Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	J. Katakura	NDS 112,495 (2011)	1-Jan-2010

Q(β^-)=−8.6×10^3 *syst*; S(n)=9.8×10^3 *syst*; S(p)=3.69×10^3 *syst*; Q(α)=1.66×10^3 *syst* 2012Wa38
Note: Current evaluation has used the following Q record −8747 SY9906 syst 3688 syst 1660 syst 2009AuZZ.
ΔQ(β^-)=446, ΔS(n)=357, ΔS(p)=204, ΔQ(α)=242 (syst,2009AuZZ).
Q(εp)=5143 *196* (syst,2009AuZZ).

^{125}Ce Levels

Cross Reference (XREF) Flags

A ^{125}Pr ε decay
B ^{58}Ni(^{70}Ge,2pnγ)
C ^{92}Mo(^{40}Ca,α2pnγ)
D ^{64}Zn(^{64}Zn,2pnγ)
E ^{9}Be(^{152}Sm,Xγ)

E(level)‡#	J$^\pi$†	$T_{1/2}$	XREF	Comments
0.0[a]	(7/2$^-$)	9.7 s *3*	ABCDE	%ε+%β^+=100; %β^+p=? $T_{1/2}$: Weighted average of 8.9 s *7* (1983Ni05), 9.2 s *10* (1986Wi15), 9.6 s *4* (1999Ca21) and 10.5 s *5* (1998Be64). Other: 11 s *4* (1978Bo32). J$^\pi$: From systematics reported in ^{92}Mo(^{40}Ca,α2pnγ) and ^{9}Be(^{152}Sm,xγ). 1986Wi15 suggest (5/2$^+$) from comparison of relative intensities of γ transitions in ^{124}Ba produced through β-delayed proton decay with statistical model calculation.
0+x?[f]	(7/2$^-$)		C	Additional information 1.
93.6[d] *4*	(1/2$^+$)		CDE	E(level): 2007Su07 report an energy of 103 keV *12* for the isomer. $T_{1/2}$: 2007Su07 give 130 s *+64−6* for fully ionized ions from Schottky frequency spectra. This value corresponds to 3.4 s for the neutral ions using α=38 for a 92-keV, E3 transition. J$^\pi$: From DCO in ^{92}Mo(^{40}Ca,α2pnγ) (2002Pe15) and the existence of a long-lived isomeric state observed in ^{9}Be(^{152}Sm,xγ) (2007Su07).
93.8+x?[f] *5*	(9/2$^-$)		C	
116.9[c] *4*	(3/2$^+$)		CD	
134.65[b] *14*	(9/2$^-$)		BCD	
135.77[&] *10*	(5/2$^+$)		ABCD	
266.9+x?[f] *6*	(11/2$^-$)		C	
267.0[d] *3*	(5/2$^+$)		CD	
y[e]	(9/2$^+$)		D	Additional information 2.
282.75[@] *15*	(7/2$^+$)		ABCD	
301.26[a] *19*	(11/2$^-$)		BCD	
322.85[c] *21*	(7/2$^+$)		CD	
463.22[&] *19*	(9/2$^+$)		ABCD	
512.47[b] *21*	(13/2$^-$)		BCD	
582.13[d] *24*	(9/2$^+$)		CD	
337.80+y[e] *20*	(13/2$^+$)		D	
661.40[c] *21*	(11/2$^+$)		CD	
679.15[@] *20*	(11/2$^+$)		BCD	
737.19[a] *22*	(15/2$^-$)		BCD	
746.0+x?[f] *6*	(15/2$^-$)		C	
912.79[&] *23*	(13/2$^+$)		BCD	

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Adopted Levels, Gammas (continued)

^{125}Ce Levels (continued)

E(level)‡#	Jπ†	XREF	E(level)‡#	Jπ†	XREF	E(level)‡#	Jπ†	XREF
1023.52[d] 25	(13/2+)	CD	3529.9? 11	(29/2+)	C	6770.7[c] 10	(47/2+)	CD
1026.8[b] 3	(17/2−)	BCD	3581.4[c] 4	(31/2+)	CD	6505+y[e] 3	(49/2+)	D
785.1+y[e] 3	(17/2+)	D	3667.4[b] 4	(33/2−)	CD	7014.4+x?[f] 18	(43/2−)	C
1126.02[c] 23	(15/2+)	CD	3673.3 11	(31/2−)	D	7244.4[@] 25	(47/2+)	D
1144.2? 11		B	3800.8+x?[f] 10	(31/2−)	C	7313.8[b] 17	(49/2−)	CD
1182.2[@] 3	(15/2+)	CD	3880.3[@] 15	(31/2+)	D	7538.2[&] 21	(49/2+)	D
1292.78[a] 25	(19/2−)	BCD	3985.2[a] 5	(35/2−)	CD	7614.8[d] 19	(49/2+)	D
1359.9+x?[f] 6	(19/2−)	C	4015.2[&] 4	(33/2+)	D	7465+y[e] 3	(53/2+)	D
1465.1[&] 3	(17/2+)	CD	4031.7[d] 7	(33/2+)	D	7820.2[c] 10	(51/2+)	CD
1570.1[d] 3	(17/2+)	CD	4051.3? 15		B	7857.5[a] 11	(51/2−)	CD
1334.1+y[e] 4	(21/2+)	D	4235.6[c] 5	(35/2+)	CD	8309.4+x?[f] 21	(47/2−)	C
1657.3[b] 3	(21/2−)	BCD	4252.7? 10	(33/2+)	C	8311[@] 3	(51/2+)	D
1688.2[c] 3	(19/2+)	CD	4043.3+y[e] 6	(37/2+)	D	8561.8[b] 20	(53/2−)	D
1780.2[@] 4	(19/2+)	CD	4375.4[b] 6	(37/2−)	CD	8632.2[&] 23	(53/2+)	D
1947.2[a] 3	(23/2−)	BCD	4529.3 15	(35/2−)	D	8729.8[d] 22	(53/2+)	D
2083.7+x?[f] 7	(23/2−)	C	4582.3[@] 18	(35/2+)	D	8496+y?[e] 3	(57/2+)	D
2100.6[&] 4	(21/2+)	CD	4751.2[&] 11	(37/2+)	D	8968.7[c] 13	(55/2+)	CD
1884.4+y[e] 4	(25/2+)	D	4767.6[a] 7	(39/2−)	CD	9084.5[a] 15	(55/2−)	D
2189.7[d] 5	(21/2+)	CD	4777.8+x?[f] 14	(35/2−)	C	9478[@] 3	(55/2+)	D
2321.9[c] 3	(23/2+)	CD	4803.8[d] 8	(37/2+)	D	9807.2[&] 25	(57/2+)	D
2340.3? 11		B	4979.5[c] 7	(39/2+)	CD	9893.8?[b] 22	(57/2−)	D
2369.1[b] 3	(25/2−)	CD	4813.3+y[e] 12	(41/2+)	D	9943.9[d] 24	(57/2+)	D
2450.3[@] 4	(23/2+)	CD	5111.5? 11	(37/2+)	C	10209.7[c] 14	(59/2+)	CD
2657.3[a] 3	(27/2−)	BCD	5216.9[b] 7	(41/2−)	CD	10454.5?[a] 18	(59/2−)	D
2785.9[&] 4	(25/2+)	CD	5380.3[@] 21	(39/2+)	D	10738[@] 3	(59/2+)	D
2536.8+y[e] 5	(29/2+)	D	5589.2[&] 15	(41/2+)	D	11062[&] 3	(61/2+)	D
2809.3[d] 7	(25/2+)	CD	5661.8[d] 13	(41/2+)	D	11256[d] 3	(61/2+)	D
2900.7+x?[f] 9	(27/2−)	C	5678.0[a] 7	(43/2−)	CD	11290.8?[b] 24	(61/2−)	D
2969.0[c] 4	(27/2+)	CD	5823.5[c] 9	(43/2+)	CD	11538.2[c] 16	(63/2+)	CD
3054.3[b] 3	(29/2−)	CD	5843.4+x?[f] 15	(39/2−)	C	12101?[@] 4	(63/2+)	D
3194.3[@] 11	(27/2+)	D	5617.3+y[e] 23	(45/2+)	D	12378[&] 3	(65/2+)	D
3269.3? 11		B	6048.2? 12	(41/2+)	C	12664?[d] 3	(65/2+)	D
3316.9[a] 4	(31/2−)	CD	6197.3[b] 7	(45/2−)	CD	12950.2?[c] 19	(67/2+)	D
3360.6[d] 7	(29/2+)	D	6268.4[@] 23	(43/2+)	D	13706?[&] 3	(69/2+)	D
3377.9[&] 4	(29/2+)	D	6522.2[&] 18	(45/2+)	D	14445.2?[c] 22	(71/2+)	D
3480.9? 9	(29/2+)	C	6595.8[d] 16	(45/2+)	D	15066?[&] 4	(73/2+)	D
3261.1+y[e] 5	(33/2+)	D	6712.5[a] 8	(47/2−)	CD			

† From systematical and band structure, unless otherwise noted.
‡ From least-squares fit by evaluators to Eγ′s.
# 146-keV and 180-keV γ′s seen in ^{125}Pr ε decay seem to be members of the (5/2+) bands in ^{58}Ni(^{70}Ge,2pnγ), ^{92}Mo(^{40}Ca,α2pnγ) and ^{64}Zn(^{64}Zn,2pnγ).
@ Band(A): ν5/2[402], α=+1/2.
& Band(a): ν5/2[402], α=−1/2.
a Band(B): ν7/2[523], α=−1/2.
b Band(b): ν7/2[523], α=+1/2.

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Adopted Levels, Gammas (continued)

^{125}Ce Levels (continued)

[c] Band(C): $\nu 1/2[411]$, $\alpha=+1/2$.
[d] Band(c): $\nu 1/2[411]$, $\alpha=-1/2$.
[e] Band(D): $\nu 1/2[401]$ or $\nu 1/2[411]$ (?).
[f] Band(E): Band based on $(7/2^-)$. Observed in ^{92}Mo(^{40}Caα2pnγ). Weakly observed, but not confirmed in ^{64}Zn(^{64}Zn,2pnγ), questionable.

$\gamma(^{125}Ce)$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
93.6	$(1/2^+)$	93.6 *4*		0.0	$(7/2^-)$	(E3)	E_γ: From level energy. 2007Su07 suggest the transition to explain the existence of a long-lived isomer. Mult.: From comparison of measured half-life with Weisskopf estimates (2007Su07), and from $(1/2^+)$ to $(7/2^-)$ for probable placement. Authors measure Eγ=103 keV *12*.
93.8+x?	$(9/2^-)$	93.8 *5*	100	0+x?	$(7/2^-)$	D+Q	
134.65	$(9/2^-)$	134.65 *14*	100	0.0	$(7/2^-)$	D	
135.77	$(5/2^+)$	135.71 *10*	100	0+x?	$(7/2^-)$	D	
266.9+x?	$(11/2^-)$	173.1 *2*	100	93.8+x?	$(9/2^-)$	D+Q	
267.0	$(5/2^+)$	150.05 *25*	100 *5*	116.9	$(3/2^+)$		
		173.36 *19*	46 *11*	93.6	$(1/2^+)$		
282.75	$(7/2^+)$	146.75 *24*	100.0 *23*	135.77	$(5/2^+)$	D	
		282.96 *19*	13.1 *14*	0.0	$(7/2^-)$		Mult.: 2004Sm02 propose E2 transition from R value, but 2007Su07 point out that this R value is also compatible with a $7/2^+$ to $7/2^-$ E1 assignment.
301.26	$(11/2^-)$	166.70 *14*	100.0 *10*	134.65	$(9/2^-)$	D	
		301.2 *14*	24.1 *9*	0.0	$(7/2^-)$	Q	
322.85	$(7/2^+)$	55.7 *10*	2.9 *10*	267.0	$(5/2^+)$		E_γ: From ^{92}Mo(^{40}Ca,α2pnγ).
		187.1 *3*	7 *3*	135.77	$(5/2^+)$	D	
		205.9 *4*	100 *3*	116.9	$(3/2^+)$	Q	
463.22	$(9/2^+)$	180.58 *22*	100 *3*	282.75	$(7/2^+)$	D	
		327.0 *4*	23 *5*	135.77	$(5/2^+)$	Q	
512.47	$(13/2^-)$	211.35 *15*	100.0 *12*	301.26	$(11/2^-)$	D	
		377.4 *3*	35 *16*	134.65	$(9/2^-)$	Q	
582.13	$(9/2^+)$	259.20 *18*	63 *11*	322.85	$(7/2^+)$		
		315.20 *20*	100 *9*	267.0	$(5/2^+)$	Q	
337.80+y	$(13/2^+)$	337.8 *2*	100	y	$(9/2^+)$		
661.40	$(11/2^+)$	79.4 *10*	<0.7	582.13	$(9/2^+)$		
		198.20 *20*	23 *15*	463.22	$(9/2^+)$	D	
		338.60 *14*	100.0 *21*	322.85	$(7/2^+)$	Q	
		378.9 *6*	43 *16*	282.75	$(7/2^+)$	Q	
679.15	$(11/2^+)$	215.95 *15*	86 *4*	463.22	$(9/2^+)$	D	
		396.35 *25*	100 *4*	282.75	$(7/2^+)$	Q	
737.19	$(15/2^-)$	224.75 *15*	62 *3*	512.47	$(13/2^-)$	D	
		435.90 *14*	100.0 *15*	301.26	$(11/2^-)$	Q	
746.0+x?	$(15/2^-)$	479.1 *2*	100	266.9+x?	$(11/2^-)$	Q	
912.79	$(13/2^+)$	234.00 *20*	42 *10*	679.15	$(11/2^+)$	D	
		449.50 *20*	100 *4*	463.22	$(9/2^+)$	Q	
1023.52	$(13/2^+)$	362.2 *3*	23.2 *19*	661.40	$(11/2^+)$		
		441.35 *15*	100 *5*	582.13	$(9/2^+)$	Q	
1026.8	$(17/2^-)$	289.60 *20*	93 *10*	737.19	$(15/2^-)$	D	
		514.3 *3*	100.0 *17*	512.47	$(13/2^-)$	Q	
785.1+y	$(17/2^+)$	447.3 *2*	100	337.80+y	$(13/2^+)$		

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Adopted Levels, Gammas (continued)

γ(^{125}Ce) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
1126.02	(15/2$^+$)	103		1023.52	(13/2$^+$)		
		216.2 *7*	4.4 *23*	912.79	(13/2$^+$)	D	
		446.55 *18*	15 *5*	679.15	(11/2$^+$)	Q	
		464.9 *3*	100.0 *21*	661.40	(11/2$^+$)	Q	
1144.2?		465		679.15	(11/2$^+$)		
1182.2	(15/2$^+$)	269.37 *19*	49 *11*	912.79	(13/2$^+$)	D	
		503.1 *4*	100 *4*	679.15	(11/2$^+$)	Q	
1292.78	(19/2$^-$)	265.85 *25*	34 *11*	1026.8	(17/2$^-$)	D	
		555.60 *14*	100.0 *15*	737.19	(15/2$^-$)	Q	
1359.9+x?	(19/2$^-$)	613.9 *2*	100	746.0+x?	(15/2$^-$)	(Q)	
1465.1	(17/2$^+$)	282.87 *19*	20.7 *21*	1182.2	(15/2$^+$)	D	
		553.5 *9*	100 *4*	912.79	(13/2$^+$)	Q	
1570.1	(17/2$^+$)	444.3 *3*	14 *9*	1126.02	(15/2$^+$)		
		546.55 *15*	100 *9*	1023.52	(13/2$^+$)	Q	
1334.1+y	(21/2$^+$)	549.0 *2*	100	785.1+y	(17/2$^+$)	Q	
1657.3	(21/2$^-$)	364.50 *14*	36.2 *15*	1292.78	(19/2$^-$)	D	
		630.9 *4*	100.0 *17*	1026.8	(17/2$^-$)	Q	
1688.2	(19/2$^+$)	118		1570.1	(17/2$^+$)		
		562.15 *14*	100 *6*	1126.02	(15/2$^+$)	Q	
1780.2	(19/2$^+$)	315.07 *19*	34 *3*	1465.1	(17/2$^+$)		
		599.5 *7*	100 *6*	1182.2	(15/2$^+$)	Q	
1947.2	(23/2$^-$)	289.80 *14*	22.8 *17*	1657.3	(21/2$^-$)	D	
		654.40 *14*	100 *3*	1292.78	(19/2$^-$)	Q	
2083.7+x?	(23/2$^-$)	723.8 *2*	100	1359.9+x?	(19/2$^-$)		
2100.6	(21/2$^+$)	320.33 *19*	5×10^1 *3*	1780.2	(19/2$^+$)	D	
		635.5 *8*	100 *12*	1465.1	(17/2$^+$)	Q	
1884.4+y	(25/2$^+$)	550.3 *2*	100	1334.1+y	(21/2$^+$)	Q	
2189.7	(21/2$^+$)	501 *1*		1688.2	(19/2$^+$)		
		619.8 *6*	100 *10*	1570.1	(17/2$^+$)	Q	
2321.9	(23/2$^+$)	132		2189.7	(21/2$^+$)		
		633.60 *14*	100.0 *23*	1688.2	(19/2$^+$)	Q	
2340.3?		683		1657.3	(21/2$^-$)		
2369.1	(25/2$^-$)	421.74 *19*	53 *6*	1947.2	(23/2$^-$)	D	
		711.81 *20*	100 *6*	1657.3	(21/2$^-$)	Q	
2450.3	(23/2$^+$)	350.2 *4*	20 *3*	2100.6	(21/2$^+$)	D	
		670.15 *15*	100 *5*	1780.2	(19/2$^+$)	Q	
2657.3	(27/2$^-$)	288.23 *19*	10 *3*	2369.1	(25/2$^-$)	D	
		710.29 *20*	100 *8*	1947.2	(23/2$^-$)	Q	
2785.9	(25/2$^+$)	335.84 *23*	23 *9*	2450.3	(23/2$^+$)		
		685.10 *20*	100 *7*	2100.6	(21/2$^+$)	Q	
2536.8+y	(29/2$^+$)	652.4 *2*	100	1884.4+y	(25/2$^+$)		
2809.3	(25/2$^+$)	619.8 *6*	100	2189.7	(21/2$^+$)	Q	
2900.7+x?	(27/2$^-$)	817.0 *5*	100	2083.7+x?	(23/2$^-$)		
2969.0	(27/2$^+$)	647.05 *25*	100	2321.9	(23/2$^+$)	Q	
3054.3	(29/2$^-$)	397.10 *14*	66 *12*	2657.3	(27/2$^-$)	D	
		685.15 *14*	100.0 *20*	2369.1	(25/2$^-$)	Q	
3194.3	(27/2$^+$)	744 *1*	100	2450.3	(23/2$^+$)		
3269.3?		612[#]		2657.3	(27/2$^-$)		The ordering of this γ and the 782-keV γ is uncertain.
3316.9	(31/2$^-$)	263.0 *3*	16 *9*	3054.3	(29/2$^-$)	D	
		660.0 *20*	100.0 *21*	2657.3	(27/2$^-$)	Q	
3360.6	(29/2$^+$)	551.3 *2*	100	2809.3	(25/2$^+$)	Q	
3377.9	(29/2$^+$)	408.7 *2*		2969.0	(27/2$^+$)		
		569 *1*	1.0×10^2 *3*	2809.3	(25/2$^+$)	Q	
		592.1 *2*	57 *14*	2785.9	(25/2$^+$)		

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Adopted Levels, Gammas (continued)

γ(^{125}Ce) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
3480.9?	(29/2$^+$)	671.6 *5*	100	2809.3	(25/2$^+$)	Q	
3261.1+y	(33/2$^+$)	724.3 *2*	100	2536.8+y	(29/2$^+$)		
3529.9?	(29/2$^+$)	744 *1*	100	2785.9	(25/2$^+$)		
3581.4	(31/2$^+$)	612.9 *5*	100	2969.0	(27/2$^+$)	Q	
3667.4	(33/2$^-$)	350.62 *20*	96 *26*	3316.9	(31/2$^-$)	D	
		612.95 *14*	100 *8*	3054.3	(29/2$^-$)	Q	
3673.3	(31/2$^-$)	1016 *1*	100	2657.3	(27/2$^-$)		
3800.8+x?	(31/2$^-$)	900.1 *5*	100	2900.7+x?	(27/2$^-$)		
3880.3	(31/2$^+$)	686 *1*	100	3194.3	(27/2$^+$)	Q	
3985.2	(35/2$^-$)	318.0 *4*	51 *9*	3667.4	(33/2$^-$)	D	
		668.6 *14*	100.0 *18*	3316.9	(31/2$^-$)	Q	
4015.2	(33/2$^+$)	433.9 *2*		3581.4	(31/2$^+$)		
		637.2 *2*	1.0×10^2 *3*	3377.9	(29/2$^+$)		
4031.7	(33/2$^+$)	671.1 *2*	100	3360.6	(29/2$^+$)	Q	
4051.3?		782[#]		3269.3?			The ordering of this γ and the 612-keV γ is uncertain.
4235.6	(35/2$^+$)	654.20 *14*	100	3581.4	(31/2$^+$)	Q	
4252.7?	(33/2$^+$)	771.8 *5*	100	3480.9?	(29/2$^+$)		
4043.3+y	(37/2$^+$)	782.2 *2*	100	3261.1+y	(33/2$^+$)		
4375.4	(37/2$^-$)	390.6 *9*	51 *5*	3985.2	(35/2$^-$)	D	
		707.5 *7*	100 *9*	3667.4	(33/2$^-$)	Q	
4529.3	(35/2$^-$)	856 *1*	100	3673.3	(31/2$^-$)		
4582.3	(35/2$^+$)	702 *1*	100	3880.3	(31/2$^+$)		
4751.2	(37/2$^+$)	736 *1*	100	4015.2	(33/2$^+$)	Q	
4767.6	(39/2$^-$)	392.6 *15*	35 *5*	4375.4	(37/2$^-$)	D	
		782.5 *6*	100.0 *17*	3985.2	(35/2$^-$)	Q	
4777.8+x?	(35/2$^-$)	977 *1*	100	3800.8+x?	(31/2$^-$)		
4803.8	(37/2$^+$)	772.1 *2*	100	4031.7	(33/2$^+$)		
4979.5	(39/2$^+$)	743.9 *5*	100	4235.6	(35/2$^+$)	Q	
4813.3+y	(41/2$^+$)	770 *1*	100	4043.3+y	(37/2$^+$)		
5111.5?	(37/2$^+$)	858.8 *5*	100	4252.7?	(33/2$^+$)		
5216.9	(41/2$^-$)	449.1 *2*	35 *5*	4767.6	(39/2$^-$)		
		841.4 *4*	100 *4*	4375.4	(37/2$^-$)	Q	
5380.3	(39/2$^+$)	798 *1*	100	4582.3	(35/2$^+$)		
5589.2	(41/2$^+$)	838 *1*	100	4751.2	(37/2$^+$)	Q	
5661.8	(41/2$^+$)	858 *1*	100	4803.8	(37/2$^+$)		
5678.0	(43/2$^-$)	460.9 *2*	40 *4*	5216.9	(41/2$^-$)		
		910.65 *25*	100 *3*	4767.6	(39/2$^-$)	Q	
5823.5	(43/2$^+$)	844.0 *6*	100	4979.5	(39/2$^+$)	Q	
5843.4+x?	(39/2$^-$)	1065.6 *5*	100	4777.8+x?	(35/2$^-$)		
5617.3+y	(45/2$^+$)	804 *2*	100	4813.3+y	(41/2$^+$)		
6048.2?	(41/2$^+$)	936.7 *5*	100	5111.5?	(37/2$^+$)		
6197.3	(45/2$^-$)	519.2 *9*		5678.0	(43/2$^-$)		
		980.45 *14*	100 *5*	5216.9	(41/2$^-$)	Q	
6268.4	(43/2$^+$)	888 *1*	100	5380.3	(39/2$^+$)		
6522.2	(45/2$^+$)	933 *1*	100	5589.2	(41/2$^+$)	Q	
6595.8	(45/2$^+$)	934 *1*	100	5661.8	(41/2$^+$)		
6712.5	(47/2$^-$)	1034.5 *4*	100	5678.0	(43/2$^-$)	Q	
6770.7	(47/2$^+$)	947.20 *19*	100	5823.5	(43/2$^+$)	Q	
6505+y	(49/2$^+$)	888 *1*	100	5617.3+y	(45/2$^+$)		
7014.4+x?	(43/2$^-$)	1171 *1*	100	5843.4+x?	(39/2$^-$)		
7244.4	(47/2$^+$)	976 *1*	100	6268.4	(43/2$^+$)		
7313.8	(49/2$^-$)	1116.5 *15*	100	6197.3	(45/2$^-$)		
7538.2	(49/2$^+$)	1016 *1*	100	6522.2	(45/2$^+$)	Q	
7614.8	(49/2$^+$)	1019 *1*	100	6595.8	(45/2$^+$)		

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

γ(^{125}Ce) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]
7465+y	(53/2$^+$)	960 *1*	100	6505+y	(49/2$^+$)	
7820.2	(51/2$^+$)	1049.5 *4*	100	6770.7	(47/2$^+$)	Q
7857.5	(51/2$^-$)	1145.0 *7*	100	6712.5	(47/2$^-$)	
8309.4+x?	(47/2$^-$)	1295 *1*	100	7014.4+x?	(43/2$^-$)	
8311	(51/2$^+$)	1067 *1*	100	7244.4	(47/2$^+$)	
8561.8	(53/2$^-$)	1248 *1*	100	7313.8	(49/2$^-$)	
8632.2	(53/2$^+$)	1094 *1*	100	7538.2	(49/2$^+$)	
8729.8	(53/2$^+$)	1115 *1*	100	7614.8	(49/2$^+$)	
8496+y?	(57/2$^+$)	1031[#] *1*	100	7465+y	(53/2$^+$)	
8968.7	(55/2$^+$)	1148.5 *7*	100	7820.2	(51/2$^+$)	
9084.5	(55/2$^-$)	1227 *1*	100	7857.5	(51/2$^-$)	
9478	(55/2$^+$)	1167 *1*	100	8311	(51/2$^+$)	
9807.2	(57/2$^+$)	1175 *1*	100	8632.2	(53/2$^+$)	
9893.8?	(57/2$^-$)	1332[#] *1*	100	8561.8	(53/2$^-$)	
9943.9	(57/2$^+$)	1214 *1*	100	8729.8	(53/2$^+$)	
10209.7	(59/2$^+$)	1241.0 *7*	100	8968.7	(55/2$^+$)	
10454.5?	(59/2$^-$)	1370[#] *1*	100	9084.5	(55/2$^-$)	
10738	(59/2$^+$)	1260 *1*	100	9478	(55/2$^+$)	
11062	(61/2$^+$)	1255 *1*	100	9807.2	(57/2$^+$)	
11256	(61/2$^+$)	1312 *1*	100	9943.9	(57/2$^+$)	
11290.8?	(61/2$^-$)	1397[#] *1*	100	9893.8?	(57/2$^-$)	
11538.2	(63/2$^+$)	1328.5 *7*	100	10209.7	(59/2$^+$)	
12101?	(63/2$^+$)	1363[#] *1*	100	10738	(59/2$^+$)	
12378	(65/2$^+$)	1316 *1*	100	11062	(61/2$^+$)	
12664?	(65/2$^+$)	1408[#] *1*	100	11256	(61/2$^+$)	
12950.2?	(67/2$^+$)	1412[#] *1*	100	11538.2	(63/2$^+$)	
13706?	(69/2$^+$)	1328[#] *1*	100	12378	(65/2$^+$)	
14445.2?	(71/2$^+$)	1495[#] *1*	100	12950.2?	(67/2$^+$)	
15066?	(73/2$^+$)	1360[#] *1*	100	13706?	(69/2$^+$)	

[†] Weighted average of ^{125}Pr ε decay, ^{92}Mo(^{40}Ca,α2pnγ) and ^{64}Zn(^{64}Zn,2pnγ), unless otherwise noted.
[‡] From DCO in ^{92}Mo(^{40}Ca,α2pnγ) and angular correlation ratios in ^{64}Zn(^{64}Zn,2pnγ), unless otherwise noted.
[#] Placement of transition in the level scheme is uncertain.

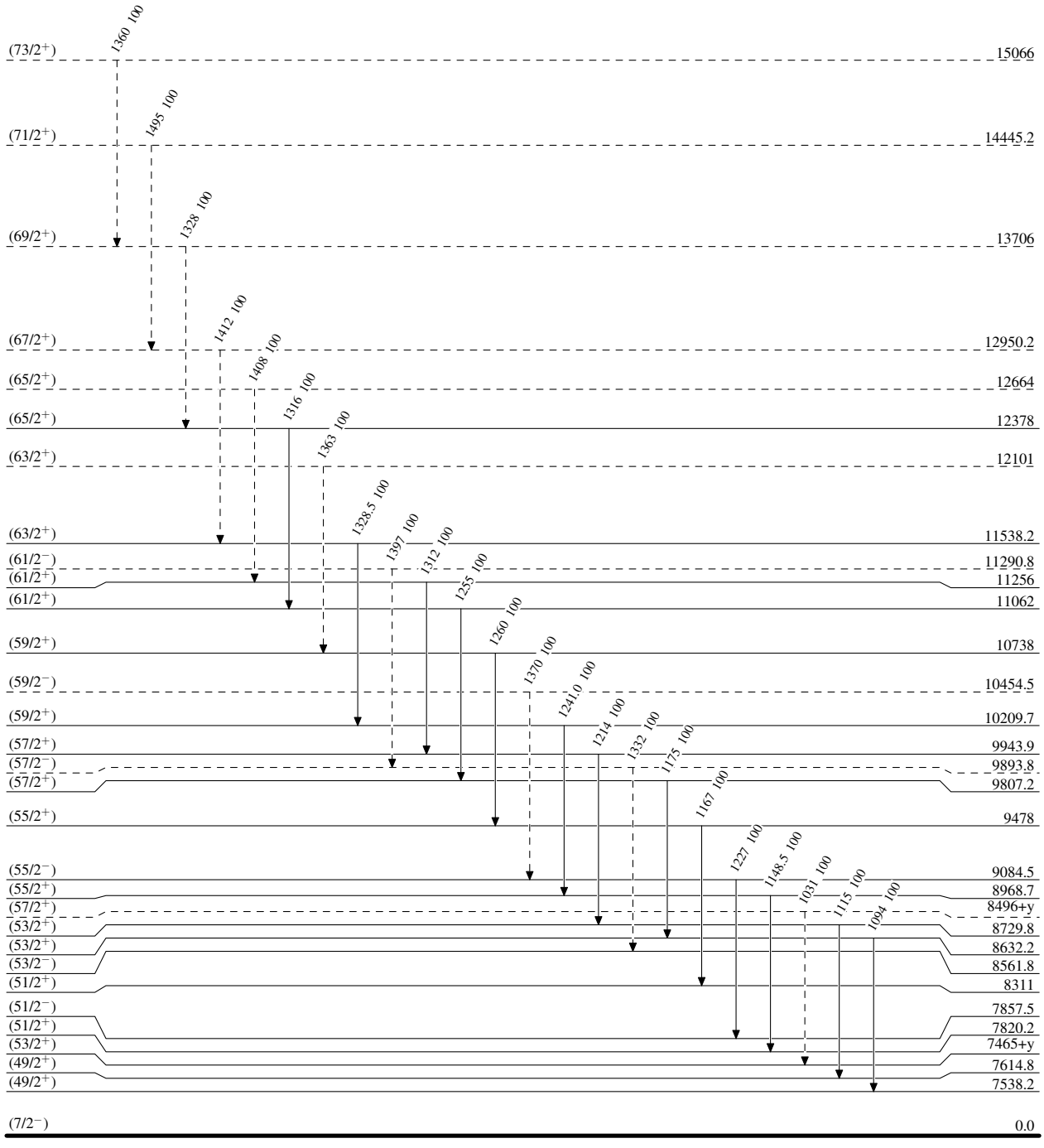
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



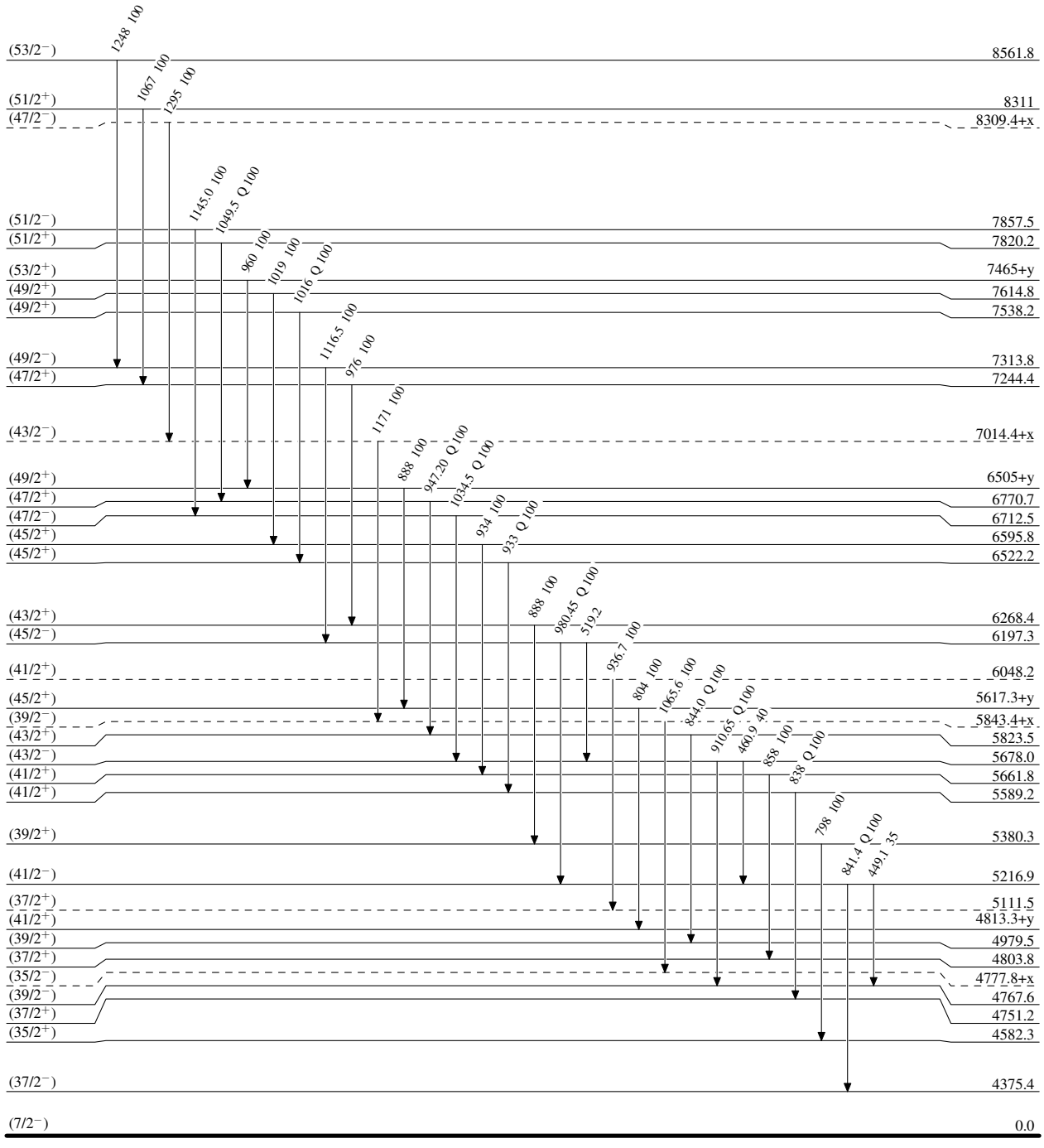
9.7 s *3*

$^{125}_{58}Ce_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{125}_{58}Ce_{67}$

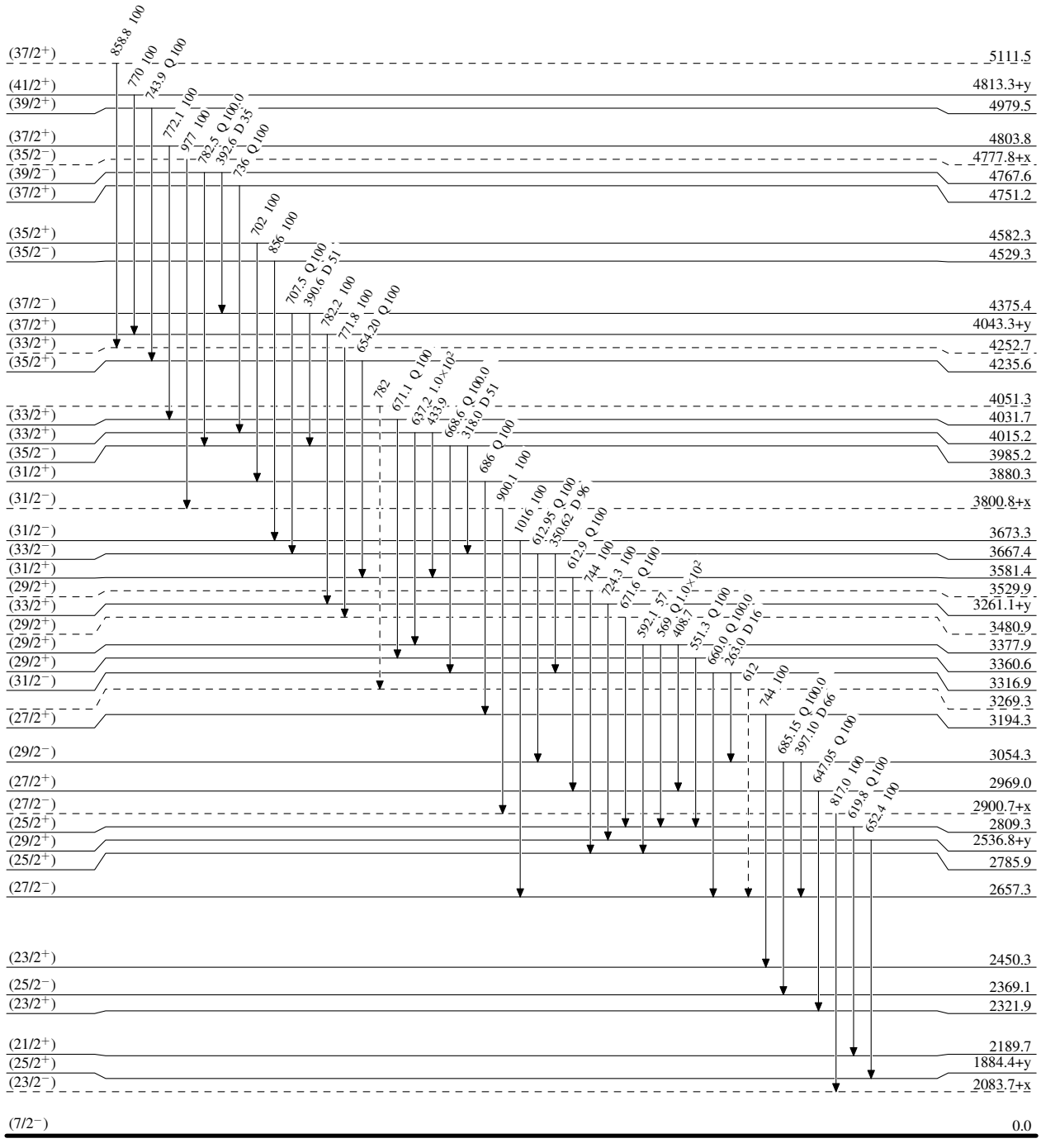
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

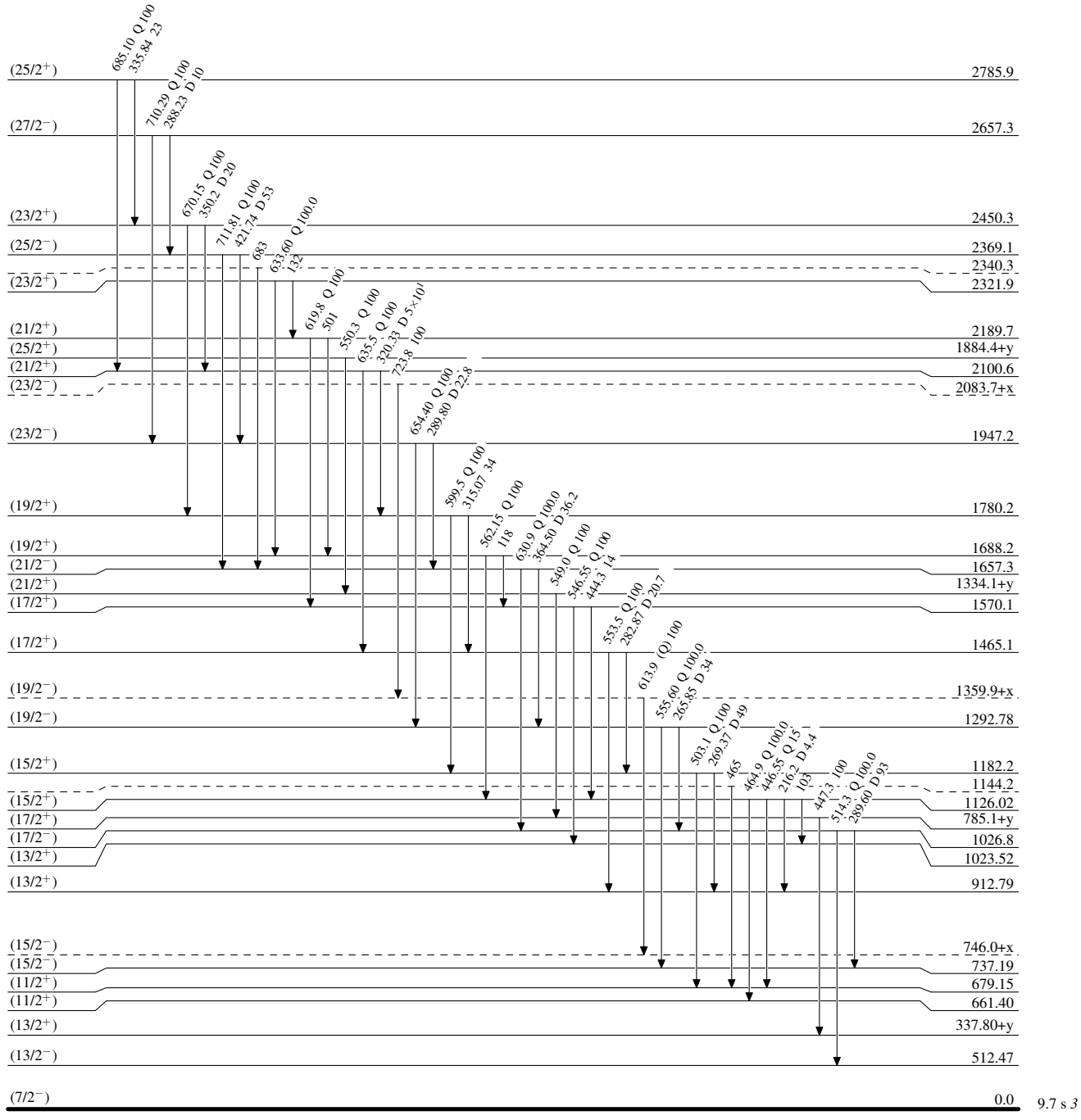


$^{125}_{58}Ce_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

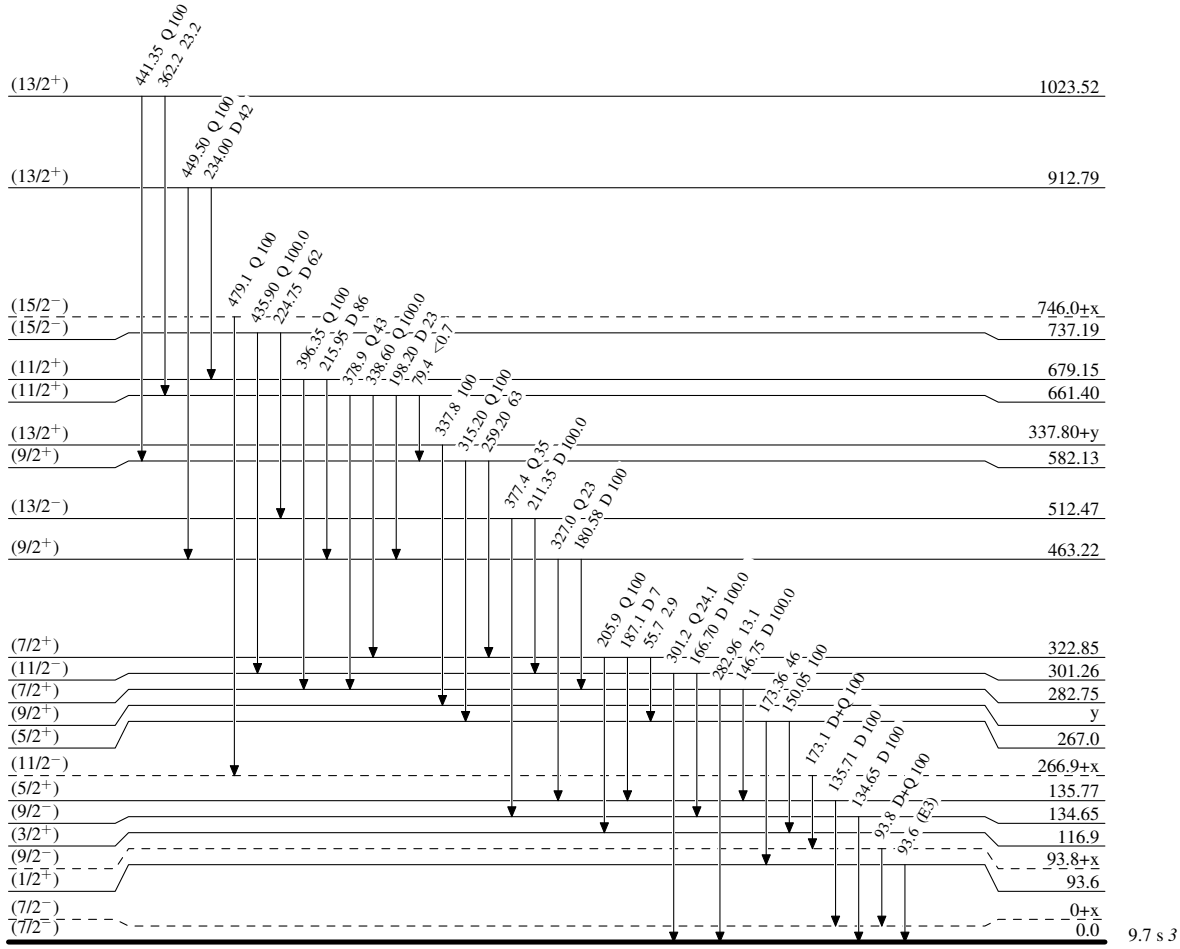


$^{125}_{58}Ce_{67}$

Adopted Levels, Gammas

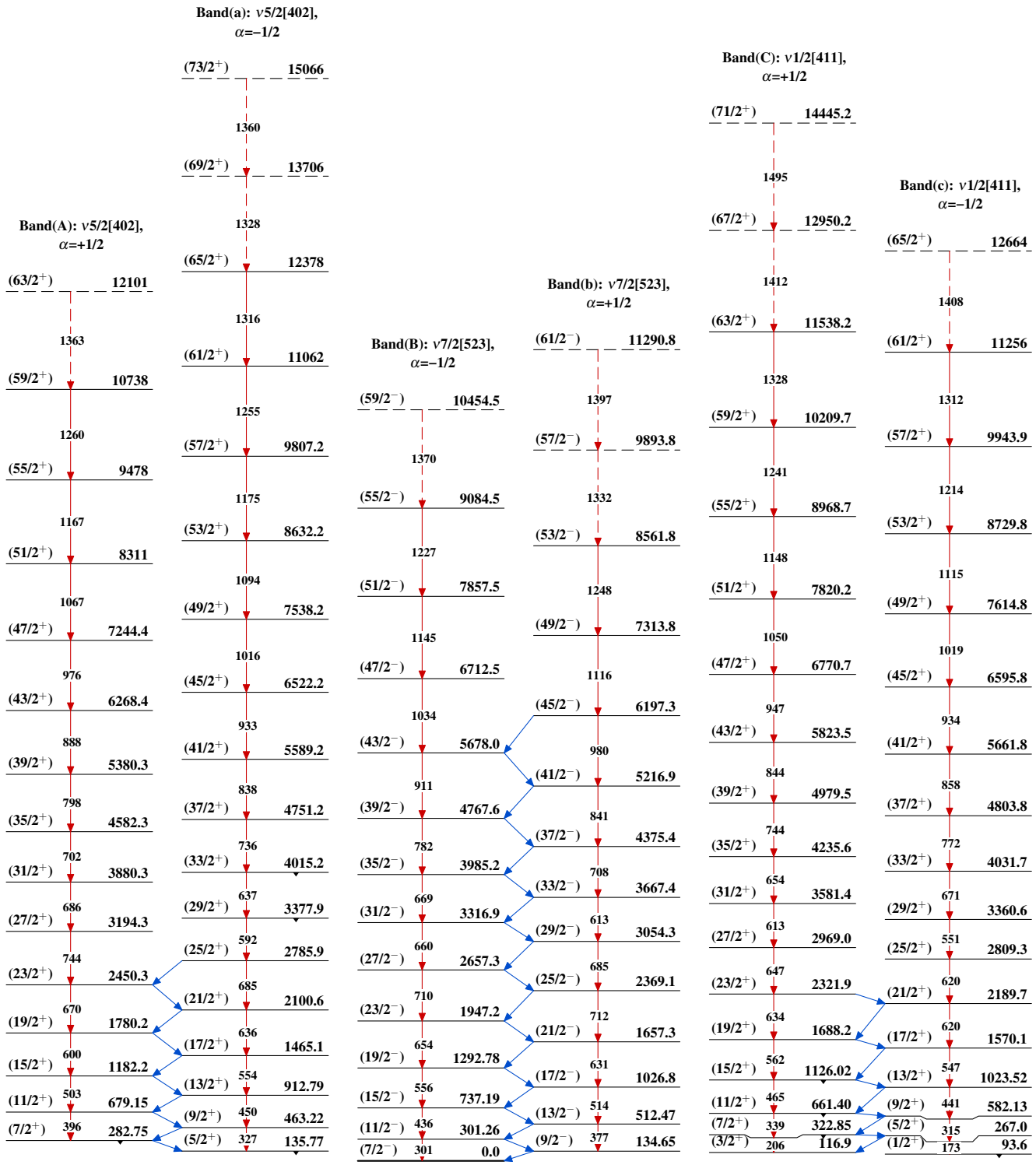
Level Scheme (continued)

Intensities: Relative photon branching from each level



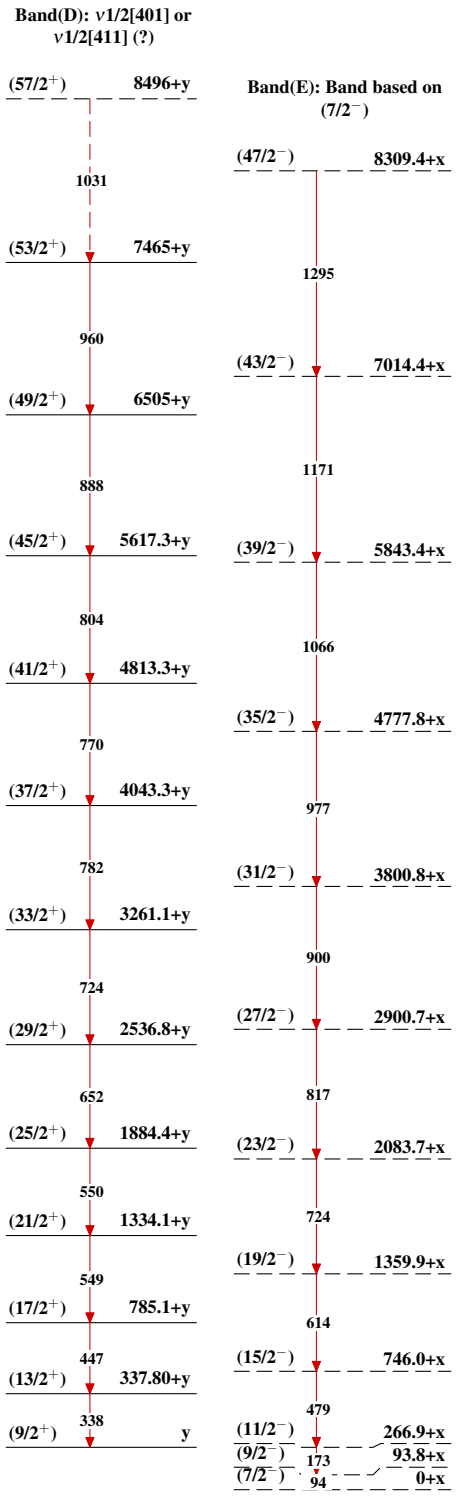
$^{125}_{58}Ce_{67}$

Adopted Levels, Gammas



$^{125}_{58}Ce_{67}$

Adopted Levels, Gammas (continued)



$^{125}_{58}Ce_{67}$