^{168}Er(γ,γ'), (γ,pol γ') 1996Ma18,1973Me17,1976Me04

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111, 1807 (2010)	15-Jun-2010

Others: 1991Zi01 (B(E1)(↑)(1786 level)).

1973Me17, 1976Me04: Eγ=1.6-4.2 MeV brehmsstrahlung endpoint energy; natural Er metal, enriched (95.47% ^{168}Er) Er oxide targets; measured γ-ray yields at 98°, 127° (Ge(Li)), angular distributions, linear polarization of resonantly scattered radiation (two Ge(Li) slabs), radiative widths; reported a few transitions possibly corresponding to other excited levels.

1996Ma18: bremsstrahlung endpoint energy=4.10 MeV; 98.2% ^{168}Er metal target; HPGe detector, 3 Ge detectors, true-coaxial HPGe Compton polarimeter with 8-crystal BGO Compton shield; θ=95°, 127°; measured Eγ, integrated cross section, γ anisotropy, γ polarization; deduced Γ_0, $\Gamma^2_{\gamma0}/\Gamma$, $\Gamma_{\gamma1}/\Gamma_{\gamma0}$, J$^\pi$, K.

^{168}Er Levels

Values of K, deduced by 1996Ma18 from measured $\Gamma_{\gamma1}/\Gamma_{\gamma0}$, are given In comments on the relevant levels.

E(level)[†]	J$^\pi$[#]	$T_{1/2}$[‡]	$\Gamma^2_{\gamma0}/\Gamma$ (meV)[@]	Comments
0.0	0$^+$			J$^\pi$: from Adopted Levels.
79.8	2$^+$			E(level): rounded value from Adopted Levels. J$^\pi$: from Adopted Levels.
1786 *1*	1$^-$	3.5 fs *3*	18.1 *13*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 17.0 *17* (1976Me04), 16.2 *15* (1996Ma18), 20.1 *13* (1991Zi01, from reported $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.72 *5* and $\Gamma_{\gamma0}$=55 meV *3*). K=0 (1996Ma18). E(level): from 1973Me17.
1935 *2*	1$^-$	0.24 ps *3*	1.82 *24*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 1.5 *4* (1976Me04) and 2.0 *3* (1996Ma18). $T_{1/2}$: from $\Gamma^2_{\gamma0}/\Gamma$ and adopted branching.
2136 *2*	1$^-$	57 fs *14*	2.4 *3*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 2.1 *6* (1976Me04, if J=1) and 2.5 *4* (1996Ma18).
2342	1	0.11 ps *3*	1.5 *3*	$T_{1/2}$: assuming adopted branching (I(2262γ):I(2342γ)=67 *11*:100 *18*).
2363 *2*	1	108 fs *22*	2.7 *4*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 3.1 *5* (1976Me04) and 2.4 *5* (1996Ma18).
2417 *2*	1$^-$	20 fs *4*	2.9 *4*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 3.3 *9* (1976Me04) and 2.8 *4* (1996Ma18). π=− based on K=0 (1996Ma18).
2458	1	0.17 ps *5*	2.1 *4*	$T_{1/2}$: from $\Gamma^2_{\gamma0}/\Gamma$ and adopted branching. 0.22 ps *4* if level deexcites to g.s. only.
2495 *2*	1$^+$	37 fs *4*	6.9 *6*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 6.5 *8* (1976Me04) and 7.3 *8* (1996Ma18). K=1 (1996Ma18).
2510	1$^-$	59 fs *18*	1.15 *27*	π=− based on K=0 (1996Ma18).
2643[&]	1$^{(+)}$	70 fs *15*	3.0 *5*	K=1 (1996Ma18).
2676 *2*	1$^+$	27 fs *3*	10.1 *7*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 10.4 *11* (1976Me04) and 9.8 *10* (1996Ma18). K=1 (1996Ma18).
2694	1$^{(+)}$		1.9 *4*	$T_{1/2}$: 0.24 ps *5* if level deexcites to g.s. only.
2728 *2*	1$^+$	13.9 fs *24*	9.0 *15*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 7.6 *10* (1976Me04) and 10.7 *11* (1996Ma18).
2740	1$^-$	38 fs *6*	2.7 *4*	
2792 *2*	1$^+$	24.5 fs *17*	12.1 *8*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 12.0 *12* (1976Me04) and 12.1 *12* (1996Ma18). K=1 (1996Ma18).
2798 *2*	1$^+$	25.6 fs *21*	14.7 *11*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 13.7 *14* (1976Me04) and 16.0 *16* (1996Ma18). K=1 (1996Ma18).
2828 *2*	1$^{(+)}$	38 fs *6*	5.2 *7*	$\Gamma^2_{\gamma0}/\Gamma$: weighted average of 4.3 *9* (1976Me04) and 5.7 *7* (1996Ma18). K=1 (1996Ma18).
2835	1$^{(-)}$		3.6 *5*	$T_{1/2}$: 127 fs *18* if level deexcites to g.s. only.

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^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04 (continued)

^{168}Er Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	$\Gamma^2_{\gamma 0}/\Gamma$ (meV)[@]	Comments
2849 *2*	1^-	31 fs *4*	5.1 *6*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 5.1 *15* (1976Me04) and 5.1 *6* (1996Ma18).
2856 *2*	(2)	28 fs *5*	1.33 *20*	Jπ: (1) In 1976Me04. $\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 2.0 *7* (1976Me04, if J=2) and 1.27 *21* (1996Ma18).
2928	$1^{(+)}$	77 fs *12*	2.8 *4*	K=1 (1996Ma18).
2946 *2*	$1^{(-)}$	10.0 fs *16*	6.0 *9*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 4.6 *12* (1976Me04) and 6.6 *8* (1996Ma18). K=0 (1996Ma18).
2955	1		2.3 *4*	$T_{1/2}$: 0.20 ps *3* if level deexcites to g.s. only.
2975	1	30 fs *6*	2.9 *5*	
3044	1	69 fs *17*	2.6 *6*	K=1 (1996Ma18).
3048	1^+	25 fs *3*	6.4 *8*	
3082	1	35 fs *6*	4.0 *6*	
3095	$1^{(-)}$	27 fs *3*	7.0 *8*	K=1 (1996Ma18).
3125	1^+	31 fs *4*	6.9 *8*	K=1 (1996Ma18).
3181	1^-	77 fs *11*	7.7 *10*	K=0 (1996Ma18).
3190	1^-	21 fs *3*	8.1 *10*	
3208	$1^{(+)}$		3.0 *5*	$T_{1/2}$: 152 fs *25* if level deexcites to g.s. only.
3220	1		2.6 *5*	$T_{1/2}$: 175 fs *34* if level deexcites to g.s. only.
3242	1		2.5 *5*	$T_{1/2}$: 0.18 ps *4* if level deexcites to g.s. only.
3302	1		2.7 *6*	$T_{1/2}$: 0.17 ps *4* if level deexcites to g.s. only.
3337	(2)	73 fs *25*	1.0 *3*	
3341	$1^{(+)}$		3.7 *9*	$T_{1/2}$: 123 fs *30* if level deexcites to g.s. only.
3358 *2*	1^+	5.4 fs *4*	30.4 *24*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 31 *4* (1976Me04) and 30 *3* (1996Ma18).
3371	(2)	55 fs *11*	1.8 *3*	
3391 *1*	1^+	2.79 fs *22*	78 *6*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 78 *7* (1976Me04) and 79 *9* (1996Ma18). K=1 (1996Ma18).
3410 *2*	1^+	9.3 fs *12*	18.7 *24*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 16.6 *22* (1976Me04) and 21.4 *25* (1996Ma18).
3441	$1^{(-)}$	19 fs *4*	3.0 *6*	K=0 (1996Ma18).
3449[a]	1		10.5 *22*	$T_{1/2}$: 43 fs *9* if level deexcites to g.s. only.
3458 *2*	1^+	5.9 fs *5*	35 *3*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 37 *5* (1976Me04) and 34 *4* (1996Ma18). K=1 (1996Ma18).
3469 *2*	1^-	10.2 fs *13*	17.2 *20*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 23 *6* (1976Me04) and 16.5 *21* (1996Ma18). K=(1) (1996Ma18).
3481 *2*	1^-	3.0 fs *4*	18.7 *21*	$\Gamma^2_{\gamma 0}/\Gamma$: weighted average of 17 *5* (1976Me04) and 19.0 *23* (1996Ma18). K=0 (1996Ma18).
3505	1^-	22 fs *8*	2.9 *9*	π=− based on K=0 (1996Ma18).
3516	1^-	13.1 fs *24*	11.4 *19*	
3529[a]	1		3.8 *8*	$T_{1/2}$: 120 fs *25* if level deexcites to g.s. only.
3566	1		3.2 *7*	$T_{1/2}$: 0.14 ps *3* if level deexcites to g.s. only.
3591	$1^{(+)}$	33 fs *6*	6.3 *10*	K=1 (1996Ma18).
3598	1	17 fs *3*	10.2 *15*	K=(1) (1996Ma18).
3627	1		8.1 *16*	$T_{1/2}$: 152 fs *25* if level deexcites to g.s. only.
3634	$1^{(-)}$		6.0 *13*	$T_{1/2}$: 76 fs *16* if level deexcites to g.s. only.
3657	$1^{(+)}$	8.9 fs *11*	26 *3*	K=1 (1996Ma18).
3696	1	35 fs *8*	4.3 *9*	K=(1) (1996Ma18).
3703	1^-	5.1 fs *9*	8.4 *13*	π=− based on K=0 (1996Ma18).
3719	$1^{(-)}$	9.3 fs *24*	10.2 *23*	
3737	1		7.6 *22*	$T_{1/2}$: 60 fs *17* if level deexcites to g.s. only.
3745	$1^{(-)}$	5.3 fs *8*	13.1 *19*	K=(0) (1996Ma18).
3776	$1^{(+)}$	27 fs *5*	7.7 *14*	K=1 (1996Ma18).
3789[a]	1		16 *4*	$T_{1/2}$: 29 fs *7* if level deexcites to g.s. only.
3800	$1^{(-)}$	12 fs *3*	4.6 *10*	K=0 (1996Ma18).
3806	1^+	7.0 fs *11*	28 *4*	K=1 (1996Ma18).

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^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04 (continued)

^{168}Er Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	$\Gamma^2_{\gamma0}/\Gamma$ (meV)[@]	Comments
3814	$1^{(-)}$	10.3 fs *19*	14.6 *23*	
3869[a]	1		9.5 *17*	$T_{1/2}$: 48 fs *9* if level deexcites to g.s. only.
3912	1		8.2 *17*	$T_{1/2}$: 44 fs *9* if level deexcites to g.s. only.
3921	$1^{(-)}$	22 fs *5*	10.3 *21*	K=1 (1996Ma18).

[†] From 1976Me04 if uncertainty is stated; from 1996Ma18 if No uncertainty is given.
[‡] Deduced from measured $\Gamma^2_{\gamma0}/\Gamma$ and $\Gamma_{\gamma1}/\Gamma_{\gamma0}$, assuming $\Gamma=\Gamma_{\gamma1}+\Gamma_{\gamma0}$. thus, $T_{1/2}$ for E(level)=2363 and above will be upper limits if branches exist to levels other than the g.s. and the 80-keV level.
[#] From angular distribution, linear polarization, and radiative Γ data, except where noted.
[@] From 1996Ma18, except As noted. calculated by evaluator from integrated cross section data of 1996Ma18 assuming J indicated, unless noted otherwise.
[&] Somewhat uncertain assignment of elastic and inelastic peaks due to high level density (1996Ma18).
[a] Double peaks separated by less than 2.5 keV (1996Ma18).

γ(^{168}Er)

E_i(level)	J^π_i	E_γ[†]	I_γ[‡]	E_f	J^π_f	Mult.[#]	Comments
1786	1^-	1706	169 *3*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=1.67 *4* (1996Ma18), 1.72 *5* (1991Zi01) and 1.70 *7* (1976Me04).
		1786	100	0.0	0^+	E1	
1935	1^-	1935		0.0	0^+	E1	$\Gamma_{\gamma0}/\Gamma\approx1$ (1976Me04).
2136	1^-	2056	82 *12*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.84 *13* (1996Ma18) and 0.6 *4* (1976Me04).
		2136	100	0.0	0^+	E1	
2342	1	2342	100	0.0	0^+	D	
2363	1	2283	25 *16*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.25 *16* (1976Me04).
		2363	100	0.0	0^+	D	
2417	1^-	2337	178 *18*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=1.78 *19* (1996Ma18) and 1.8 *5* (1976Me04).
		2417	100	0.0	0^+	D	
2458	1	2458		0.0	0^+	D	
2495	1^+	2415	34 *5*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.32 *4* (1996Ma18) and 0.52 *14* (1976Me04).
		2495	100	0.0	0^+	M1	
2510	1^-	2430	160 *40*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.6 *4* (1996Ma18).
		2510	100	0.0	0^+	D	
2643	$1^{(+)}$	2563	47 *14*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.47 *14* (1996Ma18).
		2643	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
2676	1^+	2596	30 *3*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.30 *3* (1996Ma18) and 0.32 *9* (1976Me04).
		2676	100	0.0	0^+	M1	
2694	$1^{(+)}$	2694		0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
2728	1^+	2648	91 *4*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.91 *4* (1996Ma18) and 1.00 *20* (1976Me04).
		2728	100	0.0	0^+	M1	
2740	1^-	2660	110 *15*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.10 *15* (1996Ma18).
		2740	100	0.0	0^+	D	
2792	1^+	2712	24 *3*	79.8	2^+		I_γ: from $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.24 *3* (1996Ma18). Other: 0.11 *12* (1976Me04).
		2792	100	0.0	0^+	M1	
2798	1^+	2718	10.1 *18*	79.8	2^+		I_γ: from $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.101 *18* (1996Ma18). Other: 0.11 *12* (1976Me04).

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^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04 (continued)

γ(^{168}Er) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
2798	1^+	2798	100	0.0	0^+	M1	
2828	$1^{(+)}$	2748	51 *6*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.50 *6* (1996Ma18) and 0.61 *26* (1976Me04).
		2828	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
2835	$1^{(-)}$	2835		0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
2849	1^-	2769	71 *8*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.73 *7* (1996Ma18) and 0.43 *24* (1976Me04).
		2849	100	0.0	0^+	E1	
2856	(2)	2776	250 *27*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=2.4 *3* (1996Ma18) and 2.9 *6* (1976Me04).
		2856	100	0.0	0^+	(Q)	
2928	$1^{(+)}$	2848	46 *7*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.46 *7* (1996Ma18).
		2928	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
2946	$1^{(-)}$	2866	176 *10*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=1.77 *10* (1996Ma18) and 1.63 *35* (1976Me04).
		2946	100	0.0	0^+	D	
2955	1	2955		0.0	0^+	D	
2975	1	2895	128 *18*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.28 *18* (1996Ma18).
		2975	100	0.0	0^+	D	
3044	1	2964	60 *15*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.60 *15* (1996Ma18).
		3044	100	0.0	0^+	D	
3048	1^+	2968	70 *6*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.70 *6* (1996Ma18).
		3048	100	0.0	0^+	M1	
3082	1	3002	81 *11*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.81 *11* (1996Ma18).
		3082	100	0.0	0^+	D	
3095	$1^{(-)}$	3015	55 *6*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.55 *6* (1996Ma18).
		3095	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3125	1^+	3045	46 *5*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.46 *5* (1996Ma18).
		3125	100	0.0	0^+	M1	
3181	1^-	3102	178 *10*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.78 *10* (1996Ma18).
		3181	100	0.0	0^+	E1	
3190	1^-	3110	62 *6*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.62 *6* (1996Ma18).
		3190	100	0.0	0^+	E1	
3208	$1^{(+)}$	3208		0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
3220	1	3220		0.0	0^+	D	
3242	1	3242		0.0	0^+	D	
3302	1	3302		0.0	0^+	D	
3337	(2)	3257	150 *40*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.5 *4* (1996Ma18).
		3337	100	0.0	0^+	(Q)	
3341	$1^{(+)}$	3341		0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
3358	1^+	3278	66.9 *19*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.670 *19* (1996Ma18) and 0.64 *11* (1976Me04).
		3358	100	0.0	0^+	M1	
3371	(2)	3291	115 *18*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.15 *18* (1996Ma18).
		3371	100	0.0	0^+	(Q)	
3391	1^+	3311	44.7 *9*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.447 *9* (1996Ma18) and 0.45 *7* (1976Me04).
		3391	100	0.0	0^+	M1	
3410	1^+	3330	62 *4*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.61 *3* (1996Ma18) and 0.85 *17* (1976Me04).
		3410	100	0.0	0^+	M1	
3441	$1^{(-)}$	3361	180 *30*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.8 *3* (1996Ma18).
		3441	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3449	1	3449		0.0	0^+	D	
3458	1^+	3378	48.7 *19*	79.8	2^+		I_γ: from weighted average of $(\Gamma_{\gamma1}/\Gamma_{\gamma0})$=0.485 *19* (1996Ma18) and 0.59 *15* (1976Me04).

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^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04 (continued)

γ(^{168}Er) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
3458	1^+	3458	100	0.0	0^+	M1	
3469	1^-	3389	61 *7*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.61 *7* (1996Ma18).
		3469	100	0.0	0^+	E1	
3481	1^-	3401	184 *9*	79.8	2^+		I_γ: from weighted average of ($\Gamma_{\gamma1}/\Gamma_{\gamma0}$)=1.86 *8* (1996Ma18) and 1.4 *4* (1976Me04).
		3481	100	0.0	0^+	E1	
3505	1^-	3425	170 *50*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.7 *5* (1996Ma18).
		3505	100	0.0	0^+	D	
3516	1^-	3436	75 *8*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.75 *8* (1996Ma18).
		3516	100	0.0	0^+	E1	
3529	1	3529		0.0	0^+	D	
3566	1	3566		0.0	0^+	D	
3591	$1^{(+)}$	3511	48 *8*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.48 *8* (1996Ma18).
		3591	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
3598	1	3518	62 *9*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.62 *9* (1996Ma18).
		3598	100	0.0	0^+	D	
3627	1	3627		0.0	0^+	D	
3634	$1^{(-)}$	3634		0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3657	$1^{(+)}$	3577	40 *3*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.40 *3* (1996Ma18).
		3657	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
3696	1	3616	75 *15*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.75 *15* (1996Ma18).
		3696	100	0.0	0^+	D	
3703	1^-	3623	227 *20*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=2.27 *20* (1996Ma18).
		3703	100	0.0	0^+	E1	
3719	$1^{(-)}$	3639	119 *21*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.19 *21* (1996Ma18).
		3719	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3737	1	3737		0.0	0^+	D	
3745	$1^{(-)}$	3665	157 *10*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.57 *10* (1996Ma18).
		3745	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3776	$1^{(+)}$	3696	47 *8*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.47 *8* (1996Ma18).
		3776	100	0.0	0^+	D	Mult.: Δπ=(No) (1996Ma18).
3789	1	3789		0.0	0^+	D	
3800	$1^{(-)}$	3720	190 *40*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=1.9 *4* (1996Ma18).
		3800	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3806	1^+	3726	53 *4*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.53 *4* (1996Ma18).
		3806	100	0.0	0^+	M1	
3814	$1^{(-)}$	3734	74 *10*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.74 *10* (1996Ma18).
		3814	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).
3869	1	3869		0.0	0^+	D	
3912	1	3912		0.0	0^+	D	
3921	$1^{(-)}$	3841	42 *8*	79.8	2^+		I_γ: from $\Gamma_{\gamma1}/\Gamma_{\gamma0}$=0.42 *8* (1996Ma18).
		3921	100	0.0	0^+	D	Mult.: Δπ=(yes) (1996Ma18).

[†] From level energy difference.

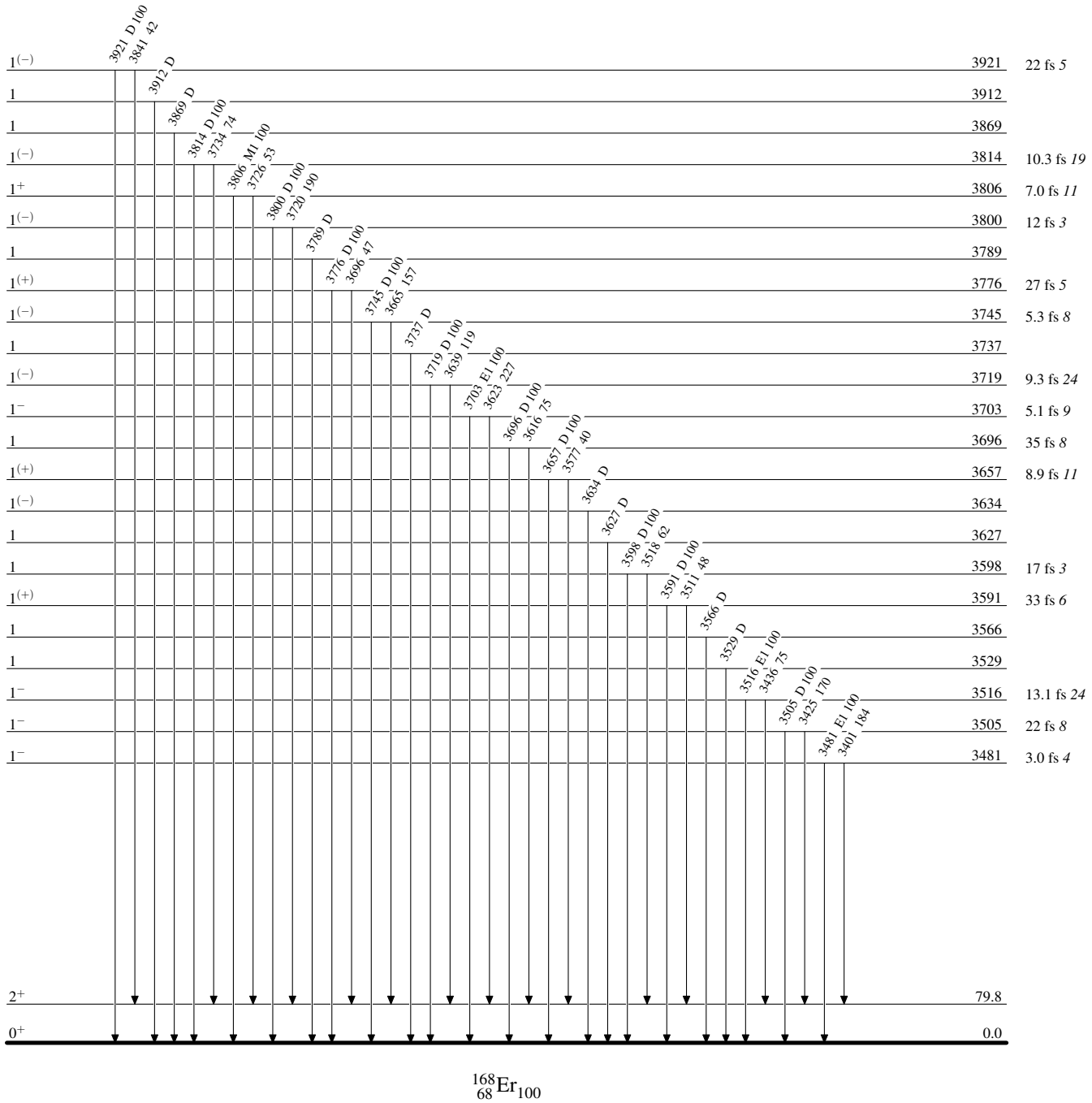
[‡] Relative branching based on ($\Gamma_{\gamma1}/\Gamma_{\gamma0}$) calculated by evaluator from experimental R=($\Gamma_{\gamma1}/\Gamma_{\gamma0}$)($E_{\gamma0}/E_{\gamma1}$)^3 In 1996Ma18, except As noted. values of $\Gamma_{\gamma1}/\Gamma_{\gamma0}$ are given In comments.

[#] ΔJ from γ anisotropy, Δπ from γ linear polarization (1996Ma18).

^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04

Level Scheme

Intensities: Relative photon branching from each level

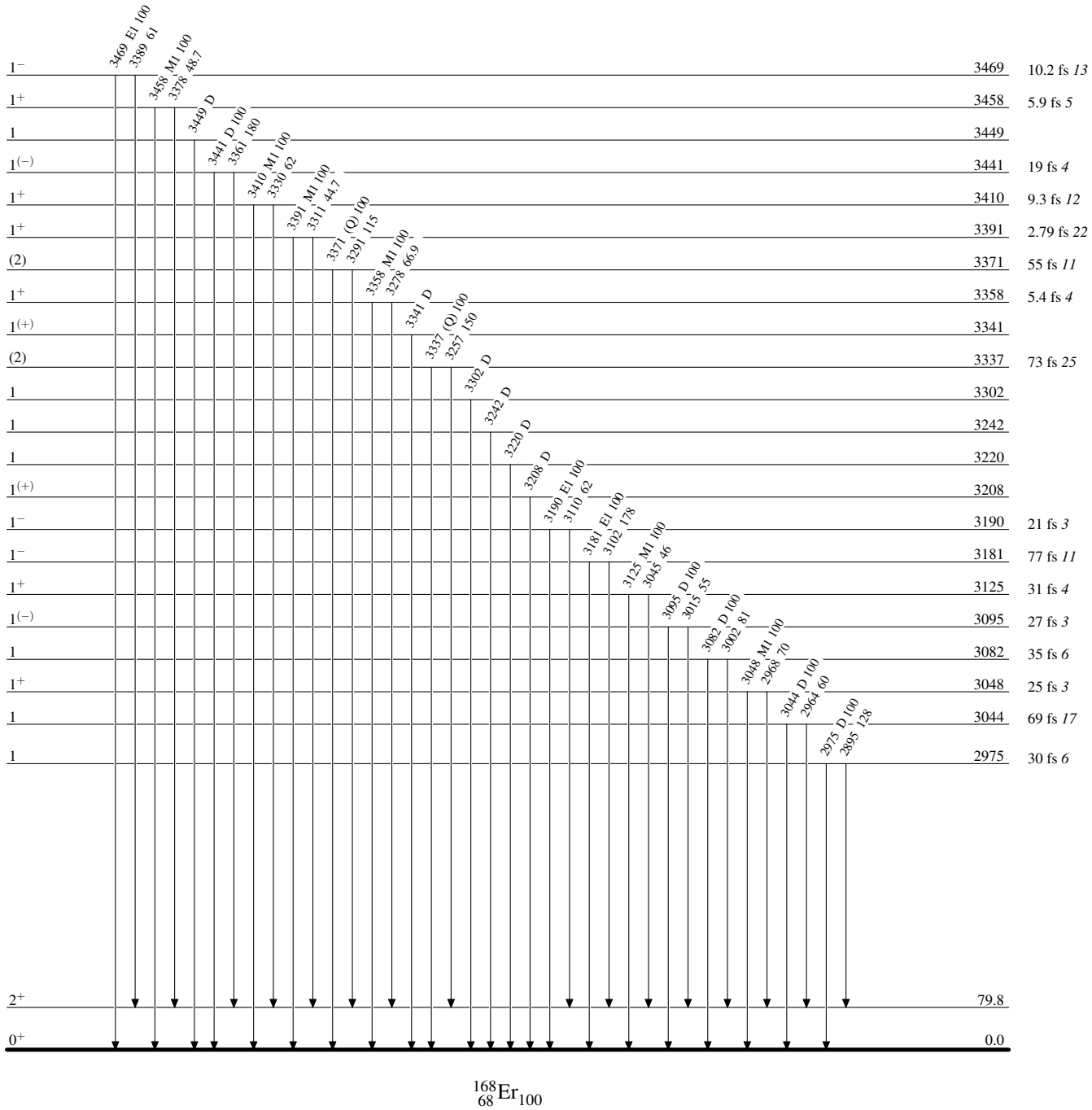


$^{168}_{68}Er_{100}$

^{168}Er(γ,γ'), (γ,pol γ') 1996Ma18,1973Me17,1976Me04

Level Scheme (continued)

Intensities: Relative photon branching from each level

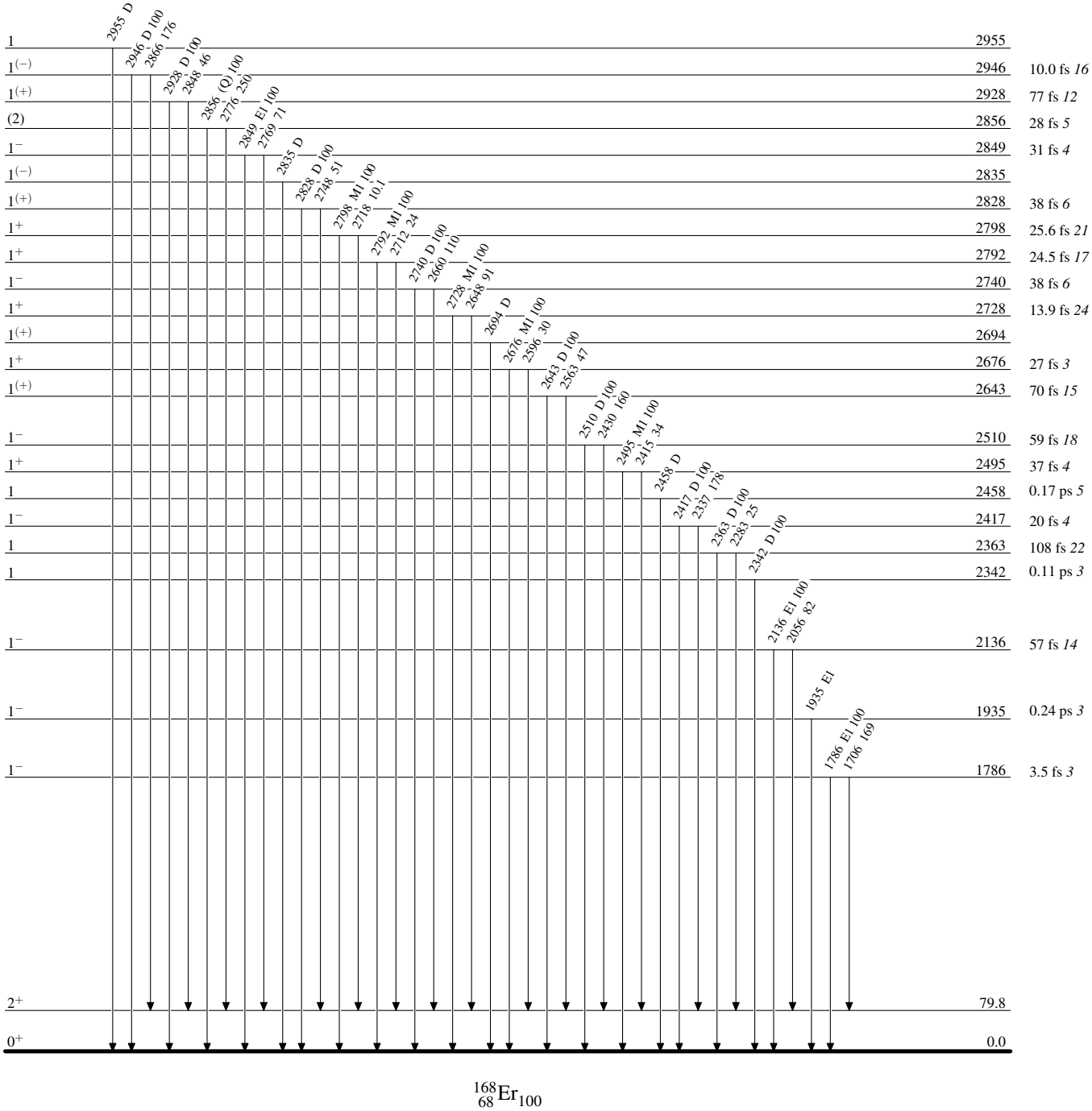


$^{168}_{68}Er_{100}$

^{168}Er(γ,γ′), (γ,pol γ′) 1996Ma18,1973Me17,1976Me04

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{168}_{68}Er_{100}$