Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley	NDS 150, 1 (2018)	1-Feb-2018

Q(β^-)=−524 *9*; S(n)=6867 *30*; S(p)=4415 *9*; Q(α)=3450 *10* 2017Wa10

^{188}Ir Levels

Cross Reference (XREF) Flags

- A ^{188}Pt ε decay (10.16 d)
- B ^{187}Re(α,3nγ)
- C ^{186}W(^{7}Li,5nγ)

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0.0#	1$^-$	41.5 h *5*	ABC	%ε+%β^+=100 μ=+0.31 *1* (2006Ve10) Q=+0.484 *6* (1996Se15,2016St14) J$^\pi$: J was directly measured using the NMR (1985Ed02) and resonance ionization spectroscopy (2006Ve10) techniques; π from μ and 478.3γ E1 from 1$^+$. μ: using resonance ionization spectroscopy technique. Others: 0.302 *10* (NMR-nuclear orientation,1985Ed02) 0.385 *20* (1980Be27), 1974EkZW. Q: using the NMR on oriented nuclei method. Others: +0.46 *5* (2006Ve10), +0.507 *34* (1996Ha09), +0.543 *18* (1985Ed02), +0.492 *26* (1988Oh05,1988Oh08), 1.26 (1980Mu07) (for J=2). Δ<r^2>(^{191}Ir,^{188}Ir)=−0.140 *4* (2006Ve10). T$_{1/2}$: from 1950Ch11. Others: 41 h *1* (1963Gr22), 41 h *4* (1955Sm42), and 40 h *3* (1954Na25). configuration: Dominant K$^\pi$=1$^-$, π3/2$^+$[402]⊗ν1/2$^-$[510] with possible π1/2$^+$[400]⊗ν3/2$^-$[512] admixtures.
54.81# *4*	2$^-$	1.93 ns *10*	ABC	J$^\pi$: 54.85γ M1+E2 to 1$^-$; 97.2γ M1 from (3)$^-$; absence of a direct β^- feeding to this level in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$). T$_{1/2}$: From 54.8e(L$_{ii}$+L$_{iii}$)−140.3e(K)(t) in 1969Ma37. Others: 2.3 ns *2* (1965Ja06) and 2.7 ns *8* (1965Kr03,1970Ba53), but the accuracy of those values is disputed in 1969Ma37. configuration: Most likely a member of the K$^\pi$=1$^-$ g.s. band, given the large B(E2) strength.
96.73 *4*	2$^-$	1.59 ns *12*	ABC	J$^\pi$: 96.70γ E2+M1 to 1$^-$; 114.6γ M1(+E2) from (3)$^-$; absence of a direct β^- feeding to this level in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$). T$_{1/2}$: From 41.9e(L)−381.6γ(t) in 1969Ma37. configuration: K$^\pi$=2$^-$, π3/2$^+$[402]⊗ν1/2$^-$[510] with possible π1/2$^+$[400]⊗ν3/2$^-$[512] admixtures.
151.95 *12*	3$^-$		BC	J$^\pi$: 97.2γ M1 to 2$^-$; the absence of direct population in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$) would argue against J$^\pi$=1$^-$.
166.17 *9*	(3$^-$)		B	J$^\pi$: 166.2γ (E2) to 1$^-$.
187.62 *7*	(1)$^-$	56 ps *13*	A	J$^\pi$: 187.59γ E2(+M1) to 1$^-$; direct population of this level in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$). T$_{1/2}$: From KLL-187.59(L$_I$)(t) in 1969Ma37.
195.10 *5*	1$^-$	51 ps *10*	A	J$^\pi$: 140.35γ M1(+E2) to 2$^-$; 195.05γ M1(+E2) to 1$^-$; direct population of this level in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$) would argue against J$^\pi$=2$^-$.
211.19 *7*	(3)$^-$		BC	J$^\pi$: 114.6γ M1(+E2) to 2$^-$; the absence of direct population in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$) would argue against J$^\pi$=1$^-$.
280.30 *15*	(1,2)$^-$		A	J$^\pi$: 280.30γ E2+M1 to 1$^-$; direct population in ^{188}Pt ε decay (10.2 d) (J$^\pi$=0$^+$) would argue against J$^\pi$=3$^-$, but first forbidden unique β^- transition cannot be excluded (log *ft*=7.3).

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Adopted Levels, Gammas (continued)

^{188}Ir Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
354.14@ *9*	$(4)^+$		BC	Jπ: 202.2γ E1 to 3^-. configuration: likely $K^\pi=4^+$, $\pi 3/2^+[402]\otimes\nu 11/2^+[615]$.
410.38@ *18*	$(5)^+$		B	Jπ: 56.2γ M1 to $(4)^+$; assigned by the evaluators as a member of the $K^\pi=(4)^+$ band, by reordering the 56.2γ and 81.6γ. This assignment is consistent with the expected smooth behavior as a function of spin of a K=4 rotational band.
478.18 *7*	1^+	<150 ps	A	Jπ: 478.3γ E1 to 1^-; 381.43γ E1 to 2^-; direct population of this level in ^{188}Pt ε decay (10.2 d) ($J^\pi=0^+$) would argue against $J^\pi=2^+$. $T_{1/2}$: From LMM − 300 (and higher)γ(t) in 1969Ma37.
492.03@ *13*	$(6)^+$		BC	Jπ: 81.6γ M1 to $(5)^+$; 137.9γ E2 to $(4)^+$.
641.93@ *17*	$(7)^+$		BC	Jπ: 149.9γ M1,E2 to $(6)^+$; band member. $J^\pi=(8^+)$ in ^{186}W(^{7}Li,5nγ) (2008Ju02), see the comment to the 815-keV level.
674.9 *3*	(8^-)		BC	Jπ: 33.0γ (E1) to $(7)^+$.
708.13 *20*	(8^-)		BC	Jπ: 66.2γ (E1) to $(7)^+$.
764.53& *17*	(8^+)		C	
801.63 *20*			C	
814.85@ *19*	(8^+)		C	Jπ: 172.8γ to $(7)^+$, 322.5γ to $(6)^+$; $J^\pi=(9^+)$ in ^{186}W(^{7}Li,5nγ) (2008Ju02), but the assignment is incorrect since 322.5γ would be Mult.=M3.
877.8?			B	
915.5?			B	
923.53 *22*	$(7\text{ to }10)^-$		BC	Jπ: 215.4γ M1,E2 to (8^-).
923.53+x[a] *22*	(11^-)	4.15 ms *15*	BC	Additional information 1. E(level): Presumably decays via a low-energy transition (Eγ<80 keV), so x<80 keV. Jπ: From systematics of similar high-spin isomers in neighboring ^{190}Ir and ^{192}Ir nuclei. The assignment is consistent with the expected configuration at 880 keV. The proposed $J^\pi=(9^-)$ assignment in 2004Ba91 and 2008Ju02 is unlikely, since the band-head spin is inconsistent with the proposed $\pi h_{9/2}\otimes\nu i_{13/2}$ configuration, where the low-K, $(\pi 1/2^-[541]$ $(h_{9/2})$ and high-K $(\nu 11/2^+[615]$ $(i_{13/2})$ orbitals are near the Fermi surfaces, thus leading to $J^\pi=6^-$. $T_{1/2}$: Weighted average of 4.1 ms *3* (1984Kr18), 4.1 ms *4* (1975An08), and 4.2 ms *2* (1971Go21). Other: 3.8 ms *2* (1973RoYQ). configuration: Likely $\pi 11/2^-[505]\otimes\nu 11/2^+[615]$ configuration, expected at 880 keV from energies of known proton and neutron orbitals in neighboring Ir and Os nuclei. This configuration was assigned to the known isomers in ^{190}Ir and ^{192}Ir.
1042.20@ *19*	(9^+)		C	Jπ: 227.4γ to (8^+); 400.4γ to $(7)^+$; band member.
1143.03& *20*	(10^+)		C	Jπ: 378.5γ to (8^+); band member. $J^\pi=(11^+)$ in ^{186}W(^{7}Li,5nγ) (2008Ju02).
1221.77+x[a] *8*	(12^-)		C	Additional information 2. Jπ: 298.3γ M1+E2 to (11^-); band member.
1238.23@ *19*	(10^+)		C	Jπ: 196.2γ to (9^+); 423.2γ to (8^+); band member. $J^\pi=(11^+)$ in ^{186}W(^{7}Li,5nγ) (2008Ju02).
1252.53 *22*			C	
1397.94+x[a] *6*	(13^-)		C	Jπ: 176.2γ M1+E2 to (12^-); 474.4γ E2 to (11^-); band member.
1419.23 *22*			C	
1540.69@ *21*	(11^+)		C	Jπ: 302.4γ to (10^+); 498.5γ to (9^+); band member. $J^\pi=(12^+)$ in ^{186}W(^{7}Li,5nγ) (2008Ju02).
1626.83& *22*	(12^+)		C	Jπ: 483.8γ to (10^+); band member.
1663.53+x *9*			C	

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Adopted Levels, Gammas (continued)

^{188}Ir Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
1709.92+x[a] *7*	(14⁻)		C	Jπ: 312.0γ M1+E2 to (13⁻); 488.1γ to (12⁻); band member.
1717.2 *3*			C	
1753.83[@] *22*	(12⁺)		C	Jπ: 515.6γ to (10⁺); band member. Jπ=(13⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
1921.11+x[a] *8*	(15⁻)		C	Jπ: 211.2γ M1+E2 to (14⁻); 523.2γ E2 to (13⁻); band member.
2010.53 *24*			C	
2070.39+x *16*			C	
2121.19[@] *23*	(13⁺)		C	Jπ: 580.5γ to (11⁺); band member. Jπ=(14⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
2133.25+x *12*			C	
2166.49+x *10*	(15⁻)		C	Jπ: 456.7γ M1+E2 to (14⁻); 768.7γ to (13⁻).
2199.49+x *16*			C	
2218.13[&] *24*	(14⁺)		C	Jπ: 591.3γ to (12⁺); band member.
2288.07+x[a] *9*	(16⁻)		C	Jπ: 367.1γ to (15⁻); 578.0γ to (14⁻); band member.
2352.74[@] *24*	(14⁺)		C	Jπ: 598.9γ to (12⁺); band member. Jπ=(15⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
2441.65+x *12*	(16⁻)		C	Jπ: 275.2γ (M1+E2) to (15⁻).
2455.14+x *10*	(16⁻)		C	Jπ: 745.4γ to (14⁻); 533.9γ to (15⁻).
2554.21+x[a] *10*	(17⁻)		C	Jπ: 266.2γ to (16⁻); 633.0γ to (15⁻); band member.
2642.64+x *14*	(18⁻)	12.27 ns *14*	C	Jπ: 88.3γ (M1+E2) to (17⁻). $T_{1/2}$: from γγ(t) (2008Ju02).
2677.52+x *11*	(17⁻)		C	Jπ: 222.5γ (M1+E2) to (16⁻).
2723.92+x *13*	(16⁻)		C	Jπ: 802.8γ M1+E2 to (15⁻).
2744.77+x *14*			C	
2761.2[@] *11*	(15⁺)		C	Jπ: 640γ to (13⁺); band member. Jπ=(16⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
2892.90+x *13*	(18⁻)		C	Jπ: 338.8γ M1+E2 to (17⁻).
2894.7[&] *3*	(16⁺)		C	Jπ: 676.6γ to (14⁺); band member.
2946.67+x *15*			C	
2987.09+x[a] *17*	(18⁻)		C	Jπ: 432.8γ to (17⁻); 699.1γ to (16⁻); band member.
3001.32+x *24*			C	
3027.3[@] *4*	(16⁺)		C	Jπ: 674.6γ to (14⁺); band member. Jπ=(17⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
3068.52+x *23*	(18⁻)		C	Jπ: 391.0γ to (17⁻); 627γ to (16⁻).
3155.67+x *25*			C	
3223.20+x *12*	(19⁻)		C	Jπ: 330.3γ to (18⁻); 545.7γ to (17⁻).
3305.15+x *19*			C	
3353.0+x *4*			C	
3448.93+x *17*			C	
3495.52+x *25*			C	
3520.95+x *16*			C	
3521.90+x *16*			C	
3627.0[&] *11*	(18⁺)		C	Jπ: 732.3γ to (16⁺); band member.
3680.0[@] *4*	(18⁺)		C	Jπ: 652.7γ to (16⁺); band member. Jπ=(19⁺) in ^{186}W(^{7}Li,5nγ) (2008Ju02).
3693.79+x *14*			C	
3748.6+x *3*			C	
3828.29+x *17*			C	
3907.3+x *3*			C	
4046.9+x *4*			C	
4091.43+x *18*			C	
4098.36+x *16*			C	
4227.36+x *19*			C	
4352.54+x *17*			C	
4459.4+x *3*			C	
4690.7+x *3*			C	
4705.56+x *18*			C	
4824.8+x *3*			C	
4839.4+x *3*			C	
4863.86+x *21*			C	

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Adopted Levels, Gammas (continued)

^{188}Ir Levels (continued)

E(level)†	XREF	E(level)†	XREF	E(level)†	XREF	E(level)†	XREF
5046.9+x *3*	C	5354.1+x *3*	C	5562.5+x *3*	C	6002.4+x *4*	C
5065.21+x *21*	C	5363.56+x *21*	C	5669.7+x *11*	C	6062.9+x *4*	C
5222.2+x *4*	C	5479.4+x *11*	C	5877.6+x *3*	C	6127.9+x *3*	C
5262.3+x *3*	C	5516.3+x *3*	C	5998.6+x *4*	C	6299.3+x *11*	C

† From a least-squares fit to Eγ's.
‡ From deduced γ-ray transition multipolarities and apparent band structures, unless otherwise stated.
# Band(A): $K^{\pi}=1^{-}$, $\pi 3/2^{+}[402]\otimes\nu 1/2^{-}[510]$ g.s. band.
@ Band(B): $K^{\pi}=4^{+}$, $\pi 3/2^{+}[402]\otimes\nu 11/2^{+}[615]$ band.
& Band(C): Band based on the (8^{+}) level at 764.5 keV.
a Band(D): $K^{\pi}=11^{-}$, $\pi 11/2^{-}[505]\otimes\nu 11/2^{+}[615]$ band.

Adopted Levels, Gammas (continued)

γ(^{188}Ir)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	δ[#]	α[†]	Comments
54.81	2⁻	54.85[@] *5*	100[@]	0.0	1⁻	M1+E2	0.65 *4*	24.5 *17*	α(L)=18.6 *13*; α(M)=4.7 *4*; α(N+..)=1.31 *9* α(N)=1.13 *8*; α(O)=0.176 *12*; α(P)=0.00269 *9* B(M1)(W.u.)=0.00191 *18*; B(E2)(W.u.)=108 *13* Mult.: from α(L)exp=12.7, L1/L2/L3=39/100/100 (1963Pr12) and L1/L2=0.27 *6*, L1/L3=0.29 *6* (1962Ca27) in ^{188}Pt ε decay (10.2 d).
96.73	2⁻	41.98[@] *5*	100[@] *11*	54.81	2⁻	M1+E2	0.070 *7*	14.8 *4*	α(L)=11.37 *25*; α(M)=2.64 *6*; α(N+..)=0.770 *17* α(N)=0.649 *15*; α(O)=0.1134 *24*; α(P)=0.00789 *12* B(M1)(W.u.)=0.0103 *19*; B(E2)(W.u.)=12 *3* Mult.: from L1/L2/L3=100/11/5.7 (1963Pr12) and L1/L2=7.1 *10* (1962Ca27) in ^{188}Pt ε decay (10.2 d).
		96.70[@] *5*	33[@] *15*	0.0	1⁻	E2+M1	1.41 *4*	5.78 *9*	α(K)=2.38 *7*; α(L)=2.57 *5*; α(M)=0.652 *13*; α(N+..)=0.183 *4* α(N)=0.158 *3*; α(O)=0.0245 *5*; α(P)=0.000297 *9* B(M1)(W.u.)=9.E−5 *5*; B(E2)(W.u.)=8 *4* Mult.: from K/L1/L2/L3=100/14/54/38 (1963Pr12) in ^{188}Pt ε decay (10.2 d).
151.95	3⁻	55.2		96.73	2⁻				E_γ: From ^{187}Re(α,3nγ).
		97.2[&] *2*	100[&]	54.81	2⁻	M1		6.64	α(K)=5.47 *9*; α(L)=0.902 *14*; α(M)=0.208 *4*; α(N+..)=0.0608 *10* α(N)=0.0511 *8*; α(O)=0.00905 *14*; α(P)=0.000681 *11* Mult.: from α(L)exp=0.6 *3* for a doublet line in ^{187}Re(α,3nγ).
166.17	(3⁻)	166.2[&] *1*	100[&]	0.0	1⁻	(E2)		0.658	α(K)=0.271 *4*; α(L)=0.292 *5*; α(M)=0.0745 *11*; α(N+..)=0.0209 *3* α(N)=0.0180 *3*; α(O)=0.00279 *4*; α(P)=2.69×10^{-5} *4* Mult.: from intensity balance in ^{187}Re(α,3nγ).
187.62	(1)⁻	132.86[@] *10*	1.3[@] *3*	54.81	2⁻	E2		1.503	α(K)=0.456 *7*; α(L)=0.788 *12*; α(M)=0.202 *3*; α(N+..)=0.0564 *9* α(N)=0.0489 *7*; α(O)=0.00751 *11*; α(P)=4.60×10^{-5} *7* B(E2)(W.u.)=34 *12* Mult.: α(L2)exp=0.69; L2/L3=1.5 (1962Ca27) in ^{188}Pt ε decay (10.2 d).
		187.59[@] *10*	100[@] *5*	0.0	1⁻	E2(+M1)	≈30	≈0.430	α(K)≈0.201; α(L)≈0.1734; α(M)≈0.0441; α(N+..)≈0.01236 α(N)≈0.01068; α(O)≈0.001662; α(P)≈2.01×10^{-5} Mult.: K/L1/L2/L3/M/N=1.0/0.16/0.02/0.002/0.044/0.01 (1964Sa30) in ^{188}Pt ε decay (10.2 d).
195.10	1⁻	98.37[@] *5*	1.82[@] *18*	96.73	2⁻	M1(+E2)	<0.1	6.41	α(K)=5.27 *8*; α(L)=0.882 *17*; α(M)=0.204 *5*; α(N+..)=0.0596 *12* α(N)=0.0501 *10*; α(O)=0.00884 *17*; α(P)=0.000655 *10* Mult.: from α(K)exp=6.7 and K/L1/L2=100/15/1.5 (1963Pr12).
		140.35[@] *10*	12.5[@] *6*	54.81	2⁻	M1(+E2)	<0.13	2.32	α(K)=1.91 *3*; α(L)=0.316 *6*; α(M)=0.0730 *13*; α(N+..)=0.0214 *4* α(N)=0.0180 *3*; α(O)=0.00317 *5*; α(P)=0.000236 *4* Mult.: from α(K)exp=1.32 and K/L1/L2/L3=100/21/1.5/<0.2 (1963Pr12).
		195.05[@] *10*	100[@] *5*	0.0	1⁻	M1(+E2)	<0.1	0.918 *14*	α(K)=0.757 *11*; α(L)=0.1238 *18*; α(M)=0.0285 *4*;

Adopted Levels, Gammas (continued)

γ(^{188}Ir) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	δ[#]	α[†]	Comments
									α(N+..)=0.00835 *12* α(N)=0.00701 *10*; α(O)=0.001241 *18*; α(P)=9.32×10^{-5} *14* Mult.: from α(K)exp=0.89, K/L=6.55 *7*, L/M=3.47 *3* (1962Ca27). Other: K/L1/L2/L3/M/N=1.0/0.17/0.01/0.002/0.043/0.01 (1964Sa30).
211.19	(3)$^-$	59.4[b]		151.95	3$^-$				E_γ: From ^{187}Re(α,3nγ).
		114.6[&] *1*	100[&] *6*	96.73	2$^-$	M1(+E2)	<0.9	3.8 *4*	α(K)=2.8 *7*; α(L)=0.78 *22*; α(M)=0.19 *6*; α(N+..)=0.054 *17* α(N)=0.046 *15*; α(O)=0.0077 *21*; α(P)=0.00034 *8* Mult.,δ: from α(L)exp=0.7 *3* in ^{187}Re(α,3nγ).
		156.2[&] *1*	54[&] *5*	54.81	2$^-$	(E2)		0.823	α(K)=0.315 *5*; α(L)=0.383 *6*; α(M)=0.0979 *14*; α(N+..)=0.0274 *4* α(N)=0.0237 *4*; α(O)=0.00366 *6*; α(P)=3.12×10^{-5} *5* Mult.: from intensity balance in ^{187}Re(α,3nγ) (1984Kr18).
280.30	(1,2)$^-$	92.9[@b] *2*	≈7.5[@]	187.62	(1)$^-$				
		280.30[@] *15*	100[@] *13*	0.0	1$^-$	E2+M1	1.16 *+27−21*	0.211 *23*	α(K)=0.160 *21*; α(L)=0.0388 *13*; α(M)=0.00932 *23*; α(N+..)=0.00268 *8* α(N)=0.00228 *6*; α(O)=0.000382 *14*; α(P)=1.9×10^{-5} *3* Mult.: from α(K)exp=0.16 in ^{188}Pt ε decay (10.2 d).
354.14	(4)$^+$	142.9[&] *1*	100[&] *5*	211.19	(3)$^-$	E1		0.1602	α(K)=0.1309 *19*; α(L)=0.0226 *4*; α(M)=0.00521 *8*; α(N+..)=0.001485 *21* α(N)=0.001262 *18*; α(O)=0.000212 *3*; α(P)=1.181×10^{-5} *17* Mult.: from α(L)exp=0.03 *2* in ^{187}Re(α,3nγ) (1984Kr18).
		188.0[&] *1*	10.9[&] *9*	166.17	(3$^-$)				
		202.2[&] *1*	48[&] *3*	151.95	3$^-$	E1		0.0664	α(K)=0.0547 *8*; α(L)=0.00904 *13*; α(M)=0.00208 *3*; α(N+..)=0.000596 *9* α(N)=0.000505 *7*; α(O)=8.60×10^{-5} *12*; α(P)=5.17×10^{-6} *8* Mult.: from α(L)exp=0.025 *15* in ^{187}Re(α,3nγ) (1984Kr18).
410.38	(5)$^+$	56.2[&] *2*	100[&]	354.14	(4)$^+$	M1		5.78 *11*	α(L)=4.45 *8*; α(M)=1.026 *18*; α(N+..)=0.300 *6* α(N)=0.252 *5*; α(O)=0.0446 *8*; α(P)=0.00336 *6* E_γ: placement made by the evaluators. Mult.: from intensity balance in ^{187}Re(α,3nγ).
478.18	1$^+$	197.8[@b] *4*	<0.78[@]	280.30	(1,2)$^-$	(E1)		0.0702 *11*	α(K)=0.0578 *9*; α(L)=0.00957 *15*; α(M)=0.00220 *4*; α(N+..)=0.000631 *10* α(N)=0.000535 *8*; α(O)=9.09×10^{-5} *14*; α(P)=5.45×10^{-6} *8* Mult.: α(K)exp<2.6 in ^{188}Pt ε decay (10.2 d).
		283.15[@] *20*	1.4[@] *7*	195.10	1$^-$	[E1]		0.0290	α(K)=0.0240 *4*; α(L)=0.00384 *6*; α(M)=0.000882 *13*; α(N+..)=0.000254 *4* α(N)=0.000215 *3*; α(O)=3.69×10^{-5} *6*; α(P)=2.36×10^{-6} *4*

$^{188}_{77}Ir_{111}$-6

Adopted Levels, Gammas (continued)

γ(^{188}Ir) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	α[†]	Comments
478.18	1$^+$	290.64[@] *20*	1.4[@] *5*	187.62	(1)$^-$	[E1]	0.0272	α(K)=0.0226 *4*; α(L)=0.00360 *5*; α(M)=0.000826 *12*; α(N+..)=0.000238 *4* α(N)=0.000201 *3*; α(O)=3.46×10^{-5} *5*; α(P)=2.23×10^{-6} *4*
		381.43[@] *10*	100[@] *5*	96.73	2$^-$	E1	0.01445	α(K)=0.01202 *17*; α(L)=0.00188 *3*; α(M)=0.000429 *6*; α(N+..)=0.0001240 *18* α(N)=0.0001047 *15*; α(O)=1.81×10^{-5} *3*; α(P)=1.217×10^{-6} *17* Mult.: α(K)exp=0.0144 in ^{188}Pt ε decay (10.2 d).
		423.34[@] *10*	58[@] *3*	54.81	2$^-$	E1	0.01144	α(K)=0.00953 *14*; α(L)=0.001474 *21*; α(M)=0.000337 *5*; α(N+..)=9.75×10^{-5} *14* α(N)=8.22×10^{-5} *12*; α(O)=1.429×10^{-5} *20*; α(P)=9.72×10^{-7} *14* Mult.: α(K)exp=0.0078 in ^{188}Pt ε decay (10.2 d).
		478.3[@] *5*	24[@] *4*	0.0	1$^-$	E1	0.00876	α(K)=0.00731 *11*; α(L)=0.001119 *16*; α(M)=0.000256 *4*; α(N+..)=7.40×10^{-5} *11* α(N)=6.24×10^{-5} *9*; α(O)=1.087×10^{-5} *16*; α(P)=7.52×10^{-7} *11* Mult.: α(K)exp<0.02 in ^{188}Pt ε decay (10.2 d).
492.03	(6)$^+$	81.6[&] *2*	6.4[&] *4*	410.38	(5)$^+$	M1	10.95 *17*	α(K)=9.00 *14*; α(L)=1.498 *24*; α(M)=0.345 *6*; α(N+..)=0.1010 *16* α(N)=0.0849 *14*; α(O)=0.01502 *24*; α(P)=0.001131 *18* E_γ: placement made by the evaluators. Mult.: from intensity balance in ^{187}Re(α,3nγ).
		137.9[&] *1*	100[&] *5*	354.14	(4)$^+$	E2	1.305	α(K)=0.420 *6*; α(L)=0.666 *10*; α(M)=0.1708 *25*; α(N+..)=0.0477 *7* α(N)=0.0413 *6*; α(O)=0.00635 *10*; α(P)=4.21×10^{-5} *6* Mult.: from α(L)exp=0.7 *2* in ^{187}Re(α,3nγ).
641.93	(7)$^+$	149.9[&] *1*	100[&]	492.03	(6)$^+$	M1,E2		Mult.: α(L)exp=0.4 *1* in ^{187}Re(α,3nγ) gives mult=E2,M1, but intensity balance favors E2. 1981RoZY quote mult=M1.
674.9	(8$^-$)	33.0[&] *2*	100[&]	641.93	(7)$^+$	(E1)	1.60 *4*	α(L)=1.23 *3*; α(M)=0.290 *7*; α(N+..)=0.0791 *18* α(N)=0.0684 *15*; α(O)=0.01040 *23*; α(P)=0.000342 *7* Mult.: from intensity balance in ^{187}Re(α,3nγ).
708.13	(8$^-$)	66.2[&] *1*	100[&]	641.93	(7)$^+$	(E1)	0.237	α(L)=0.183 *3*; α(M)=0.0425 *7*; α(N+..)=0.01191 *18* α(N)=0.01019 *15*; α(O)=0.001645 *24*; α(P)=7.27×10^{-5} *11* Mult.: from intensity balance in ^{187}Re(α,3nγ).
764.53	(8$^+$)	272.5 *1*	100	492.03	(6)$^+$			
801.63		159.7 *1*	100	641.93	(7)$^+$			
814.85	(8$^+$)	172.8 *1*	100 *8*	641.93	(7)$^+$			
		322.5 *1*	29 *4*	492.03	(6)$^+$			
877.8?		202.9[b]		674.9	(8$^-$)			E_γ: From ^{187}Re(α,3nγ).
915.5?		207.4[b]		708.13	(8$^-$)			E_γ: From ^{187}Re(α,3nγ).
923.53	(7 to 10)$^-$	215.4[&] *1*	100[&]	708.13	(8$^-$)	M1,E2	0.698	α(K)=0.577 *9*; α(L)=0.0937 *14*; α(M)=0.0216 *3*; α(N+..)=0.00631 *9* α(N)=0.00530 *8*; α(O)=0.000940 *14*; α(P)=7.09×10^{-5} *10* Mult.: from α(L)exp=0.14 *8* in ^{187}Re(α,3nγ).
1042.20	(9$^+$)	227.4 *1*	96 *9*	814.85	(8$^+$)			

$^{188}_{77}Ir_{111}$-7

Adopted Levels, Gammas (continued)

γ(^{188}Ir) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	α[†]	Comments
1042.20	(9$^+$)	400.4 *1*	100 *10*	641.93	(7)$^+$			
1143.03	(10$^+$)	378.5 *1*	100	764.53	(8$^+$)			
1221.77+x	(12$^-$)	298.3 *1*	100	923.53+x	(11$^-$)	M1+E2	0.285	α(K)=0.236 *4*; α(L)=0.0381 *6*; α(M)=0.00876 *13*; α(N+..)=0.00256 *4* α(N)=0.00215 *3*; α(O)=0.000382 *6*; α(P)=2.89×10^{-5} *4* Mult.: DCO=0.89 *2* (2008Ju02). Others: DCO(Q)=0.66 *3* and DCO(D)=1.18 *8* (2004Ba91).
1238.23	(10$^+$)	196.2 *1*	37 *5*	1042.20	(9$^+$)			
		423.2 *1*	100 *8*	814.85	(8$^+$)			
1252.53		450.9 *1*	100	801.63				
1397.94+x	(13$^-$)	176.2 *1*	17.6 *4*	1221.77+x	(12$^-$)	M1+E2	1.223	α(K)=1.010 *15*; α(L)=0.1647 *24*; α(M)=0.0379 *6*; α(N+..)=0.01110 *16* α(N)=0.00932 *14*; α(O)=0.001651 *24*; α(P)=0.0001245 *18* Mult.: DCO(Q)=0.63 *7* and DCO(D)=0.76 *7* (2004Ba91).
		474.4 *1*	100 *7*	923.53+x	(11$^-$)	E2	0.0271	α(K)=0.0199 *3*; α(L)=0.00544 *8*; α(M)=0.001317 *19*; α(N+..)=0.000377 *6* α(N)=0.000321 *5*; α(O)=5.32×10^{-5} *8*; α(P)=2.24×10^{-6} *4* Mult.: DCO=1.02 *3* (2008Ju02). Others: DCO(Q)=0.95 *4* (2004Ba91).
1419.23		617.6 *1*	100	801.63				
1540.69	(11$^+$)	302.4 *2*	38 *9*	1238.23	(10$^+$)			
		498.5 *1*	100 *25*	1042.20	(9$^+$)			
1626.83	(12$^+$)	483.8 *1*	100	1143.03	(10$^+$)			
1663.53+x		441.8 *1*	100	1221.77+x	(12$^-$)			
1709.92+x	(14$^-$)	312.0 *1*	100.0 *25*	1397.94+x	(13$^-$)	M1+E2	0.253	α(K)=0.209 *3*; α(L)=0.0337 *5*; α(M)=0.00775 *11*; α(N+..)=0.00227 *4* α(N)=0.00191 *3*; α(O)=0.000338 *5*; α(P)=2.55×10^{-5} *4* Mult.: DCO=0.86 *7* (2008Ju02). Others: DCO(Q)=0.76 *4* and DCO(D)=0.95 *7* (2004Ba91).
		488.1 *1*	48.9 *15*	1221.77+x	(12$^-$)	(E2)	0.0252	α(K)=0.0187 *3*; α(L)=0.00498 *7*; α(M)=0.001204 *17*; α(N+..)=0.000344 *5* α(N)=0.000294 *5*; α(O)=4.87×10^{-5} *7*; α(P)=2.11×10^{-6} *3* Mult.: DCO=1.30 *18* (2008Ju02). Others: DCO(Q)=1.34 *22* and DCO(D)=1.20 *9* (2004Ba91).
1717.2		464.7 *2*	100	1252.53				
1753.83	(12$^+$)	515.6 *1*	100	1238.23	(10$^+$)			
1921.11+x	(15$^-$)	211.2 *1*	16.1 *4*	1709.92+x	(14$^-$)	M1+E2	0.737	α(K)=0.609 *9*; α(L)=0.0990 *14*; α(M)=0.0228 *4*; α(N+..)=0.00667 *10* α(N)=0.00560 *8*; α(O)=0.000993 *14*; α(P)=7.49×10^{-5} *11* Mult.: DCO=0.74 *6* (2008Ju02). Others: DCO(Q)=0.76 *9* and DCO(D)=0.88 *10* (2004Ba91).
		523.2 *1*	100.0 *19*	1397.94+x	(13$^-$)	E2	0.0213	α(K)=0.01599 *23*; α(L)=0.00403 *6*; α(M)=0.000970 *14*; α(N+..)=0.000278 *4* α(N)=0.000237 *4*; α(O)=3.95×10^{-5} *6*; α(P)=1.81×10^{-6} *3* Mult.: DCO=0.98 *3* (2008Ju02). Others: DCO(Q)=0.97 *4* and DCO(D)=1.39 *8*.
2010.53		591.3 *1*	100	1419.23				
2070.39+x		406.7 *2*	100	1663.53+x				
2121.19	(13$^+$)	580.5 *1*	100	1540.69	(11$^+$)			
2133.25+x		469.8 *1*	100	1663.53+x				
2166.49+x	(15$^-$)	456.7[a] *1*	100[a] *4*	1709.92+x	(14$^-$)	M1+E2	0.0912	α(K)=0.0756 *11*; α(L)=0.01206 *17*; α(M)=0.00277 *4*; α(N+..)=0.000811 *12* α(N)=0.000681 *10*; α(O)=0.0001207 *17*; α(P)=9.17×10^{-6} *13*

$^{188}_{77}Ir_{111}$-8

Adopted Levels, Gammas (continued)

γ(^{188}Ir) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	α[†]	Comments
								Mult.: DCO=0.92 *7* (2008Ju02). Others: DCO(Q)=0.92 *12* and DCO(D)=1.58 *19* (2004Ba91).
2166.49+x	(15$^-$)	768.7 *2*	15.1 *19*	1397.94+x	(13$^-$)	[E2]	0.00893	α(K)=0.00710 *10*; α(L)=0.001404 *20*; α(M)=0.000331 *5*; α(N+..)=9.55×10^{-5} *14* α(N)=8.09×10^{-5} *12*; α(O)=1.383×10^{-5} *20*; α(P)=8.09×10^{-7} *12*
2199.49+x		801.3 *2*	100	1397.94+x	(13$^-$)	(M1+E2)	0.0213	α(K)=0.01767 *25*; α(L)=0.00277 *4*; α(M)=0.000634 *9*; α(N+..)=0.000186 *3* α(N)=0.0001559 *22*; α(O)=2.77×10^{-5} *4*; α(P)=2.12×10^{-6} *3* Mult.: DCO(Q)=0.6 *3* and DCO(D)=0.35 *10* (2004Ba91).
2218.13	(14$^+$)	591.3 *1*	100	1626.83	(12$^+$)			
2288.07+x	(16$^-$)	367.1 *1*	100.0 *24*	1921.11+x	(15$^-$)	M1+E2	0.1631	α(K)=0.1350 *19*; α(L)=0.0217 *3*; α(M)=0.00498 *7*; α(N+..)=0.001458 *21* α(N)=0.001224 *18*; α(O)=0.000217 *3*; α(P)=1.645×10^{-5} *23* Mult.: DCO=0.81 *4* (2008Ju02). Others: DCO(Q)=0.59 *7* and DCO(D)=1.03 *18* (2004Ba91).
		578.0 *1*	90.5 *24*	1709.92+x	(14$^-$)			Mult.: DCO(Q)=0.6 3 and DCO(D)=1.2 6 (2004Ba91).
2352.74	(14$^+$)	598.9 *1*	100	1753.83	(12$^+$)			
2441.65+x	(16$^-$)	241.9 *2*	100 *7*	2199.49+x		(M1+E2)	0.507 *8*	α(K)=0.419 *6*; α(L)=0.0679 *10*; α(M)=0.01562 *23*; α(N+..)=0.00457 *7* α(N)=0.00384 *6*; α(O)=0.000680 *10*; α(P)=5.14×10^{-5} *8* Mult.: DCO(Q)=0.43 *15* (2004Ba91).
		275.2 *2*	72 *4*	2166.49+x	(15$^-$)	(M1+E2)	0.356	α(K)=0.294 *5*; α(L)=0.0475 *7*; α(M)=0.01093 *16*; α(N+..)=0.00320 *5* α(N)=0.00269 *4*; α(O)=0.000476 *7*; α(P)=3.60×10^{-5} *5* Mult.: DCO=0.51 *13* (2008Ju02).
		521.0 *2*	38 *10*	1921.11+x	(15$^-$)			
		731.4 *2*	52 *10*	1709.92+x	(14$^-$)			
2455.14+x	(16$^-$)	289.3 *2*	12.2 *10*	2166.49+x	(15$^-$)			E_γ: Poor fit, level energy difference=289.65.
		322.2 *2*	17.4 *10*	2133.25+x				
		384.6 *2*	14.3 *10*	2070.39+x				
		533.9 *1*	100 *3*	1921.11+x	(15$^-$)			DCO=1.09 *12* (2008Ju02).
		745.4 *2*	12.2 *10*	1709.92+x	(14$^-$)			
2554.21+x	(17$^-$)	266.2 *1*	11.0 *5*	2288.07+x	(16$^-$)	M1+E2	0.389	α(K)=0.322 *5*; α(L)=0.0521 *8*; α(M)=0.01198 *17*; α(N+..)=0.00351 *5* α(N)=0.00295 *5*; α(O)=0.000522 *8*; α(P)=3.95×10^{-5} *6* Mult.: DCO(Q)=0.61 *14*.
		633.0 *1*	100.0 *21*	1921.11+x	(15$^-$)	E2	0.01364	α(K)=0.01059 *15*; α(L)=0.00234 *4*; α(M)=0.000556 *8*; α(N+..)=0.0001600 *23* α(N)=0.0001359 *19*; α(O)=2.30×10^{-5} *4*; α(P)=1.206×10^{-6} *17* Mult.: DCO=1.01 *7* (2008Ju02). Others: DCO(Q)=1.06 *6* and DCO(D)=1.38 *9* (2004Ba91).
2642.64+x	(18$^-$)	88.3 *1*	100	2554.21+x	(17$^-$)	(M1)	8.75	α(K)=7.20 *11*; α(L)=1.191 *18*; α(M)=0.274 *4*; α(N+..)=0.0803 *12* α(N)=0.0675 *10*; α(O)=0.01195 *18*; α(P)=0.000899 *13* B(M1)(W.u.)=0.000267 *5* Mult.: DCO=1.4 *3* (2008Ju02).
2677.52+x	(17$^-$)	222.5 *1*	100 *6*	2455.14+x	(16$^-$)	(M1+E2)	0.638	α(K)=0.527 *8*; α(L)=0.0856 *12*; α(M)=0.0197 *3*; α(N+..)=0.00577 *9* α(N)=0.00484 *7*; α(O)=0.000858 *12*; α(P)=6.48×10^{-5} *10* Mult.: DCO=0.97 *6* (2008Ju02). Others: DCO(Q)=0.75 *11* and DCO(D)=1.46 *24* (2004Ba91).

$^{188}_{77}Ir_{111}$-9

Adopted Levels, Gammas (continued)

γ(^{188}Ir) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[‡]	α[†]	Comments
2677.52+x	(17⁻)	235.8 *2*	41.5 *11*	2441.65+x	(16⁻)	(M1+E2)	0.544	α(K)=0.449 *7*; α(L)=0.0728 *11*; α(M)=0.01677 *24*; α(N+..)=0.00491 *7* α(N)=0.00412 *6*; α(O)=0.000730 *11*; α(P)=5.51×10^{-5} *8* Mult.: DCO=0.58 *13* (2008Ju02). Others: DCO(Q)=0.42 *13* and DCO(D)=0.74 *19* (2004Ba91).
		389.1 *2*	22.3 *11*	2288.07+x	(16⁻)			
		511[b]		2166.49+x	(15⁻)			E_γ: 512.3 keV in 2004Ba91.
2723.92+x	(16⁻)	802.8 *1*	100	1921.11+x	(15⁻)	M1+E2	0.0212	α(K)=0.01759 *25*; α(L)=0.00276 *4*; α(M)=0.000631 *9*; α(N+..)=0.000185 *3* α(N)=0.0001552 *22*; α(O)=2.75×10^{-5} *4*; α(P)=2.11×10^{-6} *3* Mult.: DCO(Q)=0.30 *17* and DCO(D)=0.68 *28* (2004Ba91).
2744.77+x		456.7 *1*	100	2288.07+x	(16⁻)			DCO=0.92 *7* (2008Ju02).
2761.2	(15⁺)	640	100	2121.19	(13⁺)			
2892.90+x	(18⁻)	338.8 *1*	100	2554.21+x	(17⁻)	M1+E2	0.202	α(K)=0.1673 *24*; α(L)=0.0269 *4*; α(M)=0.00619 *9*; α(N+..)=0.00181 *3* α(N)=0.001522 *22*; α(O)=0.000270 *4*; α(P)=2.04×10^{-5} *3* Mult.: DCO=0.70 *3* (2008Ju02).
2894.7	(16⁺)	676.6 *1*	100	2218.13	(14⁺)			
2946.67+x		304.2 *1*	100	2642.64+x	(18⁻)			DCO=0.70 2 (2008Ju02).
2987.09+x	(18⁻)	432.8 *2*	100 *4*	2554.21+x	(17⁻)			
		699.1 *2*	91 *4*	2288.07+x	(16⁻)			
3001.32+x		277.4 *2*	100	2723.92+x	(16⁻)			DCO(Q)=1.06 *20* (2004Ba91).
3027.3	(16⁺)	674.6 *2*	100	2352.74	(14⁺)			
3068.52+x	(18⁻)	391.0 *2*	100	2677.52+x	(17⁻)			
		627[b]		2441.65+x	(16⁻)			
3155.67+x		410.9 *2*	100	2744.77+x				
3223.20+x	(19⁻)	330.3 *1*	100 *4*	2892.90+x	(18⁻)			DCO=0.81 *1* (2008Ju02).
		545.7 *1*	63.4 *24*	2677.52+x	(17⁻)			DCO=0.81 *9* (2008Ju02).
3305.15+x		412.7 *2*	100	2892.90+x	(18⁻)			
3353.0+x		351.7 *2*	100	3001.32+x				
3448.93+x		502.3 *1*	100	2946.67+x				DCO=1.14 *24* (2008Ju02).
3495.52+x		427.0 *1*	100	3068.52+x	(18⁻)			
3520.95+x		878.0 *1*	100	2642.64+x	(18⁻)			DCO=0.94 *12* (2008Ju02).
3521.90+x		575.4 *1*	100	2946.67+x				DCO=0.99 *5* (2008Ju02).
3627.0	(18⁺)	732.3	100	2894.7	(16⁺)			
3680.0	(18⁺)	652.7 *2*	100	3027.3	(16⁺)			
3693.79+x		389.1[a] *2*	41.2[a] *20*	3305.15+x				
		470.6 *1*	100 *4*	3223.20+x	(19⁻)			DCO=0.99 *9* (2008Ju02).
		747.0 *2*	75 *6*	2946.67+x				DCO=1.05 *2* (2008Ju02).
3748.6+x		591.5[b] *2*	100 *5*	3155.67+x				
		761.5 *2*	65 *3*	2987.09+x	(18⁻)			
3828.29+x		134.9 *2*	26.7 *11*	3693.79+x				DCO=0.99 *22* (2008Ju02).
		306.2 *1*	100 *3*	3521.90+x				DCO=0.73 *3* (2008Ju02).
		379.5 *2*	16 *4*	3448.93+x				
3907.3+x		458.4 *2*	100	3448.93+x				

$^{188}_{77}Ir_{111}$-10

Adopted Levels, Gammas (continued)

$\gamma(^{188}Ir)$ (continued)

E_i(level)	E_γ ‡	I_γ ‡	E_f	Comments
4046.9+x	551.4[b] *2*	100	3495.52+x	
4091.43+x	569.5 *1*	100	3521.90+x	DCO=1.00 *9* (2008Ju02).
4098.36+x	577.1 *1*		3521.90+x	
	577.1 *1*		3520.95+x	
4227.36+x	399.0 *1*	100	3828.29+x	DCO=0.89 *8* (2008Ju02).
4352.54+x	255.0 *2*	10.6 *15*	4098.36+x	
	830.4 *1*	100 *6*	3521.90+x	DCO=0.66 *7* (2008Ju02).
	831.6 *2*	4.6 *15*	3520.95+x	
4459.4+x	552.1 *1*	100	3907.3+x	
4690.7+x	599.3 *2*	100	4091.43+x	DCO=1.04 *15* (2008Ju02).
4705.56+x	353.0 *1*	100 *5*	4352.54+x	DCO=1.02 *9* (2008Ju02).
	607.7 *2*	7.9 *16*	4098.36+x	
	614.0 *2*	49 *6*	4091.43+x	
4824.8+x	726.4 *2*	100	4098.36+x	
4839.4+x	741.0 *2*	100	4098.36+x	
4863.86+x	636.5 *1*	100	4227.36+x	
5046.9+x	955.5[a] *2*	100[a]	4091.43+x	DCO=1.01 *16* (2008Ju02).
5065.21+x	359.7 *2*	100 *4*	4705.56+x	
	837.6 *2*	53 *6*	4227.36+x	
5222.2+x	531.5 *2*	100	4690.7+x	
5262.3+x	1034.9 *2*	100	4227.36+x	DCO=0.89 *25* (2008Ju02).
5354.1+x	648.5 *2*	100	4705.56+x	
5363.56+x	298.3 *1*		5065.21+x	
	658.2 *2*	100	4705.56+x	
5479.4+x	640	100	4839.4+x	
5516.3+x	652.4 *2*	100	4863.86+x	
5562.5+x	497.3 *2*	100	5065.21+x	
5669.7+x	979	100	4690.7+x	
5877.6+x	1013.7 *2*	100	4863.86+x	
5998.6+x	736.3 *2*	100	5262.3+x	
6002.4+x	955.5 *2*	100	5046.9+x	DCO=1.01 *16* (2008Ju02).
6062.9+x	708.8 *2*	100	5354.1+x	
6127.9+x	764.3 *2*	100	5363.56+x	
6299.3+x	783	100	5516.3+x	

† Additional information 3.
‡ From $^{186}W(^{7}Li,5n\gamma)$, unless otherwise stated.
# From ce data in ^{188}Pt ε decay (10.2 d), deduced using the BrIccmixing program (v.23), unless otherwise stated. Uncertainties of 10% were assumed, if those were not given by the authors.
@ From ^{188}Pt ε decay (10.2 d).

$^{188}_{77}Ir_{111}$-11

γ(^{188}Ir) (continued)

[&] From ^{187}Re(α,3nγ).
[a] Multiply placed with undivided intensity.
[b] Placement of transition in the level scheme is uncertain.

$^{188}_{77}$Ir$_{111}$-12

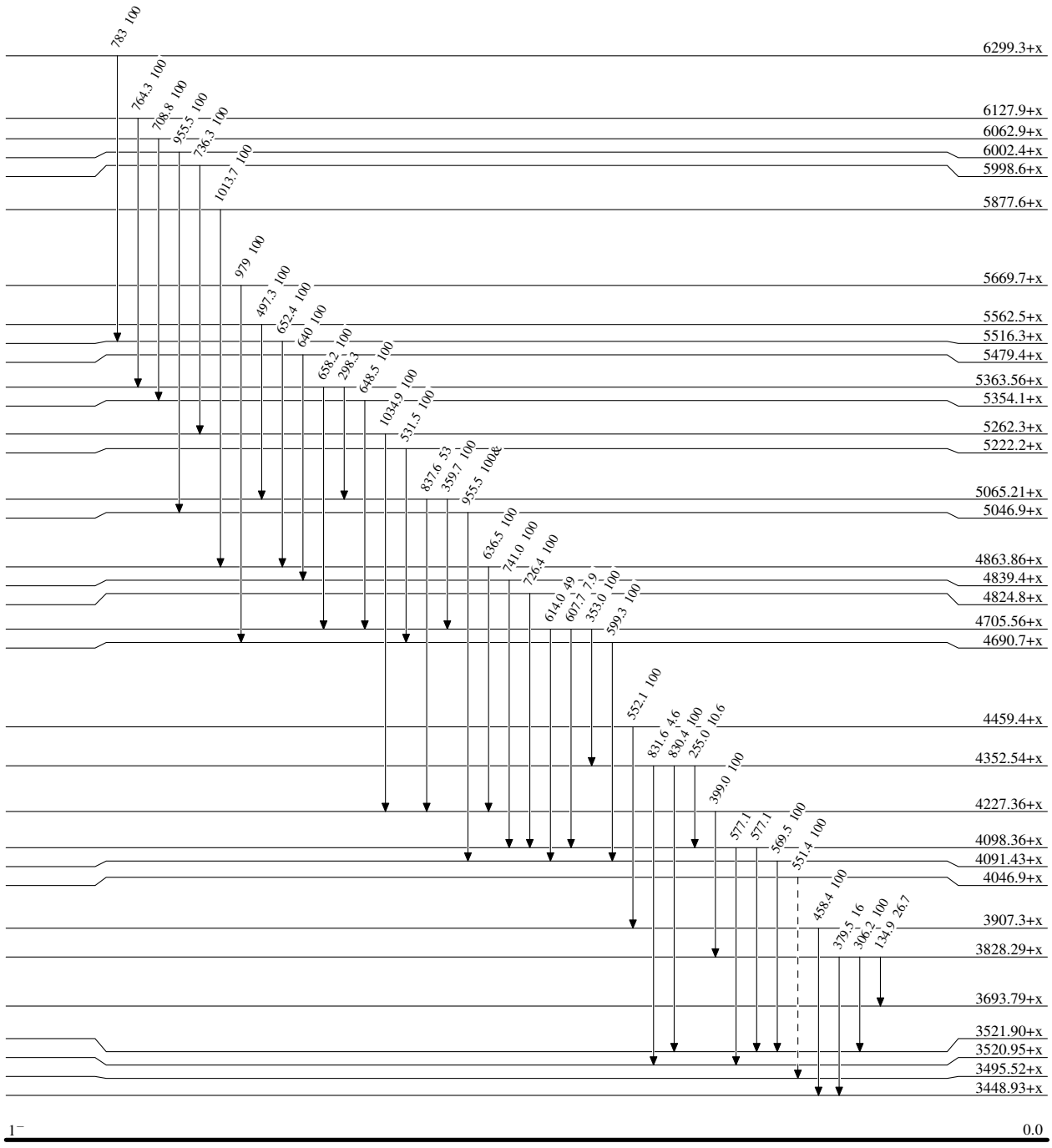
Adopted Levels, Gammas

Legend

Level Scheme

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

- - - - - - ► γ Decay (Uncertain)



$^{188}_{77}Ir_{111}$

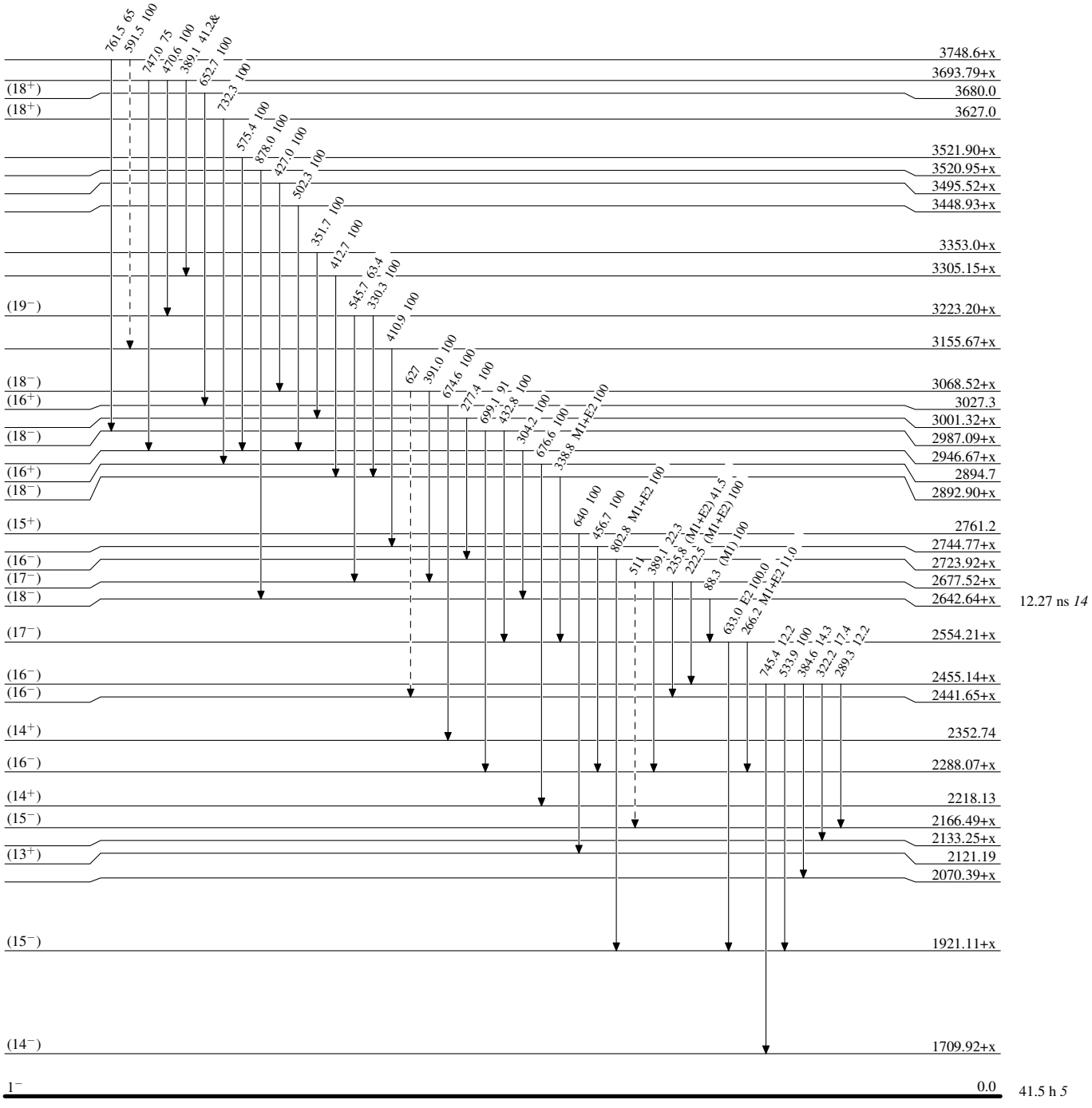
Adopted Levels, Gammas

Legend

Level Scheme (continued)

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

– – – – – – ► γ Decay (Uncertain)



$^{188}_{77}Ir_{111}$

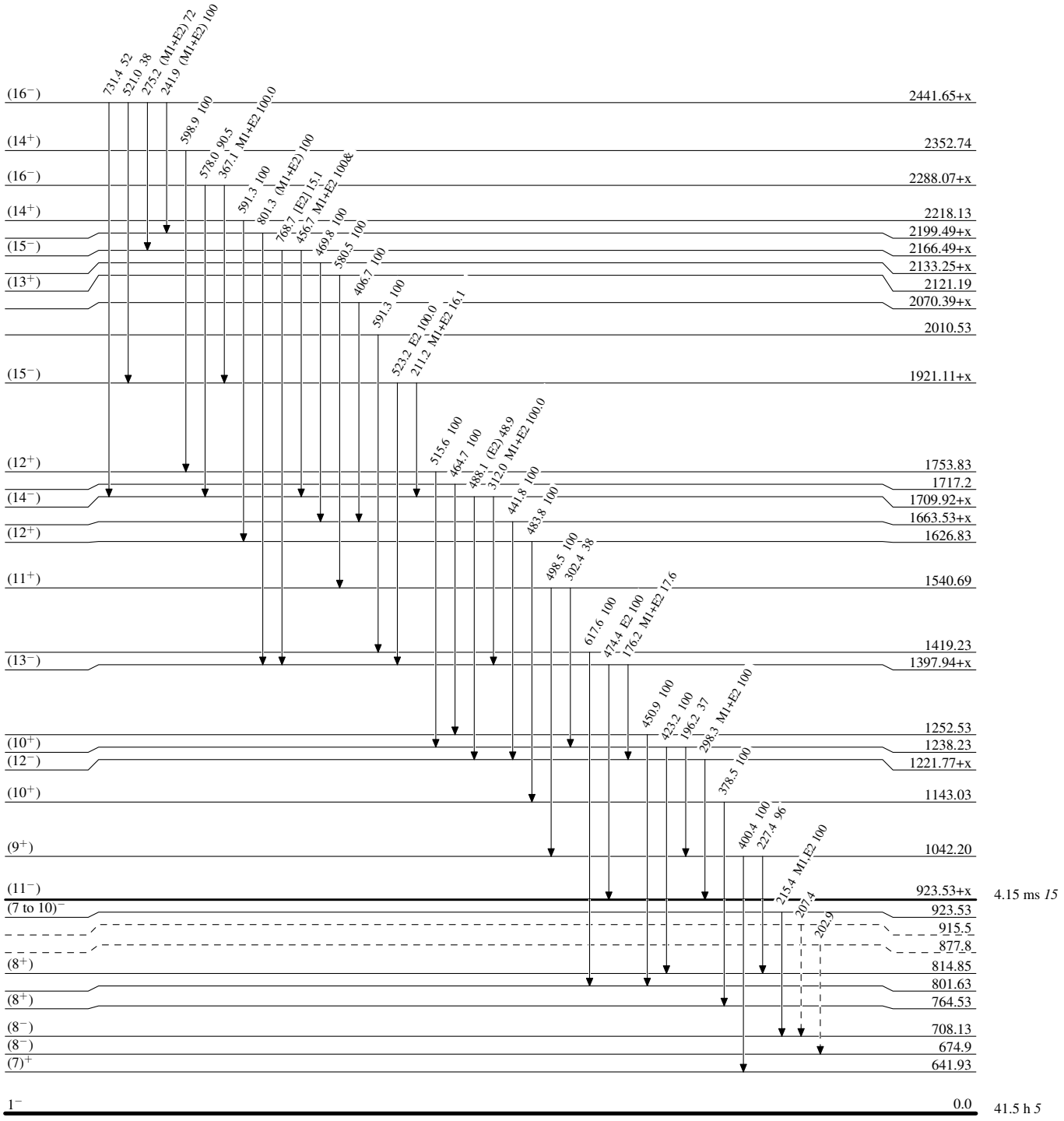
Adopted Levels, Gammas

Legend

Level Scheme (continued)

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

γ Decay (Uncertain)



$^{188}_{77}Ir_{111}$

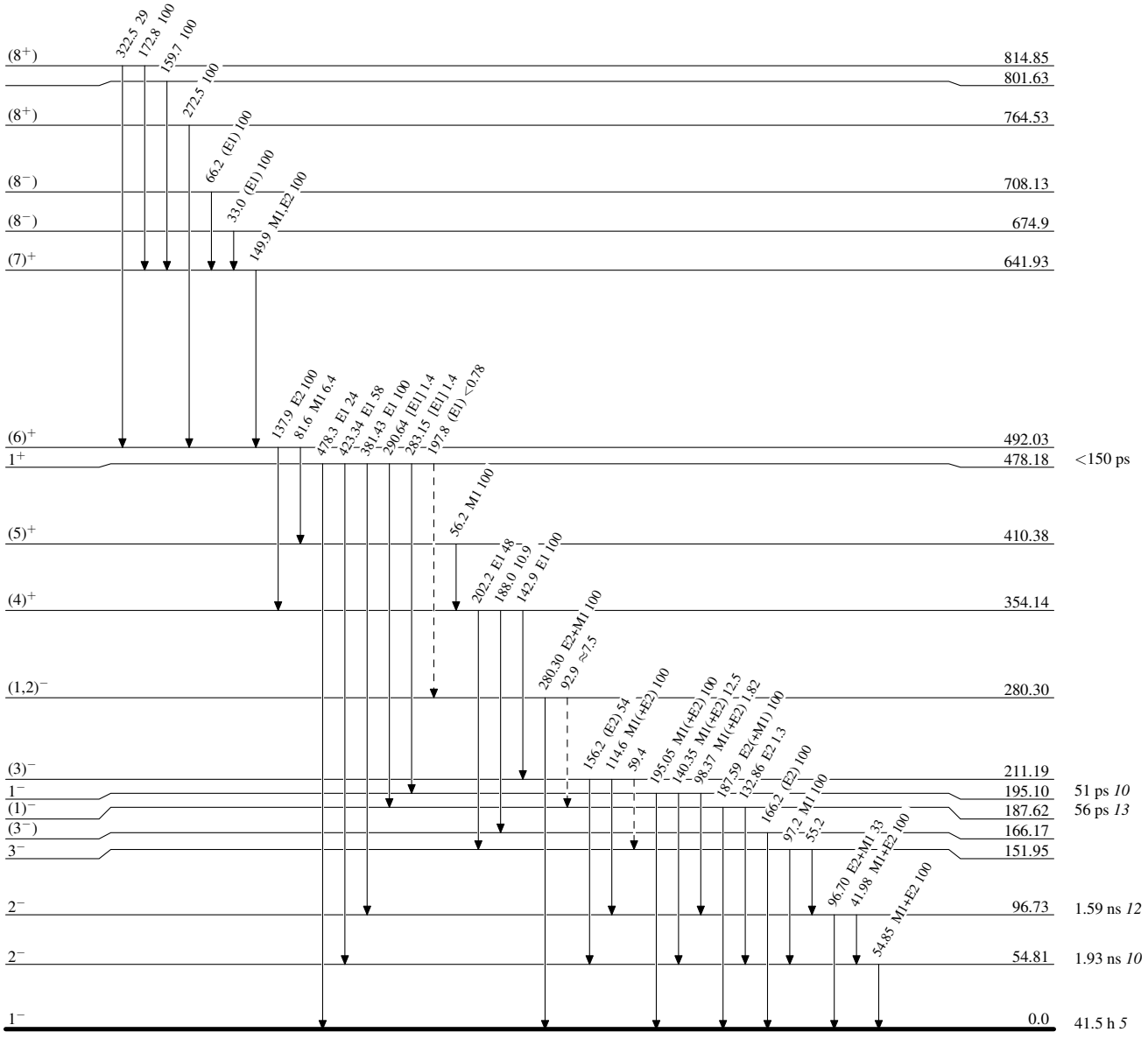
Adopted Levels, Gammas

Legend

Level Scheme (continued)

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

- - - - - - ► γ Decay (Uncertain)



$^{188}_{77}Ir_{111}$

Adopted Levels, Gammas