Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 110,265 (2009)	15-Nov-2008

Q(β^-)=−5811 *13*; S(n)=9899 *22*; S(p)=1824 *17*; Q(α)=4.78×10^3 *3* 2012Wa38
Note: Current evaluation has used the following Q record −5814 149897 231820 204786 30 2003Au03.
Production: ^{165}Ho(^{22}Ne,8n) and ^{165}Ho(^{20}Ne,6n); identified through its descendant nuclei ^{179}Os and ^{179}Re.

^{179}Ir Levels

Cross Reference (XREF) Flags

- A ^{183}Au α decay
- B (HI,xnγ)
- C ^{179}Pt ε decay

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]	XREF	Comments
0.0[g]	(5/2)$^-$	79 s *1*	A C	%ε+%β^+=100 J$^\pi$: HF<4 from (5/2)$^-$ in ^{183}Au α decay; consistent with J$^\pi$(g.s.) for neighboring Ir isotopes. Note, however, that apparent ε+β^+ feeding to (7/2$^-$) and (9/2$^-$) and (9/2$^+$) states in ^{179}Os suggests J=7/2 instead. T$_{1/2}$: from β-delayed γ rays (1992Bo19). Other: 4 min *1* (1971Na27).
0.0+x[g]	(9/2$^-$)		B	E(level): x=35 keV *10* estimated by evaluator based on energy systematics; see comment on E(level) values in (HI,xnγ) data set.
99.8[g]	(1/2)$^-$		A C	J$^\pi$: E2 100γ to (5/2)$^-$ g.s.; band assignment.
140.0+x[&] *6*	(9/2$^-$)		B	
186.5+x[b] *4*	(5/2$^+$)		B	
193.1[h]	(3/2)$^-$		A C	J$^\pi$: intraband M1(+E2) 93γ to (1/2)$^-$ 100.
202.74+x[g] *16*	(13/2$^-$)	97 ps *21*	B	
264.0+x[a] *6*	(11/2$^-$)		B	J$^\pi$: D+Q intraband 124γ to (9/2$^-$) 140+x.
271.5	(1/2,3/2)$^+$		A C	J$^\pi$: E1 172γ to (1/2)$^-$ 100. However, log *ft* in ε decay from 1/2$^-$ is far too low for the implied first-forbidden decay.
288.6+x[c] *4*	(7/2$^+$)		B	
343.0	(1/2,3/2,5/2$^-$)		C	J$^\pi$: 243γ to (1/2)$^-$ 100.
377.8			C	J$^\pi$: 106γ to (1/2,3/2)$^+$ 272, so J≤(7/2).
394 *11*			A	E(level): from measured Eα to this level relative to that feeding the g.s. in ^{183}Au α decay.
414.5+x[b] *4*	(9/2$^+$)		B	
427.3+x[&] *6*	(13/2$^-$)		B	
432.57+x[h] *16*	(11/2$^-$)		B	
493.2	(1/2,3/2,5/2$^-$)		C	J$^\pi$: 393γ to (1/2)$^-$ 100.
502.4	(1/2,3/2,5/2$^-$)		C	J$^\pi$: 393γ to (1/2)$^-$ 100.
553.08+x[g] *21*	(17/2$^-$)	7.6 ps *7*	B	
563.3+x[c] *4*	(11/2$^+$)		B	
607.5+x[a] *6*	(15/2$^-$)		B	
731.7+x[b] *4*	(13/2$^+$)		B	
759.95+x[h] *19*	(15/2$^-$)		B	
804.58+x[d] *17*			B	J$^\pi$: 602γ to (13/2$^-$) 203+x, 805γ to (9/2$^-$) 0+x allow J$^\pi$=(9/2$^-$,11/2,13/2$^-$).
807.6+x[&] *6*	(17/2$^-$)		B	
903.6+x[@] *3*	(15/2$^-$)		B	
919.9+x[c] *4*	(15/2$^+$)		B	

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Adopted Levels, Gammas (continued)

^{179}Ir Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
1018.35+x[g] *24*	(21/2⁻)	2.3 ps *3*	B	
1022.5+x[a] *5*	(19/2⁻)		B	
1115.1+x[e] *3*	17/2⁺		B	
1134.2+x[b] *3*	(17/2⁺)		B	
1141.37+x[d] *19*			B	
1191.22+x[h] *22*	(19/2⁻)		B	
1253.6+x[&] *5*	(21/2⁻)		B	
1284.42+x[@] *25*	(19/2⁻)		B	
1344.1+x[c] *4*	(19/2⁺)		B	
1397.3+x[e] *3*	(21/2⁺)	15.9 ps *21*	B	
1497.6+x[a] *5*	(23/2⁻)		B	
1565.1+x[d] *3*			B	
1568.6+x[g] *3*	(25/2⁻)	0.90 ps *7*	B	
1578.0+x[b] *4*	(21/2⁺)		B	
1697.68+x[h] *25*	(23/2⁻)		B	
1733.6+x[@] *3*	(23/2⁻)		B	
1756.3+x[&] *5*	(25/2⁻)		B	
1758.9+x[e] *4*	(25/2⁺)	4.4 ps *5*	B	
1825.0+x[c] *4*	(23/2⁺)		B	
2027.2+x[a] *5*	(27/2⁻)		B	
2067.7+x[d] *4*			B	
2086.1+x[b] *4*	(25/2⁺)		B	
2182.3+x[g] *4*	(29/2⁻)	0.55 ps *14*	B	
2192.9+x[e] *4*	(29/2⁺)	1.66 ps *7*	B	
2214.0+x[@] *3*	(27/2⁻)		B	
2290.7+x[h] *3*	(27/2⁻)		B	
2312.7+x[&] *5*	(29/2⁻)		B	
2365.0+x[c] *4*	(27/2⁺)		B	
2533.7+x[d] *4*			B	
2610.3+x[a] *5*	(31/2⁻)		B	
2690.4+x[e] *5*	(33/2⁺)	0.76 ps *14*	B	
2765.0+x[@] *4*	(31/2⁻)		B	
2845.3+x[g] *4*	(33/2⁻)	0.35 ps *7*	B	
2916.3+x[h] *4*	(31/2⁻)		B	
2921.0+x[&] *5*	(33/2⁻)		B	
2925.6+x[f] *5*	(33/2⁻)		B	Jπ: ΔJ=2 613γ to (29/2⁻) 2313+x; ΔJ=1 d+Q 315γ to (31/2⁻) 2610+x.
3245.5+x[a] *5*	(35/2⁻)		B	
3245.9+x[e] *5*	(37/2⁺)	0.42 ps *7*	B	
3371.6+x[@] *4*	(35/2⁻)		B	
3400.8+x[f] *5*	(37/2⁻)	1.2 ps *6*	B	
3563.9+x[g] *5*	(37/2⁻)		B	
3577.3+x[h] *6*	(35/2⁻)		B	
3581.3+x[&] *5*	(37/2⁻)		B	
3857.1+x[e] *6*	(41/2⁺)	0.35 ps *+22−14*	B	$T_{1/2}$: from DSAM in (HI,xnγ). Other: <0.55 from DSAM in (HI,xnγ). Corrected for side-feeding.
3921.1+x[a] *5*	(39/2⁻)		B	
3986.0+x[f] *5*	(41/2⁻)		B	

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Adopted Levels, Gammas (continued)

^{179}Ir Levels (continued)

E(level)[†]	J^{π}[‡]	$T_{1/2}$[#]	XREF	Comments
4002.6+x?[@] *7*	(39/2⁻)		B	
4262.5+x[&] *5*	(41/2⁻)		B	
4285.3+x?[h] *8*	(39/2⁻)		B	
4317.6+x[g] *5*	(41/2⁻)		B	
4523.1+x[e] *6*	(45/2⁺)	0.20 ps *5*	B	$T_{1/2}$: from DSAM in (HI,xnγ). Other: 0.18 ps +*18*−*7* from (HI,xnγ). Corrected for side-feeding.
4600.2+x[a] *5*	(43/2⁻)		B	
4655.7+x[f] *6*	(45/2⁻)		B	
4928.5+x?[&] *7*	(45/2⁻)		B	
5113.6+x[g] *7*	(45/2⁻)		B	
5242.9+x[e] *6*	(49/2⁺)	0.187 ps *21*	B	$T_{1/2}$: from DSAM in (HI,xnγ). Other: 0.14 ps +*5*−*4* from (HI,xnγ). Corrected for side-feeding.
≈5300+x[a]	(47/2⁻)		B	
5397.7+x[f] *8*	(49/2⁻)		B	
≈5650+x[&]	(49/2⁻)		B	
≈6000+x[a]	(51/2⁻)		B	
6012.9+x[e] *8*	(53/2⁺)		B	
6200.7+x?[f] *9*	(53/2⁻)		B	
6829.9+x?[e] *10*	(57/2⁺)		B	

[†] From least-squares fit to Eγ, except as noted. The 5/2⁻ member of the 1/2[541] g.s. band was not observed in the (HI,xnγ) studies so energies from those reactions are expressed relative to the excitation energy "x" of the lowest band member (i.e., 9/2⁻) observed in those reactions. x=+35 *10* is estimated by evaluator based on energy systematics; see comment on level energies in (HI,xnγ) data set.

[‡] Based on band structure deduced in (HI,xnγ), except as noted. Band assignments are supported by DCO data, systematics of neighboring nuclei, B(M1)/B(E2) ratios inferred in (^{27}Al,4nγ) from intraband cascade to crossover transition branching ratios and by observed band crossing frequencies and alignments.

[#] From RDM in (HI,xnγ), except as noted.

[@] Band(A): 1/2[530], α=−1/2 band. Decoupled band with strikingly similar structure to that known for a low-lying (π $f_{7/2}$) band in ^{185}Au.

[&] Band(B): 9/2[514], α=+1/2 band. π $h_{11/2}$ band; strongly populated. No signature splitting, supporting high-K assignment. Configuration assignment supported by intraband cascade and crossover transition B(M1)/B(E2) ratios.

[a] Band(b): 9/2[514], α=−1/2 band. See comment on signature partner band.

[b] Band(C): 5/2[402], α=+1/2 band. π $d_{5/2}$ band; strongly-coupled band, suggesting high K. Band has same π as 1/2[660] band based on crossing pattern for transitions between the two bands. 5/2[402] band expected at low energy; assignment supported by intraband cascade- and crossover-transition B(M1)/B(E2) ratios.

[c] Band(c): 5/2[402], α=−1/2 band. See comment on signature partner band.

[d] Band(D): Collective band (1996Ji04). Only one signature observed. 1996Ji04 tentatively suggest a 3/2[532], (π $h_{9/2}$) prolate band or, alternatively, an oblate band with a high-K (π $h_{9/2}$) orbital coupled to an oblate shape.

[e] Band(E): 1/2[660], α=+1/2 band. For this (π $i_{13/2}$) band, only the favored signature states are observed, suggesting a low-K structure and large signature splitting. Second-strongest sequence observed by 1996Ji04. π=− unlikely based on minimal interaction with π=− bands; available π=+ orbitals are 1/2[660] and 5/2[402]. Band parameters: A=10.5, B=−4.9, a=+7.3 (J=1/2 through 17/2 levels), but A=20.6, B=+4.9, a=+7.9 (J=1/2 through 21/2 levels).

[f] Band(F): π=−, α=+1/2 band. Yrast sequence for J^{π}≥37/2⁻.

[g] Band(G): 1/2[541] (π $h_{9/2}$), α=+1/2 band. Decoupled characteristics of band imply low K. Favored signature, strongly populated. Assignment fits energy signature-splitting systematics of known (π $h_{9/2}$) bands in Ir and Au well (1996Ji04). Band parameters are too highly dependent on levels included in band fit to Be meaningful.

[h] Band(g): 1/2[541], α=−1/2 band. (π $h_{9/2}$) unfavored signature decoupled band; weakly populated. The J=7/2 band member has not been reported yet. See also the comment on signature partner band.

$\gamma(^{179}Ir)$

E_i(level)	J^{π}_i	E_γ[†]	I_γ[†]	E_f	J^{π}_f	Mult.[‡]	δ	α[&]	Comments
99.8	(1/2)$^-$	99.8	100	0.0	(5/2)$^-$	E2		4.65	Mult.: from sub-shell ratio in ε decay which implies δ(M1,E2) ≥3.
140.0+x	(9/2$^-$)	140.0[a] *2*	100	0.0+x	(9/2$^-$)				
193.1	(3/2)$^-$	93.3[#]	18.4[#] *11*	99.8	(1/2)$^-$	M1(+E2)	≤0.52	7.33 *18*	Other Eγ: 92.5 from α decay. Mult.,δ: from ε decay.
		193.1[#]	100[#] *6*	0.0	(5/2)$^-$	[M1,E2]		0.7 *3*	
202.74+x	(13/2$^-$)	202.7 *2*	100	0.0+x	(9/2$^-$)	(E2)[@]		0.330	B(E2)(W.u.)=210 *50*
264.0+x	(11/2$^-$)	124.1 *2*	100	140.0+x	(9/2$^-$)	(M1+E2)		2.6 *7*	
271.5	(1/2,3/2)$^+$	171.7	100	99.8	(1/2)$^-$	E1		0.1003	Mult.: from approximate α(K)exp in ε decay.
288.6+x	(7/2$^+$)	102.1 *2*	100	186.5+x	(5/2$^+$)	(M1+E2)		5.0 *8*	
343.0	(1/2,3/2,5/2$^-$)	243.2	100	99.8	(1/2)$^-$				
377.8		106.3	100	271.5	(1/2,3/2)$^+$				
414.5+x	(9/2$^+$)	125.9 *2*	100.0 *9*	288.6+x	(7/2$^+$)	(M1+E2)		2.5 *7*	
		228.0 *2*	41.0 *9*	186.5+x	(5/2$^+$)	(E2)		0.223	
427.3+x	(13/2$^-$)	163.4 *2*	100.0 *10*	264.0+x	(11/2$^-$)	(M1+E2)		1.1 *4*	
		287.3 *2*	15.6 *4*	140.0+x	(9/2$^-$)	(E2)		0.1080	
432.57+x	(11/2$^-$)	432.6 *2*	100	0.0+x	(9/2$^-$)				
493.2	(1/2,3/2,5/2$^-$)	300.0[#]	78[#] *7*	193.1	(3/2)$^-$				
		393.3[#]	100[#] *7*	99.8	(1/2)$^-$				
502.4	(1/2,3/2,5/2$^-$)	309.0[#]	63[#] *9*	193.1	(3/2)$^-$				
		402.4[#]	100[#] *9*	99.8	(1/2)$^-$				
553.08+x	(17/2$^-$)	350.3 *2*	100	202.74+x	(13/2$^-$)	E2[@]		0.0605	B(E2)(W.u.)=222 *21*
563.3+x	(11/2$^+$)	148.8 *2*	100.0 *11*	414.5+x	(9/2$^+$)	(M1+E2)		1.5 *5*	
		274.7 *2*	38.7 *5*	288.6+x	(7/2$^+$)	(E2)		0.1238	
607.5+x	(15/2$^-$)	180.1 *2*	100.0 *13*	427.3+x	(13/2$^-$)	(M1+E2)		0.8 *4*	
		343.5 *2*	40.0 *4*	264.0+x	(11/2$^-$)	(E2)		0.0640	
731.7+x	(13/2$^+$)	168.3 *2*	83.1 *9*	563.3+x	(11/2$^+$)	(M1+E2)		1.0 *4*	
		317.1 *2*	100.0 *9*	414.5+x	(9/2$^+$)	(E2)		0.0805	
759.95+x	(15/2$^-$)	327.4 *2*	<60	432.57+x	(11/2$^-$)				
		557.2 *2*	<100	202.74+x	(13/2$^-$)				
804.58+x		602.0[a] *5*		202.74+x	(13/2$^-$)				
		804.6 *2*		0.0+x	(9/2$^-$)				
807.6+x	(17/2$^-$)	200.1 *2*	100.0 *11*	607.5+x	(15/2$^-$)	(M1+E2)		0.6 *3*	
		380.3 *2*	62.0 *15*	427.3+x	(13/2$^-$)	(E2)		0.0482	
903.6+x	(15/2$^-$)	701.0 *5*	100	202.74+x	(13/2$^-$)				
919.9+x	(15/2$^+$)	188.2 *2*	81.1 *9*	731.7+x	(13/2$^+$)	(M1+E2)		0.7 *3*	
		356.6 *2*	100.0 *16*	563.3+x	(11/2$^+$)	(E2)		0.0576	
1018.35+x	(21/2$^-$)	465.3 *2*	100	553.08+x	(17/2$^-$)	E2[@]		0.0284	B(E2)(W.u.)=183 *24*
1022.5+x	(19/2$^-$)	214.8 *2*	100.0 *10*	807.6+x	(17/2$^-$)	(M1+E2)		0.49 *22*	

Adopted Levels, Gammas (continued)

$\gamma(^{179}Ir)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[‡]	α[&]	Comments
1022.5+x	(19/2⁻)	415.0 2	70.3 8	607.5+x	(15/2⁻)	(E2)	0.0381	
1115.1+x	17/2⁺	195.1 2	40.9 5	919.9+x	(15/2⁺)	D+Q		
		383.4 2	100.0 11	731.7+x	(13/2⁺)	Q		
1134.2+x	(17/2⁺)	214.4 2	86 5	919.9+x	(15/2⁺)			
		402.6 2	100.0 14	731.7+x	(13/2⁺)	(E2)	0.0413	
1141.37+x		336.8 2	<65	804.58+x				
		938.6 2	100 3	202.74+x	(13/2⁻)			
1191.22+x	(19/2⁻)	431.3 2	<102	759.95+x	(15/2⁻)			I_γ: undivided Iγ is 90 12 for doublet.
		638.1 2	100 6	553.08+x	(17/2⁻)	(M1+E2)	0.026 13	
1253.6+x	(21/2⁻)	231.1 2	84.0 8	1022.5+x	(19/2⁻)			
		446.0 2	100.0 10	807.6+x	(17/2⁻)	(E2)	0.0316	
1284.42+x	(19/2⁻)	380.8 2	38 5	903.6+x	(15/2⁻)	(E2)	0.0480	
		731.3 2	100 3	553.08+x	(17/2⁻)	D+Q		
1344.1+x	(19/2⁺)	210.1 2	26.6 25	1134.2+x	(17/2⁺)			
		228.9 2	30 3	1115.1+x	17/2⁺			
		424.1 2	100 5	919.9+x	(15/2⁺)	(E2)	0.0360	
1397.3+x	(21/2⁺)	206.1 2	2.7 4	1191.22+x	(19/2⁻)	(E1)	0.0633	B(E1)(W.u.)=2.1×10^{-5} 5
		263.0 2	66.3 7	1134.2+x	(17/2⁺)	E2[@]	0.1416	B(E2)(W.u.)=157 21
		282.3 2	100.0 9	1115.1+x	17/2⁺	E2[@]	0.1139	B(E2)(W.u.)=167 22
		378.9 2	8.8 7	1018.35+x	(21/2⁻)	(E1)	0.01467	B(E1)(W.u.)=1.09×10^{-5} 17
1497.6+x	(23/2⁻)	244.0 2	71.1 24	1253.6+x	(21/2⁻)	(M1+E2)	0.34 16	
		475.1 2	100 7	1022.5+x	(19/2⁻)	(E2)	0.0270	
1565.1+x		423.7 2	100 11	1141.37+x		(E2)	0.0361	
		1012.0 5	49 5	553.08+x	(17/2⁻)			
1568.6+x	(25/2⁻)	550.2 2	100	1018.35+x	(21/2⁻)	E2[@]	0.0189	B(E2)(W.u.)=204 16
1578.0+x	(21/2⁺)	234.0 2	53.0 7	1344.1+x	(19/2⁺)	(M1+E2)	0.38 18	
		443.8 2	78.8 13	1134.2+x	(17/2⁺)	(E2)	0.0320	
		463.0 2	100 9	1115.1+x	17/2⁺	Q		
1697.68+x	(23/2⁻)	413[a]		1284.42+x	(19/2⁻)			
		506.4 2	74 7	1191.22+x	(19/2⁻)	(E2)	0.0230	
		679.5 2	100 11	1018.35+x	(21/2⁻)	(M1+E2)	0.022 11	
1733.6+x	(23/2⁻)	449.2 2	100.0 18	1284.42+x	(19/2⁻)	(E2)	0.0311	
		715.0 5	<45	1018.35+x	(21/2⁻)			
1756.3+x	(25/2⁻)	258.6 2	49.5 5	1497.6+x	(23/2⁻)			
		502.7 2	100 9	1253.6+x	(21/2⁻)	(E2)	0.0234	
1758.9+x	(25/2⁺)	361.6 2	100	1397.3+x	(21/2⁺)	E2[@]	0.0554	B(E2)(W.u.)=330 40
1825.0+x	(23/2⁺)	246.9 2	29 3	1578.0+x	(21/2⁺)	(M1+E2)	0.33 16	
		480.9 2	100 10	1344.1+x	(19/2⁺)	(E2)	0.0261	
2027.2+x	(27/2⁻)	270.9 2	33.7 4	1756.3+x	(25/2⁻)	(M1+E2)	0.25 13	
		529.6 2	100.0 18	1497.6+x	(23/2⁻)	(E2)	0.0207	
2067.7+x		502.6 2	100	1565.1+x		(E2)	0.0234	

$^{179}_{77}Ir_{102}$-5

Adopted Levels, Gammas (continued)

$\gamma(^{179}Ir)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[‡]	α[&]	Comments
2086.1+x	(25/2+)	261.0 2	31 4	1825.0+x	(23/2+)	(M1+E2)	0.28 14	
		508.2 2	100 11	1578.0+x	(21/2+)	(E2)	0.0228	
2182.3+x	(29/2−)	613.7 2	100	1568.6+x	(25/2−)	E2[@]	0.01464	B(E2)(W.u.)=190 50
2192.9+x	(29/2+)	434.0 2	100	1758.9+x	(25/2+)	E2[@]	0.0339	B(E2)(W.u.)=357 15
2214.0+x	(27/2−)	480.4 2	69 7	1733.6+x	(23/2−)	(E2)	0.0262	
		516.3 2	100 13	1697.68+x	(23/2−)	Q		
		645.0 5	55 8	1568.6+x	(25/2−)			
2290.7+x	(27/2−)	556.9 2	58 9	1733.6+x	(23/2−)			
		593.1 2	100 5	1697.68+x	(23/2−)	(E2)	0.01583	
		722.0[a] 5	<54	1568.6+x	(25/2−)			
2312.7+x	(29/2−)	285.5 2	39.2 4	2027.2+x	(27/2−)			
		556.4 2	100 6	1756.3+x	(25/2−)	(E2)	0.0184	
2365.0+x	(27/2+)	278.9 2	32 4	2086.1+x	(25/2+)	(M1+E2)	0.23 12	
		539.9 2	100.0 20	1825.0+x	(23/2+)			
2533.7+x		466.0 2	100	2067.7+x		(E2)	0.0283	
2610.3+x	(31/2−)	297.6 2	42.1 10	2312.7+x	(29/2−)	(M1+E2)	0.19 10	
		583.2 2	100.0 12	2027.2+x	(27/2−)	(E2)	0.01645	
2690.4+x	(33/2+)	497.5 2	100	2192.9+x	(29/2+)	E2[@]	0.0240	B(E2)(W.u.)=400 80
2765.0+x	(31/2−)	551.0 2	100	2214.0+x	(27/2−)	(E2)	0.0188	
2845.3+x	(33/2−)	663.0 2	100	2182.3+x	(29/2−)	E2[@]	0.01230	B(E2)(W.u.)=210 50
2916.3+x	(31/2−)	625.6 2	100	2290.7+x	(27/2−)	(E2)	0.01401	
2921.0+x	(33/2−)	310.6 2	24.7 18	2610.3+x	(31/2−)	(M1+E2)	0.17 9	
		608.3 2	100 7	2312.7+x	(29/2−)	(E2)	0.01493	
		739.0[a] 5	<12	2182.3+x	(29/2−)			
2925.6+x	(33/2−)	315.1 2	51 4	2610.3+x	(31/2−)	D+Q		
		612.9 2	100 11	2312.7+x	(29/2−)	Q		
		743.0 5	<40	2182.3+x	(29/2−)			I_γ: undivided Iγ is 38.3 16 for doublet.
3245.5+x	(35/2−)	324.6 2	23 3	2921.0+x	(33/2−)	(M1+E2)	0.15 8	
		635.3 2	100 7	2610.3+x	(31/2−)	(E2)	0.01353	
3245.9+x	(37/2+)	555.5 2	100	2690.4+x	(33/2+)	E2[@]	0.0184	B(E2)(W.u.)=420 70
3371.6+x	(35/2−)	606.6 2	100	2765.0+x	(31/2−)	(E2)	0.01503	
3400.8+x	(37/2−)	475.2 2	78 6	2925.6+x	(33/2−)	E2[@]	0.0269	B(E2)(W.u.)=100 50
		479.9 2	100 7	2921.0+x	(33/2−)	(E2)	0.0263	B(E2)(W.u.)=120 70
		555.6 2	72 4	2845.3+x	(33/2−)	E2	0.0184	B(E2)(W.u.)=42 21
3563.9+x	(37/2−)	718.6 2	100	2845.3+x	(33/2−)	(E2)	0.01032	
3577.3+x	(35/2−)	661.0 5	100	2916.3+x	(31/2−)			
3581.3+x	(37/2−)	335.9 2	56 5	3245.5+x	(35/2−)			
		655.7 2	62 9	2925.6+x	(33/2−)	(Q)		
		660.3 2	100 17	2921.0+x	(33/2−)	(E2)	0.01242	
3857.1+x	(41/2+)	611.2 2	100	3245.9+x	(37/2+)	E2[@]	0.01477	B(E2)(W.u.)=3.1×10^2 +13−20

From ENSDF

Adopted Levels, Gammas (continued)

γ(^{179}Ir) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[‡]	α[&]	Comments
3921.1+x	(39/2$^-$)	339.7 *2*	40 *5*	3581.3+x	(37/2$^-$)			
		675.6 *2*	100 *3*	3245.5+x	(35/2$^-$)	(E2)	0.01180	
3986.0+x	(41/2$^-$)	585.2 *2*	100	3400.8+x	(37/2$^-$)	(E2)	0.01632	
4002.6+x?	(39/2$^-$)	631.0[a] *5*	100	3371.6+x	(35/2$^-$)	(E2)	0.01374	
4262.5+x	(41/2$^-$)	341.4 *2*	64 *8*	3921.1+x	(39/2$^-$)			
		681.2 *2*	100 *14*	3581.3+x	(37/2$^-$)	(E2)	0.01159	
4285.3+x?	(39/2$^-$)	708.0[a] *5*	100	3577.3+x	(35/2$^-$)			
4317.6+x	(41/2$^-$)	753.7 *2*	100	3563.9+x	(37/2$^-$)	(E2)	0.00931 *13*	
4523.1+x	(45/2$^+$)	666.0 *2*	100	3857.1+x	(41/2$^+$)	(E2)[@]	0.01218	B(E2)(W.u.)=360 *90*
4600.2+x	(43/2$^-$)	337.6 *2*	56 *7*	4262.5+x	(41/2$^-$)			
		679.2 *2*	100 *12*	3921.1+x	(39/2$^-$)	(E2)	0.01166	
4655.7+x	(45/2$^-$)	669.7 *2*	100	3986.0+x	(41/2$^-$)	(E2)	0.01203	
4928.5+x?	(45/2$^-$)	666.0[a] *5*	100	4262.5+x	(41/2$^-$)			
5113.6+x	(45/2$^-$)	796.0 *5*	100	4317.6+x	(41/2$^-$)			
5242.9+x	(49/2$^+$)	719.8 *2*	100	4523.1+x	(45/2$^+$)	(E2)[@]	0.01028	B(E2)(W.u.)=260 *30*
5397.7+x	(49/2$^-$)	742.0 *5*	100	4655.7+x	(45/2$^-$)			
6012.9+x	(53/2$^+$)	770.0 *5*	100	5242.9+x	(49/2$^+$)			
6200.7+x?	(53/2$^-$)	803.0[a] *5*	100	5397.7+x	(49/2$^-$)			
6829.9+x?	(57/2$^+$)	817.0[a] *5*	100	6012.9+x	(53/2$^+$)			

† From (HI,xnγ), except as noted.

‡ Based on measured DCO data from (HI,xnγ), except as noted. Additionally, the evaluator assigns $\Delta\pi$=(no) for intraband transitions.

From ^{179}Pt ε decay.

@ Q or (Q) from DCO ratio in (HI,xnγ); not M2 from RUL.

& 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.

a Placement of transition in the level scheme is uncertain.

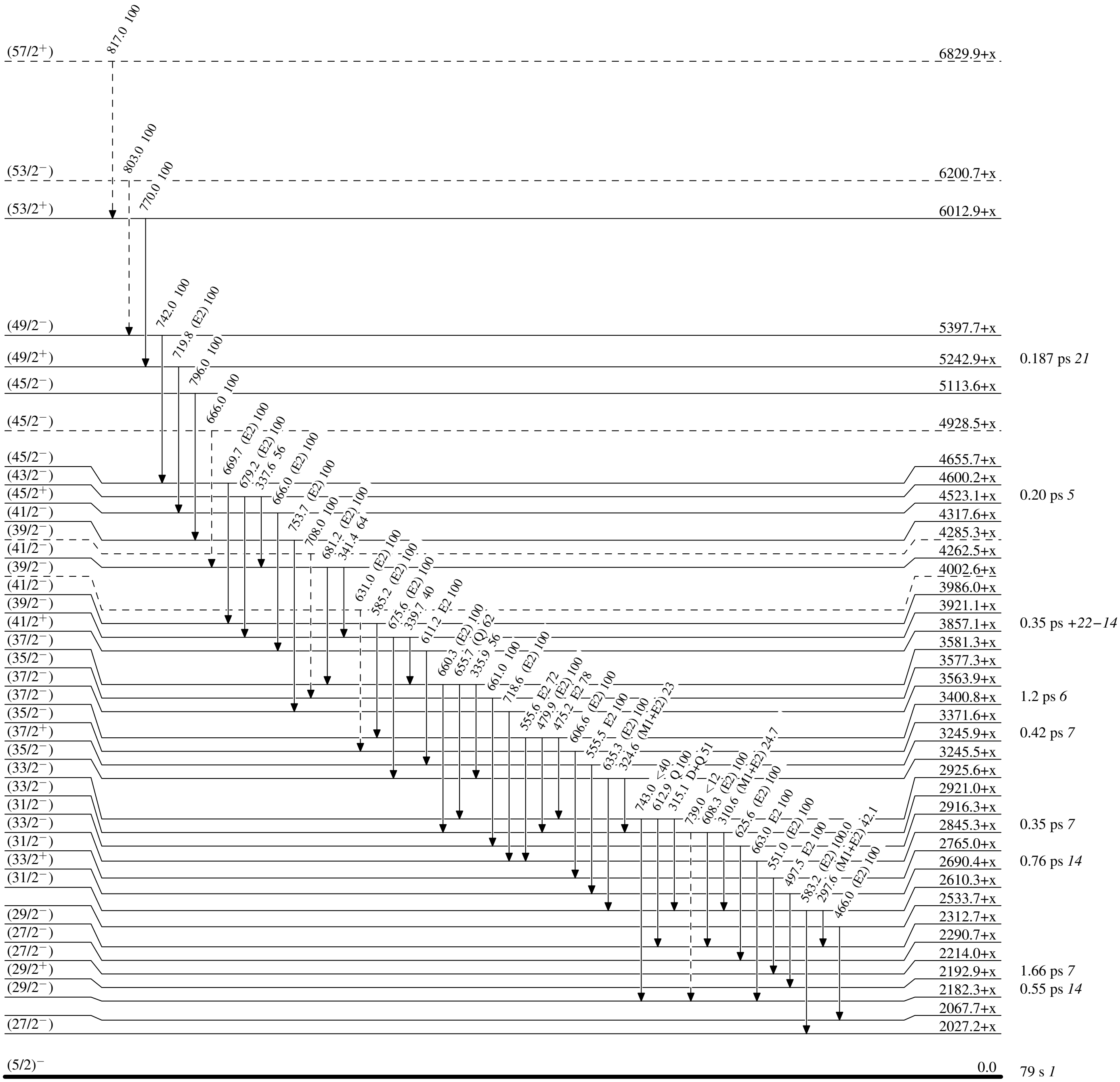
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{179}_{77}Ir_{102}$

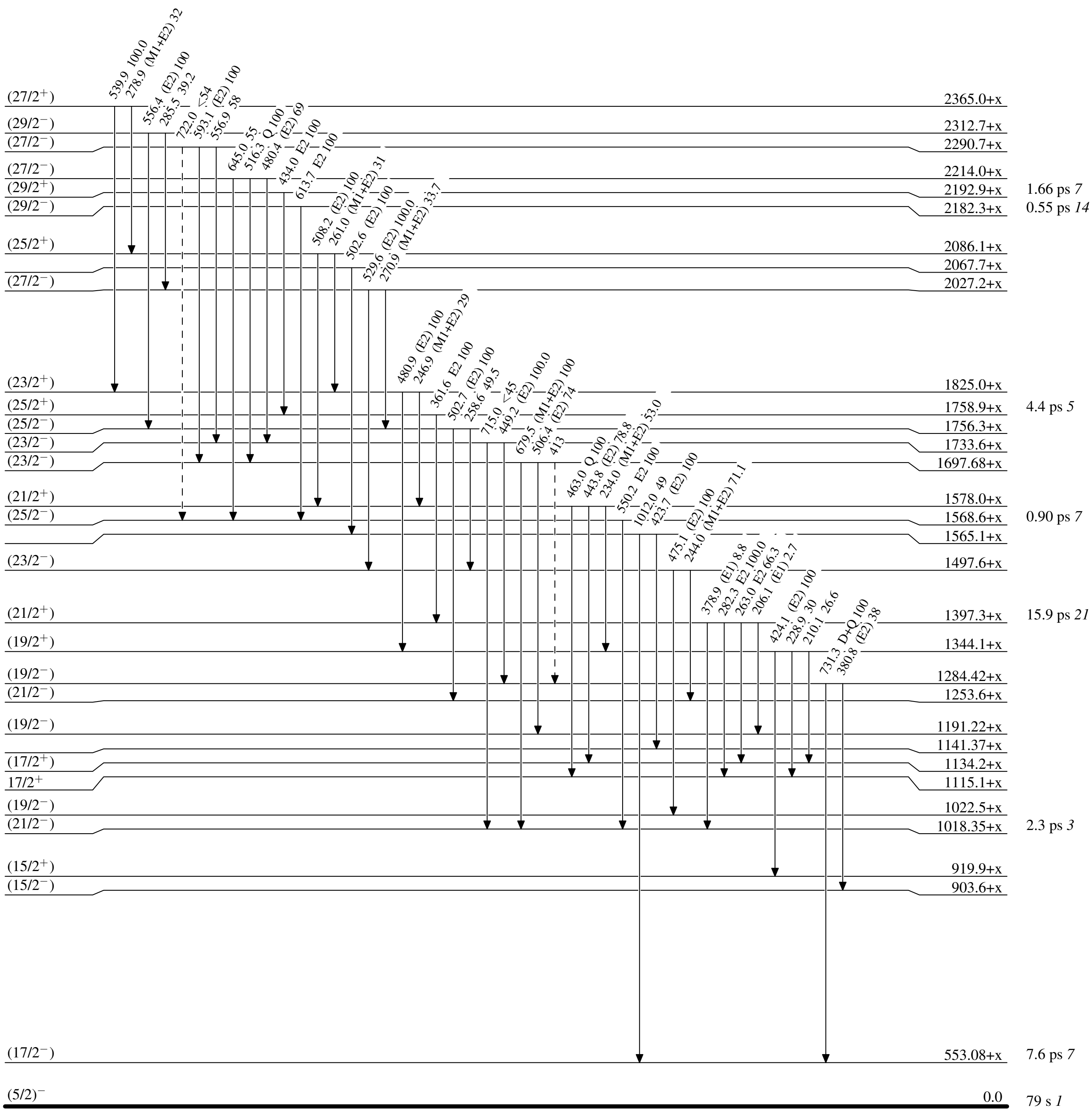
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

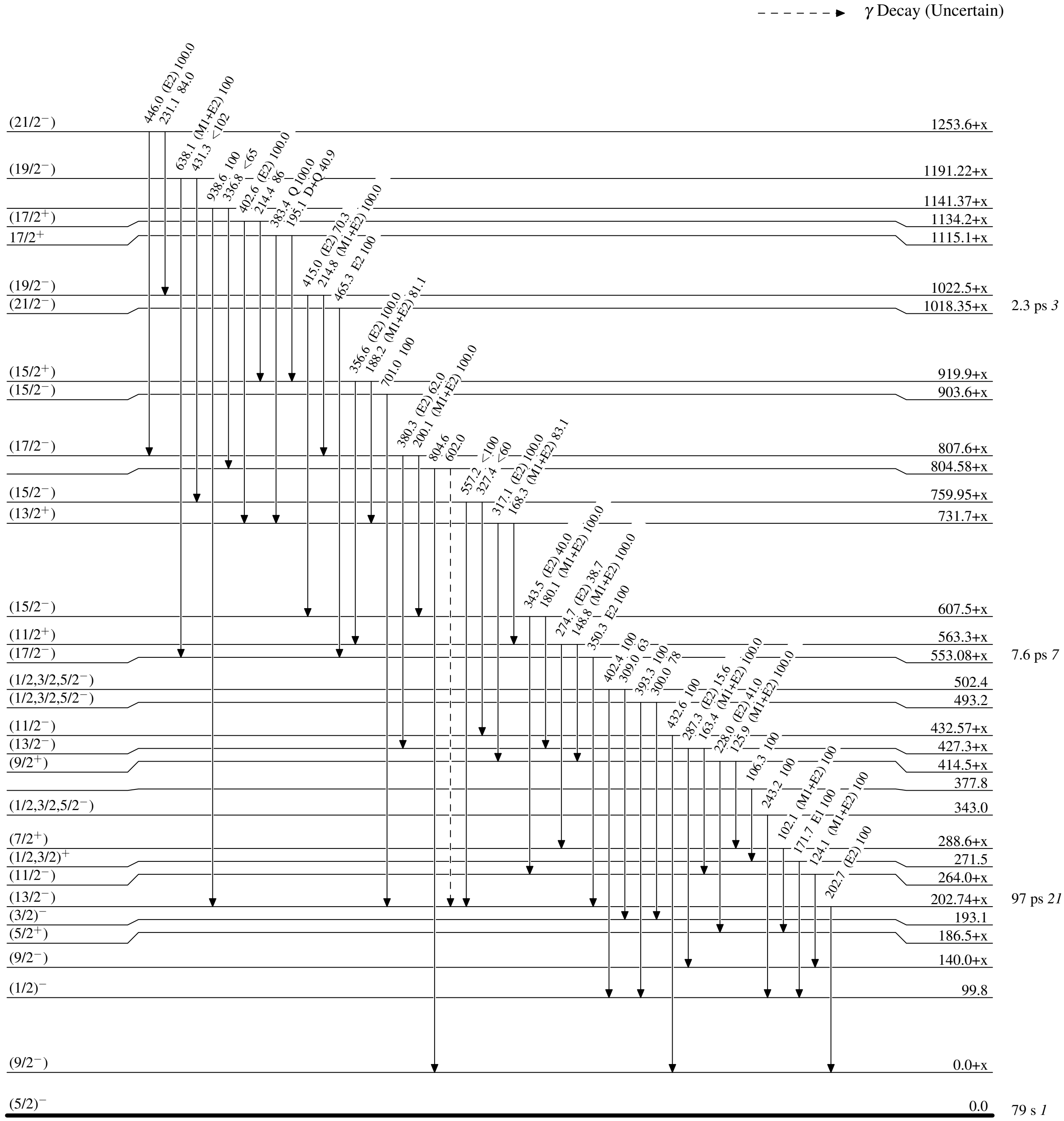


$^{179}_{77}Ir_{102}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



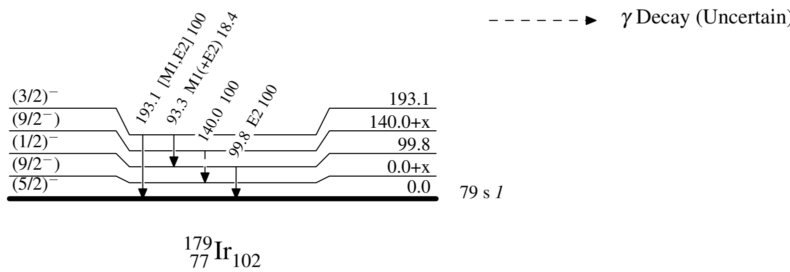
$^{179}_{77}Ir_{102}$

Adopted Levels, Gammas

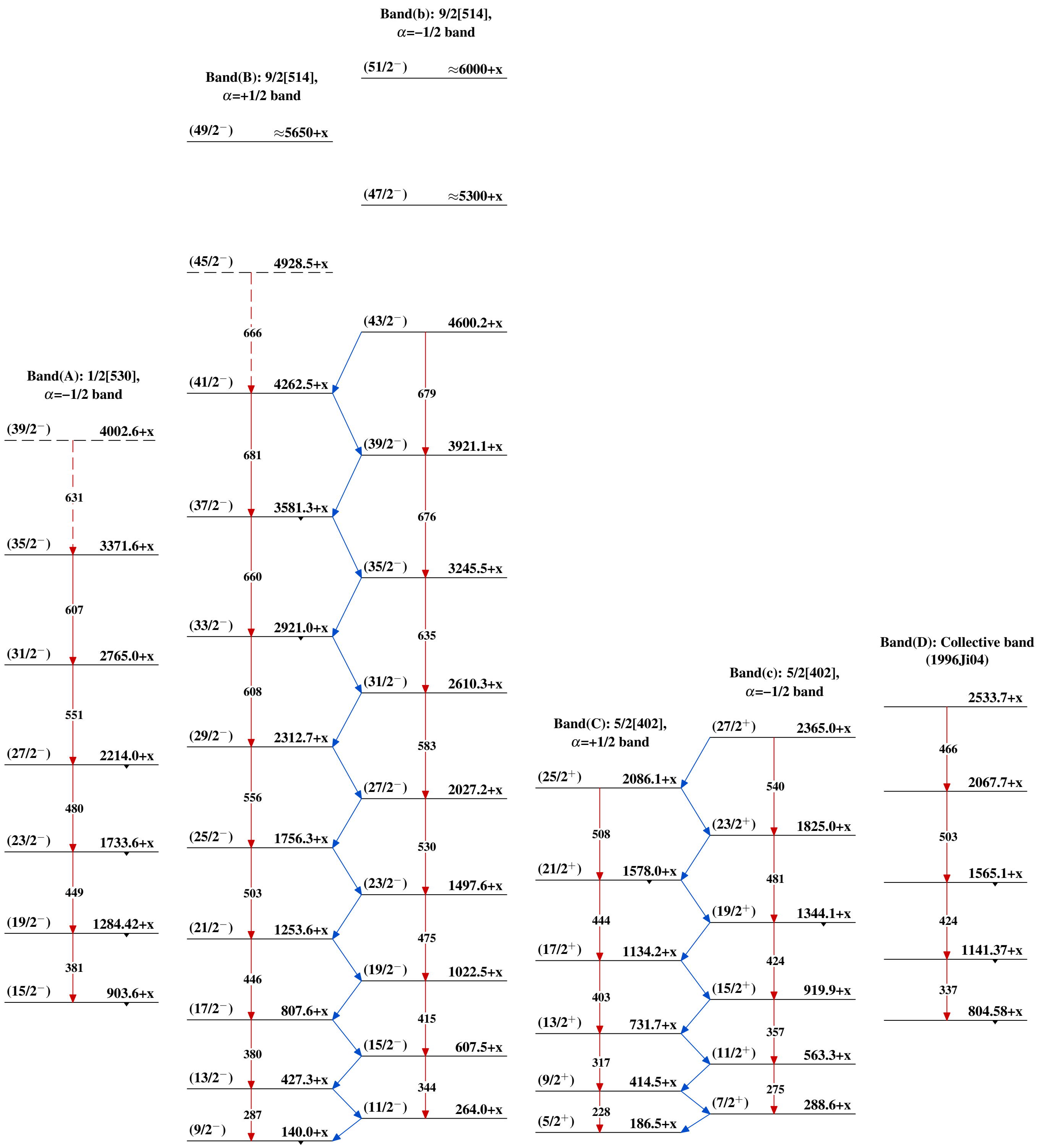
Level Scheme (continued)

Intensities: Relative photon branching from each level

Legend

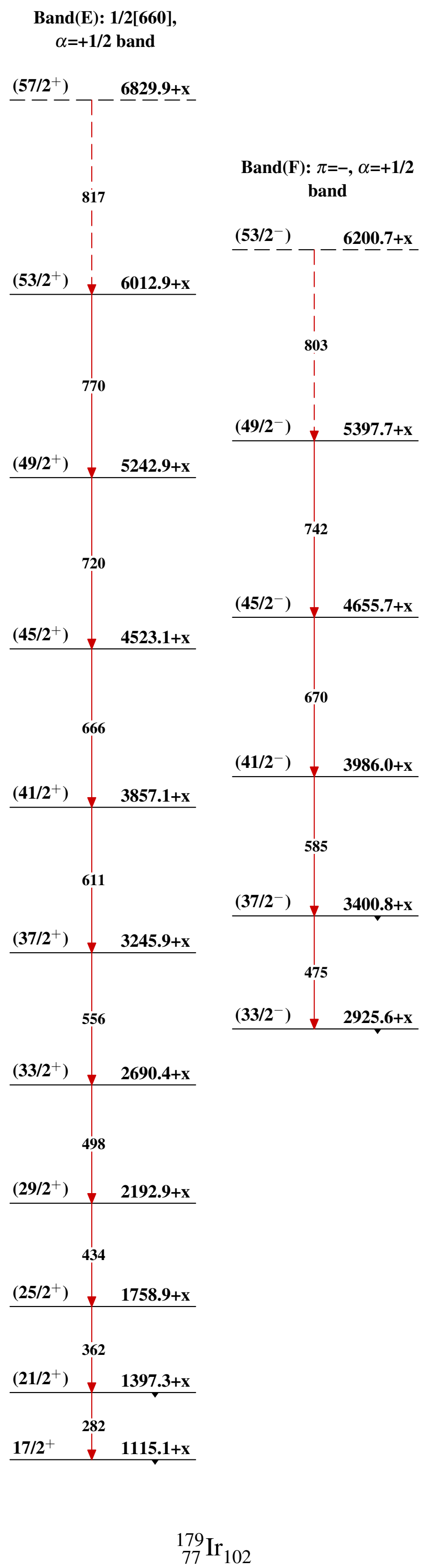


Adopted Levels, Gammas

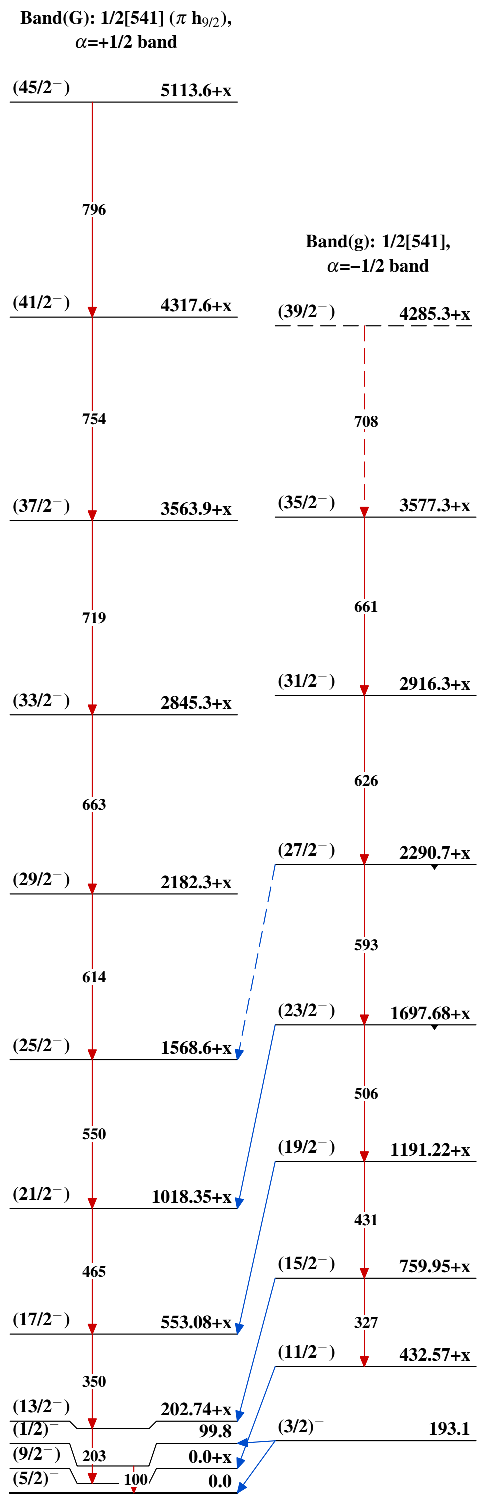


$^{179}_{77}Ir_{102}$

Adopted Levels, Gammas (continued)



Adopted Levels, Gammas (continued)



$^{179}_{77}Ir_{102}$