Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 93,33 (2001)	11-May-2001

Q(β^-)=−417 *4*; S(n)=8419.4 *9*; S(p)=10013 *22*; Q(α)=−3763 *11* 2012Wa38
Note: Current evaluation has used the following Q record −420 4 *8419* 3 *10016* 21 −3758 *11* 1995Au04.
Additional information 1.
Muonic atom and isotope shifts: 1989Sh02.
Isotope shifts from x-ray data: 1970Me10.
Antiprotonic atoms: 1998Lu05, 1993Wy03.

^{130}Te Levels

Cross Reference (XREF) Flags

A	^{130}Sb β^- decay (39.5 min)	E	^{130}Te(n,n′γ)	I	Coulomb excitation
B	^{130}Sb β^- decay (6.3 min)	F	^{130}Te(p,p′),(p,p′γ)	J	^{238}U(^{12}C,Fγ)
C	^{130}Te(γ,γ′)	G	^{130}Te(d,d′)	K	^{239}Pu(n,Fγ),^{241}Pu(n,Fγ)
D	^{130}Te(^{64}Ni,Xγ)	H	^{130}Te(α,α′)		

E(level)[†]	J^π	$T_{1/2}$	XREF	Comments
0.0	0^+	>0.79×10^{21} y	ABCDEFGHIJK	%2β^-=100 J^π: measurement (1933Ra02) by optical-spectroscopy method. $T_{1/2}$: 0.79×10^{21} y *10* (from geochemical method,1996Ta04). The value is treated as a lower limit, as proposed by 2000Al26. $T_{1/2}$: Neutrinoless ββ decay: no evidence found by 2000Al26 with $T_{1/2}$>1.44×10^{23} y (at 90% confidence level). 2000Al26 (also 1998Al19,1994Al49,1994Al25,1992Al09) used bolometric method with an array of 20 tellurite crystals with a total mass of 6.8 Kilograms. 2000Al26 also found no evidence for neutrinoless decay to first 2$^+$ or excited 0$^+$ states in ^{130}Xe. $T_{1/2}$: Geochemical methods: 0.79×10^{21} y *10* (1996Ta04), >1.25×10^{21} y (1988Li11), 2.60×10^{21} y *28* (1983Ki02,1983Ki03), 2.51×10^{21} y *24* (1972Sr03), 2.03×10^{21} y *30* (1969Al22), 2.2×10^{21} y *6* (1968Ki02) and ≤1.00×10^{21} y *12* (1986Li10), 1.0×10^{21} y *3* (1986Ri02), 0.97×10^{21} y *11* (1975He04), 0.82×10^{21} y *6* (1966Ta02), 1.4×10^{21} y (1950In03,1949In03). See also 1993Be04, 1992Be30, 1988Mi13, 1987Be13, 1985HoZN, 1984Fi16, 1980Zd02, 1980Zd03, 1980Zd01, 1970Ki21, 1969Va39, 1967Ge12, 1967Ki04. Compilation and analysis of ββ data: 2001Ej01, 1998Kl25. Additional information 2.
839.494 *17*	2^+	2.30 ps *5*	ABCDEFGHIJK	μ=+0.58 *10* (1989Ra17,1988Du10) Q=−0.15 *10* (1989Ra17,1976Bo12) B(E2)↑=0.295 *6* μ: γ(θ,H) in Coul. ex. (1988Du10). See other measurements in Coulomb excitation. Q: reorientation method in Coul. ex. for positive sign of the interference term (1976Bo12). See other details in Coulomb excitation. B(E2)↑: from Coul. ex. J^π: L(p,p′)=2; E2 γ to 0$^+$. $T_{1/2}$: from B(E2) in Coul. ex.
1588.256 *24*	2^+		BCDEF HI	J^π: E2 γ to 0$^+$.
1632.997 *22*	4^+		AB DEF IJK	J^π: E2 γ to 2$^+$; E1 γ from 5$^-$.

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Adopted Levels, Gammas (continued)

^{130}Te Levels (continued)

E(level)†	J^π	$T_{1/2}$	XREF	Comments
1815.336 *25*	(6)$^+$	9.8 ns *5*	AB DEF JK	J^π: E2 γ to 4$^+$, no γ to 2$^+$; systematics of even Te isotopes. $T_{1/2}$: $\gamma\gamma$(t) in 39.5-min ^{130}Sb decay.
1885.700 *25*	2$^+$		BCDEFG	J^π: E2 γ to 0$^+$.
1964.76 *4*	(0$^+$)		CDE	J^π: $\gamma(\theta)$ isotropic in (n,n′γ).
1981.546 *23*	4$^+$		B DEF H	J^π: L(p,p′)=4; $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2101.25 *3*	5$^-$		AB DEF H	J^π: L(p,p′)=5; $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2138.63 *3*	3$^+$		DE	J^π: M1+E2 γ′s to 2$^+$, 4$^+$.
2146.41 *4*	(7)$^-$	115 ns *8*	A DEF JK	J^π: log *ft*=7.4 from from (8$^-$); E1 γ to (6)$^+$. $T_{1/2}$: $\beta\gamma$(t) in 39.5-min ^{130}Sb decay.
2190.615 *23*	(2$^+$)		C EF	J^π: (E2) γ to 0$^+$ from $\gamma(\theta)$, γ(lin pol) in (n,n′γ).
2282.593 *25*	(2$^+$)		EF	J^π: (E2) γ to 0$^+$ from $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2300.22 *4*	(2$^+$)		EFG	J^π: (E2) γ to 0$^+$ from $\gamma(\theta)$ in (n,n′γ).
2330.74 *4*	(4$^+$)		B DEF	J^π: log *ft*=7.2 from (5)$^+$; γ to 2$^+$; $\gamma(\theta)$ in (n,n′γ) rules out J=3.
2404.65 *4*	(6)$^-$		A DE	J^π: M1+E2 γ′s to 5$^-$ and (7)$^-$. But log *ft*=7.65 from (8$^-$) is inconsistent with (6)$^-$.
2418? *10*	‡		F	
2432.08 *7*	(7)$^-$		A DE	J^π: log *ft*=8.2 from (8$^-$); M1+E2 γ to (7)$^-$.
2435.59 *4*	4$^-$		DE	J^π: $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2449.48 *4*	4$^+$		B EF h	J^π: $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2466.89 *4*	(2$^+$)‡		EFGh	J^π: (E2) γ to 0$^+$ from $\gamma(\theta)$ in (n,n′γ).
2527.06 *3*	3$^-$		EF	J^π: $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2575.2? *4*			B	J^π: γ to 4$^+$.
2581.15 *5*	(2$^+$)‡		EFg	J^π: $\gamma(\theta)$ in (n,n′γ).
2607.33 *5*	1‡		C EF	J^π: γ to 0$^+$; $\gamma(\theta)$ in (n,n′γ) rules out J=2.
2648.57 *22*	(8$^+$)		D JK	J^π: γ′s to 6$^+$ and 7$^-$; systematics of even-even Te and Xe nuclides in this mass region.
2648.6+x	(10$^+$)	1.90 μs *8*	D JK	J^π: systematics, probable $\nu h^{-2}_{11/2}$ configuration in N=78,80 and Z=52,54 nuclides. $T_{1/2}$: from timing of 182γ in ^{239}Pu(n,Fγ) (2001Ge07). Other: 4.2 μs *9* (from delayed γ rays in (^{64}Ni,Xγ),1998Zh09). E(level): x<25 keV (2001Ge07). Other: x<90 keV (1998Zh09).
2689.12 *5*	1‡		C EF	J^π: γ to 0$^+$; $\gamma(\theta)$ in (n,n′γ) rules out J=2.
2714.97? *5*	(4$^-$)		E	J^π: $\gamma(\theta)$ and γ(lin pol) in (n,n′γ).
2719.49 *7*	(5$^+$)		E	J^π: $\gamma(\theta)$ in (n,n′γ).
2729.5 *10*	3$^-$		EFGHi	B(E3)↑=0.061 *+20−35* β_3=0.073 *6* XREF: E(2770). β_3: from (p,p′). Others: 0.10 (n,n′); 0.06 (α,α′). J^π: L(p,p′)=L(α,α′)=3. E(level): from (p,p′). B(E3)↑: from Coul. ex.
2736.31 *5*	(4$^+$)		B E	J^π: γ′s to 2$^+$ and (6)$^+$ favor J^π=(4$^+$); but $\gamma(\theta)$ in (n,n′γ) consistent with J=(5).
2743.14? *4*	1		C E	J^π: γ to 0$^+$; $\gamma(\theta)$ in (n,n′γ) rules out J=2.
2744.97 *4*	(2$^+$,3)		E	J^π: $\gamma(\theta)$ in (n,n′γ).
2765.26 *22*	(4$^+$)		B	J^π: γ′s to 2$^+$ and (6)$^+$.
2770.84 *8*			A E	
2782.12 *12*	(7$^-$)		A E	J^π: log *ft*=7.3 from (8$^-$); γ to 5$^-$.
2789.26? *5*			E	
2833.35 *6*	(4,5,6)$^+$		B E	J^π: log *ft*=5.8 from (5)$^+$.
2878.43 *10*	(7,8,9)$^-$		A D	J^π: log *ft*=7.3 from (8$^-$); M1,E2 γ to (7)$^-$.
2950 *20*			FGH	E(level): from (p,p′). J^π: L=(p,p′)=(4).
3081.38 *15*	(7,8,9)$^-$		A D J	J^π: log *ft*=7.4 from (8$^-$); M1,E2 γ to (7)$^-$.

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Adopted Levels, Gammas (continued)

^{130}Te Levels (continued)

E(level)[†]	J^{π}	$T_{1/2}$	XREF	Comments
3155.03? *10*			E	
3180 *20*			F H	E(level): from (α,α').
3279 *20*			F	
3287.90 *23*	(7,8$^+$)		A	J^{π}: log *ft*=7.0 from (8$^-$); γ to (6)$^+$.
3360 *10*	3$^-$		F H	J^{π}: L(p,p′)=3.
3385.1 *3*			A	
3404.9 *4*			A	
3413.1 *3*	(4,5,6)		B	J^{π}: log *ft*=5.9 from (5)$^+$.
3470.2 *5*	(7$^-$)		A	J^{π}: log *ft*=7.2 from (8$^-$); γ to 5$^-$.
3536.74 *21*	(7,8,9)$^-$		A	J^{π}: log *ft*=6.6 from (8$^-$); M1,E2 γ to π=−.
3545.2 *4*			A	
3565.26 *20*	(7,8$^+$)		A	J^{π}: log *ft*=6.5 from (8$^-$); γ to (6)$^+$.
3567.7 *3*	(1,2)		C F	XREF: F(3570).
3642 *20*			F h	
3708.17 *19*			A	
3791.4? *11*			J	
3909.1 *4*			A	
3930 *20*			F	
3995 *20*			F	
4073.5 *5*			A	
4170.68 *25*	(7$^-$,8$^-$,9$^-$)		A	J^{π}: log *ft*=5.6 from (8$^-$).
4249.4? *15*			J	
4303.7 *3*	(7$^-$,8$^-$,9$^-$)		A	J^{π}: log *ft*=5.8 from (8$^-$).
4375.4? *18*		261 ns *33*	J	$T_{1/2}$: from γ(t) (1998HoZP), assumed as $T_{1/2}$ by the evaluator.
4384 *20*	@		F	
4446 *20*	@		F	
4460.3 *4*	(7$^-$,8$^-$,9$^-$)		A	J^{π}: log *ft*=5.2 from (8$^-$).
4497 *20*	@		F	
4531.5 *4*	(1,2)		C	
4559 *20*	#		F	
4597 *20*	#		F	
4667 *20*	#		F	
4714? *20*			F	
4748? *20*			F	
4793 *20*	#		F	
4796 *20*	&		F	
4833? *20*			F	
4856 *20*	&		F	
4891 *20*	#		F	
4950 *20*	#		F	
4983? *20*			F	
7538.2 *22*	1	1.9 fs *5*	C	J^{π}: dipole γ to 0$^+$. $T_{1/2}$: from Γ_{γ}=0.24 eV *6* in (γ,γ'). $\Gamma_{\gamma0}$=0.05 eV *1*.
7636.5 *5*	1$^-$	7.6 fs *40*	C	J^{π}: E1 γ to 0$^+$. $T_{1/2}$: from Γ_{γ}=0.06 eV *3* in (γ,γ'). $\Gamma_{\gamma0}$=0.030 eV *10*.

[†] From least-squares adjustment to Eγ′s.
[‡] (1$^+$,2$^+$) from on-resonance p(θ) in IAR (1971Hi02).
[#] (3$^-$,4$^-$) from on-resonance p(θ) in IAR (1971Hi02).
[@] (3$^-$,4$^-$,5$^-$) from on-resonance p(θ) in IAR (1971Hi02).
[&] (1$^-$,2$^-$) from on-resonance p(θ) in IAR (1971Hi02).

Adopted Levels, Gammas (continued)

$\gamma(^{130}Te)$

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.‡	δ‡	α@	$I_{(\gamma+ce)}$	Comments
839.494	2^+	839.49 *2*	100	0.0	0^+	E2				B(E2)(W.u.)=15.1 *3*
1588.256	2^+	748.76 *2*	100 *14*	839.494	2^+	M1+E2	+0.65 *15*			
		1588.19 *8*	1.6 *3*	0.0	0^+	E2				
1632.997	4^+	793.53 *2*	100	839.494	2^+	E2				
1815.336	$(6)^+$	182.335 *11*	100	1632.997	4^+	E2		0.207		α(K)= 0.1647; α(L)= 0.0339; α(M)=0.00691; α(N+..)=0.00158 B(E2)(W.u.)=6.1 *3*
1885.700	2^+	1046.21 *2*	100 *14*	839.494	2^+	M1+E2	−0.175 *10*			
		1885.69 *18*	2.0 *4*	0.0	0^+	E2				
1964.76	(0^+)	1125.26 *3*	100	839.494	2^+					
1981.546	4^+	348.58 *2*	100 *10*	1632.997	4^+	M1+E2	−0.12 *3*	0.0234		
		1142.02 *2*	70 *9*	839.494	2^+	E2				
2101.25	5^-	468.27 *2*	100	1632.997	4^+	E1(+M2)	+0.03 *2*			
2138.63	3^+	505.63 *3*	37 *4*	1632.997	4^+	M1+E2	+1.2 *5*			
		550.36 *3*	100 *10*	1588.256	2^+	M1+E2	+2.4 *2*			
		1299.16 *3*	94 *13*	839.494	2^+	M1+E2	+0.32 *2*			I_γ: other: 200 in (^{64}Ni,Xγ).
2146.41	$(7)^-$	(46)		2101.25	5^-				≈0.04	
		330.94 *5*	100	1815.336	$(6)^+$	E1+M2	+0.070 *6*			B(E1)(W.u.)=6.3×10^{-8}; B(M2)(W.u.)=0.013 *3*
2190.615	(2^+)	1351.11 *3*	94 *13*	839.494	2^+	(M1+E2)	−0.27 *2*			
		2190.60 *3*	100 *15*	0.0	0^+	(E2)				
2282.593	(2^+)	1443.09 *2*	100 *15*	839.494	2^+	(M1+E2)	−0.10 *2*			
		2282.60 *7*	21 *3*	0.0	0^+	(E2)				
2300.22	(2^+)	1460.72 *3*	100 *14*	839.494	2^+	(M1+E2)	−0.20 *2*			
		2300.0 *3*	4.5 *7*	0.0	0^+	(E2)				
2330.74	(4^+)	697.73 *3*	100 *10*	1632.997	4^+	(M1+E2)				δ: 1.12 *8* or −0.08 *4*.
		1491.24 *7*	29 *5*	839.494	2^+	(E2)				
2404.65	$(6)^-$	258.21 *3*	100 *10*	2146.41	$(7)^-$	M1+E2	+0.21 *6*	0.0516 *4*		α(K)=0.04444 *21*; α(L)=0.00571 *9*; α(M)=0.00114; α(N+..)=0.00027
		303.43 *3*	100 *10*	2101.25	5^-	M1(+E2)	+0.02 *2*	0.0335		α(K)=0.02896; α(L)=0.00364; α(M)=0.00072; α(N+..)=0.00017
2432.08	$(7)^-$	285.61 *7*	35 *4*	2146.41	$(7)^-$	M1+E2		0.043 *2*		
		331.0 *1*	100 *10*	2101.25	5^-					γ from (^{64}Ni,Xγ) only.
2435.59	4^-	334.34 *2*	100	2101.25	5^-	M1+E2	−0.052 *7*	0.0261		α(K)=0.02253; α(L)=0.00283; α(M)=0.00056; α(N+..)=0.00013
2449.48	4^+	816.48 *3*	100 *8*	1632.997	4^+	M1+E2	−0.21 *2*			
		861.6 *4*	3.3 *17*	1588.256	2^+					
2466.89	(2^+)	1627.38 *3*	100 *14*	839.494	2^+	(M1+E2)				δ=−0.48 *4* or 1/δ=−0.02 *3*.
		2466.94 *18*	11 *2*	0.0	0^+	(E2)				
2527.06	3^-	894.06& *14*	4.3 *7*	1632.997	4^+					
		1687.56 *2*	100 *16*	839.494	2^+	E1(+M2)	+0.030 *6*			
2575.2?		942.2 *4*	100	1632.997	4^+					

$\gamma(^{130}Te)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[‡]	δ[‡]	Comments
2581.15	(2$^+$)	992.95 *13*	12.1 *19*	1588.256	2$^+$			
		1741.64 *4*	100 *15*	839.494	2$^+$	D+Q	+0.18 *2*	
2607.33	1	1767.81 *8*	61 *8*	839.494	2$^+$			
		2607.31 *6*	100 *14*	0.0	0$^+$			
2648.57	(8$^+$)	502.0 *3*	75 *8*	2146.41	(7)$^-$			
		833.4 *3*	100 *10*	1815.336	(6)$^+$			
2689.12	1	2689.09 *5*	100	0.0	0$^+$			
2714.97?	(4$^-$)	613.72 *3*	100	2101.25	5$^-$	(M1+E2)	+0.42 *2*	
2719.49	(5$^+$)	738.1 *2*	32 *6*	1981.546	4$^+$			
		904.04 *10*	100 *16*	1815.336	(6)$^+$			
		1086.54 *9*	74 *11*	1632.997	4$^+$	(M1+E2)		δ: −0.21 *4* or −2.6.
2729.5	3$^-$	1890[&]		839.494	2$^+$			E_γ: tentative γ from Coul. ex.
2736.31	(4$^+$)	405.2 *2*	13 *5*	2330.74	(4$^+$)			
		921.01 *5*	100 *10*	1815.336	(6)$^+$			
		1103.29 *6*	93 *9*	1632.997	4$^+$			
		1896.9 *8*	33 *8*	839.494	2$^+$			
2743.14?	1	2743.11 *4*	100	0.0	0$^+$			
2744.97	(2$^+$,3)	859.30 *4*	91 *13*	1885.700	2$^+$			
		1112.01 *9*	29 *4*	1632.997	4$^+$			
		1905.43 *4*	100 *14*	839.494	2$^+$			
2765.26	(4$^+$)	949.8 *4*	46 *9*	1815.336	(6)$^+$			
		1131.9 *4*	59 *14*	1632.997	4$^+$			
		1177.3 *4*	100 *10*	1588.256	2$^+$			
		1925.7[&] *8*	18 *9*	839.494	2$^+$			
2770.84		669.60 *7*	100 *20*	2101.25	5$^-$			
		1137.6[&] *5*	27 *20*	1632.997	4$^+$			
2782.12	(7$^-$)	635.7 *3*	25 *5*	2146.41	(7)$^-$			
		680.85 *13*	100 *10*	2101.25	5$^-$			
2789.26?		1156.21 *14*	25 *4*	1632.997	4$^+$			
		1949.76 *5*	100 *14*	839.494	2$^+$			
2833.35	(4,5,6)$^+$	502.6 *3*	6.3 *13*	2330.74	(4$^+$)			
		1018.01 *5*	100 *5*	1815.336	(6)$^+$			
		1200.0 *4*	12.0 *12*	1632.997	4$^+$			
2878.43	(7,8,9)$^-$	732.0 *1*	100	2146.41	(7)$^-$	M1,E2		
3081.38	(7,8,9)$^-$	934.9 *2*	100	2146.41	(7)$^-$	M1,E2		
3155.03?		1173.25 *17*	86 *13*	1981.546	4$^+$			
		1522.14 *12*	100 *15*	1632.997	4$^+$			
3287.90	(7,8$^+$)	855.7 *4*	80 *15*	2432.08	(7)$^-$			
		883.3 *4*	60 *15*	2404.65	(6)$^-$			
		1141.4 *4*	100 *20*	2146.41	(7)$^-$			
		1473.1 *8*	30 *10*	1815.336	(6)$^+$			

Adopted Levels, Gammas (continued)

γ(^{130}Te) (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.‡
3385.1		506.7 *3*	100 *20*	2878.43	(7,8,9)$^-$	
		1239.0 *5*	90 *15*	2146.41	(7)$^-$	
3404.9		1000.2 *4*	100 *20*	2404.65	(6)$^-$	
		1258.5 *5*	44 *9*	2146.41	(7)$^-$	
3413.1	(4,5,6)	647.7 *3*	100 *10*	2765.26	(4$^+$)	
		1598.0 *5*	54 *6*	1815.336	(6)$^+$	
3470.2	(7$^-$)	1368.7 *5*	100 *20*	2101.25	5$^-$	
		1655.6 *8*	73 *20*	1815.336	(6)$^+$	
3536.74	(7,8,9)$^-$	455.4 *2*	100 *10*	3081.38	(7,8,9)$^-$	M1,E2
		658.2 *3*	35 *8*	2878.43	(7,8,9)$^-$	
3545.2		1443.7 *5*	100	2101.25	5$^-$	
3565.26	(7,8$^+$)	483.6 *3*	69 *10*	3081.38	(7,8,9)$^-$	
		686.6 *3*	100 *10*	2878.43	(7,8,9)$^-$	
		1134.2 *5*	13 *6*	2432.08	(7)$^-$	
		1419.3 *5*	38 *6*	2146.41	(7)$^-$	
		1749.8 *8*	9 *6*	1815.336	(6)$^+$	
3567.7	(1,2)	2728&	<25	839.494	2$^+$	
		3567.6 *3*	100	0.0	0$^+$	
3708.17		626.7 *3*	100 *10*	3081.38	(7,8,9)$^-$	
		829.8 *3*	64 *14*	2878.43	(7,8,9)$^-$	
		926.0 *5*	14 *7*	2782.12	(7$^-$)	
		1561.6 *8*	21 *7*	2146.41	(7)$^-$	
3791.4?		710		3081.38	(7,8,9)$^-$	
3909.1		1030.7 *4*	60 *12*	2878.43	(7,8,9)$^-$	
		1762.6 *5*	100 *10*	2146.41	(7)$^-$	
4073.5		992.1 *4*	100	3081.38	(7,8,9)$^-$	
4170.68	(7$^-$,8$^-$,9$^-$)	462.5 *4*	22 *5*	3708.17		
		1089.5 *4*	100 *10*	3081.38	(7,8,9)$^-$	
		1292.3 *4*	100 *10*	2878.43	(7,8,9)$^-$	
		2023.3 *8*	11 *5*	2146.41	(7)$^-$	
4249.4?		458		3791.4?		
4303.7	(7$^-$,8$^-$,9$^-$)	595.5 *3*	100 *20*	3708.17		
		1521.1 *8*	80 *20*	2782.12	(7$^-$)	
		1533.7 *8*	90 *20*	2770.84		
4375.4?		126		4249.4?		
4460.3	(7$^-$,8$^-$,9$^-$)	914.9 *4*	95 *20*	3545.2		
		1075.5 *5*	21 *10*	3385.1		
		1581.9 *8*	100 *20*	2878.43	(7,8,9)$^-$	
4531.5	(1,2)	3691&	<10	839.494	2$^+$	
		4531.4 *4*	100	0.0	0$^+$	
7538.2	1	4856 *6*	11 *4*	2689.12	1	

From ENSDF

$^{130}_{52}Te_{78}$-6

$\gamma(^{130}Te)$ (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.‡	Comments
7538.2	1	4932 *6*	11 *4*	2607.33	1		
		5344 *6*	15 *3*	2190.615	(2^+)		
		5571 *6*	11 *3*	1964.76	(0^+)		
		5650 *6*	10 *3*	1885.700	2^+		
		5950 *6*	100 *16*	1588.256	2^+	D#	
		6698 *6*	90 *8*	839.494	2^+	D#	
		7538 *6*	80 *16*	0.0	0^+	D#	
7636.5	1^-	5749		1885.700	2^+		
		6049		1588.256	2^+		
		6797		839.494	2^+		
		7637		0.0	0^+	E1#	B(E1)(W.u.)=3.9×10^{-5} *13*

† Generally from (n,n′γ) where most precise and complete data are available. In a few cases weighted averages were taken where common levels were populated.

‡ From γ(θ) and γ(lin pol) in (n,n′γ), unless otherwise stated.

From γ(θ) and/or γ(lin pol) in (γ,γ′).

@ 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.

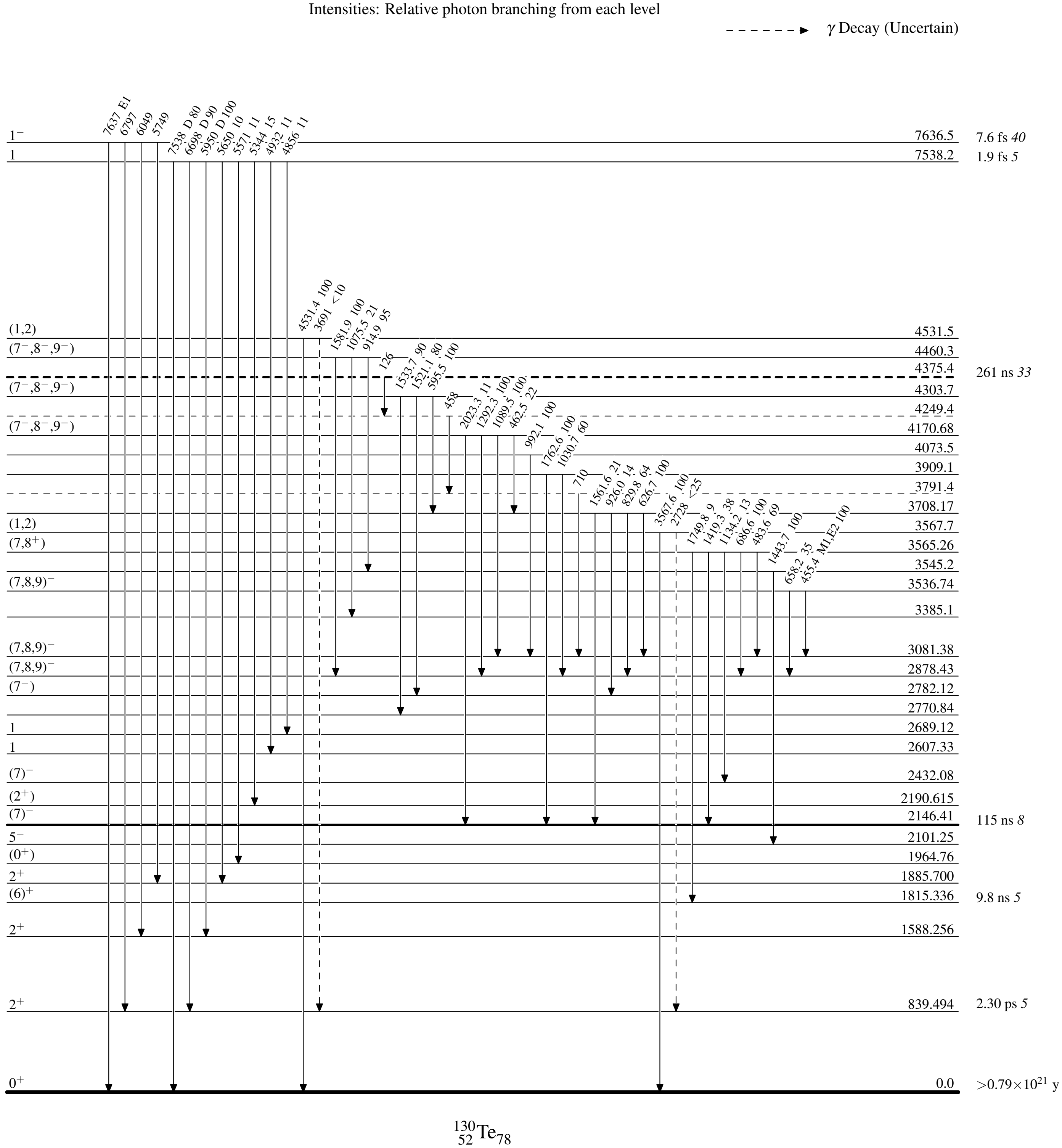
& Placement of transition in the level scheme is uncertain.

$^{130}_{52}Te_{78}$-7

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



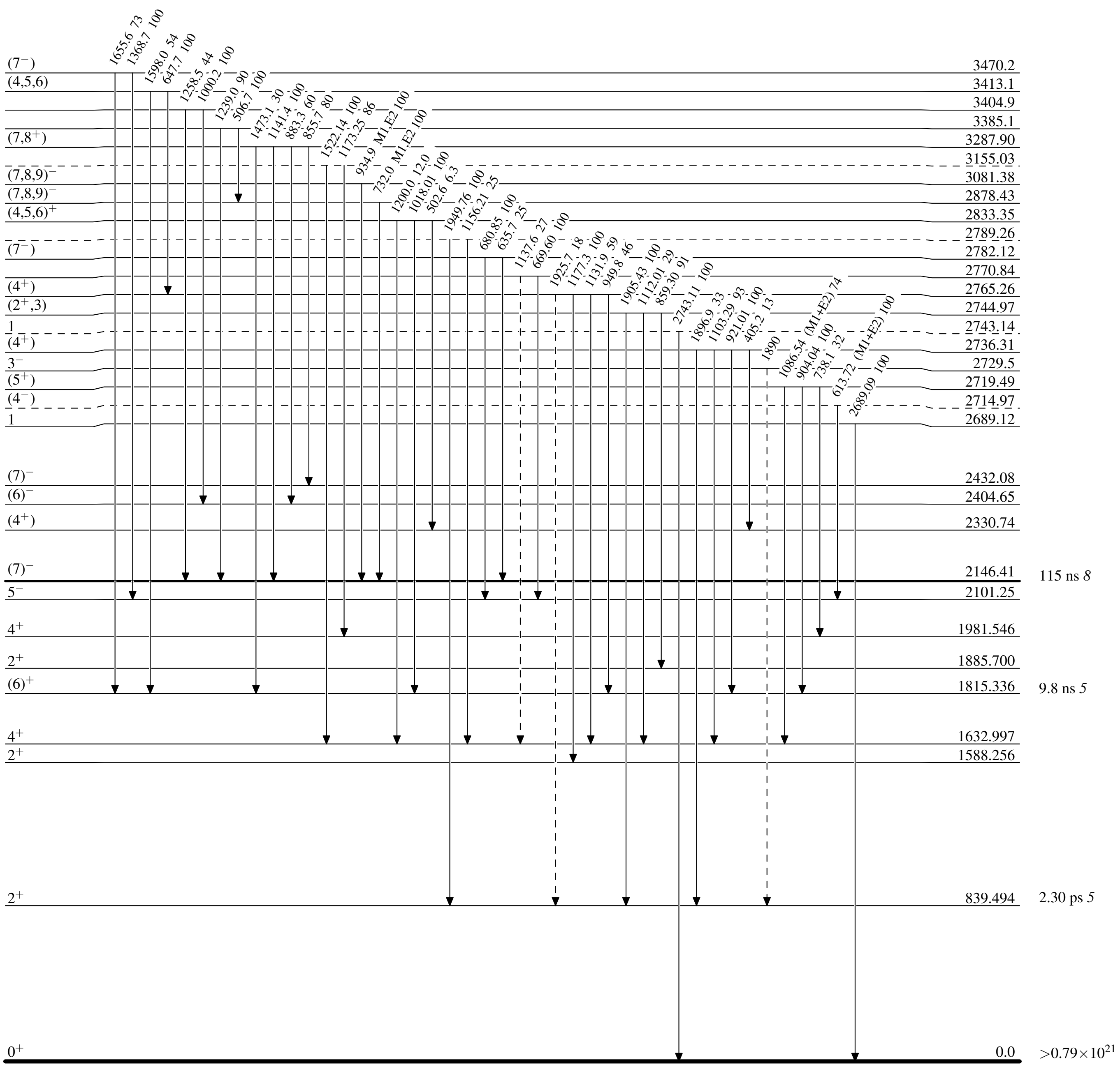
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

Legend

γ Decay (Uncertain)



$^{130}_{52}Te_{78}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - ► γ Decay (Uncertain)