Adopted Levels, Gammas

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

Q(β^-)=−3.65×10^3 *4*; S(n)=8.80×10^3 *4*; S(p)=3.37×10^3 *3*; Q(α)=3.76×10^3 *3* 2012Wa38
Note: Current evaluation has used the following Q record −3650 50 *8800* 40 *3368* 28 *3750* 30 2003Au03.
Other Reactions:
^{185}Re(α,4n): 1993Is01.

^{185}Ir Levels

Cross Reference (XREF) Flags

A ^{185}Pt ε decay
B ^{185}Re(α,4nγ),^{187}Re(α,6nγ)

E(level)‡	J$^\pi$†	T$_{1/2}$	XREF	Comments
0.0[d]	5/2$^-$	14.4 h *1*	AB	%ε+%β^+=100 μ=2.605 *13*; Q=−2.06 *14* (2001StZZ) T$_{1/2}$: from 1982Al34. Other values: 14.0 h *9* (1963Em02), 15 h *3* (1958Di44). J$^\pi$: J from atomic beam (1975Ru06). K=1/2 assignment from experimental Q. Nilsson orbital assignment 1/2[541] based on the agreement between experimental and calculated μ (1985Va07) (including the Coriolis interaction between the 1/2[541] and 3/2[532] orbitals). μ: radiative detection of nuclear magnetic resonance (1988Oh02,1989Ra17). Other values: 2.601 *14*, radiative detection of nuclear magnetic resonance (1986Ed02). Other values: 2.6 *2* (1981Sp06), 2.49 *20* (1985Va07) static (low-temperature) nuclear orientation. Q: radiative detection of nuclear magnetic resonance (1988Oh02,1989Ra17). Other values: −1.9 *5* radiative detection of nuclear magnetic resonance (1986Ed02); −2.5 *3* (1982Al34), −1.9 *3* recalculated for consistency with standards (1981Ha33,1989Ra17) static (low temperature) nuclear orientation. Other: 1988Oh08. <r^2>$^{1/2}$=5.39 fm 11 for ^{185}Ir based on a global fit to charge radius data for all nuclides (2004An14).
5.8[d] *1*	9/2$^-$	5 ns *1*	AB	T$_{1/2}$: from ^{185}Pt ε decay (1979Sc20). J$^\pi$: 5.8γ E2 to 5/2$^-$; band structure.
135.3[d] *1*	1/2$^-$	0.29 ns *3*	A	T$_{1/2}$: from ^{185}Pt ε decay (1979Sc20). J$^\pi$: 135.3γ E2 to 5/2$^-$; 94.3 E1 from 229.6 state, which is the band head of 3/2[402] rotational band; level not populated in ^{185}Re(α,4n), ^{187}Re(α,6n) makes high J unlikely. 135.3 γ is noted as mostly from the 33.0 min ^{185}Pt decay (1979Sc20). The 1/2$^-$[541] state.
158.6[d] *2*	(13/2)$^-$		AB	J$^\pi$: 152.8γ E2 to 9/2$^-$; band structure.
229.6[&] *1*	3/2$^+$	2.10 ns *17*	AB	T$_{1/2}$: from ^{185}Pt ε decay (1979Sc20). J$^\pi$: 94.3γ E1 to 1/2$^-$, 229.6γ E1 to 5/2$^-$; 3/2[402] rotational band head.
255.10 *15*	3/2$^-$		A	J$^\pi$: 119.8γ M1+E2 to 1/2$^-$, 255.1 γ M1+E2 to 5/2$^-$.
300.10 *15*	(7/2)$^-$		A	J$^\pi$: 294.3γ (M1+E2) to 9/2$^-$, 300.2γ M1+E2 to 5/2$^-$.
332.7[b] *2*	(1/2)$^+$		A	J$^\pi$: 197.4γ E1 to 1/2$^-$, 103.1 E2(+M1) to 3/2$^+$; band head for 1/2[400].
335.3[a] *2*	(5/2)$^+$		AB	J$^\pi$: 335.4γ E1 to 5/2$^-$, 105.6γ M1+E2 to 3/2$^+$; band structure.
418.7[c] *2*	(3/2)$^+$		AB	J$^\pi$: 83.5γ (M1+E2) to (5/2)$^+$, 85.9γ (M1+E2) to (1/2)$^+$; band structure.
442.3 *4*	(3/2$^+$,5/2$^+$)		AB	J$^\pi$: 106.9γ (M1+E2) to (5/2)$^+$, 212.6γ (M1) to 3/2$^+$.
448.83[#d] *16*	(17/2)$^-$		B	J$^\pi$: 290.2γ to (13/2)$^-$; band structure.
465.7[e] *3*	(11/2)$^-$		AB	J$^\pi$: 307.3γ (M1) to (13/2)$^-$, 459.8γ M1(+E2) to 9/2$^-$; band structure.

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Adopted Levels, Gammas (continued)

^{185}Ir Levels (continued)

E(level)[‡]	J$^{\pi}$[†]	$T_{1/2}$	XREF	Comments
496.9[&] *3*	$(7/2)^+$		AB	J$^{\pi}$: 267γ to $3/2^+$, 161γ to $(5/2)^+$; band structure.
506.8 *2*	$(5/2^-)$		A	J$^{\pi}$: 206.8γ (M1) to $(7/2)^-$, 251.2γ (M1) to $3/2^-$.
519.7 *2*	$(3/2)^-$		A	J$^{\pi}$: 384.5γ (M1+E2) to $1/2^-$, 264.4 M1 to $3/2^-$.
556.0[b] *2*	$(5/2^+)$		AB	J$^{\pi}$: 59.2γ (M1+E2) to $(7/2)^+$, 137.0γ (M1+E2) to $(3/2)^+$; band structure.
646.6[f] *3*	$(11/2^-)$	21.5 ns *20*	AB	J$^{\pi}$: 640.8γ (M1) to $9/2^-$, 488.0γ to $(13/2)^-$. $T_{1/2}$: from ^{185}Re(α,4nγ) (1979An20). Other value: 19 ns *3*, from ^{185}Pt ε decay (1970FiZZ).
648.7 *3*	$(3/2^+,5/2^+,7/2^+)$		AB	J$^{\pi}$: 313.4γ (M1) to $(5/2)^+$.
696.8[c] *3*	$(7/2)^+$		AB	J$^{\pi}$: 140.9 (M1) to $(5/2)^+$; 361.5 (M1) to $(5/2)^+$; band structure.
720.3 *2*	$1/2^-,3/2^-$		A	J$^{\pi}$: 584.9γ M1 to $1/2^-$.
727.1 *3*	$(5/2^-,7/2^-,9/2^-)$		A	J$^{\pi}$: 427.0γ (M1+E2) to $(7/2)^-$.
755.97[#e] *16*	$(15/2)^-$		AB	J$^{\pi}$: γ to $(11/2)^-$, $(17/2)^-$, $(13/2)^-$ states; band structure.
801.4 *4*	$(5/2^-,7/2,9/2^-)$		A	J$^{\pi}$: 801.8γ to $5/2^-$, 795.1γ to $9/2^-$.
852.3[#] *3*	$(9/2^-,11/2,13/2^-)$		B	J$^{\pi}$: 846.5γ to $9/2^-$, 693.6γ to $(13/2)^-$.
861.1 *4*	$(1/2^-,3/2^-,5/2^-)$		A	J$^{\pi}$: 341.4γ (M1) to $(3/2^-)$.
861.94[d] *19*	$(21/2)^-$		B	J$^{\pi}$: γ to $(17/2)^-$; band structure.
876.9 *6*			A	
881.1[#b] *4*	$(9/2)^+$		B	J$^{\pi}$: 184γ to $(7/2)^+$, 325γ to $(5/2)^+$; band structure.
899.7 *7*	$(9/2^-,11/2^-,13/2^-)$		A	XREF: A(899.7). J$^{\pi}$: 253.1γ (M1) to $(11/2^-)$.
900.5 *5*	$(11/2^-,13/2^-)$		A	XREF: A(900.5). J$^{\pi}$: 434.6γ (M1) to $(11/2)^-$, 741.6γ (M1+E2) to $(13/2)^-$.
944.7[g] *4*	$(13/2^-)$		AB	J$^{\pi}$: 298γ (M1) to $(11/2^-)$; band structure.
1016.7 *4*			AB	
1038.9 *10*			A	
1068.1 *6*	$(3/2^+)$		A	J$^{\pi}$: 735.3γ (M1+E2) to $(1/2)^+$.
1086.6[#c] *3*	$(11/2)^+$		B	J$^{\pi}$: 390γ to $(7/2)^+$; band structure.
1103.1 *6*			A	
1130.2[#] *3*			B	
1136.1 *5*			A	
1163.9[#e] *3*	$(19/2)^-$		B	J$^{\pi}$: 715γ to $(17/2)^-$, 407γ to $(15/2)^-$; band structure.
1170 *1*			A	
1192.3[#f] *4*	$(15/2^-)$		B	J$^{\pi}$: 545γ to $(11/2^-)$, 247γ to $(13/2^-)$; band structure.
1211.0 *4*			A	
1228.3 *5*			A	
1259.7 *5*			A	
1295.0 *5*			A	
1304.9[#b] *4*	$(13/2)^+$		B	J$^{\pi}$: 218γ to $(11/2)^+$, 424γ to $(9/2)^+$; band structure.
1315.9[#] *4*			B	
1352.8 *4*			A	
1383.66[#d] *21*	$(25/2)^-$		B	J$^{\pi}$: 522γ (E2) to $(21/2)^-$; band structure.
1511.0[#] *4*			B	
1515.4[#g] *5*	$(17/2^-)$		B	J$^{\pi}$: 323γ to $(15/2^-)$, 571γ to $(13/2^-)$; band structure.
1531.3[#c] *3*	$(15/2)^+$		B	J$^{\pi}$: 445γ to $(11/2)^+$, 226γ to $(13/2)^+$; band structure.
1582.6 *5*			A	
1622.42[#] *19*			B	
1625.5 *5*			A	
1670.9[#] *4*			B	
1677.5[#e] *4*	$(23/2)^-$		B	J$^{\pi}$: 514γ to $(19/2)^-$, 816γ to $(21/2)^-$; band structure.
1734.9[#] *3*			B	

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Adopted Levels, Gammas (continued)

^{185}Ir Levels (continued)

E(level)‡	Jπ†	$T_{1/2}$	XREF	Comments
1745.9#b 5	(17/2)+		B	Jπ: 441γ to (13/2)+, 214γ to (15/2)+; band structure.
1779.3#f 6	(19/2−)		B	Jπ: 587γ to (15/2−), 264γ to (17/2−); band structure.
1856.7# 4			B	
1900.65# 18			B	
1949.0#c 5	(19/2)+		B	Jπ: 203γ to (17/2)+, 418γ to (15/2)+; band structure.
1997.5# 4			B	
2001.37#d 23	(29/2)−		B	Jπ: 618γ (E2) to (25/2)−; band structure.
2012.6# 4			B	
2130.9# 8			B	
2148.0# 4			B	
2154.5#b 6	(21/2)+		B	Jπ: 409γ to (17/2)+; band structure.
2157.3# 5			B	
2157.2+x		120 ns 20	B	E(level),$T_{1/2}$: from ^{185}Re(α,4nγ) (1979An20).
2183.0# 5			B	
2278.5# 5			B	
2282.9#e 4	(27/2)−		B	Jπ: 606γ to (23/2)−, 899γ to (25/2)−; band structure.
2295.8+x#@			B	
2393.0# 5			B	
2514.3+x#@			B	
2597.5# 6			B	
2614.0+x#@		40 ns 10	B	$T_{1/2}$: from ^{185}Re(α,4nγ) (1979An20).
2702.3#d 6	(33/2)−		B	Jπ: 701γ (E2) to (29/2)−; band structure.
2827.9?# 7			B	
2940.4+x#@			B	
2962.9#e 5	(31/2)−		B	Jπ: 961γ to (29/2)−, 680γ to (27/2)−; band structure.
3171.6+x#@			B	
3304.0+x#@			B	
3469.1#d 7	(37/2)−		B	Jπ: 767γ (E2) to (33/2)−; band structure.
3630+x?#@			B	
4264.9d	(41/2)−		B	Jπ: 796γ (E2) to (37/2)−; band structure.
4292.0?# 9			B	
5054.4d	(45/2)−		B	Jπ: 790γ to (41/2)−; band structure.

† J^π and Nilsson orbital assignments are based on rotational structure; on γ-ray multipolarities and decay patterns; on γ(θ) in ^{185}Re(α,4nγ), ^{187}Re(α,6nγ); and on the energy and γ-ray transition probability systematics of Nilsson orbitals in 185-193 odd-A Ir isotopes. Deviations from pure rotational structure are explained in terms of Coriolis coupling between rotational bands, and by using the nonaxial rotor-plus-particle model (1979An20,1979Sc20). Specific arguments are given with individual levels.

‡ From ^{185}Ir ε decay, unless otherwise specified.

From ^{185}Re(α,4nγ).

@ From ^{185}Re(α,4nγ). x≤80 keV.

& Band(A): 3/2[402] band; α=−1/2.

a Band(a): 3/2[402] band; α=+1/2.

b Band(B): 1/2(400) band; α=+1/2.

c Band(b): 1/2(400) band; α=−1/2.

d Band(C): 1/2(541) decoupled band; α=+1/2.

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Adopted Levels, Gammas (continued)

^{185}Ir Levels (continued)

[e] Band(c): 1/2(541) decoupled band; α=−1/2.
[f] Band(D): 11/2(505) band; α=−1/2.
[g] Band(d): 11/2(505) band; α=+1/2.

Adopted Levels, Gammas (continued)

γ(^{185}Ir)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[c]	Comments
5.8	9/2⁻	5.8 *1*	100	0.0	5/2⁻	E2		1.22×10⁶	B(E2)(W.u.)=2.3×10² *5*
135.3	1/2⁻	135.3[@] *1*	100[@]	0.0	5/2⁻	E2		1.42	B(E2)(W.u.)=2.8×10² *3*
158.6	(13/2)⁻	152.8[d] *1*	100	5.8	9/2⁻	E2		0.905	
229.6	3/2⁺	94.3[@] *1*	1.5[@b] *3*	135.3	1/2⁻	E1		0.469	B(E1)(W.u.)=1.7×10⁻⁶ *6*
		229.60[@] *10*	100 *4*	0.0	5/2⁻	E1		0.0486	B(E1)(W.u.)=7.7×10⁻⁶ *24*
255.10	3/2⁻	119.8[@] *1*	28.8[@] *3*	135.3	1/2⁻	M1+E2	0.132 *12*	3.75	
		255.10[@] *15*	100[@b] *10*	0.0	5/2⁻	M1+E2	0.4 *+2−4*	0.41 *7*	
300.10	(7/2)⁻	294.3[@] *1*	86[@] *13*	5.8	9/2⁻	(M1+E2)	0.8 *4*	0.23 *4*	
		300.15[@] *15*	100[@b] *13*	0.0	5/2⁻	M1+E2	0.7 *4*	0.23 *4*	
332.7	(1/2)⁺	103.1[@] *1*	2.7[@] *5*	229.6	3/2⁺	E2(+M1)		5.0 *8*	
		197.4[@] *1*	100[@] *14*	135.3	1/2⁻	E1		0.071	
335.3	(5/2)⁺	105.6[@] *1*	30[#] *6*	229.6	3/2⁺	M1+E2	0.78 *14*	4.79 *13*	
		335.4[@] *2*	100[#]	0.0	5/2⁻	E1		0.0195	
418.7	(3/2)⁺	83.5[@] *1*	16[@] *4*	335.3	(5/2)⁺	(M1+E2)	0.20 *4*	10.7	
		85.9[@] *1*	100[@] *13*	332.7	(1/2)⁺	(M1+E2)	0.20 *4*	9.80	
		418.8[@] *2*	≤200[@b]	0.0	5/2⁻				I_γ: data from ^{185}Re(α,4n), ^{187}Re(α,6n) leads to inconsistent branching.
442.3	(3/2⁺,5/2⁺)	24.0[@] *5*	5.8[@b] *7*	418.7	(3/2)⁺				
		106.9[@] *1*	12[#] *4*	335.3	(5/2)⁺	(M1+E2)	1.2 *4*	4.26 *21*	
		109.1[@] *1*	48[@] *6*	332.7	(1/2)⁺				
		212.6[@] *1*	100[#] *17*	229.6	3/2⁺	(M1)		0.748	
		442.2[@] *3*	12.5[@] *25*	0.0	5/2⁻				
448.83	(17/2)⁻	290.2 *1*	100	158.6	(13/2)⁻				
465.7	(11/2)⁻	307.4[@] *2*	≤58[#b]	158.6	(13/2)⁻	(M1)		0.272	
		459.8[@] *2*	100[#] *7*	5.8	9/2⁻	M1(+E2)	0.7 *7*	0.072 *21*	
496.9	(7/2)⁺	161.50[@] *15*	5[b] *3*	335.3	(5/2)⁺				
		267.3[@] *2*	100 *10*	229.6	3/2⁺				
506.8	(5/2⁻)	206.80[@] *15*	81[@b] *13*	300.10	(7/2)⁻	(M1)		0.808	
		251.2[@] *3*	100[@b] *13*	255.10	3/2⁻	(M1)		0.472	
		506.9[d@] *6*		0.0	5/2⁻				
519.7	(3/2)⁻	264.40[@] *15*	57[@] *10*	255.10	3/2⁻	M1		0.410	
		384.5[@] *2*	100[@b] *10*	135.3	1/2⁻	(M1+E2)	1.1 *+13−5*	0.093 *18*	
		519.7[@] *3*		0.0	5/2⁻				

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

Adopted Levels, Gammas (continued)

γ(^{185}Ir) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[c]
556.0	(5/2$^+$)	59.2[@]		496.9	(7/2)$^+$	(M1+E2)	0.63 *+8−6*	17.2 *16*
		113.8[@] *1*	63[#] *3*	442.3	(3/2$^+$,5/2$^+$)	(M1)		4.37
		137.0[@] *2*	100[#] *10*	418.7	(3/2)$^+$	(M1+E2)	0.7 *6*	2.2 *4*
646.6	(11/2$^-$)	488.0[@] *5*	≤10	158.6	(13/2)$^-$			
		640.8[@] *2*	100 *10*	5.8	9/2$^-$	(M1)		0.0392
648.7	(3/2$^+$,5/2$^+$,7/2$^+$)	152.8[d@]		496.9	(7/2)$^+$			
		313.4[@] *2*	100[#b] *10*	335.3	(5/2)$^+$	(M1)		0.258
696.8	(7/2)$^+$	140.9[@] *2*	100[#b] *6*	556.0	(5/2$^+$)	(M1)		2.38
		278.1[@] *2*	65[#] *10*	418.7	(3/2)$^+$			
		361.5[@@] *3*	62 *18*	335.3	(5/2)$^+$	(M1)		0.176
720.3	1/2$^-$,3/2$^-$	200.4[@] *4*	4.0[@] *8*	519.7	(3/2)$^-$			
		465.0[@] *2*	100[@] *20*	255.10	3/2$^-$	M1(+E2)	<0.9	0.08 *3*
		584.9[@] *2*	68[@] *12*	135.3	1/2$^-$	M1		0.0497
		720.5[d@] *2*	≤80[@]	0.0	5/2$^-$			
727.1	(5/2$^-$,7/2$^-$,9/2$^-$)	427.0[@] *2*	100[@]	300.10	(7/2)$^-$	(M1+E2)	1.3 *+25−6*	0.064 *12*
		720.5[d@] *2*	≤606[@]	5.8	9/2$^-$			
		726.4[d@] *5*	≤152[@]	0.0	5/2$^-$			
755.97	(15/2)$^-$	290		465.7	(11/2)$^-$			
		307.4 *5*	≤25	448.83	(17/2)$^-$			
		596.8[@] *2*	100[@b]	158.6	(13/2)$^-$			
801.4	(5/2$^-$,7/2,9/2$^-$)	795.1[@] *4*	61[@b] *17*	5.8	9/2$^-$			
		801.8[@] *4*	100[@] *26*	0.0	5/2$^-$			
852.3	(9/2$^-$,11/2,13/2$^-$)	693.6 *5*	100 *18*	158.6	(13/2)$^-$			
		846.5 *5*	71 *11*	5.8	9/2$^-$			
861.1	(1/2$^-$,3/2$^-$,5/2$^-$)	341.4[@] *2*	100[@]	519.7	(3/2)$^-$	(M1)		0.205
		726.4[d@]	≤143[@]	135.3	1/2$^-$			
861.94	(21/2)$^-$	413.1 *1*	100	448.83	(17/2)$^-$	(E2)[a]		
876.9		370.1[f@]	≤73[f@]	506.8	(5/2$^-$)			
		576.8[@] *5*	100[@b]	300.10	(7/2)$^-$			
881.1	(9/2)$^+$	184.2 *5*	100 *11*	696.8	(7/2)$^+$			
		325.2 *5*	76 *7*	556.0	(5/2$^+$)			
899.7	(9/2$^-$,11/2$^-$,13/2$^-$)	253.1[@] *5*	100[@]	646.6	(11/2$^-$)	(M1)		0.462
900.5	(11/2$^-$,13/2$^-$)	434.6[@] *3*	21[@] *3*	465.7	(11/2)$^-$	(M1)		0.108
		741.6[@] *2*	45[@] *15*	158.6	(13/2)$^-$	(M1+E2)	1.0 *+8−5*	0.018 *3*

$^{185}_{77}Ir_{108}$-6

Adopted Levels, Gammas (continued)

γ(^{185}Ir) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	α[c]
900.5	(11/2⁻,13/2⁻)	895.2[@] *3*	100[@] *15*	5.8	9/2⁻	(E2)		0.00658
944.7	(13/2⁻)	298.1[@] *2*	100	646.6	(11/2⁻)	(M1)		0.295
1016.7		117.2[@g]		899.7	(9/2⁻,11/2⁻,13/2⁻)			
		370.1[f@] *2*	100[f] *3*	646.6	(11/2⁻)			
1038.9		573.7[@] *5*	42[@] *17*	465.7	(11/2)⁻			
		879.4[@] *6*	100[@] *25*	158.6	(13/2)⁻	(M1)		0.0175
1068.1	(3/2⁺)	626.0[@] *4*	23[@] *5*	442.3	(3/2⁺,5/2⁺)			
		735.3[@] *2*	100[@] *13*	332.7	(1/2)⁺	(M1+E2)	1.2 *+12−5*	0.017 *3*
		837.6[d@] *3*	88[@] *19*	229.6	3/2⁺			
1086.6	(11/2)⁺	205.2[d] *5*	≤54	881.1	(9/2)⁺			
		390.0 *1*	100 *5*	696.8	(7/2)⁺			
1103.1		202.60[@] *15*	100[@]	900.5	(11/2⁻,13/2⁻)			
1130.2		277.8[eg]	≤44[e]	852.3	(9/2⁻,11/2,13/2⁻)			
		971.5 *5*	100 *7*	158.6	(13/2)⁻			
1136.1		191.40[@] *15*	100[@]	944.7	(13/2⁻)	(E2)		0.406
1163.9	(19/2)⁻	407.2 *5*	45 *7*	755.97	(15/2)⁻			
		715.1 *5*	100 *9*	448.83	(17/2)⁻			
1170		726.4[d@] *2*		442.3	(3/2⁺,5/2⁺)			
		751.6[@] *3*		418.7	(3/2)⁺			
		837.6[d@]		332.7	(1/2)⁺			
1192.3	(15/2⁻)	247.5[d] *5*	100 *17*	944.7	(13/2⁻)			
		545.5 *5*	100 *9*	646.6	(11/2⁻)			
1211.0		490.7[@] *3*	100[@] *14*	720.3	1/2⁻,3/2⁻			
		691.0[@g] *3*	65[@b]	519.7	(3/2)⁻			
		704.2[@g] *3*	70[@] *23*	506.8	(5/2⁻)			
1228.3		506.9[d@] *6*		720.3	1/2⁻,3/2⁻			
		720.5[d@]		506.8	(5/2⁻)			
		1093.0[@] *4*		135.3	1/2⁻			
1259.7		243.00[@] *15*	100[@b]	1016.7				
1295.0		788.2[@] *4*	35[@] *10*	506.8	(5/2⁻)			
		1039.9[@] *4*	100[@b] *23*	255.10	3/2⁻			
1304.9	(13/2)⁺	218.5 *5*	77 *10*	1086.6	(11/2)⁺			
		423.6 *5*	100 *11*	881.1	(9/2)⁺			
1315.9		559.7 *5*	100 *24*	755.97	(15/2)⁻			
		867.2 *5*	94 *12*	448.83	(17/2)⁻			

$^{185}_{77}Ir_{108}$-7

Adopted Levels, Gammas (continued)

γ(^{185}Ir) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]
1352.8		706.2[@] *2*	100[@][b]	646.6	$(11/2^-)$	
1383.66	$(25/2)^-$	521.7 *1*	100	861.94	$(21/2)^-$	(E2)[a]
1511.0		380.6[f] *5*	41[f] *6*	1130.2		
		1061.9 *5*	100 *8*	448.83	$(17/2)^-$	
1515.4	$(17/2^-)$	323.0 *5*	100 *9*	1192.3	$(15/2^-)$	
		570.7 *5*	47 *13*	944.7	$(13/2^-)$	
1531.3	$(15/2)^+$	226.3 *5*	59 *4*	1304.9	$(13/2)^+$	
		444.8 *5*	100 *5*	1086.6	$(11/2)^+$	
1582.6		1139.9[@] *5*	57[@] *21*	442.3	$(3/2^+,5/2^+)$	
		1164.1[@] *5*	43[@] *21*	418.7	$(3/2)^+$	
		1247.6[@] *4*	100[@] *21*	335.3	$(5/2)^+$	
1622.42		457.2[g] *5*	12 *3*	1163.9	$(19/2)^-$	
		492.3 *5*	24 *4*	1130.2		
		1173.6 *5*	100 *6*	448.83	$(17/2)^-$	
1625.5		1105.9[@] *4*	29[@] *10*	519.7	$(3/2)^-$	
		1292.8[@] *4*	98[@] *24*	332.7	$(1/2)^+$	
		1395.8[@] *4*	100[@] *24*	229.6	$3/2^+$	
1670.9		584.5 *5*	100	1086.6	$(11/2)^+$	
1677.5	$(23/2)^-$	514.0		1163.9	$(19/2)^-$	
		815.7 *5*		861.94	$(21/2)^-$	
1734.9		112.7 *5*		1622.42		
		570.7 *5*		1163.9	$(19/2)^-$	
		1286.2[d] *5*		448.83	$(17/2)^-$	
1745.9	$(17/2)^+$	214.4 *5*	55 *4*	1531.3	$(15/2)^+$	
		441.1 *5*	100 *5*	1304.9	$(13/2)^+$	
1779.3	$(19/2^-)$	263.9 *5*	74 *15*	1515.4	$(17/2^-)$	
		587.1 *5*	100 *15*	1192.3	$(15/2^-)$	
1856.7		121.8 *5*	53 *5*	1734.9		
		994.4 *5*	100 *11*	861.94	$(21/2)^-$	
1900.65		230		1670.9		
		370.1[f] *5*	7[f] *3*	1531.3	$(15/2)^+$	
		1144.6 *5*	8.0 *25*	755.97	$(15/2)^-$	
		1451.8 *1*	100 *5*	448.83	$(17/2)^-$	
1949.0	$(19/2)^+$	202.8 *5*	100 *10*	1745.9	$(17/2)^+$	
		417.6 *5*	≤192	1531.3	$(15/2)^+$	
1997.5		486.0[g] *5*	100 *8*	1511.0		
		1136.1 *5*	48 *10*	861.94	$(21/2)^-$	
2001.37	$(29/2)^-$	617.7 *5*	100	1383.66	$(25/2)^-$	(E2)[a]
2012.6		155.7 *5*	100 *16*	1856.7		

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

Adopted Levels, Gammas (continued)

γ(^{185}Ir) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
2012.6		277.8[e] *5*	≤62[e]	1734.9			
2130.9		351.6 *5*	100	1779.3	(19/2$^-$)		
2148.0		247.5[d] *5*		1900.65			
		291.0 *5*		1856.7			
		1286.2[dg] *5*		861.94	(21/2)$^-$		
2154.5	(21/2)$^+$	205.2[d] *5*		1949.0	(19/2)$^+$		
		409		1745.9	(17/2)$^+$		
2157.3		256.6 *5*	100	1900.65			
2157.2+x		(x)	100	2157.3			E_γ: x ≤80.
2183.0		170.2 *5*		2012.6			
		326.4[dg] *5*		1856.7			
2278.5		894.8 *5*	100	1383.66	(25/2)$^-$		
2282.9	(27/2)$^-$	606		1677.5	(23/2)$^-$		
		898.9 *5*		1383.66	(25/2)$^-$		
2295.8+x		138.6 *5*	100	2157.2+x			
2393.0		210.3 *5*	94 *25*	2183.0			
		380.6[f] *5*	100[f] *16*	2012.6			
2514.3+x		218.5 *5*	100	2295.8+x			
2597.5		205.2[d] *5*		2393.0			
		414.0		2183.0			
2614.0+x		99.7 *5*	100 *6*	2514.3+x			
		317.6 *5*	43 *13*	2295.8+x			
2702.3	(33/2)$^-$	700.9 *5*	100	2001.37	(29/2)$^-$	(E2)[a]	
2827.9?		434.9[g] *5*	100	2393.0			
2940.4+x		326.4[d] *5*	100	2614.0+x			
2962.9	(31/2)$^-$	680.2 *5*	44 *9*	2282.9	(27/2)$^-$		
		961.4 *5*	100 *9*	2001.37	(29/2)$^-$		
3171.6+x		231		2940.4+x			
		557.9 *5*		2614.0+x			
3304.0+x		363.6 *5*		2940.4+x			
		690		2614.0+x			
3469.1	(37/2)$^-$	766.8 *5*	100	2702.3	(33/2)$^-$	(E2)[a]	
3630+x?		326.4[dg] *5*		3304.0+x			
4264.9	(41/2)$^-$	795.8		3469.1	(37/2)$^-$	(E2)[a]	
4292.0?		822.9[@g] *5*	100[@]	3469.1	(37/2)$^-$		
5054.4	(45/2)$^-$	789.5[&]		4264.9	(41/2)$^-$		

[†] From ^{185}Re(α,4nγ), unless otherwise specified.

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Adopted Levels, Gammas (continued)

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

‡ From ^{185}Pt ε decay, unless otherwise specified.
# Average of data from ^{185}Pt ε decay and $^{185}Re(\alpha,4n\gamma)$.
@ From ^{185}Pt ε decay.
& From $^{187}Re(\alpha,6n\gamma)$ (1989Ba02).
[a] Quadrupole transition from DCO ratios in $^{187}Re(\alpha,6n\gamma)$. Multipolarity assumes stretched E2 (1989Ba02).
[b] Line from ^{185}Pt ε decay contains impurity.
[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.
[f] Multiply placed with intensity suitably divided.
[g] Placement of transition in the level scheme is uncertain.

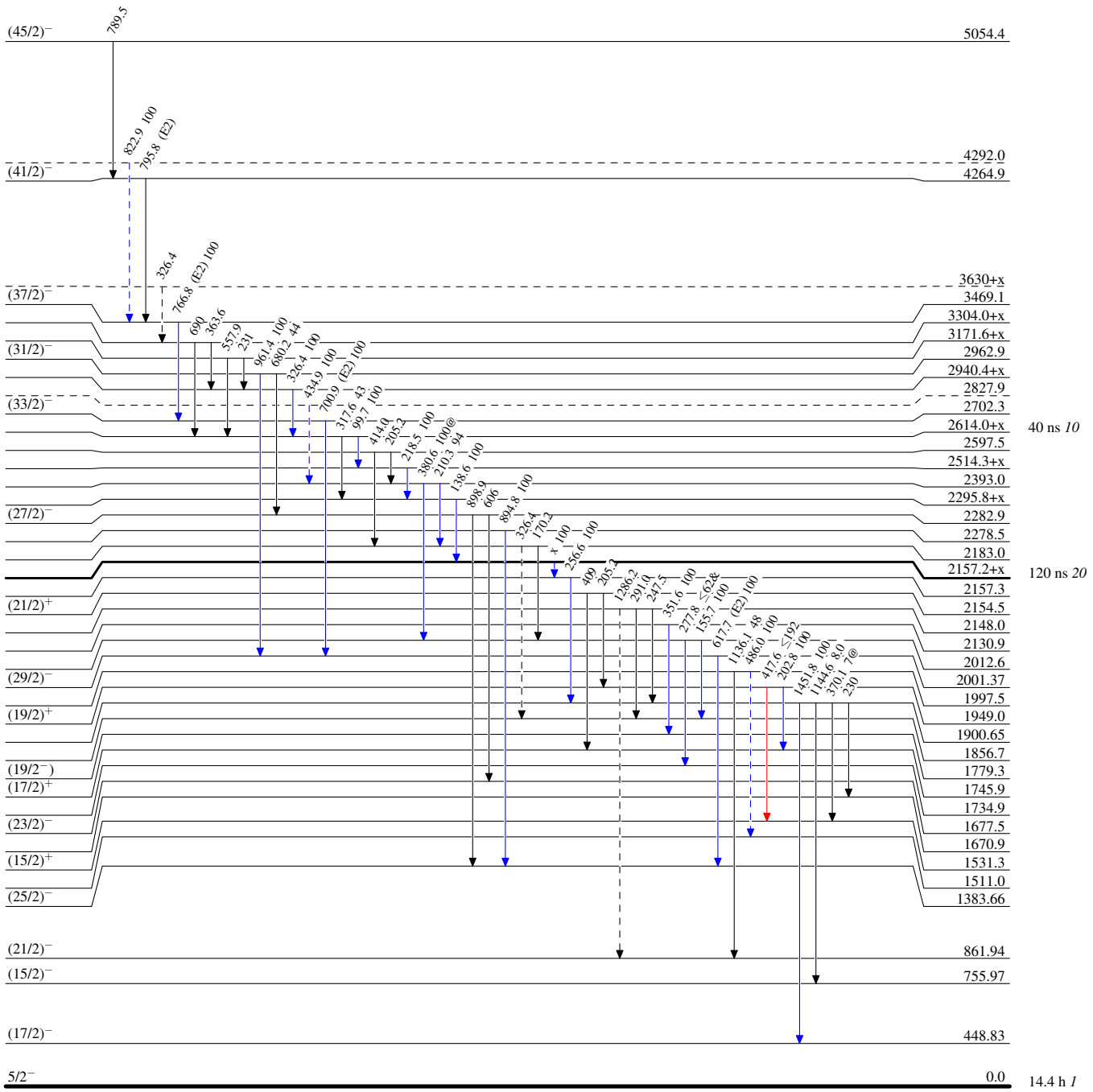
$^{185}_{77}Ir_{108}$-10

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified
& 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)



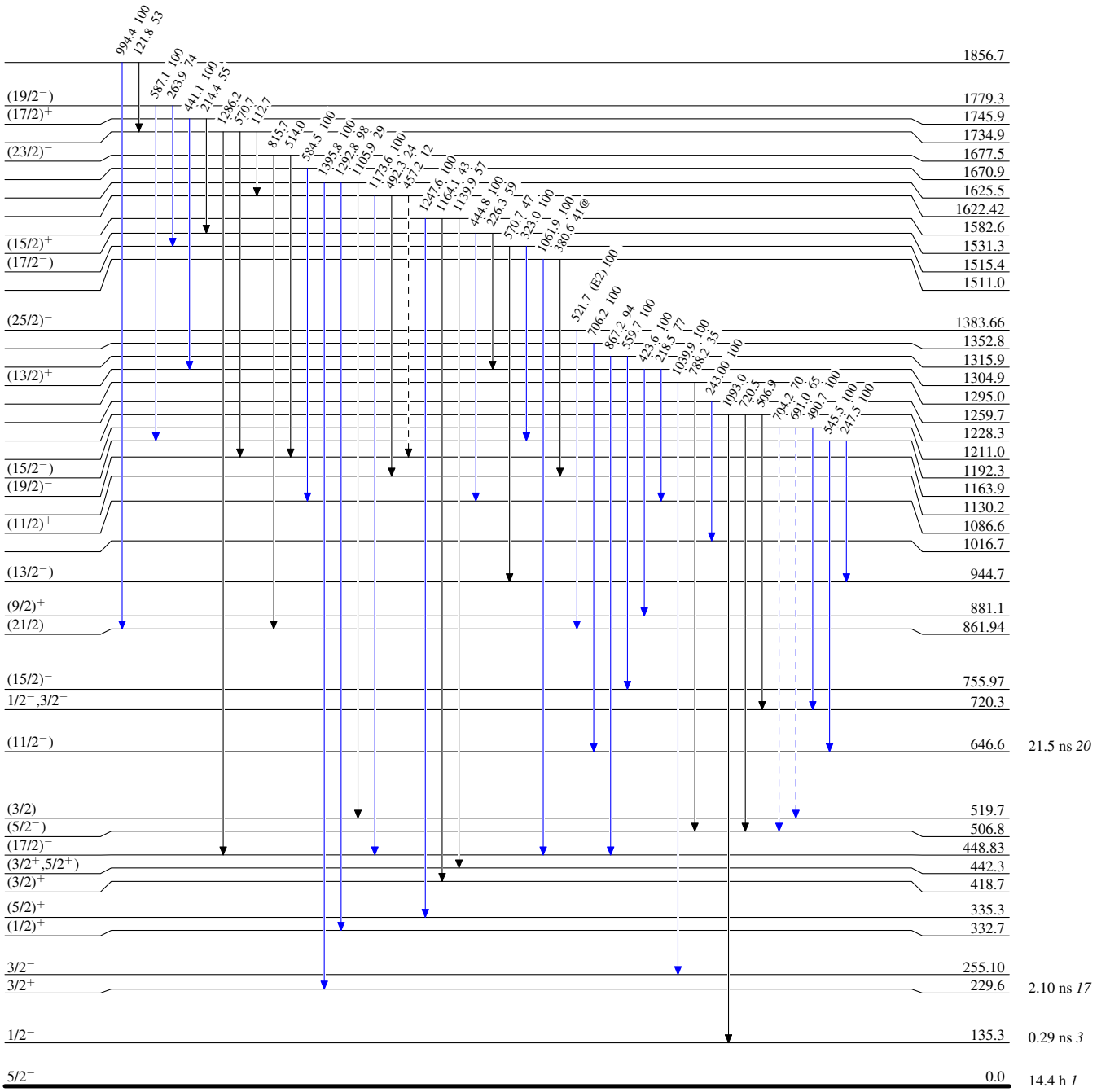
$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& 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)



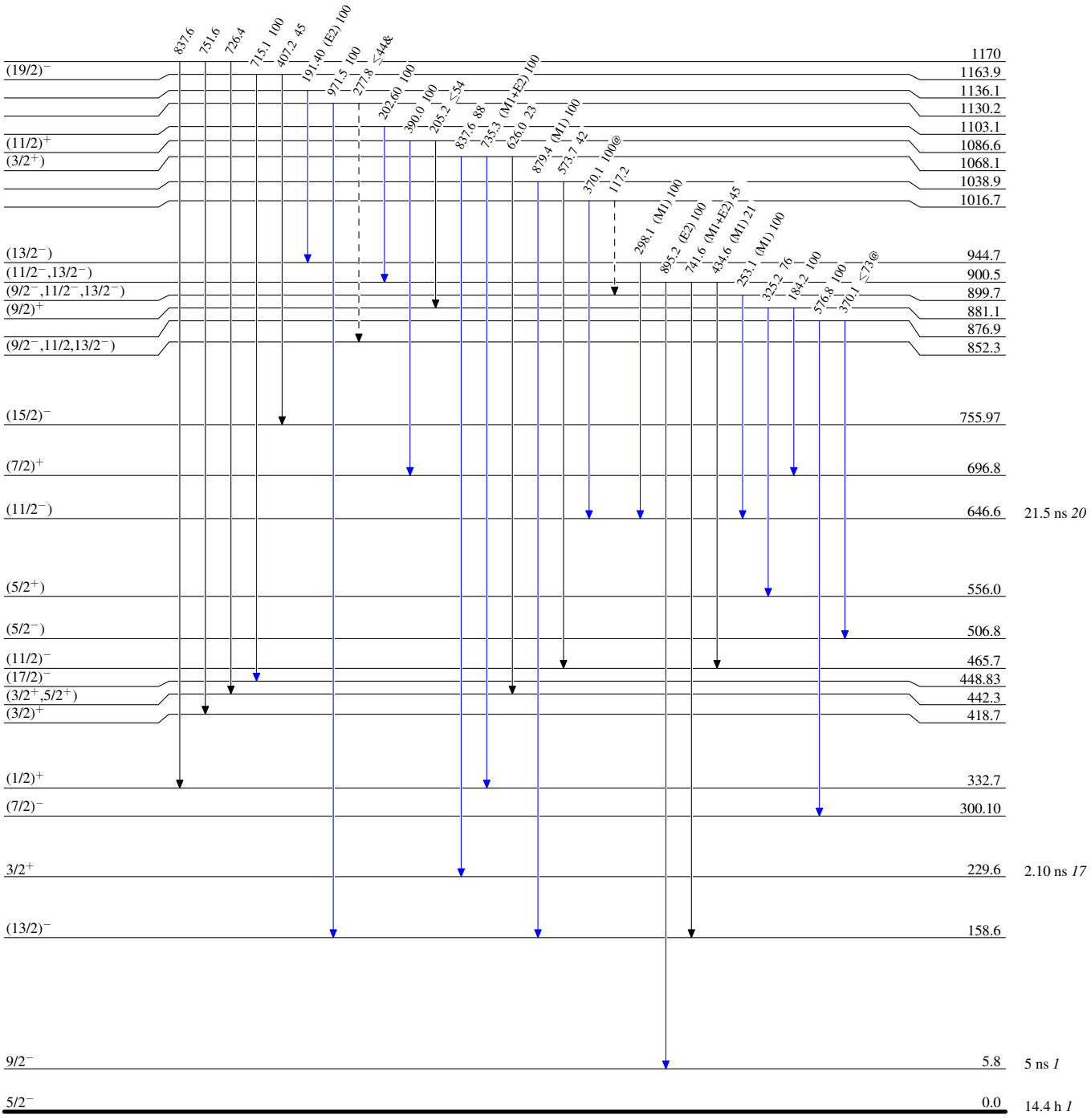
$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& 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)

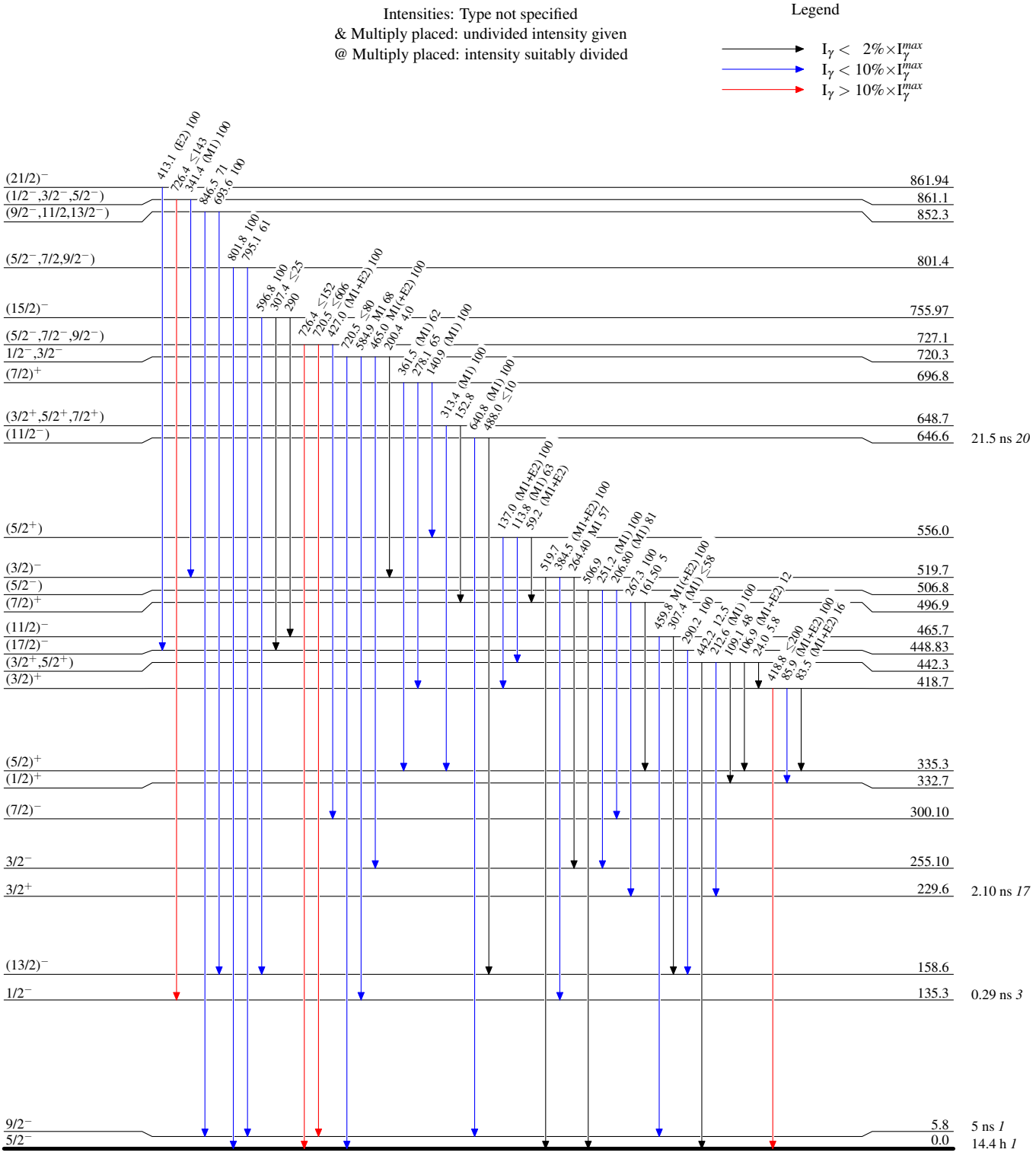


$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

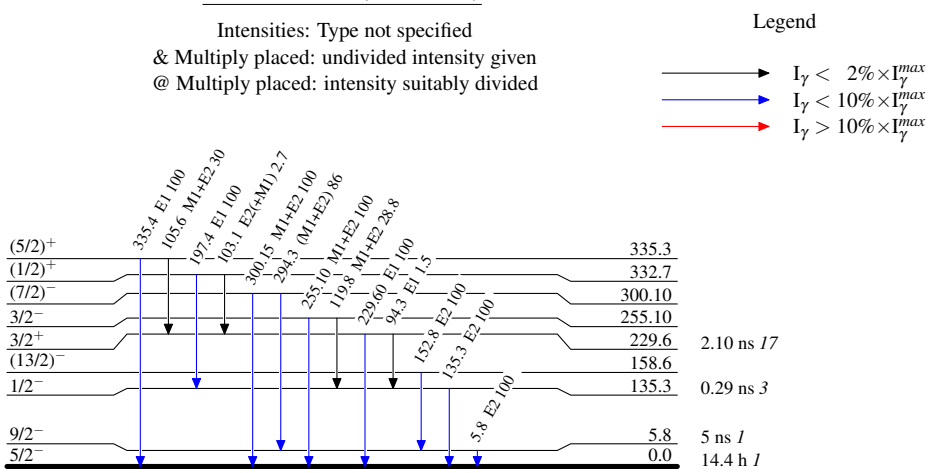


$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas

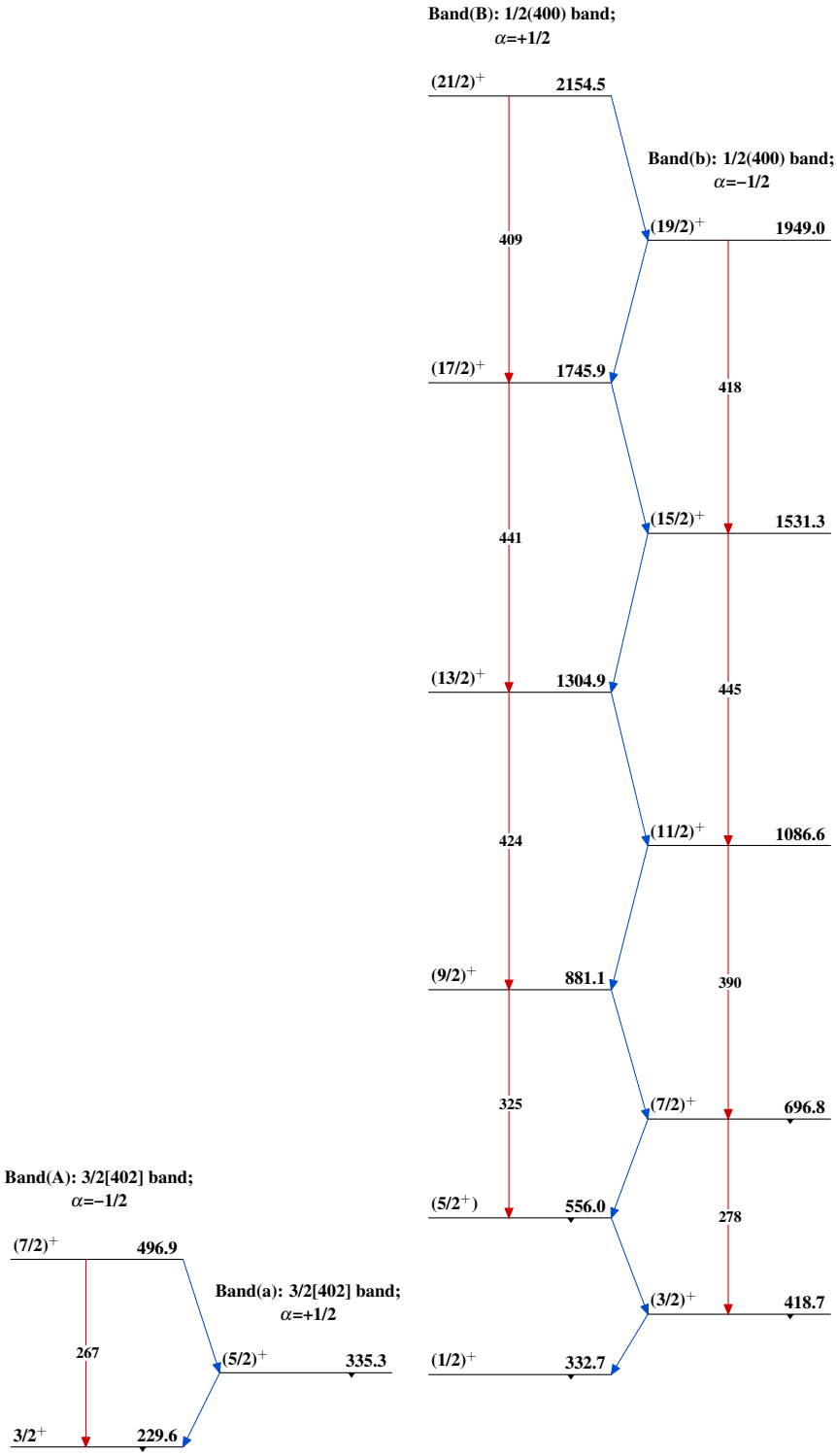
Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



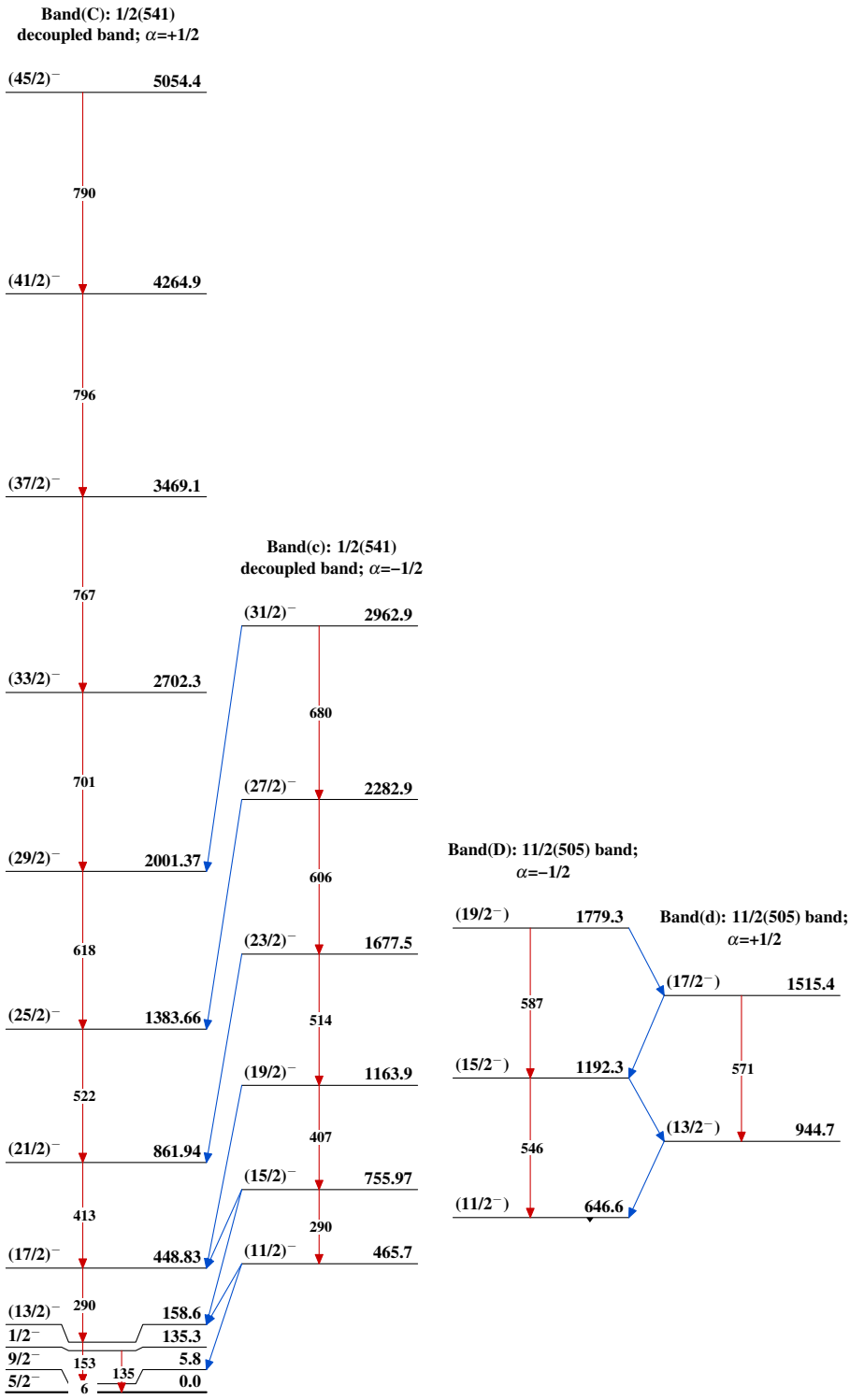
$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas



$^{185}_{77}Ir_{108}$

Adopted Levels, Gammas (continued)



$^{185}_{77}Ir_{108}$