^{185}Ir ε decay 1962Ha24,1970FiZZ,1971AhZX

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

Parent: ^{185}Ir: E=0.0; J$^{\pi}$=5/2$^-$; $T_{1/2}$=14.4 h *1*; Q(ε)=2474 *28*; %ε+%β^+ decay=100.0

1962Ha24: Radioactivity ^{185}Ir; measured Eγ, Conversion electrons, mult., mixing ratios.

1970FiZZ: Radioactivity ^{185}Ir; Ge(Li) detector; measured Eγ, Iγ, $\gamma\gamma$-coin, deduced K Conv. Coeff.; $T_{1/2}$ of ^{185m}Os .

1971AhZX: Radioactivity ^{185}Ir; measured Eγ, Iγ, $\gamma\gamma$-coin., ICC; ^{185}Os deduced levels, J^{π}.

1981Sp06: Radioactivity ^{185}Ir; measured NMR, $\gamma(\theta$,T), deduced K Conv. Coeff.; oriented nuclei. ^{185}Os deduced levels,J^{π}.

Other measurements: 1958Di44, 1963Em02, 1965Qa01.

Because of the large number of unplaced γ rays the decay scheme is incomplete, and therefore, ε populations to the various levels have not been deduced.

^{185}Os Levels

E(level)	J$^{\pi}$†	$T_{1/2}$	Comments
0.0	1/2$^-$	93.6 d *5*	$T_{1/2}$: From Adopted Levels.
37.4 *1*	3/2$^-$		
97.4 *2*	5/2$^-$		
102.3 *7*	7/2$^-$	3.0 μs *4*	$T_{1/2}$: from delayed $\gamma\gamma$ coincidences (1970FiZZ).
127.9 *2*	3/2$^-$		
198.1 *2*	7/2$^-$		
222.4 *3*	5/2$^-$		
260.5 *6*	9/2$^-$		
275.7 *8*	11/2$^+$	0.78 μs *5*	$T_{1/2}$: from delayed $\gamma\gamma$ coincidences (1970FiZZ).
317.8 *3*	9/2$^-$		
351.7 *3*	7/2$^-$		
402.6 *7*	9/2$^+$		
729.4 *4*	(5/2$^-$,7/2$^-$)		
1769.8	5/2$^+$		J$^{\pi}$: 1732γ E1 to 3/2$^-$, $\gamma\gamma(\theta$,H) (1981Sp06).
1866.3	5/2$^+$		J$^{\pi}$: 1829γ E1 to 3/2$^-$, $\gamma\gamma(\theta$,H) (1981Sp06).
1907.6	5/2$^+$		J$^{\pi}$: 1870γ E1 to 3/2$^-$, $\gamma\gamma(\theta$,H) (1981Sp06).
2003.8	5/2$^+$		J$^{\pi}$: 1876γ E1 to 3/2$^-$, $\gamma\gamma(\theta$,H) (1981Sp06).

† From Adopted Levels, unless otherwise specified.

γ(^{185}Os)

Iγ normalization: from decay scheme assuming no ε population to g.s. from ^{185}Ir(J^{π}=5/2$^-$), and ΣI(γ+ce)(to g.s.)=100%. The normalization factor 0.07 *1* should be considered an upper limit because there is a total unplaced γ-ray transition intensity of ≈20%, some of which may feed the ground state.

ce data listed in this table are from 1962Ha24, unless otherwise noted.

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[@]	α[c]	Comments
(4.9)		102.3	7/2$^-$	97.4	5/2$^-$				Transition was not observed. Delayed (158.2γ)(37.4, 60.0, 97.4 γ's) coincidences observed in ^{183}W(α,2nγ) (1975So01) imply its existence.
(15.2)		275.7	11/2$^+$	260.5	9/2$^-$				Transition not observed, its existence is inferred by the 158.2γ measured in the delayed spectrum in ^{183}W(α,2nγ) (1975So01).
24.20[a] *4*	0.26 *11*	222.4	5/2$^-$	198.1	7/2$^-$	M1+E2	0.09 *+5−3*	94 *22*	α(L)= 72 *12*; α(M)= 17 *3* δ: from ce(L1)/ce(L2)exp=3.0 *15*. I_γ: from Ice(L1)=12 *5* and α(L1)=45.4.
30.4[a] *5*	0.30 *13*	127.9	3/2$^-$	97.4	5/2$^-$	(M1)		33.5	α(L)= 25.7; α(M)= 5.89 Mult.: from ce(L1):ce(M)exp=7:2. I_γ: from Ice(L1)=7 *3* and α(L1)=23.2.
33.85[a] *5*	0.18 *8*	351.7	7/2$^-$	317.8	9/2$^-$	(M1)		24.4	α(L)= 18.7; α(M)= 4.28 From ce(L1)/ce(M)exp=3. I_γ: from Ice(L1)=3.0 *12* and α(L1)=16.86.
37.4 *1*	49 *10*	37.4	3/2$^-$	0.0	1/2$^-$	M1+E2	0.05 *1*	19.2	α(L)= 14.7; α(M)= 3.38 %Iγ=3.5 *2*. δ: from ce(L1):ce(L2):ce(L3)exp=600 *120*:90 *18*:33 *7*. I_γ: from Ice(L1)=723 and α(L)=14.7.
60.0[a] *1*	82 *17*	97.4	5/2$^-$	37.4	3/2$^-$	M1+E2	0.18 *3*	5.6 *4*	α(L)= 4.32 *23*; α(M)= 1.01 *6*; α(N+..)= 0.308 *23* δ: from ce(L1):ce(L2):ce(L3)exp=250 *50*:60 *12*:45 *9*. I_γ: from Ice(L1)=250 *50* and α(L1)=3.04. Iγ(60γ)/Iγ(97γ)=1.65 was measured in the (α,2nγ) reaction. This ratio and Iγ(97γ) yield Iγ(60γ)=99.
(64.9)		102.3	7/2$^-$	37.4	3/2$^-$				Transition was not observed. A weak E2 transition to the 3/2$^-$,1/2[510] state is expected in analogy with the decay pattern of the 7/2$^-$,7/2[503] state in ^{183}W.
90.45 *14*	18.6 *19*	127.9	3/2$^-$	37.4	3/2$^-$	M1(+E2)	≤1.5	7.4 *5*	α(K)= 5 *3*; α(L)= 2.2 *15*; α(M)= 0.5 *4*; α(N+..)= 0.16 *13* δ: from ce(L1):ce(L2)exp=18 *4*:3.5 *14*.
94.5 *2*	5.7 *6*	222.4	5/2$^-$	127.9	3/2$^-$	M1+E2	0.9 *3*	6.28 *18*	α(K)= 3.5 *7*; α(L)= 2.1 *4*; α(M)= 0.52 *9*; α(N+..)= 0.16 *3* δ: from α(L1)exp=0.46 *19* and ce(L1):ce(L2):ce(L3)exp=2.6 *10*/4.0 *16*/3.6 *15*.
97.4 *2*	60 *12*	97.4	5/2$^-$	0.0	1/2$^-$	E2		4.93	α(K)= 0.842; α(L)= 3.07; α(M)= 0.781; α(N+..)=

γ(^{185}Os) (continued)

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[@]	α[c]	Comments
									0.235 I_γ: from Ice(L2)=95 *19* and α(L2)=1.58. Mult.: from ce(L2):ce(L3):ce(M):ce(N)exp=95:85:47:12.
100.75 *16*	35 *4*	198.1	7/2$^-$	97.4	5/2$^-$	M1+E2	0.22 *5*	5.63	α(K)= 4.52; α(L)= 0.85; α(M)= 0.198; α(N+..)= 0.061 δ: from α(K)exp=4.2 *9* and ce(K):ce(L1):ce(L2):ce(L3)exp=145 *30*:26 *5*:3.5 *14*:2.5 *10*.
119.65 *18*	0.76 *8*	317.8	9/2$^-$	198.1	7/2$^-$	M1+E2	≤1.2	3.1 *6*	α(K)= 2.2 *11*; α(L)= 0.7 *4*; α(M)= 0.16 *10*; α(N+..)= 0.05 *3* δ: from α(K)exp=2.6 *11*.
124.95[a] *20*	0.47 *19*	222.4	5/2$^-$	97.4	5/2$^-$	(M1)		3.07	α(K)= 2.54; α(L)= 0.411; α(M)= 0.0942; α(N+..)= 0.0294 I_γ: from Ice(K)=1.2 *5* and α(K)=2.536 (M1 theory). Mult.: M1,E2 from decay scheme. Only conversion electrons were observed. An upper limit on Iγ gives α(K)exp<1.7, and δ<0.9. Evaluator adopts (M1).
126.9 *2*	12 *5*	402.6	9/2$^+$	275.7	11/2$^+$	M1+E2	≈0.4	2.77 *15*	α(K)= 2.16 *24*; α(L)= 0.46 *8*; α(M)= 0.109 *20*; α(N+..)= 0.034 *5* δ: from ce(K):ce(L1):ce(L2):ce(L3)exp=≈18:3.2: ≈1:weak. I_γ: from measured Iγ(126.9γ+127.9γ)=21.7 *22* and calculated Iγ(127.9)=9.7 *39*. Iγ(126.9)=10 *5*, from Ice(L1)=3.2 and α(L1)=0.31. Iγ(126.9)=10 *5*, from Iγ(126.9)/Iγ(300.3)=1.05 *45* in (α,2nγ).
127.9 *2*	10 *4*	127.9	3/2$^-$	0.0	1/2$^-$	M1		2.87	α(K)= 2.37; α(L)= 0.384; α(M)= 0.0881; α(N+..)= 0.0275 Mult.: from ce(K)/ce(L)exp=5.1. I_γ: Iγ(126.9γ+127.9γ)=21.7 *22* was measured. Iγ(127.9γ)=9.7 *39* from Ice(K)=23 *9* and α(K)=2.37.
129.4[a] *2*		351.7	7/2$^-$	222.4	5/2$^-$	(E2+M1)		2.2 *6*	α(K)= 1.4 *9*; α(L)= 0.6 *3*; α(M)= 0.15 *7*; α(N+..)= 0.045 *19* Mult.: from ce(K):ce(L2):ce(L3)exp=≈0.5: ≈1.1:0.55. The L1, L2 lines were only partially resolved.
142.1[&] *2*	0.6 *1*	402.6	9/2$^+$	260.5	9/2$^-$	[E1]		0.160	α(K)= 0.131; α(L)= 0.0223; α(M)= 0.00509; α(N+..)= 0.00153
153.5 *2*	29 *3*	351.7	7/2$^-$	198.1	7/2$^-$	M1+E2	0.8 *3*	1.37 *14*	α(K)= 0.99 *17*; α(L)= 0.29 *5*; α(M)= 0.070 *11*; α(N+..)= 0.0214 *21* δ: from α(K)exp=1.0 *2*.
158.2 *2*	34 *4*	260.5	9/2$^-$	102.3	7/2$^-$	M1+E2		1.2 *4*	α(K)= 0.8 *5*; α(L)= 0.27 *13*; α(M)= 0.07 *3*; α(N+..)= 0.020 *5* Mult.: from α(L1)exp=0.13 and ce(K):ce(L1):ce(L2):ce(M)exp=≈30:4.6:weak:1.4.
160.7 *2*	25 *3*	198.1	7/2$^-$	37.4	3/2$^-$	E2		0.721	α(K)= 0.300; α(L)= 0.317; α(M)= 0.0801; α(N+..)= 0.0240 Mult.: from α(M)exp=0.06 *3* and ce(K):ce(L2):ce(L3):ce(M):ce(N)exp=≈5:<5.9: <5.8:1.6:0.44.
^{x}177.3	1.7								

$^{185}_{76}$Os$_{109}$-3

γ(^{185}Os) (continued)

Eγ[†]	Iγ[‡b]	Ei(level)	J^π_i	Ef	J^π_f	Mult.[#]	δ[@]	α[c]	Comments
185.0 *2*	12.3 *12*	222.4	5/2⁻	37.4	3/2⁻	M1(+E2)		0.7 *3*	α(K)= 0.5 *3*; α(L)= 0.15 *7*; α(M)= 0.037 *17*; α(N+..)= 0.0113 *17* Mult.: from α(K)exp=0.7 22and ce(K):ce(L1):ce(M)exp=8.6:1.3:weak.
[x]188.7[&] *2*	1.7 *2*								
[x]189.4	3.1								
[x]193.6	1.0								
[x]203.3	1.0								
[x]205.8	1.0								
[x]217.5	1.8								
220.4 *2*	16.7 *17*	317.8	9/2⁻	97.4	5/2⁻	E2		0.243	α(K)= 0.133; α(L)= 0.0832; α(M)= 0.0208; α(N+..)= 0.00619 Mult.: from α(K)exp=0.08 *4* and ce(K):ce(L2):ce(L3):ce(M)exp=1.4: ≈0.77: <0.64:0.25.
222.3 *2*	23.9 *24*	222.4	5/2⁻	0.0	1/2⁻	(E2)		0.236	α(K)= 0.130; α(L)= 0.0803; α(M)= 0.0201; α(N+..)= 0.00596 Mult.: from α(L2)exp=0.042 *17* and ce(K):ce(L2):ce(L3):ce(M)exp=<5.9:1.0: <1.7:0.35.
223.8 *2*	30 *3*	351.7	7/2⁻	127.9	3/2⁻	E2		0.231	α(K)= 0.128; α(L)= 0.0782; α(M)= 0.0195; α(N+..)= 0.00581 Mult.: from α(L3)exp=0.023 *10* and ce(K):ce(L2):ce(L3):ce(M)exp=<5.8: <1.7:0.7:0.34.
[x]228.9	1.2								
[x]248.8	1.6								
254.2 *2*	190 *19*	351.7	7/2⁻	97.4	5/2⁻	M1+E2	0.3 *1*	0.397 *15*	α(K)= 0.325 *14*; α(L)= 0.0549 *25*; α(M)= 0.0126 *6*; α(N+..)= 0.00384 *10* δ: from α(K)exp=0.26 *6* and ce(K):ce(L1):ce(L3)exp=50 *10*:8.5 *20*:0.20 *8*.
[x]266.5[a] *4*									Ice(K)=0.35 *14*.
[x]276.5	2.6								
[x]282.1	1.4								
[x]283.1	1.4								
300.3 *2*	9.3 *10*	402.6	9/2⁺	102.3	7/2⁻	E1		0.0245	α(K)= 0.0203; α(L)= 0.00320; α(M)= 0.000730; α(N+..)= 0.000217 Mult.: from α(K)exp=0.027 *11*.
[x]307.1[a] *5*									Ice(K)=0.28 *12*.
[x]308.6	1.2								
314.2 *2*	12.9 *13*	351.7	7/2⁻	37.4	3/2⁻	[E2]		0.0804	α(K)= 0.0529; α(L)= 0.0209; α(M)= 0.00514; α(N+..)= 0.00152
[x]321.4 *2*	4.0 *4*					M1		0.221	α(K)= 0.183; α(L)= 0.0293; α(M)= 0.00670; α(N+..)= 0.00203 Mult.: from α(K)exp=0.22 *9*. (1970FiZZ).
[x]339.2 *5*	2.0					(M1+E2)		0.13 *6*	α(K)= 0.10 *6*; α(L)= 0.021 *9*; α(M)= 0.0048 *21*; α(N+..)= 0.0014 *3* Mult.: from α(K)exp=0.10.
[x]346.8	0.9								
[x]352.4[a] *6*									Ice(K)=0.30 *12*.
[x]358.4	1.0								
[x]367.3	1.2								

γ(^{185}Os) (continued)

E_γ †	I_γ ‡b	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	δ @	α c	Comments
x370.6	1.2								
377.6 2	3.0 3	729.4	(5/2−,7/2−)	351.7	7/2−	(M1)		0.143	α(K)= 0.119; α(L)= 0.0189; α(M)= 0.00433; α(N+..)= 0.00131 Mult.: from α(K)exp=0.16 7 and ce(K):ce(L1)exp=0.48:weak. I_γ: measured intensities of 1970FiZZ and 1971AhZX do not agree: Iγ=3.0 (1970FiZZ), Iγ=11.4 (1971AhZX). Iγ=4.0 16 from Ice(K)=0.48 19 and α(K)=0.119.
x382.2	1.0								
x394.4	1.1								
x398.5 2	4.6 5					(M1)		0.124	α(K)= 0.103; α(L)= 0.0164; α(M)= 0.00375; α(N+..)= 0.00114 Mult.: from α(K)exp=0.08 3 (1970FiZZ).
x402.6	2.3								
x406.9 2	6.5 7					(M1)		0.118	α(K)= 0.0976; α(L)= 0.0155; α(M)= 0.00354; α(N+..)= 0.00108 Mult.: from α(K)exp=0.10 2.
x418.8 2	3.8 4					(M1+E2)	0.6 4	0.090 17	α(K)= 0.073 15; α(L)= 0.0126 23; α(M)= 0.0029 5; α(N+..)= 0.00088 10 δ: from α(K)exp=0.074 14.
x426.8	2.0								
x431.4 7	5.4					(M1+E2)			I_γ: from 1971AhZX. Mult.: from α(K)exp≈0.046.
x446.1	0.9								
x449.8	1.5								
x453.0	0.7								
x464.9	1.5								
x486.4	1.2								
x489.0	2.9								
x501.0	1.8								
507.0 2	9.7 10	729.4	(5/2−,7/2−)	222.4	5/2−	(M1)		0.0664	α(K)= 0.0549; α(L)= 0.00864 Mult.: from α(K)exp=0.036.
x513.1 2	13.1 14					(M1+E2)	1.5 6	0.035 5	α(K)= 0.028 5; α(L)= 0.0054 7 δ: from α(K)exp=0.028 5.
x517.4	3.1								
x533.0	1.1								
x539.2 2	18.6 19					(M1+E2)		0.038 19	α(K)= 0.031 16; α(L)= 0.0054 24 Mult.: from α(K)exp≈0.030.
x544.9	2.0								
x550.4 2	16.7 17								
x576.1	2.0								
x590.0	2.2								
601.3	2.0	729.4	(5/2−,7/2−)	127.9	3/2−				
x627.2 2	8.0 8								
x638.5& 2	4.2 4								

$^{185}_{76}$Os$_{109}$-5

γ(^{185}Os) (continued)

E_γ †	I_γ ‡b	E_i(level)	J^π_i	E_f	J^π_f	Comments
x642.8	4.1					
x646.2 *2*	17.7 *18*					
x666.1 *2*	7.2 *7*					
x670.9	6.1					
x681.5	3.2					
691.9	6.0	729.4	(5/2$^-$,7/2$^-$)	37.4	3/2$^-$	
x695.4	2.1					
x710.6	1.7					
x726.5	1.1					
x743.2	3.6					
x745.7 *11*	8.1					E_γ: from 1962Ha24.
x759.2	2.0					
x761.2	2.2					
x785.4	1.4					
x796.4	2.0					
x798.2	2.0					
x807.3	10.6					
x817.1	0.7					
x823.9	0.5					
x828.3	2.0					
x850.8	2.5					
x855.7	1.1					
x860.6	0.5					
x870.8	0.9					
x913.9	10.6					
x925.0	4.4					
x954.9	1.5					
x959.0	3.2					
x966.2	2.5					
x978.2	1.6					
x997.2	1.7					
x1016.8	0.5					
x1038.7						
1040.7		1769.8	5/2$^+$	729.4	(5/2$^-$,7/2$^-$)	Iγ(1038.7γ+1040.7γ)=6.8 was measured.
x1064.2	2.8					
x1076.2	1.2					
x1079.3	1.4					
x1094.4	1.2					
x1101.8	0.9					
x1127.9	2.0					
x1153.9	1.0					
x1157.5	1.0					
x1165.9	1.0					
1178.1	1.0	1907.6	5/2$^+$	729.4	(5/2$^-$,7/2$^-$)	

$^{185}_{76}Os_{109}$-6

γ(^{185}Os) (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [#]	Comments
[x]1190.4	2.0						
[x]1205.3	0.4						
[x]1221.2	1.2						
[x]1226.1	2.3						
[x]1230.6	1.8						
[x]1237.0	1.2						
[x]1247.2	1.8						
[x]1255.6	1.2						
[x]1264.4	3.1						
[x]1266.6	3.1						
[x]1299.7	6.3						
[x]1310.9	12.3						
[x]1318.2	4.3						
[x]1325.2	4.1						
[x]1345.9	1.8						
[x]1359.1	2.7						
[x]1361.8	2.3						
[x]1366.6	2.5						
[x]1384.6	2.7						
[x]1390.9	1.2						
[x]1409.1	1.6						
1418.1	7.7	1769.8	5/2$^+$	351.7	7/2$^-$		
[x]1441.3	7.7						
[x]1463.1	2.3						
[x]1465.8	2.1						
[x]1478.3	1.8						
[x]1512.0	0.5						
[x]1568.3	3.6						
1571.6	3.8	1769.8	5/2$^+$	198.1	7/2$^-$		
[x]1579.9	1.4						
[x]1625.9	2.8						
1641.8	16.6	1769.8	5/2$^+$	127.9	3/2$^-$		
1652.2	0.7	2003.8	5/2$^+$	351.7	7/2$^-$		
1668.3	52.0	1866.3	5/2$^+$	198.1	7/2$^-$	E1	Mult.: from α(K)exp=0.00048 *11* (1981Sp06).
1685.0	4.3	1907.6	5/2$^+$	222.4	5/2$^-$		
[x]1698.5	2.3						
[x]1701.0	2.8						
1709.6	4.9	1907.6	5/2$^+$	198.1	7/2$^-$		
1732.2	39.4	1769.8	5/2$^+$	37.4	3/2$^-$	E1	Mult.: from α(K)exp=0.00072 *15* (1981Sp06).
1738.4	34.4	1866.3	5/2$^+$	127.9	3/2$^-$	E1	Mult.: from α(K)exp=0.00096 *21* (1981Sp06).
[x]1757.6	13.0						
[x]1763.1	1.4						
1768.0[e]	1.0	1866.3	5/2$^+$	97.4	5/2$^-$		
1779.8[d]	5.4[d]	1907.6	5/2$^+$	127.9	3/2$^-$		Possible doublet.

γ(^{185}Os) (continued)

Eγ[†]	Iγ[‡b]	Ei(level)	J^π_i	E_f	J^π_f	Mult.[#]	Comments
1779.8[de]	5.4[d]	2003.8	5/2+	222.4	5/2−		
[x]1794.2	0.5						
1804.9[e]	5.9	2003.8	5/2+	198.1	7/2−	E1	Mult.: from α(K)exp<0.001 (1981Sp06).
1828.8	144	1866.3	5/2+	37.4	3/2−	E1	Mult.: from α(K)exp=0.00047 *10* (1981Sp06).
[x]1854.7	1.0						
1870.0	17.2	1907.6	5/2+	37.4	3/2−	E1	Mult.: from α(K)exp=0.00039 *9* (1981Sp06).
1876.0	6.4	2003.8	5/2+	127.9	3/2−	E1	Mult.: from α(K)exp=0.00021 *19* (1981Sp06).
[x]1882.5	2.1						
[x]1893.2	1.0						
[x]1901.3	0.5						
[x]1920.3	0.5						
[x]1924.0	1.0						
[x]1938.0	0.5						
[x]1942.3	0.5						
[x]1948.4	1.7						
1966.5	1.4	2003.8	5/2+	37.4	3/2−		
[x]1978.4	0.5						
[x]1982.4	0.2						
[x]1996.6	0.5						
[x]2014.4	0.2						
[x]2026.2	0.7						
[x]2044.4	1.4						
[x]2049.7	4.9						

† From 1962Ha24 (conv. electrons by magnetic spectrometer), 1970FiZZ (γ), 1971AhZX (γ). All Iγ and Eγ values given without uncertainties are from 1971AhZX, except for those high-energy E1 transitions determined by 1981Sp06.

‡ From 1970FiZZ and 1971AhZX. See 1974El08 for comparison of measured intensities. Relative intensities are normalized to 60 for 97.4γ E2 to give α(L2)=1.58.

From Iγ and ce data of 1962Ha24, unless otherwise indicated, normalized to α(L2)(97.4γ)=1.58. Uncertainties on Ice′s are ≈20% for the strong lines, and ≈40% for the weak ones (1962Ha24).

@ Derived by evaluator from ce data of 1962Ha24 using the minimization method and computer code of 1980Ry04. Evaluator assigned uncertainties to Ice following authors′ guidelines.

& Observed by 1970FiZZ only.

a Observed in ce spectrum by 1962Ha24 only.

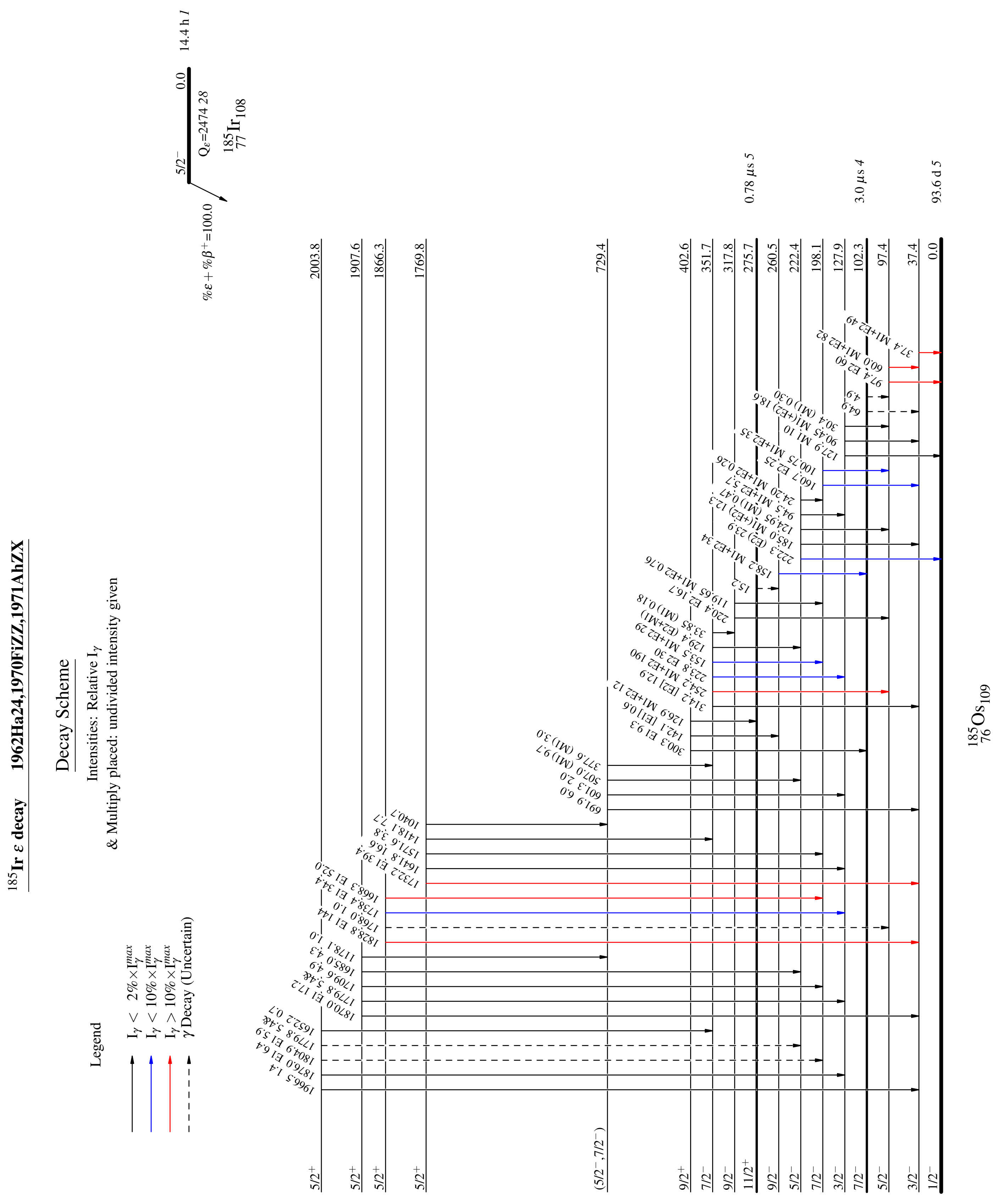
b For absolute intensity per 100 decays, multiply by 0.07 *1*.

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 with undivided intensity.

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

[e] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.



^{185}Ir ε decay 1962Ha24,1970FiZZ,1971AhZX
Decay Scheme
Intensities: Relative I_γ
& Multiply placed: undivided intensity given
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)
5/2− 0.0 14.4 h 1
Q_ε=2474 28
$^{185}_{77}Ir_{108}$
%ε + %β+=100.0
5/2+ 2003.8
5/2+ 1907.6
5/2+ 1866.3
5/2+ 1769.8
(5/2−,7/2−) 729.4
9/2+ 402.6
7/2− 351.7
9/2− 317.8
11/2+ 275.7 0.78 μs 5
9/2− 260.5
5/2− 222.4
7/2− 198.1
3/2− 127.9
7/2− 102.3 3.0 μs 4
5/2− 97.4
3/2− 37.4
1/2− 0.0 93.6 d 5
1966.5 1.4
1876.0 E1 6.4
1804.9 E1 5.9
1779.8 5.4&
1652.2 0.7
1870.0 E1 17.2
1779.8 5.4&
1709.6 4.9
1685.0 4.3
1178.1 1.0
1828.8 E1 144
1768.0 1.0
1738.4 E1 34.4
1668.3 E1 52.0
1732.2 E1 39.4
1641.8 16.6
1571.6 3.8
1418.1 7.7
1040.7
691.9 6.0
601.3 2.0
507.0 (M1) 9.7
377.6 (M1) 3.0
300.3 E1 9.3
142.1 [E1] 0.6
126.9 M1+E2 12
314.2 [E2] 12.9
254.2 M1+E2 190
223.8 E2 30
153.5 M1+E2 29
129.4 (E2+M1)
33.85 (M1) 0.18
220.4 E2 16.7
119.65 M1+E2 0.76
15.2
158.2 M1+E2 34
222.3 (E2) 23.9
185.0 M1(+E2) 12.3
124.95 (M1) 0.47
94.5 M1+E2 5.7
24.20 M1+E2 0.26
160.7 E2 25
100.75 M1+E2 35
127.9 M1 10
90.45 M1(+E2) 18.6
30.4 (M1) 0.30
64.9
4.9
97.4 E2 60
60.0 M1+E2 82
37.4 M1+E2 49
$^{185}_{76}Os_{109}$