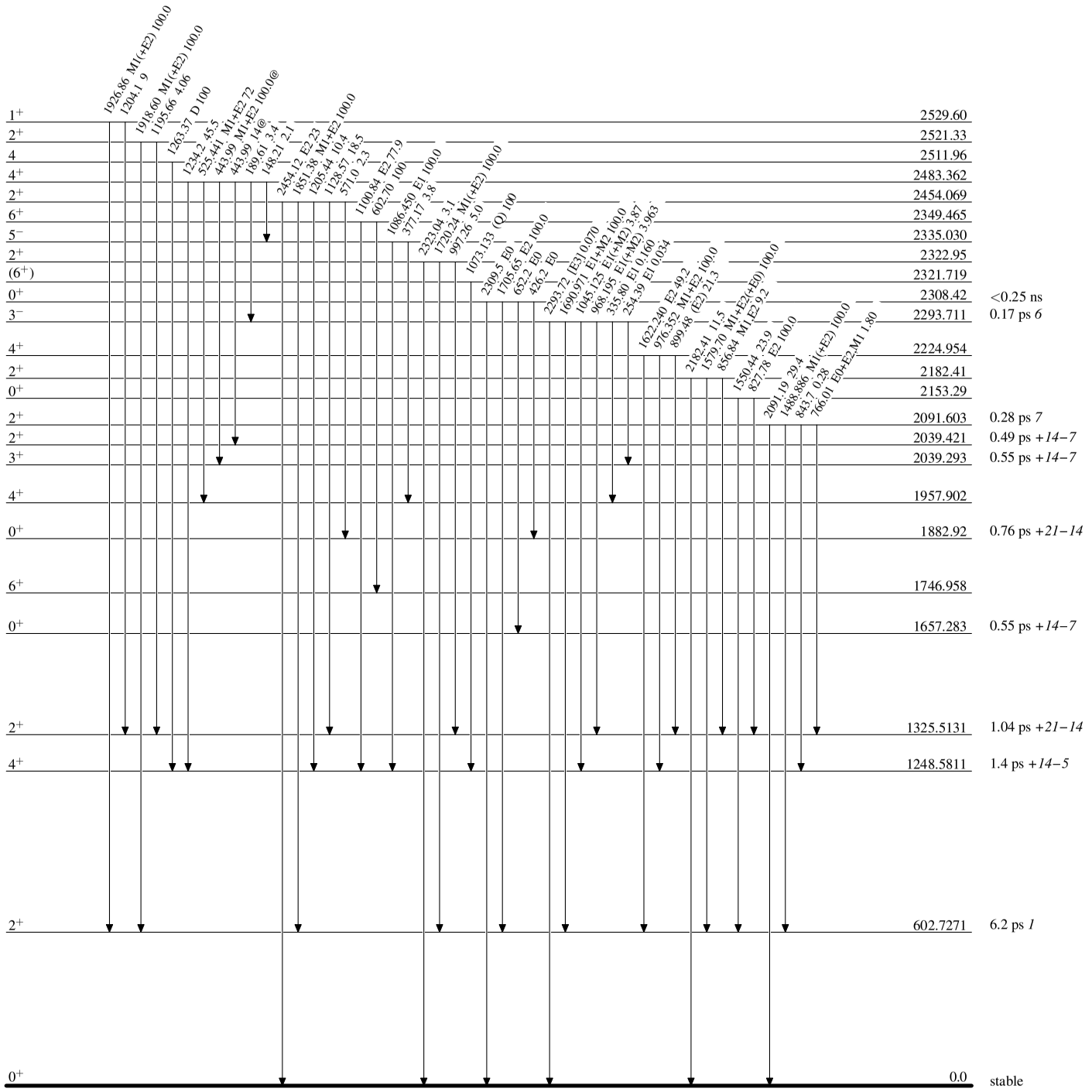


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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

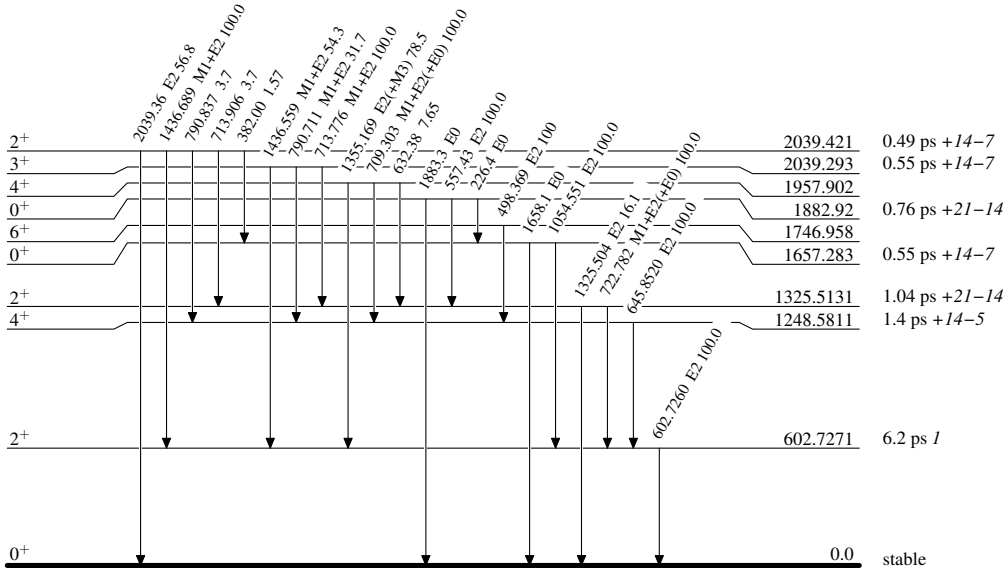


$^{124}_{52}Te_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

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



$^{124}_{52}Te_{72}$