^{195}Ir β^- decay (3.67 h) 1973Ja10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao	NDS 121, 395 (2014)	1-Mar-2014

Parent: ^{195}Ir: E=100 *5*; J$^\pi$=11/2$^-$; T$_{1/2}$=3.67 h *8*; Q(β^-)=1102.0 *21*; %β^- decay=95 *5*

Measured Eγ, Iγ, E(ce), α(K)exp, and $\gamma\beta$ with Ge(Li) and Si(Li).

Sources produced by ^{198}Pt(p,α) (1973Ja10), ^{198}Pt(d,αn) (1968Ja06), and ^{192}Os(α,p) (1968Ho01).

Energy balance: total decay energy of 1054 keV *56* deduced (using RADLIST code) from proposed decay scheme is in agreement with the expected value of 1142 keV *60* ((Q(β^-, g.s.)+100keV)× %Iβ^-), suggesting that the decay scheme is reasonably complete.

^{195}Pt Levels

All data are shown in the drawing.

E(level)†	J$^\pi$‡	T$_{1/2}$‡	E(level)†	J$^\pi$‡	E(level)†	J$^\pi$‡
0.0	1/2$^-$	stable	389.09 *7*	5/2$^-$	612.65 *9*	(7/2)$^-$
98.81 *4*	3/2$^-$		432.03 *12*	9/2$^+$	695.26 *7*	(7/2)$^-$
129.75 *4*	5/2$^-$		449.62 *6*	(7/2)$^-$	814.48 *5*	9/2$^-$
199.47 *4*	3/2$^-$		455.12 *6*	5/2$^-$	895.34 *8*	9/2$^-$
211.29 *7*	3/2$^-$		508.04 *6*	(7/2)$^-$	930.67 *7*	9/2$^-$
239.20 *6*	5/2$^-$		547.24 *12*	(11/2$^+$)		
259.28 *12*	13/2$^+$	4.010 d *5*	562.78 *6*	9/2$^-$		

† From decay scheme and Eγ using least-squares fit to data.
‡ From Adopted Levels.

β^- radiations

Measured β singles, $\beta\gamma$-coin, and F-K plots with Ge(Li) and Si(Li) (1973Ja10).
Q(β^-)=1230 *20* (weighted av) from measured (410β)(685γ)-, (670β)(433γ)-, (810β)(173γ)-coin.

E(decay)	E(level)	Iβ^-†‡	Log *ft*	Comments
(271 *6*)	930.67	5.0 *9*	5.54 *9*	av Eβ=75.4 *17*
(307 *6*)	895.34	1.9 *3*	6.13 *8*	av Eβ=86.2 *17*
(388 *6*)	814.48	36 *6*	5.18 *8*	av Eβ=111.8 *18* E(decay): Eβ=410 *20* from β(685γ)-coin.
(507 *6*)	695.26	0.6 *6*	7.3 *5*	av Eβ=151.2 *19*
(639 *6*)	562.78	7.7 *13*	6.57 *8*	av Eβ=197.1 *20* E(decay): Eβ=670 *20* from β(433γ)-coin.
(655 *6*)	547.24	0.9 *5*	7.54 *25*	av Eβ=202.6 *20*
(694 *6*)	508.04	1.2 *5*	7.50 *19*	av Eβ=216.6 *20*
(747 *6*)	455.12	1.5 *6*	7.51 *18*	av Eβ=235.8 *20*
(770 *6*)	432.03	7.3 *12*	6.87 *8*	av Eβ=244.2 *20* E(decay): Eβ=810 *40* from β(173γ)-coin.
(943 *6*)	259.28	33 *7*	6.52 *10*	av Eβ=308.9 *21* Iβ^-: I(β +γ+ce) to 259 level=33 *7* (1973Ja10).

† From I(γ+ce) imbalance.
‡ Absolute intensity per 100 decays.

$\gamma(^{195}Pt)$

Iγ normalization: From %IT=5 *5* and I(β +γ+ce) to 259 level=33 *7* (1973Ja10).

E_γ[#]	I_γ[ac]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[†]	δ	α[d]	$I_{(\gamma+ce)}$[c]	Comments
(19.8)		259.28	13/2$^+$	239.20	5/2$^-$	[M4][‡]		6.68×10^8	5.1 *3*	ce(L)/(γ+ce)=0.566 *8*; ce(M)/(γ+ce)=0.331 *6*; ce(N+)/(γ+ce)=0.1033 *20* B(M4)(W.u.)=0.6 *3* $I_{(\gamma+ce)}$: from intensity balance at 259 level and I(γ+ce) branching.
^{x}27.8 *4*	2.4 *5*									
(28.0)		239.20	5/2$^-$	211.29	3/2$^-$				18 *3*	$I_{(\gamma+ce)}$: from I(γ+ce)(28γ)/I(γ+ce)(140γ)= 0.64 *3* (^{195}Pt IT decay).
30.85	19.3[&] *3*	129.75	5/2$^-$	98.81	3/2$^-$	M1+E2	−0.021 *4*	37.7	747 *8*	ce(L)/(γ+ce)=0.749 *8*; ce(M)/(γ+ce)=0.174 *4*; ce(N+)/(γ+ce)=0.0512 *11* δ,Mult.: from L-subshell ratios, sign from ce$\gamma(\theta)$: ^{195}Au ε decay. $I_{(\gamma+ce)}$: from intensity balance at 129.7 level and Iγ-branching. I_γ: from I(γ+ce)/(1+α). Measured Iγ=33 *4* includes 2.29-h component.
60.4	<15	449.62	(7/2)$^-$	389.09	5/2$^-$				12 *4*	$I_{(\gamma+ce)}$: required for intensity balance at 389 level.
98.85 *5*	109.3[&] *18*	98.81	3/2$^-$	0.0	1/2$^-$	M1+E2	−0.130 *4*	6.86	859 *10*	α(K)=5.58 *8*; α(L)=0.983 *14*; α(M)=0.229 *4*; α(N+..)=0.0673 *10* $I_{(\gamma+ce)}$: required for intensity balance at 98.9 level. I_γ: from I(γ+ce)/(1+α). Measured Iγ=210 *10* includes 2.29-h component. δ,Mult.: from L-subshell ratios (^{195}Au decay), sign from 1972Ba22, 1965Ca12.
100.652 *3*	1.02 *12*	199.47	3/2$^-$	98.81	3/2$^-$	M1(+E2)	+0.02 *23*	6.54 *14*	7.7 *9*	α(K)=5.4 *3*; α(L)=0.90 *13*; α(M)=0.21 *4* E_γ: from ^{194}Pt(n,γ), not observed in 1973Ja10. Mult.,δ: from adopted gammas. $I_{(\gamma+ce)}$: from intensity balance at 199.4 level. I_γ: from I(γ+ce)/(1+α).
115.0 *5*	1.0 *3*	547.24	(11/2$^+$)	432.03	9/2$^+$	[M1,E2][‡]		3.6 *9*		α(K)=2.1 *16*; α(L)=1.1 *6*; α(M)=0.28 *15*; α(N+..)=0.08 *4* α: from [(α(M1)+α(E2))]/ 2±[(α(M1)-α(E2))]/2.
119.12[e] *10*	4[e] *1*	508.04	(7/2)$^-$	389.09	5/2$^-$					I_γ: doublet=4 *1*. Intensity balance suggests small fraction deexcites from 508 level.

^{195}Ir β^- decay (3.67 h) 1973Ja10 (continued)

γ(^{195}Pt) (continued)

E_γ[#]	I_γ[ac]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[†]	δ	α[d]	$I_{(\gamma+ce)}$[c]	Comments
119.12[e] *10*	4[e] *1*	814.48	9/2⁻	695.26	(7/2)⁻	(M1)		4.04		α(K)=3.32 *5*; α(L)=0.551 *8*; α(M)=0.1275 *19*; α(N+..)=0.0376 *6* α(K)exp=4.5 *12*.
(129.5 2)	0.385 *21*	259.28	13/2⁺	129.75	5/2⁻	M4[b]		1135 *19*	431 *23*	ce(K)/(γ+ce)=0.134 *3*; ce(L)/(γ+ce)=0.613 *9*; ce(M)/(γ+ce)=0.194 *5*; ce(N+)/(γ+ce)=0.0576 *14* B(M4)(W.u.)=1.36 *11* $I_{(\gamma+ce)}$: from intensity balance at 259 level and I(γ+ce)-branching. E_γ: from 1961Kr02 (^{195}Pt IT decay).
129.70 *5*	17.4[&] *15*	129.75	5/2⁻	0.0	1/2⁻	E2[b]		1.732	47.5 *6*	ce(K)/(γ+ce)=0.1712 *25*; ce(L)/(γ+ce)=0.348 *5*; ce(M)/(γ+ce)=0.0897 *14*; ce(N+)/(γ+ce)=0.0253 *5* $I_{(\gamma+ce)}$: from intensity balance at 129.7 level and Iγ branching. I_γ: from I(γ+ce)/(1+α). Measured Iγ=31 *2* includes 2.29-h component.
130.3 *5*	0.8 *5*	562.78	9/2⁻	432.03	9/2⁺	[E1][‡]		0.208 *4*		α(K)=0.169 *3*; α(L)=0.0300 *6*; α(M)=0.00694 *13*; α(N+..)=0.00199 *4*
140.50 *10*	8 *1*	239.20	5/2⁻	98.81	3/2⁻	M1+E2	−0.17 *4*	2.49		α(K)=2.03 *4*; α(L)=0.353 *7*; α(M)=0.0820 *18*; α(N+..)=0.0241 *5* δ,Mult.: from Coul. ex. (1959Mc69,1966As02).
[x]147.60 *15*	1.0 *3*									
150.11 *15*	1.8 *4*	389.09	5/2⁻	239.20	5/2⁻	[M1][‡]		2.09		α(K)=1.722 *25*; α(L)=0.285 *4*; α(M)=0.0658 *10*; α(N+..)=0.0194 *3*
172.78 *7*	52 *2*	432.03	9/2⁺	259.28	13/2⁺	E2		0.598		α(K)=0.244 *4*; α(L)=0.266 *4*; α(M)=0.0683 *10*; α(N+..)=0.0193 *3* α(K)exp=0.50 *10*, α(K)exp/α(L)exp=1.7 *4*. Mult.: from adopted γ radiations. Mult=E2 is discrepant with the conversion data from β⁻ decay, which leads to mult=M1+E2 with δ=+1.7 *+6−4*.
[x]178.46 *25*	0.9 *2*									
[x]197.44 *25*	1.0 *2*									
199.58 *15*	6 *1*	199.47	3/2⁻	0.0	1/2⁻	M1+E2	+1.2 *2*	0.60 *6*		α(K)=0.42 *6*; α(L)=0.1371 *25*; α(M)=0.0337 *9*; α(N+..)=0.00971 *21* α(K)exp: 1.4 *5* (1973Ja10), 0.44 *6* (1972HsZX, ^{195}Au ε decay). δ,Mult.: from α(K)exp (1972HsZX), sign from Coul. ex. (1970Br26).
201.65 *15*	8 *1*	814.48	9/2⁻	612.65	(7/2)⁻	M1		0.912		α(K)=0.752 *11*; α(L)=0.1237 *18*; α(M)=0.0286 *4*; α(N+..)=0.00843 *12* $I_{(\gamma+ce)}$: from intensity balance at 612.7 level. I_γ: from I(γ+ce)/(1+α). Iγ=15 *1* (1973Ja10). α(K)exp=0.87 *25*.

$^{195}_{78}Pt_{117}$-3

γ(^{195}Pt) (continued)

E_γ[#]	I_γ[ac]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[†]	δ	α[d]	$I_{(\gamma+ce)}$[c]	Comments
211.30[f] *10*	20.1[f&] *23*	211.29	3/2$^-$	0.0	1/2$^-$	M1+E2	+0.38 *3*	0.738 *14*	35 *4*	ce(K)/(γ+ce)=0.343 *5*; ce(L)/(γ+ce)=0.0628 *10*; ce(M)/(γ+ce)=0.01470 *24*; ce(N+)/(γ+ce)=0.00431 *7* $I_{(\gamma+ce)}$: from intensity balance at 211 level. Mult.: from α(K)exp=0.73 *15* and α(K)exp/α(L)exp=5 *1*. δ: from Coul. ex. (1969Ku06). I_γ: from I(γ+ce)/(1+α). Measured Iγ=45 *2* includes 2.29-h component.
211.30[f]	2.7[f@]	449.62	(7/2)$^-$	239.20	5/2$^-$	[M1][‡]		0.801		α(K)=0.660 *10*; α(L)=0.1085 *16*; α(M)=0.0251 *4*; α(N+..)=0.00740 *11*
216.00 *10*	9 *1*	455.12	5/2$^-$	239.20	5/2$^-$	M1(+E2)		0.52 *24*		α(K)=0.38 *24*; α(L)=0.1028 *17*; α(M)=0.0250 *15*; α(N+..)=0.0072 *3* α(K)exp=0.84 *30*, α(K)exp/α(L)exp=3 *1*.
223.7 *3*	≈0.1	612.65	(7/2)$^-$	389.09	5/2$^-$	[M1][‡]		0.684		α(K)=0.564 *9*; α(L)=0.0925 *14*; α(M)=0.0214 *3*; α(N+..)=0.00631 *10*
235.4 *3*	2.7 *5*	930.67	9/2$^-$	695.26	(7/2)$^-$	[M1][‡]		0.594		α(K)=0.490 *7*; α(L)=0.0803 *12*; α(M)=0.0185 *3*; α(N+..)=0.00547 *8*
239.21[f] *10*	17.8[f] *10*	239.20	5/2$^-$	0.0	1/2$^-$	E2		0.199		α(K)=0.1080 *16*; α(L)=0.0683 *10*; α(M)=0.01730 *25*; α(N+..)=0.00492 *7* I_γ: doublet Iγ=19 *1*, Iγ=1.3 ($\gamma\gamma$-coin) deexcites 449.7 level. Mult.: α(K)exp/α(L)exp=1.0 *2* is close to E2 theory.
239.21[f]	1.3[f@]	449.62	(7/2)$^-$	211.29	3/2$^-$	[E2][‡]		0.199		α(K)=0.1080 *16*; α(L)=0.0683 *10*; α(M)=0.01730 *25*; α(N+..)=0.00492 *7*
243.87 *10*	8.0 *5*	455.12	5/2$^-$	211.29	3/2$^-$	M1		0.539		α(K)=0.444 *7*; α(L)=0.0728 *11*; α(M)=0.01681 *24*; α(N+..)=0.00496 *7* α(K)exp=0.41 *15*.
251.61 *5*	19 *2*	814.48	9/2$^-$	562.78	9/2$^-$	M1(+E2)		0.33 *17*		α(K)=0.25 *16*; α(L)=0.061 *6*; α(M)=0.0148 *7*; α(N+..)=0.0043 *3* α(K)exp=0.35 *10*.
255.79 *10*	9 *1*	455.12	5/2$^-$	199.47	3/2$^-$	(M1+E2)		0.32 *16*		α(K)=0.24 *15*; α(L)=0.058 *6*; α(M)=0.0140 *8*; α(N+..)=0.0041 *3* α(K)exp=0.24 *10*.
259.33 *15*	8 *1*	389.09	5/2$^-$	129.75	5/2$^-$	(M1+E2)		0.30 *15*		α(K)=0.23 *15*; α(L)=0.055 *6*; α(M)=0.0133 *9*; α(N+..)=0.0039 *4* α(K)exp=0.25 *10*.
[x]264.5 *5*	0.6 *1*									
267.10 *15*	6 *1*	814.48	9/2$^-$	547.24	(11/2$^+$)	E1		0.0344		α(K)=0.0284 *4*; α(L)=0.00463 *7*; α(M)=0.001066 *15*; α(N+..)=0.000309 *5* α(K)exp<0.06.
[x]270.7 *3*	0.4 *1*									

γ(^{195}Pt) (continued)

E_γ[#]	I_γ[ac]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[†]	δ	α[d]	Comments
[x]277.0 *4*	0.4 *1*								
283.0 *5*	0.6 *2*	895.34	9/2⁻	612.65	(7/2)⁻	[M1][‡]		0.358	α(K)=0.295 *5*; α(L)=0.0483 *8*; α(M)=0.01114 *17*; α(N+..)=0.00329 *5*
287.80 *15*	10 *3*	547.24	(11/2⁺)	259.28	13/2⁺	(M1+E2)		0.23 *12*	α(K)=0.17 *11*; α(L)=0.040 *7*; α(M)=0.0095 *12*; α(N+..)=0.0028 *4* α(K)exp=0.16 *8*.
290.30 *15*	20 *1*	389.09	5/2⁻	98.81	3/2⁻	M1(+E2)		0.22 *12*	α(K)=0.17 *11*; α(L)=0.039 *7*; α(M)=0.0092 *12*; α(N+..)=0.0027 *4* α(K)exp=0.25 *6*.
306.48[f]	8.8[f]	695.26	(7/2)⁻	389.09	5/2⁻	[M1][‡]		0.288	α(K)=0.238 *4*; α(L)=0.0388 *6*; α(M)=0.00895 *13*; α(N+..)=0.00264 *4* I_γ: doublet Iγ=23 *1*; Iγ(M1)=8.8, Iγ(E2)=14.2 deduced from doublet α(K)exp=0.13 *3*.
306.48[f] *10*	14.2[f]	814.48	9/2⁻	508.04	(7/2)⁻				α(K)= 0.0584; α(L)= 0.0265; α(M)=0.00659; α(N+..)=0.00202
319.90 *7*	100 *5*	449.62	(7/2)⁻	129.75	5/2⁻	M1+E2	1.5 *3*	0.135 *18*	α(K)=0.101 *17*; α(L)=0.0260 *13*; α(M)=0.0063 *3*; α(N+..)=0.00182 *9* α(K)exp=0.105 *15*, α(K)exp/α(L)exp=4.0 *12*.
325.18 *10*	8 *1*	455.12	5/2⁻	129.75	5/2⁻	[M1][‡]		0.245	α(K)=0.203 *3*; α(L)=0.0330 *5*; α(M)=0.00761 *11*; α(N+..)=0.00225 *4*
333.2 *5*	0.8 *3*	895.34	9/2⁻	562.78	9/2⁻	[M1][‡]		0.230	α(K)=0.190 *3*; α(L)=0.0309 *5*; α(M)=0.00712 *11*; α(N+..)=0.00210 *3*
350.90 *10*	10.6 *15*	449.62	(7/2)⁻	98.81	3/2⁻	[E2][‡]		0.0626	α(K)=0.0416 *6*; α(L)=0.01594 *23*; α(M)=0.00396 *6*; α(N+..)=0.001135 *16* α(K)exp<0.19.
356.38 *15*	19 *2*	455.12	5/2⁻	98.81	3/2⁻	M1		0.192	α(K)=0.1583 *23*; α(L)=0.0257 *4*; α(M)=0.00593 *9*; α(N+..)=0.001750 *25* α(K)exp=0.16 *5*, α(K)exp/α(L)exp>3.
359.31 *15*	48 *3*	814.48	9/2⁻	455.12	5/2⁻	E2		0.0586	α(K)=0.0393 *6*; α(L)=0.01466 *21*; α(M)=0.00364 *6*; α(N+..)=0.001043 *15* α(K)exp=0.041 *15*, α(K)exp/α(L)exp>2.
364.94 *7*	99 *3*	814.48	9/2⁻	449.62	(7/2)⁻	M1+E2	1.5 *+5−3*	0.094 *14*	α(K)=0.072 *12*; α(L)=0.0170 *12*; α(M)=0.00409 *24*; α(N+..)=0.00119 *8* α(K)exp=0.073 *12*, α(K)exp/α(L)exp=3.8 *12*.
373.39 *15*	11 *3*	612.65	(7/2)⁻	239.20	5/2⁻	M1(+E2)		0.11 *6*	α(K)=0.09 *6*; α(L)=0.018 *5*; α(M)=0.0042 *11*; α(N+..)=0.0012 *4* α(K)exp=0.12 *5*.
378.24 *10*	10 *3*	508.04	(7/2)⁻	129.75	5/2⁻	M1		0.1634	α(K)=0.1350 *19*; α(L)=0.0219 *3*; α(M)=0.00505 *7*; α(N+..)=0.001490 *21* α(K)exp=0.15 *6*.
383.3[e] *3*	≤2.5[e]	814.48	9/2⁻	432.03	9/2⁺				
383.3[e] *3*	≤2.5[e]	930.67	9/2⁻	547.24	(11/2⁺)				
[x]385.2 *2*	1.7 *2*								

From ENSDF

γ(^{195}Pt) (continued)

E_γ[#]	I_γ[ac]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[†]	α[d]	Comments
387.1 2	3.3 3	895.34	9/2⁻	508.04	(7/2)⁻			α(K)= 0.0331; α(L)=0.01146; α(M)=0.00282; α(N+..)=0.00086 α(K)exp=0.30 15.
x389.85 15	6 2							
x395.7 3	0.5 5							
401.30 15	3 1	612.65	(7/2)⁻	211.29	3/2⁻	[E2][‡]	0.0434	α(K)=0.0302 5; α(L)=0.01002 14; α(M)=0.00247 4; α(N+..)=0.000709 10
409.04 10	15 1	508.04	(7/2)⁻	98.81	3/2⁻	E2	0.0412	α(K)=0.0289 4; α(L)=0.00940 14; α(M)=0.00231 4; α(N+..)=0.000665 10 α(K)exp=0.029 15.
x413.6 2	2.7 7							
x419.69 15	4 1							α(K)exp=0.08 4, α(K)exp/α(L)exp=2.2 7.
422.4 3	1.4 2	930.67	9/2⁻	508.04	(7/2)⁻			
425.41 20	7 2	814.48	9/2⁻	389.09	5/2⁻	[E2][‡]	0.0372	α(K)=0.0263 4; α(L)=0.00825 12; α(M)=0.00202 3; α(N+..)=0.000583 9
x427.8 2	7 1							
432.86 7	100	562.78	9/2⁻	129.75	5/2⁻	E2	0.0356	α(K)=0.0253 4; α(L)=0.00779 11; α(M)=0.00191 3; α(N+..)=0.000550 8 α(K)exp=0.027 5, α(K)exp/α(L)exp=2.5 8.
440.40 10	2.2 5	895.34	9/2⁻	455.12	5/2⁻	[E2][‡]	0.0340	α(K)=0.0243 4; α(L)=0.00737 11; α(M)=0.00180 3; α(N+..)=0.000520 8 α(K)exp=0.3 2.
445.55 15	4.9 6	895.34	9/2⁻	449.62	(7/2)⁻			
455.94 10	8.1 5	695.26	(7/2)⁻	239.20	5/2⁻	M1(+E2)	0.07 4	α(K)=0.05 3; α(L)=0.010 4; α(M)=0.0023 8; α(N+..)=0.00068 22 α(K)exp=0.08 4.
x463.6 3	0.6 2							
475.38 15	1.6 3	930.67	9/2⁻	455.12	5/2⁻	[E2][‡]	0.0280	α(K)=0.0204 3; α(L)=0.00578 9; α(M)=0.001408 20; α(N+..)=0.000406 6
481.17 10	28 2	930.67	9/2⁻	449.62	(7/2)⁻	E2(+M1)	0.06 3	α(K)=0.05 3; α(L)=0.009 3; α(M)=0.0020 7; α(N+..)=0.00059 20 α(K)exp=0.039 16.
495.8 2	5.3 5	695.26	(7/2)⁻	199.47	3/2⁻	[E2][‡]	0.0253	α(K)=0.0186 3; α(L)=0.00507 8; α(M)=0.001232 18; α(N+..)=0.000356 5
498.6 2	1.2 2	930.67	9/2⁻	432.03	9/2⁺			
506.16 10	6.7 5	895.34	9/2⁻	389.09	5/2⁻	[E2][‡]	0.0240	α(K)=0.01778 25; α(L)=0.00476 7; α(M)=0.001155 17; α(N+..)=0.000334 5
513.6 3	0.3 1	612.65	(7/2)⁻	98.81	3/2⁻			
x524.5 3	0.7 1							
x526.7 3	0.3 1							
x530.1 3	0.7 2							
x534.1 2	3.6 5							
x537.4 3	1.6 5							
x540.4 3	0.2 1							
x544.5 5	0.2 1							
x548.1 3	0.3 1							
565.48 15	2.3 5	695.26	(7/2)⁻	129.75	5/2⁻	[M1][‡]	0.0565	α(K)=0.0468 7; α(L)=0.00749 11; α(M)=0.001726 25; α(N+..)=0.000509 8
575.35 10	16 3	814.48	9/2⁻	239.20	5/2⁻	(E2)	0.01773	α(K)=0.01346 19; α(L)=0.00326 5; α(M)=0.000785 11; α(N+..)=0.000227 4 α(K)exp=0.03 2. Mult.: (E2,M1) (1973Ja10). But ΔJ=2 rules out M1 (evaluator).
596.48 20	2.2 5	695.26	(7/2)⁻	98.81	3/2⁻	[E2][‡]	0.01632	α(K)=0.01246 18; α(L)=0.00294 5; α(M)=0.000706 10; α(N+..)=0.000205 3
x611.1 3	0.5 1							
x613.6 3	0.2 1							

γ(^{195}Pt) (continued)

E_γ[#]	I_γ[ac]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	α[d]	Comments
[x]616.5 *3*	2.0 *4*							
[x]619.2 *3*	0.5 *1*							
684.88 *7*	100 *5*	814.48	9/2⁻	129.75	5/2⁻	E2	0.01198	α(K)=0.00935 *13*; α(L)=0.00202 *3*; α(M)=0.000480 *7*; α(N+..)=0.0001396 *20* α(K)exp=0.014 *3*, α(K)exp/α(L)exp=6 *3*.
691.6 *3*	0.5 *1*	930.67	9/2⁻	239.20	5/2⁻			
[x]715.5 *2*	0.6 *2*							
[x]723.7 *2*	2 *1*							
[x]750.8 *2*	2.1 *5*							
[x]784.1 *3*	0.9 *1*							
800.90 *10*	11 *1*	930.67	9/2⁻	129.75	5/2⁻			

[†] From α(K)exp (1973Ja10) normalized to α(L)(98.9γ)=1.02 (δ=−0.13), except as noted.
[‡] From ΔJ and Δπ.
[#] Calibration based partly on Eγ=98.85,129.70.
[@] Weak component via γγ-coin.
[&] Measured Iγ with mixed 2.29-h + 3.67-h source. Iγ(3.67-h component) calculated to achieve a level intensity balance.
[a] Relative photon intensity normalized to Iγ(Eγ=432.86)=100. I(K x ray)=1350 *100* for mixed source.
[b] From adopted γ′s.
[c] For absolute intensity per 100 decays, multiply by 0.098 *15*.
[d] 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.
[e] Multiply placed with undivided intensity.
[f] Multiply placed with intensity suitably divided.
[x] γ ray not placed in level scheme.

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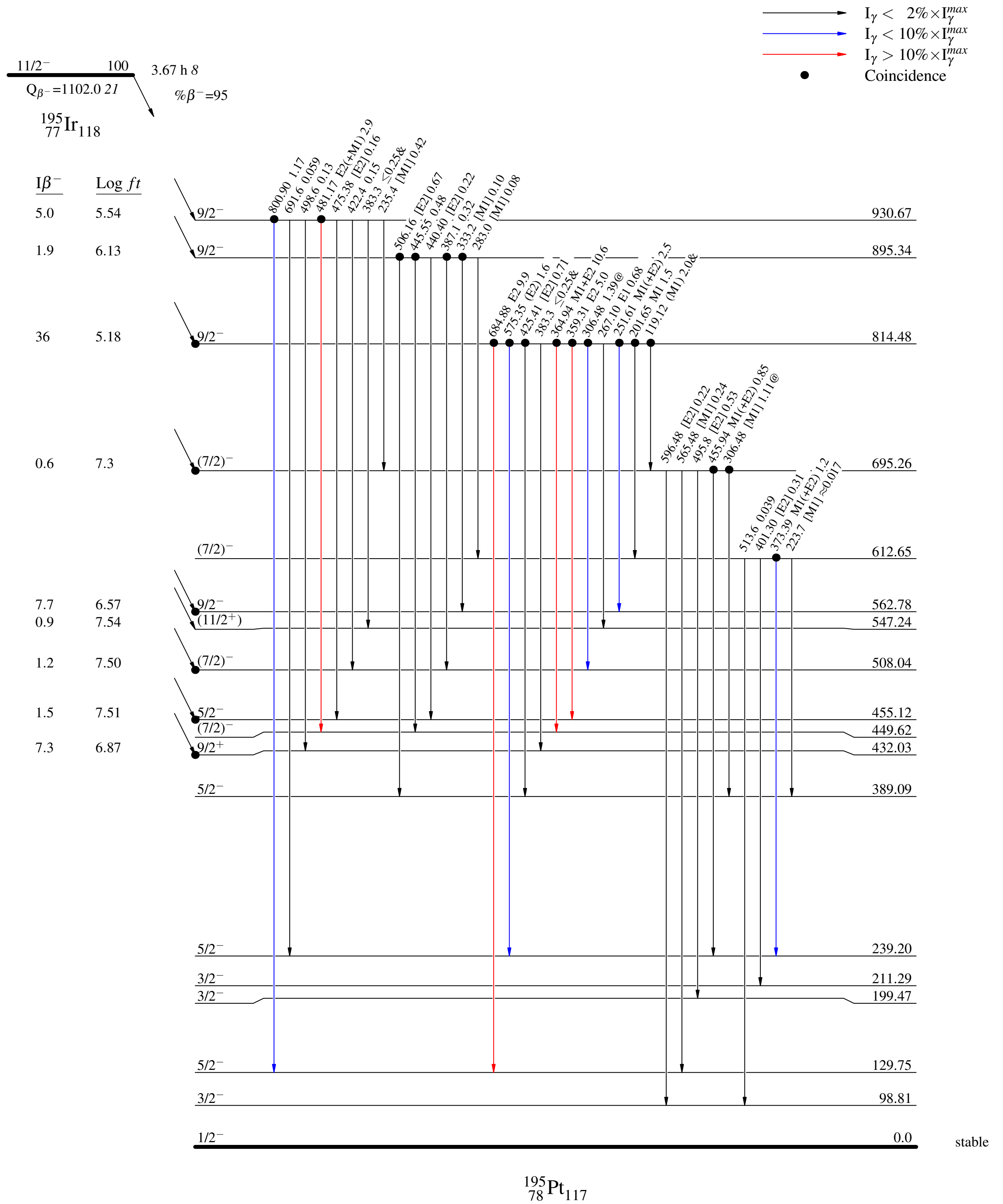
^{195}Ir β^- decay (3.67 h) 1973Ja10

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Ir β^- decay (3.67 h) 1973Ja10

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)
Coincidence