^{185}Pt ε decay 1979Sc20

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106, 619 (2005)	1-Nov-2005

Parent: ^{185}Pt: E=0.0; J$^{\pi}$=(9/2^{+}); T$_{1/2}$=70.9 min *24*; Q(ε)=3650 *50*; %ε+%β^{+} decay=100.0
Parent: ^{185}Pt: E=103.2; J$^{\pi}$=(1/2^{-}); T$_{1/2}$=33.0 min *8*; Q(ε)=3650 *50*; %ε+%β^{+} decay=100.0

1979Sc20: The source was obtained from the decay of ^{185}Hg. Both the ground-state (J^{π}=(9/2^{+}), T$_{1/2}$=70.9 min *24*) and the isomeric-state (E=129, J^{π}=(1/2^{-}), T$_{1/2}$=33.0 min *8*) activities were observed. ISOLDE 2 facilities; Ge(Li) X-ray detector, Ge(Li) for γ's, Si(Li) for electrons; measured Eγ, Iγ, $\gamma\gamma$-coin, γ-ce(t), ce-ce(t); deduced ICC. ^{185}Ir deduced levels, J^{π}, T$_{1/2}$.

The decay scheme presented here was constructed by 1979Sc20 and combines the g.s. and the isomeric-state decays of ^{185}Pt to ^{185}Ir. Since the intensities of gammas from each isomer are not available separately at this time, ε decay feedings to levels in ^{185}Ir from 70.9-min and 33.0-min ^{185}Pt could not be deduced.

^{185}Ir Levels

E(level)	J$^{\pi}$†	T$_{1/2}$‡	Comments
0.0	5/2^{-}	14.4 h *1*	T$_{1/2}$: from Adopted Levels.
5.8 *1*	9/2^{-}	5 ns *1*	
135.3 *1*	1/2^{-}	0.29 ns *3*	
158.6 *2*	(13/2)$^{-}$		
229.6 *1*	3/2^{+}	2.10 ns *17*	T$_{1/2}$: weighted average of 2.1 ns *3* from $\gamma\gamma$(t), ce γ(t) (1979Sc20), and 2.1 ns *2* from delayed $\gamma\gamma$ coincidences (1970FiZZ).
255.10 *15*	3/2^{-}		
300.10 *15*	(7/2)$^{-}$		
332.7 *2*	(1/2)$^{+}$		
335.3 *2*	(5/2)$^{+}$		
418.7 *2*	(3/2)$^{+}$		
442.3 *4*	(3/2^{+},5/2^{+})		
465.7 *3*	(11/2)$^{-}$		
496.9 *3*	(7/2)$^{+}$		
506.8 *2*	(5/2^{-})		
519.7 *2*	(3/2)$^{-}$		
556.0 *2*	(5/2^{+})		
646.6 *3*	(11/2^{-})	19 ns *3*	T$_{1/2}$: from delayed $\gamma\gamma$ coincidences (1970FiZZ).
648.7 *3*	(3/2^{+},5/2^{+},7/2^{+})		
696.8 *3*	(7/2)$^{+}$		
720.3 *2*	1/2^{-},3/2^{-}		
727.1 *3*	(5/2^{-},7/2^{-},9/2^{-})		
755.4 *3*			
801.4 *4*	(5/2^{-},7/2^{-},9/2^{-})		
861.1 *4*	(1/2^{-},3/2^{-},5/2^{-})		
876.9 *6*			
899.7 *7*	(9/2^{-},11/2^{-},13/2^{-})		
900.5 *5*	(11/2^{-},13/2^{-})		
944.7 *4*	(13/2^{-})		
1016.7 *4*			
1038.9 *10*			
1068.1 *6*	(3/2^{+})		
1103.1 *6*			
1136.1 *5*			
1170 *1*			
1211.0 *4*			
1228.3 *5*			
1259.7 *5*			
1295.0 *5*			
1352.8 *4*			

Continued on next page (footnotes at end of table)

^{185}Pt ε decay 1979Sc20 (continued)

^{185}Ir Levels (continued)

E(level)
1582.6 *5*
1625.5 *5*

† From Adopted Levels.
‡ From $\gamma\gamma$(t), ce γ(t) (1979Sc20), except as noted.

γ(^{185}Ir)

E(A,I,G) Mainly from 70.9-min ^{185}Pt decay.
RI(DIJK) Transition mixed with a transition from ^{185}Ir decay.
RI(HMFG) Transition mixed with a transition from ^{185}Au decay.

$E_γ$[†]	$I_γ$[‡]	E_i(level)	$J_i^π$	E_f	$J_f^π$	Mult.[#]	δ[@]	α[c]	Comments
5.8 *1*		5.8	9/2⁻	0.0	5/2⁻	E2		1.22×10⁶	α(M)= 9.18×10⁵ Mult.: from ce(M2)/ce(M3)exp=1.1 *3*.
24.00 *5*	0.7 *2*	442.3	(3/2⁺,5/2⁺)	418.7	(3/2)⁺				α(M1)=75.6, α(E2)=4070.
59.2		556.0	(5/2⁺)	496.9	(7/2)⁺	(M1+E2)	0.63 *+8−6*	17.2 *16*	α(L)= 13.0 *10*; α(M)= 3.25 *24*; α(N+..)= 0.98 *9* δ: from ce(L1)/ce(L2)exp=0.5 *1*.
83.5[a] *1*	0.65 *15*	418.7	(3/2)⁺	335.3	(5/2)⁺	(M1+E2)	0.20 *4*	10.7	α(K)= 8.49; α(L)= 1.66; α(M)= 0.388; α(N+..)= 0.120 δ: from ce(L1)/ce(L2)exp=5 *1*.
85.9[a] *1*	4.0 *5*	418.7	(3/2)⁺	332.7	(1/2)⁺	(M1+E2)	0.20 *4*	9.80	α(K)= 7.83; α(L)= 1.51; α(M)= 0.355; α(N+..)= 0.110 δ: from ce(L1)/ce(L2)exp=5 *1*.
94.3[a] *1*	1.5[b] *3*	229.6	3/2⁺	135.3	1/2⁻	E1		0.469	α(K)= 0.377; α(L)= 0.0701; α(M)= 0.0162; α(N+..)= 0.00485 Mult.: from α(K)exp<0.6.
103.1[&] *1*	2.0 *4*	332.7	(1/2)⁺	229.6	3/2⁺	E2(+M1)		5.0 *8*	α(K)= 2.8 *20*; α(L)= 1.7 *9*; α(M)= 0.42 *23*; α(N+..)= 0.13 *7* Mult.: from α(K)exp=1.1 *3* and ce(L2)/ce(L3)exp=1.0 *2*.
105.6[&] *1*	6.2 *6*	335.3	(5/2)⁺	229.6	3/2⁺	M1+E2	0.78 *14*	4.79 *13*	α(K)= 3.0 *3*; α(L)= 1.32 *13*; α(M)= 0.33 *3*; α(N+..)= 0.10 *1* δ: from α(K)exp=2.4 *5* and ce(L1)/ce(L2)exp=1.0 *2*.
106.9[a] *1*	3.0 *4*	442.3	(3/2⁺,5/2⁺)	335.3	(5/2)⁺	(M1+E2)	1.2 *4*	4.26 *21*	α(K)= 2.2 *5*; α(L)= 1.56 *20*; α(M)= 0.39 *5*; α(N+..)= 0.120 *15* δ: from α(K)exp=2.2 *5*.
109.1[a] *1*	5.8 *7*	442.3	(3/2⁺,5/2⁺)	332.7	(1/2)⁺	(E2)		3.29	α(K)= 0.678; α(L)= 1.96; α(M)= 0.503; α(N+..)= 0.153 Mult.: α(K)exp=1.3 *5* is consistent with E2 or with E1+M2 (δ≈0.2); however, the decay scheme requires Δπ=no.
113.8 *1*	2.4 *5*	556.0	(5/2⁺)	442.3	(3/2⁺,5/2⁺)	M1		4.37	α(K)= 3.60; α(L)= 0.592; α(M)= 0.136; α(N+..)= 0.0427 Mult.: from α(K)exp=3.6 *4*.
117.2[g]		1016.7		899.7	(9/2⁻,11/2⁻,13/2⁻)				

$\gamma(^{185}Ir)$ (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[c]	Comments
119.8[&] *1*	14.70 *15*	255.10	3/2⁻	135.3	1/2⁻	M1+E2	0.132 *12*	3.75	α(K)= 3.07; α(L)= 0.524; α(M)= 0.121; α(N+..)= 0.0379 δ: from α(K)exp=2.9 *3* and ce(L1)/ce(L2)exp=8.2 *3*.
135.3[&] *1*	80 *10*	135.3	1/2⁻	0.0	5/2⁻	E2		1.42	α(K)= 0.445; α(L)= 0.735; α(M)= 0.188; α(N+..)= 0.0571 Mult.: from ce(K):ce(L1):ce(L2):ce(L3):ce(M2): ce(M3):ce(N)exp= 1:0.11:1.0:0.87:0.37:0.30:0.2.
137.0 *2*	4 *2*	556.0	(5/2⁺)	418.7	(3/2)⁺	M1+E2	0.7 *6*	2.2 *4*	α(K)= 1.6 *5*; α(L)= 0.46 *15*; α(M)= 0.11 *4*; α(N+..)= 0.035 *9* δ: from α(K)exp=1.6 *5*.
140.9 *2*	2 *1*	696.8	(7/2)⁺	556.0	(5/2⁺)	M1		2.38	α(K)= 1.96; α(L)= 0.321; α(M)= 0.0738; α(N+..)= 0.0231 Mult.: from α(K)exp=2.0 *4*.
152.8[f] *1*	6.1[f] *10*	158.6	(13/2)⁻	5.8	9/2⁻	E2		0.905	α(K)= 0.336; α(L)= 0.427; α(M)= 0.109; α(N+..)= 0.0331 Mult.: from α(K)exp=0.36 *5* and ce(L2)/ce(L3)exp=1.2 *1*.
152.8[d]		648.7	(3/2⁺,5/2⁺,7/2⁺)	496.9	(7/2)⁺				
161.50 *15*	1.4 *4*	496.9	(7/2)⁺	335.3	(5/2)⁺				I_γ: Iγ(161γ)/Iγ(267γ)=0.05 from (α,4nγ) reaction, 0.82 *31* here, both γ′s deexciting the same level. The 161-keV peak was indicated on the γ spectrum by 1979Sc20 to include γ′s from ^{185}Ir ε-decay. α(M1)=1.614, α(E2)=0.739.
[x]168.80[&] *15*	1.4 *4*								
[x]187.10 *15*	0.4 *2*								
191.40 *15*	2.2 *4*	1136.1		944.7	(13/2⁻)	(E2)		0.406	α(K)= 0.192; α(L)= 0.161; α(M)= 0.0408; α(N+..)= 0.0123 Mult.: from α(K)exp=0.2 *1*.
[x]195.2 *2*	1.3 *2*					(M1+E2)			Mult.: from α(K)exp=0.6 *2*.
197.4[&] *1*	74 *10*	332.7	(1/2)⁺	135.3	1/2⁻	E1		0.0710	α(K)= 0.0585; α(L)= 0.00967; α(M)= 0.00222; α(N+..)= 0.000668 Mult.: from α(K)exp=0.05 *1*.
200.4[&] *4*	1.0 *2*	720.3	1/2⁻,3/2⁻	519.7	(3/2)⁻				
202.60 *15*	0.7 *2*	1103.1		900.5	(11/2⁻,13/2⁻)				
206.80[&] *15*	6.5 *10*	506.8	(5/2⁻)	300.10	(7/2)⁻	M1		0.808	α(K)= 0.666; α(L)= 0.108; α(M)= 0.0250; α(N+..)= 0.00771 Mult.: from α(K)exp=0.80 *15*.
212.6[a] *1*	12 *2*	442.3	(3/2⁺,5/2⁺)	229.6	3/2⁺	M1		0.748	α(K)= 0.617; α(L)= 0.1004; α(M)=

γ(^{185}Ir) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[@]	α[c]	Comments
									0.0231; α(N+..)= 0.00713 Mult.: from α(K)exp=0.6 *1*.
229.60[a] *10*	100	229.6	3/2$^+$	0.0	5/2$^-$	E1		0.0486	α(K)= 0.0401; α(L)= 0.00654; α(M)= 0.00150; α(N+..)= 0.000449 Mult.: from α(K)exp=0.042 *6*.
[x]238.70 *15*	3.4 *5*								
243.00 *15*	6 *2*	1259.7		1016.7					α(K)exp<0.1.
251.2 *3*	8 *1*	506.8	(5/2$^-$)	255.10	3/2$^-$	M1		0.472	α(K)= 0.390; α(L)= 0.0633; α(M)= 0.0145; α(N+..)= 0.00446 Mult.: from α(K)exp=0.37 *8*; K line was mixed with L line from another transition.
253.1 *5*	3 *1*	899.7	(9/2$^-$,11/2$^-$,13/2$^-$)	646.6	(11/2$^-$)	M1		0.462	α(K)= 0.382; α(L)= 0.0620; α(M)= 0.0142; α(N+..)= 0.00437 Mult.: from α(K)exp=0.4 *2*.
255.10[&] *15*	51[b] *5*	255.10	3/2$^-$	0.0	5/2$^-$	M1(+E2)	0.4 *+2−4*	0.41 *7*	α(K)= 0.33 *7*; α(L)= 0.059 *12*; α(M)= 0.014 *3*; α(N+..)= 0.00420 *14* δ: from α(K)exp=0.34 *4*.
264.40 *15*	8.4 *15*	519.7	(3/2)$^-$	255.10	3/2$^-$	M1		0.410	α(K)= 0.339; α(L)= 0.0550; α(M)= 0.0126; α(N+..)= 0.00386 Mult.: from α(K)exp=0.34 *8*; K line was mixed with L line of another transition.
267.3 *2*	1.7 *4*	496.9	(7/2)$^+$	229.6	3/2$^+$	[E2]		0.136	
278.1[a] *2*	1.5 *3*	696.8	(7/2)$^+$	418.7	(3/2)$^+$	[E2]		0.120	Iγ(278γ)/Iγ(361γ)=0.75 *21* was measured in (α,4nγ) reaction, 2.1 *10* here.
294.3[a] *1*	6.7 *10*	300.10	(7/2)$^-$	5.8	9/2$^-$	(M1+E2)	0.8 *4*	0.23 *4*	α(K)= 0.18 *4*; α(L)= 0.036 *6*; α(M)= 0.0085 *15*; α(N+..)= 0.00258 *15* δ: from α(K)exp=0.18 *4*; K line was mixed with L line of another transition.
298.1 *2*	2.0 *4*	944.7	(13/2$^-$)	646.6	(11/2$^-$)	(M1)		0.295	α(K)= 0.244; α(L)= 0.0395; α(M)= 0.00906; α(N+..)= 0.00277 Mult.: from α(K)exp=0.2 *1*.
300.10[a] *15*	7.8 *10*	300.10	(7/2)$^-$	0.0	5/2$^-$	M1+E2	0.7 *4*	0.23 *4*	α(K)= 0.18 *4*; α(L)= 0.035 *7*; α(M)= 0.0081 *15*; α(N+..)= 0.00247 *16* δ: from α(K)exp=0.18 *4*.
307.3 *2*	3.4 *4*	465.7	(11/2)$^-$	158.6	(13/2)$^-$	M1		0.272	α(K)= 0.225; α(L)= 0.0364; α(M)= 0.00834; α(N+..)= 0.00255 Mult.: from α(K)exp=0.22 *4*.
313.4 *2*	2.0 *4*	648.7	(3/2$^+$,5/2$^+$,7/2$^+$)	335.3	(5/2)$^+$	M1		0.258	α(K)= 0.213; α(L)= 0.0345; α(M)= 0.0079; α(N+..)= 0.00241 Mult.: from α(K)exp=0.25 *5*.
[x]326.3 *3*	<2								Mult.: (M1) from α(K)exp>0.2.
335.4[fa] *2*	13.5[f] *20*	335.3	(5/2)$^+$	0.0	5/2$^-$	E1		0.0195	α(K)= 0.0162; α(L)= 0.00255; α(M)= 0.000583;

$^{185}_{77}$Ir$_{108}$-5

γ(^{185}Ir) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[@]	α[c]	Comments
									α(N+..)= 0.000174 Mult.: from α(K)exp=0.015 *3*. I_γ: Iγ(355.4γ)/Iγ(105.6γ)=3.6 *4*, measured in the (α,4nγ) reaction, gives Iγ=22.5 *33*. Thus, if 335.4γ is a doublet, 335γ deexciting the 801-keV level must be weak.
335.4[da] *2*		801.4	(5/2$^-$,7/2$^-$,9/2$^-$)	465.7	(11/2)$^-$				
341.4[a] *2*	3.5 *4*	861.1	(1/2$^-$,3/2$^-$,5/2$^-$)	519.7	(3/2)$^-$	(M1)		0.205	α(K)= 0.170; α(L)= 0.0273; α(M)= 0.00626; α(N+..)= 0.00191 Mult.: from α(K)exp=0.16 *3*.
[x]356.6 *2*	1.7 *4*					(M1+E2)			Mult.: from α(K)exp=0.09 *3*; K line was mixed with L lines of another transition.
361.5 *3*	0.7 *3*	696.8	(7/2)$^+$	335.3	(5/2)$^+$	(M1)		0.176	α(K)= 0.146; α(L)= 0.0234; α(M)= 0.00536; α(N+..)= 0.00164 Mult.: from α(K)exp=0.22 *5*; K line was mixed with L line of another transition.
370.1[f] *2*	≤0.7[f]	876.9		506.8	(5/2$^-$)				Measured Iγ=3.3 *4*.
370.1[f] *2*	3.0[f] *5*	1016.7		646.6	(11/2$^-$)				α(K)exp=0.06 *3*; K line was mixed with L line of another transition. Measured Iγ=3.3 *4*. I_γ: authors state that >80% of intensity should be placed from 1016.7 level.
384.5[&] *2*	14.8 *15*	519.7	(3/2)$^-$	135.3	1/2$^-$	(M1+E2)	1.1 +*13*−*5*	0.093 *18*	α(K)= 0.074 *16*; α(L)= 0.0149 *24*; α(M)= 0.0035 *6*; α(N+..)= 0.00107 *10* δ: from α(K)exp=0.05 *1*.
[x]414.4[a] *3*									Iγ(414.4γ)+Iγ(416.1γ)=2.3 *3*.
[x]416.1[a] *3*									
418.8[&] *2*	6[b] *2*	418.7	(3/2)$^+$	0.0	5/2$^-$	[E1]		0.0117	
427.0 *2*	3.3 *4*	727.1	(5/2$^-$,7/2$^-$,9/2$^-$)	300.10	(7/2)$^-$	(M1+E2)	1.3 +*25*−*6*	0.064 *12*	α(K)= 0.051 *11*; α(L)= 0.0104 *16*; α(M)= 0.0024 *4*; α(N+..)= 0.00074 *8* δ: from α(K)exp=0.05 *2*.
434.6 *3*	1.4 *2*	900.5	(11/2$^-$,13/2$^-$)	465.7	(11/2)$^-$	(M1)		0.108	α(K)= 0.0892; α(L)= 0.0142; α(M)= 0.00327; α(N+..)= 0.001002 Mult.: from α(K)exp=0.10 *3*.
442.2 *3*	1.5 *3*	442.3	(3/2$^+$,5/2$^+$)	0.0	5/2$^-$	[E1]		0.0104	
459.8 *2*	7 *1*	465.7	(11/2)$^-$	5.8	9/2$^-$	M1(+E2)	0.7 *7*	0.072 *21*	α(K)= 0.059 *18*; α(L)= 0.010 *3*; α(M)= 0.0024 *6*; α(N+..)= 0.00073 *14* δ: from α(K)exp=0.06 *2*.
465.0[&] *2*	25 *5*	720.3	1/2$^-$,3/2$^-$	255.10	3/2$^-$	M1(+E2)	<0.9	0.08 *3*	α(K)= 0.063 *24*; α(L)= 0.011 *4*; α(M)= 0.0024 *8*; α(N+..)= 0.00075 *19* δ: from α(K)exp=0.07 *2*. Other data: ce(K)/ce(L)exp=4 *2*.
488.0 *5*		646.6	(11/2$^-$)	158.6	(13/2)$^-$				Iγ(488.0γ+490.7γ)=4.7 *5*. α(M1)=0.0793.

γ(^{185}Ir) (continued)

Eγ[†]	Iγ[‡]	Ei(level)	Jiπ	Ef	Jfπ	Mult.[#]	δ[@]	α[c]	Comments
490.7 3		1211.0		720.3	1/2⁻,3/2⁻				
506.9[d] 6		506.8	(5/2⁻)	0.0	5/2⁻				Iγ: may include γ ray from ^{185}Ir ε decay.
506.9[e] 6	[e]	1228.3		720.3	1/2⁻,3/2⁻				Iγ: may include γ ray from ^{185}Ir ε decay.
519.7 3		519.7	(3/2)⁻	0.0	5/2⁻				Iγ: γ ray obscured by annihilation line.
573.7 5	0.5 2	1038.9		465.7	(11/2)⁻				
576.8 5	0.9 3	876.9		300.10	(7/2)⁻				
584.9[&] 2	17 3	720.3	1/2⁻,3/2⁻	135.3	1/2⁻	M1		0.0497	α(K)= 0.0410; α(L)= 0.00651 Mult.: from α(K)exp=0.046 10 and ce(K)/ce(L)exp=8 2.
596.8 2	2.4 8	755.4		158.6	(13/2)⁻				
[x]611.9 3	2.1 4								
[x]620.5 3	2.4 3								
626.0 4	1.8 4	1068.1	(3/2⁺)	442.3	(3/2⁺,5/2⁺)				
640.8 2	7 1	646.6	(11/2⁻)	5.8	9/2⁻	(M1)		0.0392	α(K)= 0.0324; α(L)= 0.00513 Mult.: from α(K)exp=0.036 5.
[x]689.8 3	4.8 10								α(K)exp(689.8γ+691.0γ)=0.013 5.
691.0[&g] 3	2.8 5	1211.0		519.7	(3/2)⁻				
[x]699.0 3	3.0 9								
704.2[g] 3	3 1	1211.0		506.8	(5/2⁻)				
706.2 2	2.0 8	1352.8		646.6	(11/2⁻)				
720.5[d&] 2	20 4	720.3	1/2⁻,3/2⁻	0.0	5/2⁻				α(K)exp=0.016 4; K/L=6.
720.5[e]	20[e] 4	727.1	(5/2⁻,7/2⁻,9/2⁻)	5.8	9/2⁻				
720.5[e]	20[e] 4	1228.3		506.8	(5/2⁻)				
726.4[e&] 2	5[e] 1	727.1	(5/2⁻,7/2⁻,9/2⁻)	0.0	5/2⁻				
726.4[e]	5[e] 1	861.1	(1/2⁻,3/2⁻,5/2⁻)	135.3	1/2⁻				
726.4[e] 2	5[e] 1	1170		442.3	(3/2⁺,5/2⁺)				
735.3[&] 2	8 1	1068.1	(3/2⁺)	332.7	(1/2)⁺	(M1+E2)	1.2 +12−5	0.017 3	α(K)= 0.0139 23; α(L)= 0.0024 3 δ: from α(K)exp=0.014 4.
741.6[&] 2	3 1	900.5	(11/2⁻,13/2⁻)	158.6	(13/2)⁻	(M1+E2)	1.0 +8−5	0.018 3	α(K)= 0.015 3; α(L)= 0.0025 4 δ: from α(K)exp=0.015 4. This γ ray was listed by 1979Sc20 as being mainly from the 70.9 min ^{185}Pt decay.
[x]745.8 3	2.1 8								
751.6 3	1.6 4	1170		418.7	(3/2)⁺				
[x]773.5 3	2.5 5								
[x]784.8 3	1.0 3								
788.2 4	1.1 3	1295.0		506.8	(5/2⁻)				
795.1 4	1.4 4	801.4	(5/2⁻,7/2⁻,9/2⁻)	5.8	9/2⁻				
801.8 4	2.3 6	801.4	(5/2⁻,7/2⁻,9/2⁻)	0.0	5/2⁻				
[x]809.9 4	1.5 4								
[x]827.5 4	1.3 4								

γ(^{185}Ir) (continued)

Eγ[†]	Iγ[‡]	Ei(level)	J^{π}_{i}	E_f	J^{π}_{f}	Mult.[#]	α[c]	Comments
837.6[e&] 3	7.0[e] 15	1068.1	(3/2$^+$)	229.6	3/2$^+$			α(K)exp=0.012 4.
837.6[e]	7.0[e] 15	1170		332.7	(1/2)$^+$			
^{x}842.6[a] 3	3.0 15							
^{x}867.9 3	1.5 5							
879.4 6	1.2 3	1038.9		158.6	(13/2)$^-$	(M1)	0.0175	α(K)= 0.0145; α(L)= 0.00227 Mult.: from α(K)exp=0.015 5.
^{x}891.1 3	2.4 5							
895.2 3	6.6 10	900.5	(11/2$^-$,13/2$^-$)	5.8	9/2$^-$	(E2)	0.00658	α(K)= 0.00528; α(L)= 0.000975 Mult.: from α(K)exp=0.0038 15.
^{x}900.8 3	3.2 6							
^{x}909.3 4	1.7 4							
^{x}955.8[&] 4	3.0 6							
^{x}962.5 4	5 1							
1039.9 4	3.1 7	1295.0		255.10	3/2$^-$			
1093.0 4	0.9 3	1228.3		135.3	1/2$^-$			
1105.9 4	1.2 4	1625.5		519.7	(3/2)$^-$			
1139.9 5	0.8 3	1582.6		442.3	(3/2$^+$,5/2$^+$)			
1164.1 5	0.6 3	1582.6		418.7	(3/2)$^+$			
^{x}1215.6[&] 4	2.8 7							
1247.6 4	1.4 3	1582.6		335.3	(5/2)$^+$			
1292.8 4	4 1	1625.5		332.7	(1/2)$^+$			
^{x}1370.8 5	2.3 8							
1395.8 4	4.1 10	1625.5		229.6	3/2$^+$			
^{x}1418.0 4	2.3 8							
^{x}1490.0 4	1.5 5							

[†] From 1979Sc20 (semi γ, semi ce, s ce). Others: 1965Qa01, 1970FiZZ.

[‡] From 1979Sc20.

[#] From ce data of 1979Sc20; α(K)exp′s are relative to α(K)(135γ)=0.44 (E2 theory).

[@] Deduced by evaluator from ce data of 1979Sc20 using the minimization method and computer code of 1980Ry04 to determine the best value of δ that simultaneously satisfies the experimental conversion data from more than one atomic shell.

[&] Mainly from 33.0-min ^{185}Pt decay.

[a] From both 70.9-min and 33.0-min ^{185}Pt decays.

[b] Transition mixed with transitions from both ^{185}Au and ^{185}Ir decays.

[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.

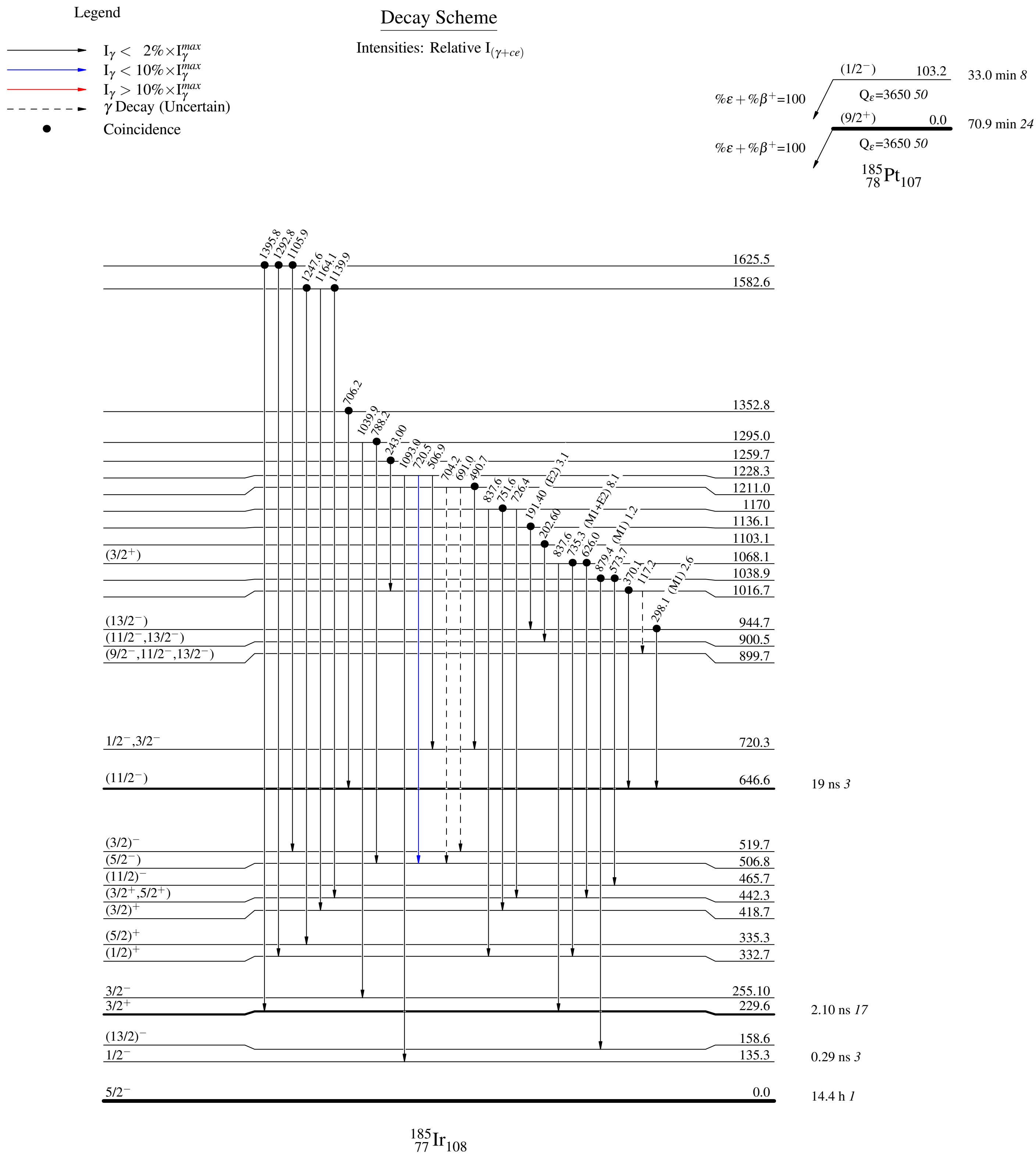
[e] Multiply placed with undivided intensity.

$^{185}_{77}$Ir$_{108}$-8

γ(^{185}Ir) (continued)

[f] Multiply placed with intensity suitably divided.
[g] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

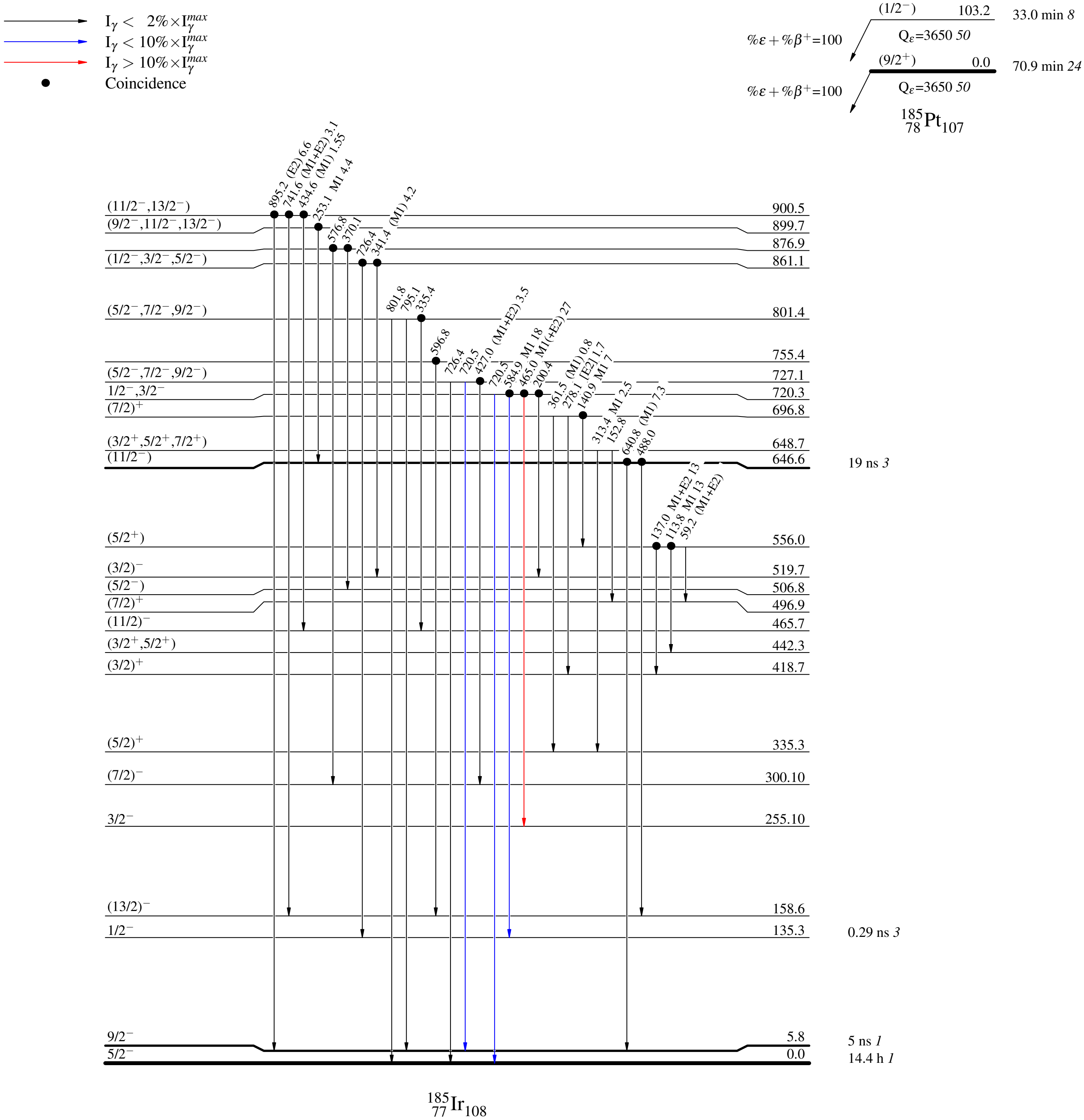
^{185}Pt ε decay 1979Sc20



^{185}Pt ε decay 1979Sc20

Decay Scheme (continued)

Intensities: Relative $I_{(\gamma+ce)}$



^{185}Pt ε decay 1979Sc20

Decay Scheme (continued)

Intensities: Relative $I_{(\gamma+ce)}$
@ Multiply placed: intensity suitably divided