Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

Q(β^-)=−7.49×10^3 *3*; S(n)=8506 *24*; S(p)=3609 *22*; Q(α)=3505 *19* 2017Wa10
Q(ε)=5356 *18*; S(2n)=2.067×10^4 *24*; S(2p)=5148 *22*; Q(εp)=3754 *17* 2017Wa10
Additional information 1.
Nuclear structure calculations: 2005Od03, 1996Lo01.

^{151}Er Levels

Cross Reference (XREF) Flags

A	^{151}Er IT decay (0.58 s)	D	^{151}Tm ε decay (6.6 s)
B	^{151}Er IT decay (0.42 μs)	E	^{155}Yb α decay (1.793 s)
C	^{151}Tm ε decay (4.17 s)		

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	XREF	Comments
0.0	(7/2$^-$)	23.5 s *20*	ABCDE	%ε+%β^+=100 T$_{1/2}$: weighted average of 23 s *2* (1970To16), 21 s *4* (1982Ba75) and 24.6 s *20* (1988Ba02). J$^\pi$: probable configuration=$\nu f_{7/2}$ (1997Co24) from systematics.
801.52 *14*	(9/2$^-$)		ABC	J$^\pi$: from analogy to the decay of ^{147}Tb and ^{149}Ho. It is supported also by log *ft*≈4.6 from (11/2$^-$) parent. Configuration=$\nu h_{9/2}$ (1997Co24).
984.1 *4*	(3/2$^-$)		D	J$^\pi$: probable configuration=$\pi p_{3/2}$.
1140.35 *14*	(13/2$^+$)	10 ns *3*	ABC	J$^\pi$: (E3) γ to (7/2$^-$). T$_{1/2}$: from pulsed beam γ(t) in (1980Ja16). Configuration=($\nu f_{7/2}\otimes 3^-$)+$\nu i_{13/2}$ (1997Co24).
1206.2 *6*	(1/2$^-$)		D	J$^\pi$: γ to (3/2$^-$), possible β feeding from (1/2$^+$) parent.
1495.50 *19*	(9/2$^-$)		A C	J$^\pi$: γ to (7/2$^-$); possible configuration=$\nu f_{7/2}\otimes 2^+$ (1997Co24). But possible γ to (13/2$^+$) disfavors this assignment.
1511.5 *3*	(3/2$^-$ to 11/2$^-$)		C	J$^\pi$: γ to (7/2$^-$).
1548.55 *17*	(11/2$^-$)		A C	J$^\pi$: γ to (7/2$^-$); possible configuration=$\nu f_{7/2}\otimes 2^+$ (1997Co24).
1683.6 *3*	(3/2$^-$ to 11/2$^-$)		C	J$^\pi$: γ to (7/2$^-$).
1720.94 *16*	(11/2$^+$)		A C	J$^\pi$: (M1) γ to (13/2$^+$); γ to (9/2$^-$); possible configuration=$\nu f_{7/2}\otimes 3^-$ (1997Co24).
2032.4? *8*	(1/2,3/2)[#]		D	
2075.25 *16*	(13/2$^+$)		A C	J$^\pi$: (M1) γ to (11/2$^+$).
2165.1 *4*			C	
2174.4 *5*			C	
2212.47 *18*	(15/2$^+$)		A C	J$^\pi$: (M1) γ to (13/2$^+$); γ from (17/2$^+$). But possible γ's to (9/2$^-$) and (7/2$^-$) are inconsistent with 15/2$^+$ assignment.
2239.63 *22*	(17/2$^+$)		AB	J$^\pi$: E2 γ to (13/2$^+$); configuration=$\nu f_{7/2}\otimes 5^-$ (1997Co24).
2313.6 *10*			C	
2329.6 *10*			C	
2449.4 *4*			C	
2451.1 *6*			C	
2528.3 *3*	(21/2$^+$)		AB	J$^\pi$: E2 γ to (17/2$^+$); probable configuration=$\nu f_{7/2}\otimes 7^-$ (1997Co24).
2586.0 *5*	(27/2$^-$)	0.58 s *2*	AB	%ε+%β^+=4.7 *4*; %IT=95.3 *4* (1988Ba02) %ε+%β^+: From I(γ+ce)(1140γ+338γ) and average I(γ+ce) of 789γ, 597γ and 297γ. Same value was given by 1988Ba02. J$^\pi$: E3 γ to (21/2$^+$); configuration=$\pi h^2_{11/2}\otimes\nu f_{7/2}$ (1997Co24). T$_{1/2}$: weighted average of 0.57 s *1* (1988Ba02) and 0.62 s *2* (1980Ja16). T$_{1/2}$: Half-life of fully-ionized atom (^{151}Er^{68+})=19 s *3* (2003Li42). The

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{151}Er Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
				ions of ^{151}Er were produced in the fragmentation of ^{209}Bi beam at 900 MeV/nucleon followed by mass separation using fragment-recoil separator and storing the fragments in cooler ring (ESR) at GSI facility.
2611.3 *4*			C	
2621.5 *7*	$(1/2^+,3/2^+)$#		D	
2776.2 *5*			C	
2874.8 *4*			C	
2916.6 *3*	$(11/2^-,13/2^-)$		C	Jπ: γ's to $(9/2^-)$ and $(13/2^+)$; probable allowed ε feeding from $(11/2^-)$.
2921.4 *4*			C	
2966.1 *21*	$(1/2^+,3/2^+)$#		D	
3031.19 *22*	$(11/2^-,13/2^-)$		C	Jπ: γ's to $(9/2^-)$ and $(13/2^+)$; probable allowed ε feeding from $(11/2^-)$.
3037.3 *3*	$(9/2^-,11/2^-)$		C	Jπ: γ to $(7/2^-)$ and probable allowed ε feeding from $(11/2^-)$.
3051.1 *21*	$(1/2^+,3/2^+)$#		D	
3094.1 *8*			C	
3110 *3*			C	
3212.5 *6*	$(9/2^+,11/2,13/2^-)$		C	Jπ: γ's to $(9/2^-)$ and $(13/2^+)$.
3270.5 *5*			C	
3288.3 *6*			C	
3341 *3*			C	
3685.9 *6*	$(31/2^-)$		B	Jπ: E2 γ to $(27/2^-)$.
3766.8 *8*			C	
3901.5 *6*	$(33/2^-)$		B	Jπ: M1 γ to $(31/2^-)$.
4189.8 *7*	$(33/2$ to $37/2^-)$		B	Jπ: γ to $(33/2^-)$.
4455.2 *7*	$(37/2^-)$		B	Jπ: E2 γ to $(33/2^-)$.
4618.1 *7*	$(39/2^-)$		B	Jπ: M1 γ to $(37/2^-)$; probable configuration= $\pi(h^4_{11/2})_{16+}\otimes\nu f_{7/2}$ (2000Fo15).
4752.2 *8*	$(41/2^-)$		B	Jπ: M1 γ to $(39/2^-)$.
5130.1 *8*	$(43/2^+)$		B	Jπ: E1 γ to $(41/2^-)$.
5804.4 *8*	$(41/2$ to $45/2^-)$		B	Jπ: γ's to $(43/2^+)$ and $(41/2^-)$.
6131.8 *8*	$(45/2^+)$		B	Jπ: M1 γ to $(43/2^+)$.
6548.0 *9*	$(47/2^-)$		B	Jπ: E1 γ to $(45/2^+)$.
6664.3 *9*	$(49/2^-)$		B	Jπ: M1 γ to $(47/2^-)$.
6771.8 *9*	$(51/2^+,53/2^-)$		B	Jπ: γ from $(55/2^+)$; γ to $(49/2^-)$.
7441.3 *9*	$(53/2^-)$		B	Jπ: E2 γ to $(49/2^-)$.
8016.0 *9*	$(55/2^+)$		B	Jπ: E1 γ to $(53/2^-)$.
8380.3 *10*	$(57/2^+)$		B	Jπ: M1 γ to $(55/2^+)$.
9046.2 *10*	$(57/2$ to $61/2^+)$		B	Jπ: γ to $(57/2^+)$.
9392.0 *10*	$(61/2^+)$		B	Jπ: E2 γ to $(57/2^+)$.
10286.6 *10*	$(67/2^-)$	0.42 μs *5*	B	%IT=100 Jπ: (E3) γ to $(61/2^+)$. $T_{1/2}$: recoil-shadow method with a pulsed (^{40}Ca) beam (1990An25).

† From least-squares fit to Eγ's, assuming Δ(Eγ)=0.3 keV when not stated.

‡ From shell-model consideration and analogy to ^{149}Dy. For levels populated in ^{151}Tm ε decay (4.17 s), J=9/2, 11/2 or 13/2 from the parent state $J^\pi=(11/2^-)$. For probable shell-model configurations see 1988Ba02 and 1997Co24.

The β transition from $(1/2^+)$ parent state is possibly allowed.

Adopted Levels, Gammas (continued)

$\gamma(^{151}Er)$

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[‡]	α[@]	Comments
801.52	(9/2⁻)	801.6 2	100	0.0	(7/2⁻)			
984.1	(3/2⁻)	984.1 4	100	0.0	(7/2⁻)			
1140.35	(13/2⁺)	338.5 2	1.1 3	801.52	(9/2⁻)	(M2)	0.372	B(M2)(W.u.)=0.34 14 α(K)=0.301 5; α(L)=0.0555 8; α(M)=0.01266 18; α(N+..)=0.00341 5 α(N)=0.00296 5; α(O)=0.000423 6; α(P)=2.20×10^{-5} 4
		1140.2 2	100	0.0	(7/2⁻)	E3	0.00539	B(E3)(W.u.)=36 11 α(K)=0.00440 7; α(L)=0.000771 11; α(M)=0.0001742 25; α(N+..)=4.66×10^{-5} 7 α(N)=4.04×10^{-5} 6; α(O)=5.67×10^{-6} 8; α(P)=2.66×10^{-7} 4; α(IPF)=2.46×10^{-7} 4
1206.2	(1/2⁻)	222.1 4	100	984.1	(3/2⁻)	[M1,E2]	0.24 7	α(K)=0.19 7; α(L)=0.041 4; α(M)=0.0095 12; α(N+..)=0.0025 3 α(N)=0.0022 3; α(O)=0.000292 13; α(P)=1.1×10^{-5} 5
1495.50	(9/2⁻)	354.2[#&] 6	5.7 18	1140.35	(13/2⁺)			
		692.8[#&] 7	9.0 8	801.52	(9/2⁻)			
		1495.8 4	100 10	0.0	(7/2⁻)			
1511.5	(3/2⁻ to 11/2⁻)	1511.5 3	100	0.0	(7/2⁻)			
1548.55	(11/2⁻)	408.3[#&] 3	4.3 5	1140.35	(13/2⁺)			
		1548.5 3	100 10	0.0	(7/2⁻)			
1683.6	(3/2⁻ to 11/2⁻)	1683.5 4	100	0.0	(7/2⁻)			
1720.94	(11/2⁺)	225.1 2	16 3	1495.50	(9/2⁻)	[E1]	0.0382	
		580.5 2	100 11	1140.35	(13/2⁺)	(M1)	0.0238	α(K)=0.0201 3; α(L)=0.00289 4; α(M)=0.000639 9; α(N+..)=0.0001720 25 α(N)=0.0001491 21; α(O)=2.16×10^{-5} 3; α(P)=1.213×10^{-6} 17
		919.3 2	17 3	801.52	(9/2⁻)			
2032.4?	(1/2,3/2)	1048.3[&] 6	100	984.1	(3/2⁻)			
2075.25	(13/2⁺)	353.8 2	20 5	1720.94	(11/2⁺)	(M1)	0.0859	α(K)=0.0724 11; α(L)=0.01059 15; α(M)=0.00234 4; α(N+..)=0.000630 9 α(N)=0.000546 8; α(O)=7.92×10^{-5} 12; α(P)=4.41×10^{-6} 7 I_γ: 88 in ^{151}Er IT decay (0.58 s).
		526.8 2	100 5	1548.55	(11/2⁻)			
		935.0 2	18 4	1140.35	(13/2⁺)			I_γ: 44 in ^{151}Er IT decay (0.58 s).
2165.1		1363.6 3	100	801.52	(9/2⁻)			
2174.4		1372.9 4	100	801.52	(9/2⁻)			
2212.47	(15/2⁺)	136.9 2	75 10	2075.25	(13/2⁺)	(M1)	1.162	α(K)=0.975 15; α(L)=0.1457 22; α(M)=0.0323 5; α(N+..)=0.00869 13 α(N)=0.00754 11; α(O)=0.001090 16; α(P)=6.01×10^{-5} 9 Iγ(136.9)/Iγ(1071.4)=40/24 in ^{151}Er IT decay (0.58 s).
		718.0[#&] 4	208 21	1495.50	(9/2⁻)			
		1071.3 10	100 19	1140.35	(13/2⁺)			

γ(^{151}Er) (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.‡	α@	Comments
2212.47	(15/2+)	1411.4#& *2*	177 *27*	801.52	(9/2−)			
2239.63	(17/2+)	28		2212.47	(15/2+)	[M1]	19.2	α(L)=14.96 *21*; α(M)=3.32 *5*; α(N+..)=0.892 *13* α(N)=0.774 *11*; α(O)=0.1117 *16*; α(P)=0.00612 *9* E_γ,α: proposed only in ^{151}Er IT decay (0.58 s), 1 keV uncertainty assumed for α.
		1098.9 *2*	100	1140.35	(13/2+)	E2	0.00277	α(K)=0.00233 *4*; α(L)=0.000349 *5*; α(M)=7.74×10^{-5} *11*; α(N+..)=2.07×10^{-5} *3* α(N)=1.80×10^{-5} *3*; α(O)=2.56×10^{-6} *4*; α(P)=1.326×10^{-7} *19*
2313.6		2313.6 *10*	100	0.0	(7/2−)			
2329.6		2329.6 *10*	100	0.0	(7/2−)			
2449.4		765.8 *4*	42 *2*	1683.6	(3/2− to 11/2−)			
		2449.5 *6*	100 *10*	0.0	(7/2−)			
2451.1		2451.1 *6*	100	0.0	(7/2−)			
2528.3	(21/2+)	288.7 *2*	100	2239.63	(17/2+)	E2	0.0776	α(K)=0.0563 *8*; α(L)=0.01646 *24*; α(M)=0.00386 *6*; α(N+..)=0.000998 *15* α(N)=0.000882 *13*; α(O)=0.0001129 *16*; α(P)=2.88×10^{-6} *4*
2586.0	(27/2−)	57.7	100	2528.3	(21/2+)	E3	1.28×10^3	B(E3)(W.u.)=0.54 *5* Mult.: from fitting of observed ce(L) lines with theoretical subshell intensity ratios (1988Ba02).
2611.3		1809.8 *3*	100	801.52	(9/2−)			
2621.5	(1/2+,3/2+)	1637.4 *5*	100	984.1	(3/2−)			
2776.2		1092.7 *4*	100 *16*	1683.6	(3/2− to 11/2−)			
		1635.5 *8*	110 *63*	1140.35	(13/2+)			
2874.8		1326.2 *5*	100 *10*	1548.55	(11/2−)			
		2073.3 *6*	67 *30*	801.52	(9/2−)			
2916.6	(11/2−,13/2−)	1368.0 *4*	5.6 *6*	1548.55	(11/2−)			
		1777.1 *10*	6 *2*	1140.35	(13/2+)			
		2115.1 *3*	100 *5*	801.52	(9/2−)			
2921.4		1199.0 *10*	14 *7*	1720.94	(11/2+)			
		2120.1 *4*	100 *6*	801.52	(9/2−)			
		2921.7 *25*	44 *11*	0.0	(7/2−)			
2966.1	(1/2+,3/2+)	1982 *2*	100	984.1	(3/2−)			
3031.19	(11/2−,13/2−)	818.6 *10*	13 *2*	2212.47	(15/2+)			
		956.1 *7*	6.1 *11*	2075.25	(13/2+)			
		1483.0 *7*	19 *5*	1548.55	(11/2−)			
		1535.6 *3*	52 *11*	1495.50	(9/2−)			
		1890.8 *3*	73 *5*	1140.35	(13/2+)			
		2229.7 *4*	100 *16*	801.52	(9/2−)			
3037.3	(9/2−,11/2−)	1488.5 *4*	60 *16*	1548.55	(11/2−)			
		1525.9 *4*	72 *16*	1511.5	(3/2− to 11/2−)			
		2236.0 *4*	100 *16*	801.52	(9/2−)			

Adopted Levels, Gammas (continued)

γ(^{151}Er) (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.‡	α@	Comments
3037.3	(9/2⁻,11/2⁻)	3037.5 *25*	64 *12*	0.0	(7/2⁻)			
3051.1	(1/2⁺,3/2⁺)	2067 *2*	100	984.1	(3/2⁻)			
3094.1		1953.7 *7*	100	1140.35	(13/2⁺)			
3110		3110 *3*	100	0.0	(7/2⁻)			
3212.5	(9/2⁺,11/2,13/2⁻)	2071.7 *7*	100 *40*	1140.35	(13/2⁺)			
		2411.9 *10*	44 *14*	801.52	(9/2⁻)			
3270.5		1549.6 *9*	100 *10*	1720.94	(11/2⁺)			
		1586.5 *6*	40 *20*	1683.6	(3/2⁻ to 11/2⁻)			
		2469.7 *9*	21 *3*	801.52	(9/2⁻)			
3288.3		1123.2 *4*	100	2165.1				
3341		2539.2 *25*	100	801.52	(9/2⁻)			
3685.9	(31/2⁻)	1099.9		2586.0	(27/2⁻)	E2	0.00277	α(K)=0.00232 *4*; α(L)=0.000348 *5*; α(M)=7.72×10⁻⁵ *11*; α(N+..)=2.06×10⁻⁵ *3* α(N)=1.79×10⁻⁵ *3*; α(O)=2.56×10⁻⁶ *4*; α(P)=1.324×10⁻⁷ *19*
3766.8		850.1 *7*	100	2916.6	(11/2⁻,13/2⁻)			
3901.5	(33/2⁻)	215.6		3685.9	(31/2⁻)	M1	0.327	α(K)=0.275 *4*; α(L)=0.0407 *6*; α(M)=0.00903 *13*; α(N+..)=0.00243 *4* α(N)=0.00211 *3*; α(O)=0.000305 *5*; α(P)=1.685×10⁻⁵ *24*
4189.8	(33/2 to 37/2⁻)	288.3		3901.5	(33/2⁻)			
4455.2	(37/2⁻)	553.6		3901.5	(33/2⁻)	E2	0.01271	α(K)=0.01023 *15*; α(L)=0.00193 *3*; α(M)=0.000438 *7*; α(N+..)=0.0001156 *17* α(N)=0.0001012 *15*; α(O)=1.382×10⁻⁵ *20*; α(P)=5.71×10⁻⁷ *8*
4618.1	(39/2⁻)	162.9		4455.2	(37/2⁻)	M1	0.712	α(K)=0.598 *9*; α(L)=0.0891 *13*; α(M)=0.0198 *3*; α(N+..)=0.00531 *8* α(N)=0.00461 *7*; α(O)=0.000666 *10*; α(P)=3.68×10⁻⁵ *6*
		428.3		4189.8	(33/2 to 37/2⁻)			
4752.2	(41/2⁻)	134.1		4618.1	(39/2⁻)	M1	1.232	α(K)=1.034 *15*; α(L)=0.1545 *22*; α(M)=0.0343 *5*; α(N+..)=0.00921 *13* α(N)=0.00799 *12*; α(O)=0.001156 *17*; α(P)=6.37×10⁻⁵ *9*
5130.1	(43/2⁺)	378.1		4752.2	(41/2⁻)	E1	0.01059	α(K)=0.00896 *13*; α(L)=0.001275 *18*; α(M)=0.000281 *4*; α(N+..)=7.47×10⁻⁵ *11* α(N)=6.50×10⁻⁵ *10*; α(O)=9.20×10⁻⁶ *13*; α(P)=4.71×10⁻⁷ *7*
5804.4	(41/2 to 45/2⁻)	674.3		5130.1	(43/2⁺)			
		1052.0		4752.2	(41/2⁻)			
6131.8	(45/2⁺)	327.4		5804.4	(41/2 to 45/2⁻)			
		1001.8		5130.1	(43/2⁺)	M1	0.00614	α(K)=0.00520 *8*; α(L)=0.000734 *11*; α(M)=0.0001618 *23*; α(N+..)=4.35×10⁻⁵ *6* α(N)=3.77×10⁻⁵ *6*; α(O)=5.49×10⁻⁶ *8*; α(P)=3.10×10⁻⁷ *5*
6548.0	(47/2⁻)	416.1		6131.8	(45/2⁺)	E1	0.00847	α(K)=0.00717 *10*; α(L)=0.001014 *15*; α(M)=0.000223 *4*; α(N+..)=5.94×10⁻⁵ *9* α(N)=5.17×10⁻⁵ *8*; α(O)=7.34×10⁻⁶ *11*; α(P)=3.80×10⁻⁷ *6*
6664.3	(49/2⁻)	116.3		6548.0	(47/2⁻)	M1	1.85	α(K)=1.550 *22*; α(L)=0.232 *4*; α(M)=0.0515 *8*;

$^{151}_{68}Er_{83}$-5

γ(^{151}Er) (continued)

E_i(level)	J^π_i	E_γ†	E_f	J^π_f	Mult.‡	α@	Comments
							α(N+..)=0.01384 *20* α(N)=0.01200 *17*; α(O)=0.001735 *25*; α(P)=9.56×10^{-5} *14*
6664.3	(49/2$^-$)	532.5	6131.8	(45/2$^+$)			
6771.8	(51/2$^+$,53/2$^-$)	107.5	6664.3	(49/2$^-$)			
7441.3	(53/2$^-$)	777.0	6664.3	(49/2$^-$)	E2	0.00575	α(K)=0.00475 *7*; α(L)=0.000780 *11*; α(M)=0.0001750 *25*; α(N+..)=4.65×10^{-5} *7* α(N)=4.05×10^{-5} *6*; α(O)=5.67×10^{-6} *8*; α(P)=2.69×10^{-7} *4*
8016.0	(55/2$^+$)	574.7	7441.3	(53/2$^-$)	E1	0.00413	α(K)=0.00350 *5*; α(L)=0.000486 *7*; α(M)=0.0001069 *15*; α(N+..)=2.85×10^{-5} *4* α(N)=2.48×10^{-5} *4*; α(O)=3.54×10^{-6} *5*; α(P)=1.89×10^{-7} *3*
		1244.1	6771.8	(51/2$^+$,53/2$^-$)			
8380.3	(57/2$^+$)	364.3	8016.0	(55/2$^+$)	M1	0.0796	α(K)=0.0670 *10*; α(L)=0.00979 *14*; α(M)=0.00217 *3*; α(N+..)=0.000583 *9* α(N)=0.000505 *7*; α(O)=7.32×10^{-5} *11*; α(P)=4.08×10^{-6} *6*
9046.2	(57/2 to 61/2$^+$)	665.9	8380.3	(57/2$^+$)			
9392.0	(61/2$^+$)	345.8	9046.2	(57/2 to 61/2$^+$)			
		1011.7	8380.3	(57/2$^+$)	E2	0.00328	α(K)=0.00274 *4*; α(L)=0.000419 *6*; α(M)=9.32×10^{-5} *13*; α(N+..)=2.49×10^{-5} *4* α(N)=2.16×10^{-5} *3*; α(O)=3.07×10^{-6} *5*; α(P)=1.563×10^{-7} *22*
10286.6	(67/2$^-$)	894.6	9392.0	(61/2$^+$)	(E3)	0.00957	α(K)=0.00761 *11*; α(L)=0.001520 *22*; α(M)=0.000348 *5*; α(N+..)=9.21×10^{-5} *13* α(N)=8.05×10^{-5} *12*; α(O)=1.107×10^{-5} *16*; α(P)=4.66×10^{-7} *7*

† From individual datasets for most cases. Only ten levels (all below 2600 keV) are populated in more than one dataset. Here averages are taken for energies and intensities.

‡ From ce data in ^{151}Er IT decay (0.42 μs), some of the assignments are from ce data in ^{151}Er IT decay (0.58 s).

γ not reported by 1997Co24 in ^{151}Er IT decay (0.58 s) study. 1997Co24 state that some of the γ-transition placements by 1990Ak01 are in conflict with their work. Apparently, the details of work by 1997Co24 are given only in a thesis by R. Collatz, KFA Julich (1994) (reference 8 in 1997Co24). This thesis is not available to the evaluator.

@ 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.

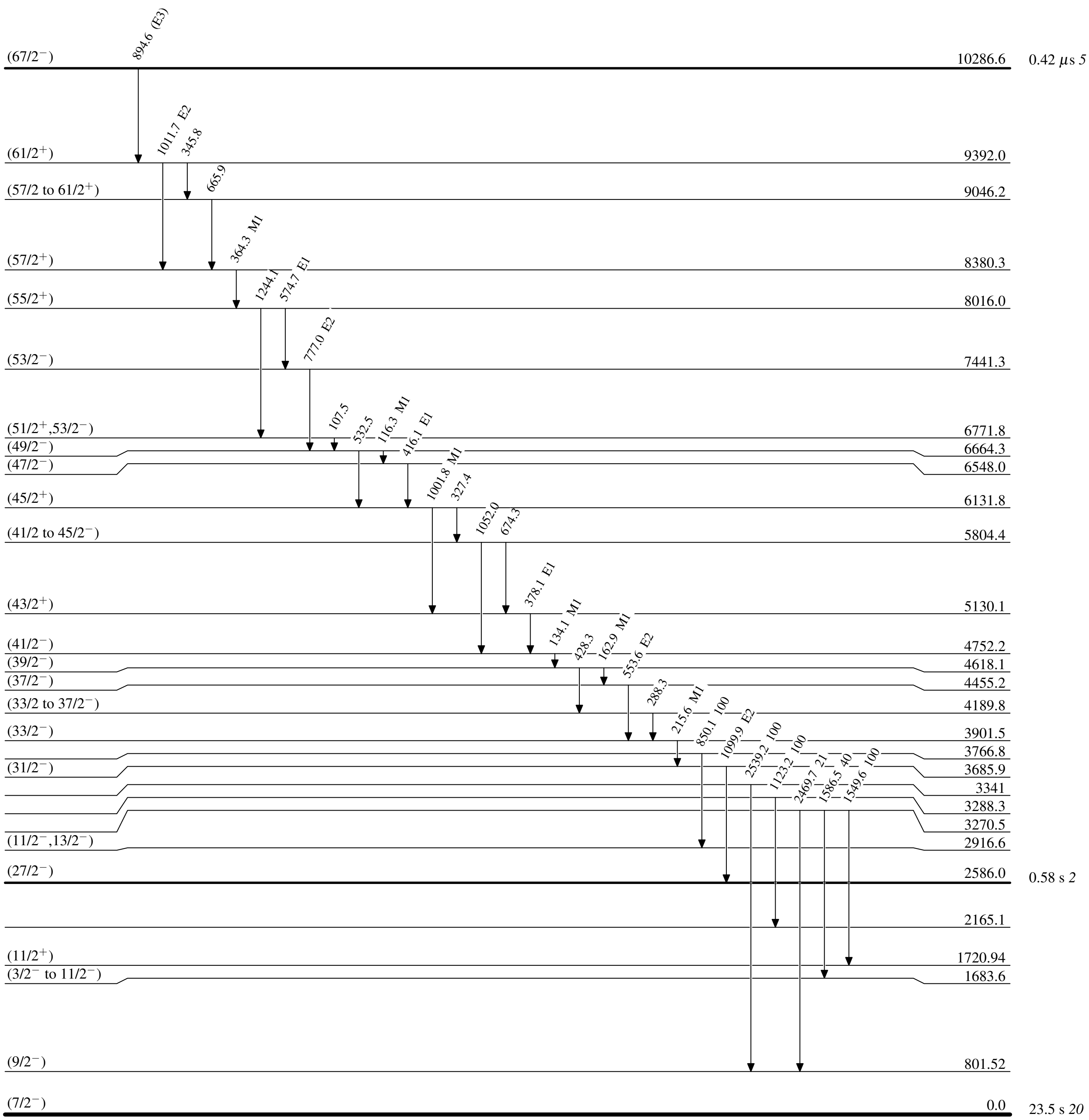
& Placement of transition in the level scheme is uncertain.

$^{151}_{68}Er_{83}$-6

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{151}_{68}Er_{83}$

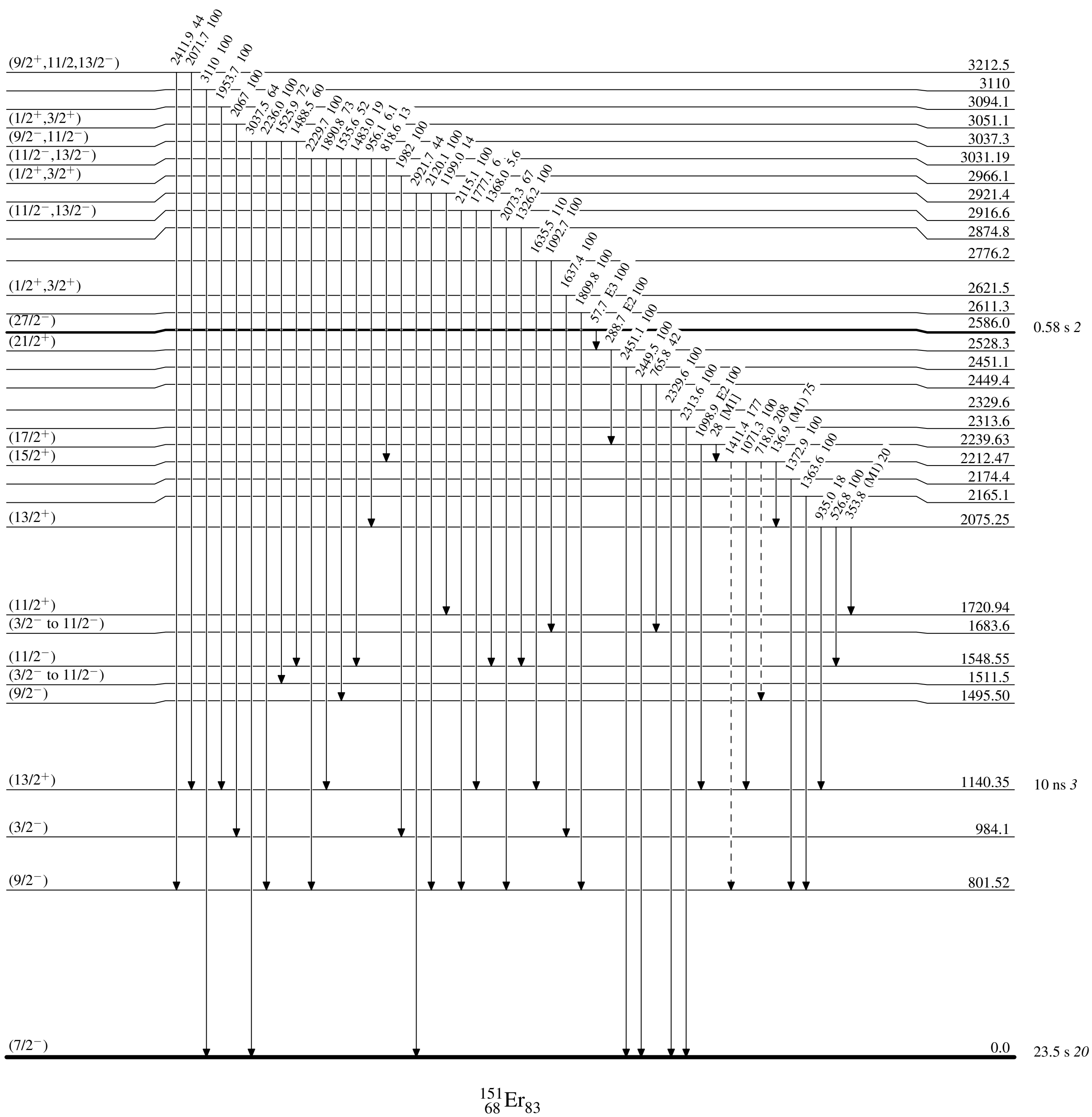
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level