

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 108,2173 (2007)	1-Oct-2006

$Q(\beta^-) = -5512$ 18; $S(n) = 8457$ 17; $S(p) = 5533$ 17; $Q(\alpha) = 409$ 21 [2012Wa38](#)

Note: Current evaluation has used the following Q record -5507 17 8452 16 5542 17 418 20 [2003Au03](#).

[Additional information 1](#).

Theory: [1996Af03](#).

Magnetic dipole rotational bands properties summarized in [2000Am02](#).

High-spin and rotational band assignments are from the comprehensive work in [1997Pe06](#).

The quadrupole moment of the highly deformed band I was measured by [1992Mu09](#): 4.5 5, which gives $\beta_2 = 0.22$ 3. Quadrupole moments for each level of the band have been reported in [1997Pe06](#).

 ^{137}Nd Levels

Q_t stands for $Q(\text{transition})$.

Cross Reference (XREF) Flags

A	^{137}Nd IT decay (1.60 s)	D	$^{124}\text{Te}(^{16}\text{O}, 3n\gamma)$
B	^{137}Pm ε decay	E	$^{110}\text{Pd}(^{30}\text{Si}, 3n\gamma), ^{123}\text{Sb}(^{19}\text{F}, 5n\gamma)$
C	$^{140}\text{Ce}(\alpha, 7n\gamma)$	F	$^{104}\text{Ru}(^{36}\text{S}, 3n\gamma)$

E(level) [†]	J ^π	T _{1/2}	XREF	Comments
0.0	1/2 ⁺	38.5 min 15	ABCDE	$\% \varepsilon + \% \beta^+ = 100$ T _{1/2} : from 1973Bu18 . Others: 40 min 2 (1968Zh01), 47.8 min 9 (1975MaXE). J ^π : atomic beam (1976Fu06), log ft=5.9 to 3/2 ⁺ . J ^π : γ 's to 1/2 ⁺ and from 5/2 ⁺ levels are M1.
108.60 11	3/2 ⁺	1.60 s 15	ABCDE	J ^π : γ to 1/2 ⁺ g.s. is E2.
268.92 21	(3/2) ⁺		BC	%IT=100
285.99 11	5/2 ⁺		ABCDE	J ^π : E3 γ ray to 1/2 ⁺ g.s., h11/2 expected state.
519.43 20	11/2 ⁻		ABCDE	T _{1/2} : from 1970Dr04 , 2.0 s 5 (1971Va22). J ^π : γ to 3/2 ⁺ , γ to 5/2 ⁺ is M1,E2; γ from 9/2 ⁻ .
615.22 16	7/2 ⁺	2.5 ns 15	B E	J ^π : γ to 5/2 ⁺ levels, γ ray from 9/2 ⁻ level, possible γ to (3/2) ⁺ level.
798.0 4			B	J ^π : γ to 5/2 ⁺ levels, γ ray from 9/2 ⁻ level, possible γ to (3/2) ⁺ .
834.73 24	(7/2 ⁺)		B	See ^{137}Pm ε decay for J ^π =9/2 ⁻ assignment suggested in 1975No08 .
851.93 22	(7/2 ⁺)		B	J ^π : M1+E2 γ ray to 11/2 ⁻ .
976.88 23			BCDE	J ^π : E2 γ ray to 11/2 ⁻ .
1101.25 22	13/2 ⁻		CDE	J ^π : γ ray to 9/2 ⁻ and 7/2 ⁺ levels, γ ray from 9/2 ⁻ , 11/2 ⁺ level, no ε decay from 11/2 ⁻ parent.
1188.83 24	15/2 ⁻		B	J ^π : R(DCO) consistent with E2 γ ray to 7/2 ⁺ .
1374.7 3	(7/2, 5/2 ⁻)		B	J ^π : γ ray to 13/2 ⁻ is M1,E2. γ ray from 9/2 ⁻ , 11/2 ⁺ is M1+E2.
1376.33 23	(11/2 ⁺)		E	J ^π : M1+E2 γ ray to 13/2 ⁻ .
1510.76 24	(11/2) ⁻		B	J ^π : γ ray to 7/2 ⁺ , ε decay via 11/2 ⁻ parent.
1683.72 25	(15/2 ⁻)	2.5 ns 15	CDE	J ^π : γ ray to 13/2 ⁻ .
1707.1 4	(9/2, 11/2)		B	J ^π : γ ray to 13/2 ⁻ .
1715.8 3	(15/2)		E	J ^π : E2 γ ray to 13/2 ⁻ and M1+E2 γ ray to (15/2 ⁻).
1788.7? 5			B	J ^π : log ft < 6 for ε decay via 11/2 ⁻ parent, γ rays to 7/2 ⁺ and 13/2 ⁻ levels.
1895.01 24	17/2 ⁻		CDE	J ^π : R(DCO) consistent with E1 γ ray to (11/2 ⁺).
1899.85 22	9/2 ⁻ , 11/2 ⁺		B	J ^π : R(DCO) consistent with E2 γ ray to 15/2 ⁻ .
1987.6 4	(9/2, 11/2)		B	J ^π : R(DCO) consistent with E1 γ ray to (17/2 ⁻).
2065.95 25	(13/2 ⁻)		E	
2071.8 [‡] 3	(19/2 ⁻)		DE	
2223.4 3	(19/2 ⁺)		CDE	

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Adopted Levels, Gammas (continued) ^{137}Nd Levels (continued)

E(level) [†]	J ^π	XREF	Comments
2370.3 4	(9/2,11/2,13/2) ⁻	B	T _{1/2} : Reported by 1974Gi01 as 1-4 ns.
2415.2 3	(19/2 ⁻)	E	J ^π : M1,E2 γ ray to 9/2 ⁻ .
2433.7 4		B	J ^π : R(DCO) consistent with E2 γ ray to (15/2 ⁻).
2442.3 3	(17/2 ⁺)	E	J ^π : R(DCO) consistent with E1 rays to (15/2 ⁻).
2473.66 24	(17/2 ⁻)	E	J ^π : R(DCO) consistent with E2 407.8 γ ray to (13/2 ⁻) and M1 789.8 γ ray to (15/2 ⁻).
2630.6 3	(23/2 ⁺)	CDE	J ^π : E2 γ ray to (19/2 ⁺).
2722.4 4		B	
2750.9 3	(19/2 ⁺)	E	J ^π : R(DCO) consistent with M1 308.7 γ ray to (17/2 ⁺) and E1 856 γ ray to (17/2 ⁻).
2776.9 3	(19/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (15/2 ⁻).
2804.3 4		B	
2850.9 4	(21/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to (19/2 ⁺).
2879.6 [‡] 3	(21/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to 17/2 ⁻ .
2947.1 ^a 3	(21/2 ⁺)	E	J ^π : R(DCO) consistent with M1 rays to (19/2 ⁺).
3049.3 3	(21/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to 17/2 ⁻ .
3081.5 [‡] 3	(23/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (19/2 ⁻).
3161.3 ^a 3	(23/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to (21/2 ⁺).
3221.0 3	(23/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to 19/2 ⁻ .
3326.9 4	(25/2)	E	
3365.4 3	(23/2 ⁻)	E	
3372.8 3	(23/2 ⁻)	E	
3379.8 ^a 3	(25/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ rays to (23/2 ⁺).
3409.9 3	(25/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to 23/2 ⁺ .
3496.8 4	(23/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to (21/2 ⁺).
3555.1 [#] 4	(27/2 ⁺)	E	J ^π : R(DCO) consistent with E2 γ ray to 23/2 ⁺ .
3674.6 ^a 3	(27/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ rays to (25/2 ⁺).
3692.3 3	(27/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (23/2 ⁻).
3717.3 7		E	
3757.5 3	(25/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (23/2 ⁻) and E2 γ ray to (21/2 ⁻).
3786.4 4	(25/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (21/2 ⁻).
3836.7 3	(27/2 ⁻)	E	
3896.1 3	(27/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (25/2 ⁻).
4043.4 6		E	
4111.6 ^a 4	(29/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to (27/2 ⁺).
4160.1 ^b 3	(29/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ rays to (27/2 ⁻).
4246.9 [@] 4	(29/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (25/2 ⁻).
4465.5 6		E	
4476.1 ^a 4	(31/2 ⁺)	E	J ^π : R(DCO) consistent with E2 γ ray to (27/2 ⁺).
4514.0 ^b 4	(31/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (29/2 ⁻).
4534.3 [#] 4	(31/2 ⁺)	E	J ^π : R(DCO) consistent with E2 γ ray to (27/2 ⁺).
4587.1 4	(29/2 ⁻)	E	
4727.9 4	(31/2 ⁺)	E	J ^π : R(DCO) consistent with M1 γ ray to (29/2 ⁺).
4822.4 3	(31/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ rays to (29/2 ⁻).
4843.9 4	(31/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (29/2 ⁻).
4870.3 4	(31/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (29/2 ⁻).
4885.6 4	(29/2 ⁺)	E	
4909.8 ^b 4	(33/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (31/2 ⁻).
4925.3 4	(29/2 ⁺)	E	
4939.2 4	(29/2 ⁺)	E	
4947.8 [@] 5	(33/2 ⁻)	E	J ^π : R(DCO) consistent with E2 γ ray to (29/2 ⁻).
5025.2 ^a 4	(33/2 ⁺)	E	
5108.1 4	(33/2 ⁻)	E	J ^π : R(DCO) consistent with M1 γ ray to (31/2 ⁻).
5180.2 5	(35/2 ⁺)	E	

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Adopted Levels, Gammas (continued) ^{137}Nd Levels (continued)

E(level) [†]	J ^π	T _{1/2}	XREF	Comments
5195.3 6	(31/2)		E	
5372.6 ^b 4	(35/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (33/2 ⁻).
5415.2 ^a 4	(35/2 ⁺)		E	
5416.3 ^c 4	(35/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (33/2 ⁻).
5520.4 ^e 4	(33/2 ⁺)		EF	
5559.4 [#] 11	(35/2 ⁺)		E	
5596.8 ^d 6	(33/2 ⁺)		E	
5701.8 6	(35/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (33/2 ⁻).
5788.4 ^c 5	(37/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (35/2 ⁻).
5813.0 ^b 4	(37/2 ⁻)		E	J ^π : R(DCO) consistent with γ ray to (35/2 ⁻).
5823.5 [@] 5	(37/2 ⁻)		E	J ^π : R(DCO) consistent with E2 γ ray to (33/2 ⁻).
5853.7 ^d 7	(35/2 ⁺)		E	J ^π : R(DCO) consistent with M1 γ ray to (33/2 ⁺).
5952.1 11	(35/2 ⁺)		E	J ^π : R(DCO) consistent with E2 γ ray to (31/2 ⁺).
6020.6 ^a 4	(37/2 ⁺)		E	
6079.5 5	(39/2 ⁺)		E	
6161.0 ^d 7	(37/2 ⁺)		E	J ^π : R(DCO) consistent with M1 γ ray to (35/2 ⁺).
6194.4 ^b 4	(39/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (37/2 ⁻).
6198.9 ^e 4	(37/2 ⁺)		EF	
6263.7 ^c 5	(39/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (37/2 ⁻).
6359.6 ^{&} 5	(39/2 ⁻)		E	J ^π : R(DCO) consistent with E2 γ ray to (35/2 ⁻).
6471.8 [#] 11	(39/2 ⁺)		E	
6479.0 ^a 7	(39/2 ⁺)		E	J ^π : R(DCO) consistent with E2 γ ray to (35/2 ⁺).
6515.8 ^d 8	(39/2 ⁺)		E	J ^π : R(DCO) consistent with M1 γ ray to (37/2 ⁺).
6531.7 ^d 8	(39/2 ⁺)		E	J ^π : R(DCO) consistent with M1 γ ray to (37/2 ⁺).
6644.4 11	(39/2 ⁺)		E	J ^π : R(DCO) consistent with E2 γ ray to (35/2 ⁺).
6669.5 ^b 4	(41/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (39/2 ⁻).
6795.2 ^c 6	(41/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (39/2 ⁻).
6851.3 [@] 7	(41/2 ⁻)		E	J ^π : R(DCO) consistent with E2 γ ray to (37/2 ⁻).
6916.4 ^d 8	(41/2 ⁺)		E	J ^π : R(DCO) consistent with M1 γ rays to (39/2 ⁺).
6940.5 ^e 5	(41/2 ⁺)		EF	
7081.1 ^a 11	(41/2 ⁺)		E	
7100.8 ^b 4	(43/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (41/2 ⁻).
7187.3 ^{&} 6	(43/2 ⁻)		E	J ^π : R(DCO) consistent with E2 γ ray to (39/2 ⁻).
7196.6 11	(43/2 ⁺)		E	
7314.5 ^c 6	(43/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (41/2 ⁻).
7339.6 ^d 8	(43/2 ⁺)		E	J ^π : R(DCO) consistent with γ ray to (41/2 ⁺).
7586.4 ^a 15	(43/2 ⁺)		E	
7652.2 ^b 4	(45/2 ⁻)		E	
7702.6 ^c 6	(45/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (43/2 ⁻).
7742.9 ^e 5	(45/2 ⁺)	0.180 ps 14	EF	T _{1/2} : from 1996Pe18. Q _t =5.2 5, from 1996Pe18.
7797.2 ^d 8	(45/2 ⁺)	0.15 ps 10	E	T _{1/2} : from 1995Pe10. J ^π : R(DCO) consistent with M1 γ ray to (43/2 ⁺).
8040.8 [@] 13	(45/2 ⁻)		E	
8187.7 ^{&} 12	(47/2 ⁻)		E	J ^π : R(DCO) consistent with E2 γ ray to (43/2 ⁻).
8197.4 ^c 7	(47/2 ⁻)		E	J ^π : R(DCO) consistent with M1 γ ray to (45/2 ⁻).
8325.4 ^d 8	(47/2 ⁺)	0.10 ps 3	E	T _{1/2} : from 1995Pe10.
8349.2 ^b 6	(47/2 ⁻)		E	

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Adopted Levels, Gammas (continued) ^{137}Nd Levels (continued)

E(level) [†]	J ^π	T _{1/2}	XREF	Comments
8604.4 ^e 6	(49/2 ⁺)	0.118 ps 14	EF	T _{1/2} : from 1996Pe18. Q _t =5.3 6, from 1996Pe18.
8745.6 ^c 7	(49/2 ⁻)		E	
8922.3 ^d 9	(49/2 ⁺)	0.17 ps 7	E	T _{1/2} : from 1995Pe10.
9337.8 ^c 7	(51/2 ⁻)		E	
9365.1 [@] 16	(49/2 ⁻)		E	
9372.6 ^{&} 16	(51/2 ⁻)		E	
9411.8 [@] 16	(49/2 ⁻)		E	
9525.0 ^e 6	(53/2 ⁺)	0.104 ps 14	EF	T _{1/2} : from 1996Pe18. Q _t =4.8 6, from 1996Pe18.
9568.8 ^d 9	(51/2 ⁺)		E	
10272.4 ^d 9	(53/2 ⁺)		E	
10508.9 ^e 6	(57/2 ⁺)	0.104 ps 21	EF	T _{1/2} : from 1996Pe18. Q _t =4.1 9, from 1996Pe18.
10729.4 ^{&} 19	(55/2 ⁻)		E	
11558.7 ^e 8	(61/2 ⁺)	0.083 ps 14	EF	T _{1/2} : from 1996Pe18. Q _t =3.8 5, from 1996Pe18.
12673.9 ^e 10	(65/2 ⁺)	0.069 ps 14	EF	T _{1/2} : from 1996Pe18. Q _t =3.7 6, from 1996Pe18.
13851.8 ^e 11	(69/2 ⁺)	0.08 ps 3	EF	T _{1/2} : from 1996Pe18. Q _t =3.2 14, from 1996Pe18.
15090.3 ^e 15	(73/2 ⁺)		EF	
16389.1 ^e 18	(77/2 ⁺)		EF	
17751.4 ^e 21	(81/2 ⁺)		E	
19184.8 ^e 23	(85/2 ⁺)		E	
20695.8 ^e 25	(89/2 ⁺)		E	
22289 ^e 3	(93/2 ⁺)		E	
23972 ^e 3	(97/2 ⁺)		E	

[†] Deduced by evaluators from a least-squares fit to γ -ray energies.

[‡] Band(A): Based on $\nu(\text{h}11/2)$.

Band(B): Based on 19/2⁺ isomer, Configuration=($\nu \text{ h}11/2$) x 5-(^{138}Nd).

@ Band(C): Possible conf= $\nu(\text{h}11/2)$ coupled to either a proton or a neutron h11/2 pair.

& Band(D): Possible conf= $\nu[530]1/2^-$ coupled to a pair of h11/2 neutrons.

^a Band(E): Possible conf= $\nu\text{h}11/2 \times \pi d5/2\text{h}11/2$ or $\nu\text{h}11/2 \times \pi g7/2\text{h}11/2$.

^b Band(F): Magnetic Dipole Rotational band (2000Am02). Conf= $\nu(\text{h}11/2)^3$.

^c Band(G): Magnetic Dipole Rotational band (2000Am02). Conf= $\pi(\text{h}11/2^2) \times \nu(\text{h}11/2)$.

^d Band(H): Magnetic Dipole Rotational band (2000Am02). Possible Conf= $\pi(\text{h}11/2^2) \times \nu(\text{h}11/2)^2 \times \nu s1/2(d3/2)$.

^e Band(I): Highly deformed band.

Adopted Levels, Gammas (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\gamma(^{137}\text{Nd})$	
							$\alpha\&$	Comments
108.60	3/2 ⁺	108.63 14	100	0.0	1/2 ⁺	M1	1.118	$\alpha(\text{K})=0.951$ 14; $\alpha(\text{L})=0.1322$ 20; $\alpha(\text{M})=0.0281$ 4; $\alpha(\text{N}+..)=0.00730$ 11 $\alpha(\text{N})=0.00628$ 9; $\alpha(\text{O})=0.000954$ 14; $\alpha(\text{P})=6.16\times 10^{-5}$ 9 E_γ : weighted average of values in 1997Pe06, 1975No08 and 1971Va22. Mult.: From ^{137}Nd IT decay (1.60 s) (1971Va22, 1970Dr04).
268.92	(3/2) ⁺	160.5@ 4	19.4@ 4	108.60	3/2 ⁺	M1,E2	0.393 22	$\alpha(\text{K})=0.303$ 15; $\alpha(\text{L})=0.07$ 3; $\alpha(\text{M})=0.016$ 7; $\alpha(\text{N}+..)=0.0039$ 15 $\alpha(\text{N})=0.0034$ 14; $\alpha(\text{O})=0.00048$ 16; $\alpha(\text{P})=1.7\times 10^{-5}$ 4 Mult.: From ^{137}Pm ε decay (1975No08).
		268.7@ 3	100.0@ 8	0.0	1/2 ⁺	M1,E2	0.083 9	$\alpha(\text{K})=0.068$ 11; $\alpha(\text{L})=0.0117$ 11; $\alpha(\text{M})=0.0025$ 3; $\alpha(\text{N}+..)=0.00065$ 6 $\alpha(\text{N})=0.00056$ 6; $\alpha(\text{O})=8.1\times 10^{-5}$ 5; $\alpha(\text{P})=4.1\times 10^{-6}$ 10 Mult.: From ^{137}Pm ε decay (1975No08).
285.99	5/2 ⁺	177.41 14	100.0	108.60	3/2 ⁺	M1+(E2)	0.288 7	$\alpha(\text{K})=0.226$ 15; $\alpha(\text{L})=0.049$ 16; $\alpha(\text{M})=0.011$ 4; $\alpha(\text{N}+..)=0.0027$ 9 $\alpha(\text{N})=0.0024$ 8; $\alpha(\text{O})=0.00033$ 10; $\alpha(\text{P})=1.3\times 10^{-5}$ 3 E_γ : weighted average of values in 1997Pe06, 1975No08 and 1971Va22. Mult.: From ^{137}Pm ε decay (1975No08).
		286.01 14	38.1 15	0.0	1/2 ⁺	E2	0.0609	$\alpha(\text{K})=0.0479$ 7; $\alpha(\text{L})=0.01018$ 15; $\alpha(\text{M})=0.00223$ 4; $\alpha(\text{N}+..)=0.000562$ 8 $\alpha(\text{N})=0.000491$ 7; $\alpha(\text{O})=6.88\times 10^{-5}$ 10; $\alpha(\text{P})=2.61\times 10^{-6}$ 4 E_γ, I_γ : weighted average of 1997Pe06, 1975No08 and 1971Va22 values. Mult.: From ^{137}Nd IT decay (1.60 s) (1971Va22).
519.43	11/2 ⁻	233.5 2	100	285.99	5/2 ⁺	E3	0.567	$\alpha(\text{K})=0.317$ 5; $\alpha(\text{L})=0.194$ 3; $\alpha(\text{M})=0.0449$ 7; $\alpha(\text{N}+..)=0.01106$ 17 $\alpha(\text{N})=0.00976$ 15; $\alpha(\text{O})=0.001279$ 19; $\alpha(\text{P})=1.690\times 10^{-5}$ 25 B(E3)(W.u.)=0.0115 11 E_γ : Weighted average of 233.4 2 $^{110}\text{Pd}(^{30}\text{Si}, 3n\gamma)$, 233.4 3 $^{140}\text{Ce}(\alpha, 7n\gamma)$, 233.7 5 (^{137}Nd IT decay (1.60 s)), and 233.6 3 (^{137}Pm ε decay). Mult.: From ^{137}Nd IT decay (1.60 s) (1971Va22, 1970Dr04) and ^{137}Pm ε decay (1975No08).
615.22	7/2 ⁺	329.4 2	25 8	285.99	5/2 ⁺	M1,E2 [#]	0.046 8	$\alpha(\text{K})=0.038$ 8; $\alpha(\text{L})=0.00617$ 9; $\alpha(\text{M})=0.00133$ 3; $\alpha(\text{N}+..)=0.000340$ 5 $\alpha(\text{N})=0.000295$ 5; $\alpha(\text{O})=4.33\times 10^{-5}$ 15; $\alpha(\text{P})=2.3\times 10^{-6}$ 6 E_γ, I_γ : from 1997Pe02. E_γ, I_γ : from 1997Pe02.
798.0		506.6 2	100	108.60	3/2 ⁺			
		512.0@b 10	@	285.99	5/2 ⁺			
834.73	(7/2) ⁺	529.2@ 4	100@	268.92	(3/2) ⁺			
		548.8@ 3	100@ 2	285.99	5/2 ⁺			
851.93	(7/2) ⁺	565.6a@ 3	<66a@	268.92	(3/2) ⁺			
		565.6a@ 3	<100a@	285.99	5/2 ⁺			
976.88		743.3@ 4	25.7@ 14	108.60	3/2 ⁺			
		457.3@ 5	100@	519.43	11/2 ⁻			

Adopted Levels, Gammas (continued)

 $\gamma(^{137}\text{Nd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
976.88		690.8 [@] 3	69 [@] 2	285.99	5/2 ⁺	M2 [#]	0.0231	$\alpha(\text{K})=0.0195$ 3; $\alpha(\text{L})=0.00283$ 4; $\alpha(\text{M})=0.000604$ 9; $\alpha(\text{N}+..)=0.0001573$ 23
1101.25	13/2 ⁻	581.9 2	100	519.43	11/2 ⁻	M1+E2 [#]	0.0102 24	$\alpha(\text{N})=0.0001354$ 19; $\alpha(\text{O})=2.06\times 10^{-5}$ 3; $\alpha(\text{P})=1.324\times 10^{-6}$ 19 $\alpha(\text{K})=0.0087$ 21; $\alpha(\text{L})=0.00123$ 20; $\alpha(\text{M})=0.00026$ 4; $\alpha(\text{N}+..)=6.7\times 10^{-5}$ 11
1188.83	15/2 ⁻	669.4 2	100	519.43	11/2 ⁻	E2	0.00558	$\alpha(\text{N})=5.8\times 10^{-5}$ 10; $\alpha(\text{O})=8.7\times 10^{-6}$ 16; $\alpha(\text{P})=5.4\times 10^{-7}$ 15 E_γ : from 1997Pe02 , Mult. from 1975No08 .
1374.7	(7/2,5/2 ⁻)	397.7 3 759.5 5	100 3 91 3	976.88 615.22	7/2 ⁺			$\alpha(\text{K})=0.00469$ 7; $\alpha(\text{L})=0.000701$ 10; $\alpha(\text{M})=0.0001497$ 21; $\alpha(\text{N}+..)=3.85\times 10^{-5}$ 6
1376.33	(11/2 ⁺)	761.2 2	100	615.22	7/2 ⁺	(E2) [‡]	0.00411	$\alpha(\text{N})=3.33\times 10^{-5}$ 5; $\alpha(\text{O})=4.94\times 10^{-6}$ 7; $\alpha(\text{P})=2.80\times 10^{-7}$ 4 E_γ : from 1997Pe02 , Mult. from 1974Gi01 .
1510.76	(11/2 ⁻)	410.6 [@] 5	100 [@] 2	1101.25	13/2 ⁻	M1,E2 [#]	0.025 5	$\alpha(\text{K})=0.00347$ 5; $\alpha(\text{L})=0.000503$ 7; $\alpha(\text{M})=0.0001071$ 15; $\alpha(\text{N}+..)=2.76\times 10^{-5}$ 4 $\alpha(\text{N})=2.39\times 10^{-5}$ 4; $\alpha(\text{O})=3.56\times 10^{-6}$ 5; $\alpha(\text{P})=2.09\times 10^{-7}$ 3
1683.72	(15/2 ⁻)	533.8 ^{a@} 4 658.6 [@] 3 493.5 ^b 582.5 2	≤ 75 ^{a@} 7.5 [@] 5 10 1 100	976.88 851.93 1188.83 1101.25	7/2 ⁺ (7/2 ⁺) 15/2 ⁻ 13/2 ⁻	M1+E2	0.0102 24	$\alpha(\text{K})=0.021$ 5; $\alpha(\text{L})=0.0032$ 3; $\alpha(\text{M})=0.00069$ 5; $\alpha(\text{N}+..)=0.000177$ 15 $\alpha(\text{N})=0.000153$ 12; $\alpha(\text{O})=2.27\times 10^{-5}$ 24; $\alpha(\text{P})=1.3\times 10^{-6}$ 4 γ observed by 1974Gi01 only. $\alpha(\text{K})=0.0086$ 21; $\alpha(\text{L})=0.00122$ 20; $\alpha(\text{M})=0.00026$ 4; $\alpha(\text{N}+..)=6.7\times 10^{-5}$ 11 $\alpha(\text{N})=5.8\times 10^{-5}$ 10; $\alpha(\text{O})=8.7\times 10^{-6}$ 16; $\alpha(\text{P})=5.3\times 10^{-7}$ 15 E_γ : from 1997Pe02 .
1707.1	(9/2,11/2)	1092.2 [@] 5	100 [@]	615.22	7/2 ⁺			
1715.8	(15/2)	614.5 2	100	1101.25	13/2 ⁻			
1788.7?		414.0 [@] 5	100 [@]	1374.7	(7/2,5/2 ⁻)	M1,E2 [#]	0.025 5	$\alpha(\text{K})=0.021$ 5; $\alpha(\text{L})=0.0031$ 3; $\alpha(\text{M})=0.00067$ 5; $\alpha(\text{N}+..)=0.000172$ 15
1895.01	17/2 ⁻	706.2 2	100	1188.83	15/2 ⁻	M1+E2	0.0063 15	$\alpha(\text{N})=0.000149$ 13; $\alpha(\text{O})=2.21\times 10^{-5}$ 24; $\alpha(\text{P})=1.3\times 10^{-6}$ 4 $\alpha(\text{K})=0.0054$ 13; $\alpha(\text{L})=0.00075$ 14; $\alpha(\text{M})=0.00016$ 3; $\alpha(\text{N}+..)=4.1\times 10^{-5}$ 8
		793.7 2	48	1101.25	13/2 ⁻	E2	0.00373	$\alpha(\text{N})=3.5\times 10^{-5}$ 7; $\alpha(\text{O})=5.3\times 10^{-6}$ 11; $\alpha(\text{P})=3.3\times 10^{-7}$ 9 E_γ, I_γ : from 1997Pe02 . $\alpha(\text{K})=0.00316$ 5; $\alpha(\text{L})=0.000453$ 7; $\alpha(\text{M})=9.65\times 10^{-5}$ 14; $\alpha(\text{N}+..)=2.49\times 10^{-5}$ 4

Adopted Levels, Gammas (continued) $\gamma(^{137}\text{Nd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
								$\alpha(\text{K})=0.00316\ 5$; $\alpha(\text{L})=0.000453\ 7$; $\alpha(\text{M})=9.65\times 10^{-5}\ 14$; $\alpha(\text{N}+..)=2.49\times 10^{-5}\ 4$ $\alpha(\text{N})=2.15\times 10^{-5}\ 3$; $\alpha(\text{O})=3.21\times 10^{-6}\ 5$; $\alpha(\text{P})=1.90\times 10^{-7}\ 3$ E_γ, I_γ : from 1997Pe02 .
1899.85	9/2 ⁻ , 11/2 ⁺	192.9@ 4 389.2@ 3	8.3@ 5 43.5@ 5	1707.1 (9/2, 11/2) 1510.76 (11/2) ⁻		M1, E2#	0.029 6	$\alpha(\text{K})=0.024\ 6$; $\alpha(\text{L})=0.00374\ 25$; $\alpha(\text{M})=0.00080\ 5$; $\alpha(\text{N}+..)=0.000206\ 14$ $\alpha(\text{N})=0.000178\ 11$; $\alpha(\text{O})=2.64\times 10^{-5}\ 24$; $\alpha(\text{P})=1.5\times 10^{-6}\ 4$
		525.1@ 4 798.6@ 5 923.0@ 5 1047.6@ 5 1064.7@ 5 1284.7@ 5	20.7@ 52 7.3@ 5 35.2@ 10 10.4@ 5 14.5@ 5 100@	1374.7 (7/2, 5/2) ⁻ 1101.25 13/2 ⁻ 976.88 851.93 (7/2) ⁺ 834.73 (7/2) ⁺ 615.22 7/2 ⁺				
1987.6	(9/2, 11/2)	199.0@ 5 1189.9@ 5	@ 100@	1788.7? 798.0				
2065.95	(13/2) ⁻	689.7 2	100	1376.33 (11/2) ⁺		(E1) [‡]	0.00195	$\alpha(\text{K})=0.001679\ 24$; $\alpha(\text{L})=0.000216\ 3$; $\alpha(\text{M})=4.53\times 10^{-5}\ 7$; $\alpha(\text{N}+..)=1.175\times 10^{-5}\ 17$ $\alpha(\text{N})=1.012\times 10^{-5}\ 15$; $\alpha(\text{O})=1.531\times 10^{-6}\ 22$; $\alpha(\text{P})=9.86\times 10^{-8}\ 14$
2071.8	(19/2) ⁻	882.9 2	100	1188.83 15/2 ⁻		(E2) [‡]	0.00294	$\alpha(\text{K})=0.00249\ 4$; $\alpha(\text{L})=0.000350\ 5$; $\alpha(\text{M})=7.44\times 10^{-5}\ 11$; $\alpha(\text{N}+..)=1.92\times 10^{-5}\ 3$ $\alpha(\text{N})=1.659\times 10^{-5}\ 24$; $\alpha(\text{O})=2.49\times 10^{-6}\ 4$; $\alpha(\text{P})=1.506\times 10^{-7}\ 21$ E_γ : from 1997Pe02 .
2223.4	(19/2) ⁺	328.4 2	100	1895.01 17/2 ⁻		(E1) [‡]	0.01079	$B(\text{E}1)(\text{W.u.})=2.8\times 10^{-6}\ 17$ $\alpha(\text{K})=0.00924\ 13$; $\alpha(\text{L})=0.001225\ 18$; $\alpha(\text{M})=0.000258\ 4$; $\alpha(\text{N}+..)=6.65\times 10^{-5}\ 10$ $\alpha(\text{N})=5.74\times 10^{-5}\ 8$; $\alpha(\text{O})=8.59\times 10^{-6}\ 12$; $\alpha(\text{P})=5.24\times 10^{-7}\ 8$ E_γ : from 1997Pe02 .
2370.3	(9/2, 11/2, 13/2) ⁻	470.7@ 3	100@	1899.85 9/2 ⁻ , 11/2 ⁺		M1, E2#	0.018 4	$\alpha(\text{K})=0.015\ 4$; $\alpha(\text{L})=0.0022\ 3$; $\alpha(\text{M})=0.00046\ 6$; $\alpha(\text{N}+..)=0.000120\ 15$ $\alpha(\text{N})=0.000103\ 13$; $\alpha(\text{O})=1.54\times 10^{-5}\ 22$; $\alpha(\text{P})=9.1\times 10^{-7}\ 25$
2415.2	(19/2) ⁻	995@ 1 731.4 2	11.5@ 10 100	1374.7 (7/2, 5/2) ⁻ 1683.72 (15/2) ⁻		(E2) [‡]	0.00451	$\alpha(\text{K})=0.00381\ 6$; $\alpha(\text{L})=0.000557\ 8$; $\alpha(\text{M})=0.0001187\ 17$; $\alpha(\text{N}+..)=3.06\times 10^{-5}\ 5$ $\alpha(\text{N})=2.64\times 10^{-5}\ 4$; $\alpha(\text{O})=3.93\times 10^{-6}\ 6$; $\alpha(\text{P})=2.28\times 10^{-7}\ 4$
2433.7		533.8@ 4	100@	1899.85 9/2 ⁻ , 11/2 ⁺				

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
2442.3	(17/2 ⁺)	758.9 2	59 6	1683.72	(15/2 ⁻)	(E1) [‡]	1.60×10^{-3}	$\alpha(\text{K})=0.001380$ 20; $\alpha(\text{L})=0.0001765$ 25; $\alpha(\text{M})=3.71 \times 10^{-5}$ 6; $\alpha(\text{N}+..)=9.62 \times 10^{-6}$ 14 $\alpha(\text{N})=8.28 \times 10^{-6}$ 12; $\alpha(\text{O})=1.255 \times 10^{-6}$ 18; $\alpha(\text{P})=8.12 \times 10^{-8}$ 12
		1253.7 5	100	1188.83	15/2 ⁻	(E1) [‡]	6.72×10^{-4}	$\alpha(\text{K})=0.000534$ 8; $\alpha(\text{L})=6.70 \times 10^{-5}$ 10; $\alpha(\text{M})=1.406 \times 10^{-5}$ 20; $\alpha(\text{N}+..)=5.65 \times 10^{-5}$ 9 $\alpha(\text{N})=3.14 \times 10^{-6}$ 5; $\alpha(\text{O})=4.79 \times 10^{-7}$ 7; $\alpha(\text{P})=3.17 \times 10^{-8}$ 5; $\alpha(\text{IPF})=5.28 \times 10^{-5}$ 8
2473.66	(17/2 ⁻)	407.8 2	69 7	2065.95	(13/2 ⁻)	(E2) [‡]	0.0208	$\alpha(\text{K})=0.01696$ 24; $\alpha(\text{L})=0.00301$ 5; $\alpha(\text{M})=0.000651$ 10; $\alpha(\text{N}+..)=0.0001656$ 24 $\alpha(\text{N})=0.0001439$ 21; $\alpha(\text{O})=2.07 \times 10^{-5}$ 3; $\alpha(\text{P})=9.73 \times 10^{-7}$ 14
		757.8 2	53 6	1715.8	(15/2)	D [‡]		
		789.8 2	100	1683.72	(15/2 ⁻)	(M1) [‡]	0.00594	$\alpha(\text{K})=0.00509$ 8; $\alpha(\text{L})=0.000670$ 10; $\alpha(\text{M})=0.0001413$ 20; $\alpha(\text{N}+..)=3.68 \times 10^{-5}$ 6 $\alpha(\text{N})=3.17 \times 10^{-5}$ 5; $\alpha(\text{O})=4.83 \times 10^{-6}$ 7; $\alpha(\text{P})=3.21 \times 10^{-7}$ 5
2630.6	(23/2 ⁺)	407.2 2	100	2223.4	(19/2 ⁺)	E2	0.0209	$\alpha(\text{K})=0.01703$ 24; $\alpha(\text{L})=0.00302$ 5; $\alpha(\text{M})=0.000655$ 10; $\alpha(\text{N}+..)=0.0001664$ 24 $\alpha(\text{N})=0.0001446$ 21; $\alpha(\text{O})=2.08 \times 10^{-5}$ 3; $\alpha(\text{P})=9.77 \times 10^{-7}$ 14 E_γ : from 1997Pe06, Mult. from 1974Gi01.
2722.4		352.3 @ 3	100 @ 3	2370.3	(9/2,11/2,13/2) ⁻	M1,E2 [#]	0.038 7	$\alpha(\text{K})=0.032$ 7; $\alpha(\text{L})=0.00503$ 17; $\alpha(\text{M})=0.001080$ 22; $\alpha(\text{N}+..)=0.000277$ 9 $\alpha(\text{N})=0.000240$ 7; $\alpha(\text{O})=3.54 \times 10^{-5}$ 21; $\alpha(\text{P})=2.0 \times 10^{-6}$ 5
		735.0 @ 5	<27 @	1987.6	(9/2,11/2)			
		821.7 @ 5	59 @ 3	1899.85	9/2 ⁻ , 11/2 ⁺			
2750.9	(19/2 ⁺)	308.7 2	53 6	2442.3	(17/2 ⁺)	(M1) [‡]	0.0634	$\alpha(\text{K})=0.0541$ 8; $\alpha(\text{L})=0.00734$ 11; $\alpha(\text{M})=0.001554$ 22; $\alpha(\text{N}+..)=0.000405$ 6 $\alpha(\text{N})=0.000348$ 5; $\alpha(\text{O})=5.30 \times 10^{-5}$ 8; $\alpha(\text{P})=3.47 \times 10^{-6}$ 5
		856.0 5	100	1895.01	17/2 ⁻	(E1) [‡]	1.26×10^{-3}	$\alpha(\text{K})=0.001086$ 16; $\alpha(\text{L})=0.0001382$ 20; $\alpha(\text{M})=2.90 \times 10^{-5}$ 4; $\alpha(\text{N}+..)=7.53 \times 10^{-6}$ 11 $\alpha(\text{N})=6.48 \times 10^{-6}$ 10; $\alpha(\text{O})=9.84 \times 10^{-7}$ 14; $\alpha(\text{P})=6.41 \times 10^{-8}$ 9
2776.9	(19/2 ⁻)	1092.9 5	100	1683.72	(15/2 ⁻)	(E2) [‡]	0.00186	$\alpha(\text{K})=0.001587$ 23; $\alpha(\text{L})=0.000215$ 3; $\alpha(\text{M})=4.56 \times 10^{-5}$ 7; $\alpha(\text{N}+..)=1.180 \times 10^{-5}$ 17 $\alpha(\text{N})=1.017 \times 10^{-5}$ 15; $\alpha(\text{O})=1.534 \times 10^{-6}$ 22; $\alpha(\text{P})=9.62 \times 10^{-8}$ 14
2804.3		370.6 @ 3	100 @ 1	2433.7		M1,E2 [#]	0.033 6	$\alpha(\text{K})=0.028$ 6; $\alpha(\text{L})=0.00432$ 22; $\alpha(\text{M})=0.00093$ 4; $\alpha(\text{N}+..)=0.000238$ 12 $\alpha(\text{N})=0.000206$ 10; $\alpha(\text{O})=3.05 \times 10^{-5}$ 23; $\alpha(\text{P})=1.7 \times 10^{-6}$ 5

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
2804.3		434.0 @ ^b 3 1293.5 @ ⁵	23 @ ¹ ≈ 36 @ ⁵	2370.3 1510.76	(9/2, 11/2, 13/2) ⁻ (11/2) ⁻			
2850.9	(21/2 ⁺)	627.5 2	100	2223.4	(19/2 ⁺)	(M1) [‡]	0.01040	$\alpha(\text{K})=0.00891$ 13; $\alpha(\text{L})=0.001180$ 17; $\alpha(\text{M})=0.000249$ 4; $\alpha(\text{N}+..)=6.49 \times 10^{-5}$ 10 $\alpha(\text{N})=5.58 \times 10^{-5}$ 8; $\alpha(\text{O})=8.52 \times 10^{-6}$ 12; $\alpha(\text{P})=5.64 \times 10^{-7}$ 8
2879.6	(21/2 ⁻)	807.8 2	78	2071.8	(19/2 ⁻)	(M1) [‡]	0.00563	$\alpha(\text{K})=0.00483$ 7; $\alpha(\text{L})=0.000634$ 9; $\alpha(\text{M})=0.0001338$ 19; $\alpha(\text{N}+..)=3.49 \times 10^{-5}$ 5 $\alpha(\text{N})=3.00 \times 10^{-5}$ 5; $\alpha(\text{O})=4.58 \times 10^{-6}$ 7; $\alpha(\text{P})=3.04 \times 10^{-7}$ 5
		984.5 2	100	1895.01	17/2 ⁻	(E2) [‡]	0.00232	$\alpha(\text{K})=0.00197$ 3; $\alpha(\text{L})=0.000272$ 4; $\alpha(\text{M})=5.76 \times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.492 \times 10^{-5}$ 21 $\alpha(\text{N})=1.286 \times 10^{-5}$ 18; $\alpha(\text{O})=1.93 \times 10^{-6}$ 3; $\alpha(\text{P})=1.194 \times 10^{-7}$ 17
2947.1	(21/2 ⁺)	196.2 2	100	2750.9	(19/2 ⁺)	(M1) [‡]	0.214	$\alpha(\text{K})=0.182$ 3; $\alpha(\text{L})=0.0251$ 4; $\alpha(\text{M})=0.00532$ 8; $\alpha(\text{N}+..)=0.001384$ 20 $\alpha(\text{N})=0.001191$ 17; $\alpha(\text{O})=0.000181$ 3; $\alpha(\text{P})=1.177 \times 10^{-5}$ 17
		504.9 2 723.8 2	36 11 71	2442.3 2223.4	(17/2 ⁺) (19/2 ⁺)	(M1) [‡]	0.00734	$\alpha(\text{K})=0.00629$ 9; $\alpha(\text{L})=0.000829$ 12; $\alpha(\text{M})=0.0001750$ 25; $\alpha(\text{N}+..)=4.56 \times 10^{-5}$ 7 $\alpha(\text{N})=3.92 \times 10^{-5}$ 6; $\alpha(\text{O})=5.98 \times 10^{-6}$ 9; $\alpha(\text{P})=3.97 \times 10^{-7}$ 6
3049.3	(21/2 ⁻)	575.5 2	100	2473.66	(17/2 ⁻)	(E2) [‡]	0.00813	$\alpha(\text{K})=0.00679$ 10; $\alpha(\text{L})=0.001060$ 15; $\alpha(\text{M})=0.000227$ 4; $\alpha(\text{N}+..)=5.83 \times 10^{-5}$ 9 $\alpha(\text{N})=5.05 \times 10^{-5}$ 7; $\alpha(\text{O})=7.42 \times 10^{-6}$ 11; $\alpha(\text{P})=4.02 \times 10^{-7}$ 6
3081.5	(23/2 ⁻)	1009.5 5	100	2071.8	(19/2 ⁻)	(E2) [‡]	0.00220	$\alpha(\text{K})=0.00187$ 3; $\alpha(\text{L})=0.000257$ 4; $\alpha(\text{M})=5.44 \times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.409 \times 10^{-5}$ 20 $\alpha(\text{N})=1.215 \times 10^{-5}$ 17; $\alpha(\text{O})=1.83 \times 10^{-6}$ 3; $\alpha(\text{P})=1.133 \times 10^{-7}$ 16
3161.3	(23/2 ⁺)	214.4 2	100 20	2947.1	(21/2 ⁺)	(M1) [‡]	0.1681	$\alpha(\text{K})=0.1432$ 21; $\alpha(\text{L})=0.0196$ 3; $\alpha(\text{M})=0.00417$ 6; $\alpha(\text{N}+..)=0.001084$ 16 $\alpha(\text{N})=0.000933$ 14; $\alpha(\text{O})=0.0001419$ 21; $\alpha(\text{P})=9.23 \times 10^{-6}$ 14
		410.6 2 805.7 2	22 7 100	2750.9 2415.2	(19/2 ⁺) (19/2 ⁻)	(E2) [‡]	0.00361	$\alpha(\text{K})=0.00305$ 5; $\alpha(\text{L})=0.000437$ 7; $\alpha(\text{M})=9.29 \times 10^{-5}$ 13; $\alpha(\text{N}+..)=2.40 \times 10^{-5}$ 4 $\alpha(\text{N})=2.07 \times 10^{-5}$ 3; $\alpha(\text{O})=3.09 \times 10^{-6}$ 5; $\alpha(\text{P})=1.84 \times 10^{-7}$ 3
3326.9	(25/2)	697.0 5	100	2630.6	(23/2 ⁺)	(E1, M1) [‡]	0.005 3	$\alpha(\text{K})=0.004$ 3; $\alpha(\text{L})=0.0006$ 4; $\alpha(\text{M})=0.00012$ 8; $\alpha(\text{N}+..)=3.1 \times 10^{-5}$ 20 $\alpha(\text{N})=2.6 \times 10^{-5}$ 17; $\alpha(\text{O})=4.E-6$ 3; $\alpha(\text{P})=2.7 \times 10^{-7}$ 17
3365.4	(23/2 ⁻)	588.5 2	100	2776.9	(19/2 ⁻)			
3372.8	(23/2 ⁻)	595.9 2	100	2776.9	(19/2 ⁻)			
3379.8	(25/2 ⁺)	218.5 2	11	3161.3	(23/2 ⁺)	(M1) [‡]	0.1597	$\alpha(\text{K})=0.1360$ 20; $\alpha(\text{L})=0.0187$ 3; $\alpha(\text{M})=0.00395$ 6;

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.	$\alpha\&$
							Comments
							$\alpha(\text{N}+..)=0.001029$ 15 $\alpha(\text{N})=0.000886$ 13; $\alpha(\text{O})=0.0001347$ 20; $\alpha(\text{P})=8.77\times 10^{-6}$ 13
3379.8	(25/2 ⁺)	432.9 2 749.1 2	2 1 100	2947.1 (21/2 ⁺) 2630.6 (23/2 ⁺)	(M1) ‡	0.00675	$\alpha(\text{K})=0.00579$ 9; $\alpha(\text{L})=0.000762$ 11; $\alpha(\text{M})=0.0001608$ 23; $\alpha(\text{N}+..)=4.19\times 10^{-5}$ 6 $\alpha(\text{N})=3.60\times 10^{-5}$ 5; $\alpha(\text{O})=5.50\times 10^{-6}$ 8; $\alpha(\text{P})=3.65\times 10^{-7}$ 6
3409.9	(25/2 ⁺)	779.2 2	100	2630.6 (23/2 ⁺)	(M1) ‡	0.00614	$\alpha(\text{K})=0.00526$ 8; $\alpha(\text{L})=0.000692$ 10; $\alpha(\text{M})=0.0001460$ 21; $\alpha(\text{N}+..)=3.81\times 10^{-5}$ 6 $\alpha(\text{N})=3.27\times 10^{-5}$ 5; $\alpha(\text{O})=5.00\times 10^{-6}$ 7; $\alpha(\text{P})=3.32\times 10^{-7}$ 5
3496.8	(23/2 ⁺)	645.9 2	100	2850.9 (21/2 ⁺)	(M1) ‡	0.00969	$\alpha(\text{K})=0.00830$ 12; $\alpha(\text{L})=0.001098$ 16; $\alpha(\text{M})=0.000232$ 4; $\alpha(\text{N}+..)=6.04\times 10^{-5}$ 9 $\alpha(\text{N})=5.20\times 10^{-5}$ 8; $\alpha(\text{O})=7.93\times 10^{-6}$ 12; $\alpha(\text{P})=5.25\times 10^{-7}$ 8
3555.1	(27/2 ⁺)	924.5 2	100	2630.6 (23/2 ⁺)	(E2) ‡	0.00265	$\alpha(\text{K})=0.00226$ 4; $\alpha(\text{L})=0.000314$ 5; $\alpha(\text{M})=6.67\times 10^{-5}$ 10; $\alpha(\text{N}+..)=1.725\times 10^{-5}$ 25 $\alpha(\text{N})=1.488\times 10^{-5}$ 21; $\alpha(\text{O})=2.23\times 10^{-6}$ 4; $\alpha(\text{P})=1.364\times 10^{-7}$ 20
3674.6	(27/2 ⁺)	264.7 2 294.8 2	36 9 100	3409.9 (25/2 ⁺) 3379.8 (25/2 ⁺)	(M1) ‡ (M1) ‡	0.0953 0.0716	$\alpha(\text{K})=0.0812$ 12; $\alpha(\text{L})=0.01108$ 16; $\alpha(\text{M})=0.00235$ 4; $\alpha(\text{N}+..)=0.000611$ 9 $\alpha(\text{N})=0.000526$ 8; $\alpha(\text{O})=8.00\times 10^{-5}$ 12; $\alpha(\text{P})=5.22\times 10^{-6}$ 8 $\alpha(\text{K})=0.0610$ 9; $\alpha(\text{L})=0.00830$ 12; $\alpha(\text{M})=0.001758$ 25; $\alpha(\text{N}+..)=0.000458$ 7 $\alpha(\text{N})=0.000394$ 6; $\alpha(\text{O})=5.99\times 10^{-5}$ 9; $\alpha(\text{P})=3.92\times 10^{-6}$ 6
3692.3	(27/2 ⁻)	513.3 2 610.8 2	9 4 100	3161.3 (23/2 ⁺) 3081.5 (23/2 ⁻)	(E2) ‡	0.00699	$\alpha(\text{K})=0.00585$ 9; $\alpha(\text{L})=0.000898$ 13; $\alpha(\text{M})=0.000192$ 3; $\alpha(\text{N}+..)=4.93\times 10^{-5}$ 7 $\alpha(\text{N})=4.27\times 10^{-5}$ 6; $\alpha(\text{O})=6.30\times 10^{-6}$ 9; $\alpha(\text{P})=3.48\times 10^{-7}$ 5
3717.3		1086 1	100	2630.6 (23/2 ⁺)			
3757.5	(25/2 ⁻)	65.3 2 384.7 2	100 43 11	3692.3 (27/2 ⁻) 3372.8 (23/2 ⁻)	(M1) ‡	0.0357	$\alpha(\text{K})=0.0305$ 5; $\alpha(\text{L})=0.00411$ 6; $\alpha(\text{M})=0.000870$ 13; $\alpha(\text{N}+..)=0.000226$ 4 $\alpha(\text{N})=0.000195$ 3; $\alpha(\text{O})=2.97\times 10^{-5}$ 5; $\alpha(\text{P})=1.95\times 10^{-6}$ 3
		392.1 2	15	3365.4 (23/2 ⁻)	(M1) ‡	0.0340	$\alpha(\text{K})=0.0290$ 4; $\alpha(\text{L})=0.00391$ 6; $\alpha(\text{M})=0.000827$ 12; $\alpha(\text{N}+..)=0.000215$ 3 $\alpha(\text{N})=0.000185$ 3; $\alpha(\text{O})=2.82\times 10^{-5}$ 4; $\alpha(\text{P})=1.86\times 10^{-6}$ 3
		430.7 2 536.4 2 596.6 2 676.1 2	9 4 9 4 87 100	3326.9 (25/2) 3221.0 (23/2 ⁻) 3161.3 (23/2 ⁺) 3081.5 (23/2 ⁻)	(M1) ‡	0.00866	$\alpha(\text{K})=0.00742$ 11; $\alpha(\text{L})=0.000981$ 14; $\alpha(\text{M})=0.000207$ 3; $\alpha(\text{N}+..)=5.39\times 10^{-5}$ 8 $\alpha(\text{N})=4.64\times 10^{-5}$ 7; $\alpha(\text{O})=7.08\times 10^{-6}$ 10; $\alpha(\text{P})=4.70\times 10^{-7}$ 7
		708.2 2	96	3049.3 (21/2 ⁻)	(E2) ‡	0.00487	$\alpha(\text{K})=0.00410$ 6; $\alpha(\text{L})=0.000605$ 9; $\alpha(\text{M})=0.0001290$ 18; $\alpha(\text{N}+..)=3.32\times 10^{-5}$ 5 $\alpha(\text{N})=2.87\times 10^{-5}$ 4; $\alpha(\text{O})=4.27\times 10^{-6}$ 6; $\alpha(\text{P})=2.46\times 10^{-7}$ 4
		877.8 2	67	2879.6 (21/2 ⁻)	(E2) ‡	0.00297	$\alpha(\text{K})=0.00252$ 4; $\alpha(\text{L})=0.000355$ 5; $\alpha(\text{M})=7.54\times 10^{-5}$ 11; $\alpha(\text{N}+..)=1.95\times 10^{-5}$ 3 $\alpha(\text{N})=1.682\times 10^{-5}$ 24; $\alpha(\text{O})=2.52\times 10^{-6}$ 4; $\alpha(\text{P})=1.524\times 10^{-7}$ 22
3786.4	(25/2 ⁻)	29 ^b 737.0 5		3757.5 (25/2 ⁻) 3049.3 (21/2 ⁻)	(E2) ‡	0.00443	Unobserved transition. $\alpha(\text{K})=0.00374$ 6; $\alpha(\text{L})=0.000546$ 8; $\alpha(\text{M})=0.0001164$ 17; $\alpha(\text{N}+..)=3.00\times 10^{-5}$ 5 $\alpha(\text{N})=2.59\times 10^{-5}$ 4; $\alpha(\text{O})=3.86\times 10^{-6}$ 6; $\alpha(\text{P})=2.25\times 10^{-7}$ 4
3836.7	(27/2 ⁻)	79.2 2	100	3757.5 (25/2 ⁻)			

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)									
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments	
3896.1	(27/2 ⁻)	109.7 2		3786.4 (25/2 ⁻)					
		138.7 2	100	3757.5 (25/2 ⁻)	(M1) [‡]	0.560		$\alpha(\text{K})=0.477$ 7; $\alpha(\text{L})=0.0660$ 10; $\alpha(\text{M})=0.01401$ 21; $\alpha(\text{N}+..)=0.00364$ 6 $\alpha(\text{N})=0.00314$ 5; $\alpha(\text{O})=0.000477$ 7; $\alpha(\text{P})=3.09\times 10^{-5}$ 5	
		814.5 2	17	3081.5 (23/2 ⁻)	(E2) [‡]	0.00352		$\alpha(\text{K})=0.00298$ 5; $\alpha(\text{L})=0.000425$ 6; $\alpha(\text{M})=9.05\times 10^{-5}$ 13; $\alpha(\text{N}+..)=2.34\times 10^{-5}$ 4 $\alpha(\text{N})=2.02\times 10^{-5}$ 3; $\alpha(\text{O})=3.01\times 10^{-6}$ 5; $\alpha(\text{P})=1.80\times 10^{-7}$ 3	
4043.4		1412 1	100	2630.6 (23/2 ⁺)					
4111.6	(29/2 ⁺)	437.0 5	100	3674.6 (27/2 ⁺)	(M1) [‡]	0.0257		$\alpha(\text{K})=0.0220$ 4; $\alpha(\text{L})=0.00295$ 5; $\alpha(\text{M})=0.000624$ 9; $\alpha(\text{N}+..)=0.0001626$ 24 $\alpha(\text{N})=0.0001399$ 20; $\alpha(\text{O})=2.13\times 10^{-5}$ 3; $\alpha(\text{P})=1.403\times 10^{-6}$ 20	
		731.8 2	15 5	3379.8 (25/2 ⁺)					
4160.1	(29/2 ⁻)	264.0 5	100	3896.1 (27/2 ⁻)	(M1) [‡]	0.0959		$\alpha(\text{K})=0.0818$ 13; $\alpha(\text{L})=0.01116$ 17; $\alpha(\text{M})=0.00236$ 4; $\alpha(\text{N}+..)=0.000615$ 10 $\alpha(\text{N})=0.000530$ 8; $\alpha(\text{O})=8.06\times 10^{-5}$ 12; $\alpha(\text{P})=5.26\times 10^{-6}$ 8	
		323.5 2	24	3836.7 (27/2 ⁻)	(M1) [‡]	0.0560		$\alpha(\text{K})=0.0478$ 7; $\alpha(\text{L})=0.00648$ 10; $\alpha(\text{M})=0.001372$ 20; $\alpha(\text{N}+..)=0.000357$ 5 $\alpha(\text{N})=0.000307$ 5; $\alpha(\text{O})=4.68\times 10^{-5}$ 7; $\alpha(\text{P})=3.06\times 10^{-6}$ 5	
4246.9	(29/2 ⁻)	460.5 2	100	3786.4 (25/2 ⁻)	(E2) [‡]	0.01474		$\alpha(\text{K})=0.01214$ 17; $\alpha(\text{L})=0.00205$ 3; $\alpha(\text{M})=0.000442$ 7; $\alpha(\text{N}+..)=0.0001127$ 16 $\alpha(\text{N})=9.78\times 10^{-5}$ 14; $\alpha(\text{O})=1.420\times 10^{-5}$ 20; $\alpha(\text{P})=7.06\times 10^{-7}$ 10	
4465.5		748.0 5	100	3717.3					
4476.1	(31/2 ⁺)	364.5 2	76	4111.6 (29/2 ⁺)	(M1) [‡]	0.0410		$\alpha(\text{K})=0.0351$ 5; $\alpha(\text{L})=0.00473$ 7; $\alpha(\text{M})=0.001002$ 14; $\alpha(\text{N}+..)=0.000261$ 4 $\alpha(\text{N})=0.000224$ 4; $\alpha(\text{O})=3.42\times 10^{-5}$ 5; $\alpha(\text{P})=2.24\times 10^{-6}$ 4	
		801.5 2	100	3674.6 (27/2 ⁺)	(E2) [‡]	0.00365		$\alpha(\text{K})=0.00309$ 5; $\alpha(\text{L})=0.000443$ 7; $\alpha(\text{M})=9.41\times 10^{-5}$ 14; $\alpha(\text{N}+..)=2.43\times 10^{-5}$ 4 $\alpha(\text{N})=2.10\times 10^{-5}$ 3; $\alpha(\text{O})=3.13\times 10^{-6}$ 5; $\alpha(\text{P})=1.86\times 10^{-7}$ 3	
4514.0	(31/2 ⁻)	353.9 2	100	4160.1 (29/2 ⁻)	(M1) [‡]	0.0443		$\alpha(\text{K})=0.0378$ 6; $\alpha(\text{L})=0.00511$ 8; $\alpha(\text{M})=0.001082$ 16; $\alpha(\text{N}+..)=0.000282$ 4 $\alpha(\text{N})=0.000242$ 4; $\alpha(\text{O})=3.69\times 10^{-5}$ 6; $\alpha(\text{P})=2.42\times 10^{-6}$ 4	
		617.9 2	9	3896.1 (27/2 ⁻)	(E2) [‡]	0.00679		$\alpha(\text{K})=0.00569$ 8; $\alpha(\text{L})=0.000870$ 13; $\alpha(\text{M})=0.000186$ 3; $\alpha(\text{N}+..)=4.78\times 10^{-5}$ 7 $\alpha(\text{N})=4.14\times 10^{-5}$ 6; $\alpha(\text{O})=6.11\times 10^{-6}$ 9; $\alpha(\text{P})=3.39\times 10^{-7}$ 5	
4534.3	(31/2 ⁺)	979.2 2	100	3555.1 (27/2 ⁺)	(E2) [‡]	0.00234		$\alpha(\text{K})=0.00200$ 3; $\alpha(\text{L})=0.000275$ 4; $\alpha(\text{M})=5.84\times 10^{-5}$ 9; $\alpha(\text{N}+..)=1.510\times 10^{-5}$ 22 $\alpha(\text{N})=1.302\times 10^{-5}$ 19; $\alpha(\text{O})=1.96\times 10^{-6}$ 3; $\alpha(\text{P})=1.208\times 10^{-7}$ 17	
4587.1	(29/2 ⁻)	691.0 5	100	3896.1 (27/2 ⁻)					
4727.9	(31/2 ⁺)	616.3 2	100	4111.6 (29/2 ⁺)	(M1) [‡]	0.01087		$\alpha(\text{K})=0.00931$ 13; $\alpha(\text{L})=0.001235$ 18; $\alpha(\text{M})=0.000261$ 4; $\alpha(\text{N}+..)=6.79\times 10^{-5}$ 10 $\alpha(\text{N})=5.84\times 10^{-5}$ 9; $\alpha(\text{O})=8.91\times 10^{-6}$ 13; $\alpha(\text{P})=5.90\times 10^{-7}$ 9	
4822.4	(31/2 ⁻)	235.3 2	60	4587.1 (29/2 ⁻)	(M1) [‡]	0.1307		$\alpha(\text{K})=0.1114$ 16; $\alpha(\text{L})=0.01524$ 22; $\alpha(\text{M})=0.00323$ 5; $\alpha(\text{N}+..)=0.000841$ 12 $\alpha(\text{N})=0.000723$ 11; $\alpha(\text{O})=0.0001100$ 16; $\alpha(\text{P})=7.17\times 10^{-6}$ 11	
		662.3 2	80 20	4160.1 (29/2 ⁻)	(M1) [‡]	0.00911		$\alpha(\text{K})=0.00780$ 11; $\alpha(\text{L})=0.001032$ 15; $\alpha(\text{M})=0.000218$ 3; $\alpha(\text{N}+..)=5.68\times 10^{-5}$ 8 $\alpha(\text{N})=4.88\times 10^{-5}$ 7; $\alpha(\text{O})=7.45\times 10^{-6}$ 11; $\alpha(\text{P})=4.94\times 10^{-7}$ 7	
		926.3 2	100	3896.1 (27/2 ⁻)					
4843.9	(31/2 ⁻)	985.8 2	50 20	3836.7 (27/2 ⁻)					
		683.8 2	100	4160.1 (29/2 ⁻)	(M1) [‡]	0.00843		$\alpha(\text{K})=0.00722$ 11; $\alpha(\text{L})=0.000954$ 14; $\alpha(\text{M})=0.000201$ 3; $\alpha(\text{N}+..)=5.25\times 10^{-5}$ 8 $\alpha(\text{N})=4.51\times 10^{-5}$ 7; $\alpha(\text{O})=6.88\times 10^{-6}$ 10; $\alpha(\text{P})=4.57\times 10^{-7}$ 7	

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)									
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments	
4870.3	(31/2 ⁻)	710.2 2	100	4160.1	(29/2 ⁻)	(M1) [‡]	0.00768	$\alpha(\text{K})=0.00658$ 10; $\alpha(\text{L})=0.000869$ 13; $\alpha(\text{M})=0.000183$ 3; $\alpha(\text{N}+..)=4.78\times 10^{-5}$ 7 $\alpha(\text{N})=4.11\times 10^{-5}$ 6; $\alpha(\text{O})=6.27\times 10^{-6}$ 9; $\alpha(\text{P})=4.16\times 10^{-7}$ 6	
4885.6	(29/2 ⁺)	420.0 5 842.0 5 989.5 2 1330.4 10	22 22 22 22 44 22 100 2	4465.5 4043.4 3896.1 (27/2 ⁻) 3555.1 (27/2 ⁺)					
4909.8	(33/2 ⁻)	395.8 2	100	4514.0	(31/2 ⁻)	(M1) [‡]	0.0332	$\alpha(\text{K})=0.0283$ 4; $\alpha(\text{L})=0.00382$ 6; $\alpha(\text{M})=0.000807$ 12; $\alpha(\text{N}+..)=0.000210$ 3 $\alpha(\text{N})=0.000181$ 3; $\alpha(\text{O})=2.76\times 10^{-5}$ 4; $\alpha(\text{P})=1.81\times 10^{-6}$ 3	
		749.7 2	19 7	4160.1	(29/2 ⁻)	(E2) [‡]	0.00426	$\alpha(\text{K})=0.00360$ 5; $\alpha(\text{L})=0.000523$ 8; $\alpha(\text{M})=0.0001114$ 16; $\alpha(\text{N}+..)=2.87\times 10^{-5}$ 4 $\alpha(\text{N})=2.48\times 10^{-5}$ 4; $\alpha(\text{O})=3.69\times 10^{-6}$ 6; $\alpha(\text{P})=2.16\times 10^{-7}$ 3	
4925.3	(29/2 ⁺)	1370.0 10	100	3555.1	(27/2 ⁺)				
4939.2	(29/2 ⁺)	1384 1	100	3555.1	(27/2 ⁺)				
4947.8	(33/2 ⁻)	700.9 2	100	4246.9	(29/2 ⁻)	(E2) [‡]	0.00499	$\alpha(\text{K})=0.00420$ 6; $\alpha(\text{L})=0.000621$ 9; $\alpha(\text{M})=0.0001326$ 19; $\alpha(\text{N}+..)=3.41\times 10^{-5}$ 5 $\alpha(\text{N})=2.95\times 10^{-5}$ 5; $\alpha(\text{O})=4.38\times 10^{-6}$ 7; $\alpha(\text{P})=2.52\times 10^{-7}$ 4	
5025.2	(33/2 ⁺)	549.1 2 913.6 2	100 25 63 25	4476.1 (31/2 ⁺) 4111.6 (29/2 ⁺)					
5108.1	(33/2 ⁻)	237.8 2	34	4870.3	(31/2 ⁻)	(M1) [‡]	0.1270	$\alpha(\text{K})=0.1082$ 16; $\alpha(\text{L})=0.01481$ 21; $\alpha(\text{M})=0.00314$ 5; $\alpha(\text{N}+..)=0.000817$ 12 $\alpha(\text{N})=0.000703$ 10; $\alpha(\text{O})=0.0001069$ 16; $\alpha(\text{P})=6.97\times 10^{-6}$ 10	
		264.2 2	38 8	4843.9	(31/2 ⁻)				
		285.8 2	100	4822.4	(31/2 ⁻)	(M1) [‡]	0.0777	$\alpha(\text{K})=0.0663$ 10; $\alpha(\text{L})=0.00902$ 13; $\alpha(\text{M})=0.00191$ 3; $\alpha(\text{N}+..)=0.000497$ 7 $\alpha(\text{N})=0.000428$ 6; $\alpha(\text{O})=6.51\times 10^{-5}$ 10; $\alpha(\text{P})=4.26\times 10^{-6}$ 6	
5180.2	(35/2 ⁺)	948.0 5	23 8	4160.1	(29/2 ⁻)				
5195.3	(31/2)	645.9 2	100	4534.3	(31/2 ⁺)				
5372.6	(35/2 ⁻)	661.0 5	100	4534.3	(31/2 ⁺)				
		462.8 2	100	4909.8	(33/2 ⁻)	(M1) [‡]	0.0223	$\alpha(\text{K})=0.0190$ 3; $\alpha(\text{L})=0.00255$ 4; $\alpha(\text{M})=0.000539$ 8; $\alpha(\text{N}+..)=0.0001403$ 20 $\alpha(\text{N})=0.0001207$ 17; $\alpha(\text{O})=1.84\times 10^{-5}$ 3; $\alpha(\text{P})=1.212\times 10^{-6}$ 17	
		858.6 2	15 5	4514.0	(31/2 ⁻)				
5415.2	(35/2 ⁺)	390.0 5	36 18	5025.2	(33/2 ⁺)				
		939.1 2	100	4476.1	(31/2 ⁺)				
5416.3	(35/2 ⁻)	308.2 2	100	5108.1	(33/2 ⁻)	(M1) [‡]	0.0636	$\alpha(\text{K})=0.0543$ 8; $\alpha(\text{L})=0.00737$ 11; $\alpha(\text{M})=0.001561$ 22; $\alpha(\text{N}+..)=0.000406$ 6 $\alpha(\text{N})=0.000350$ 5; $\alpha(\text{O})=5.32\times 10^{-5}$ 8; $\alpha(\text{P})=3.48\times 10^{-6}$ 5	
5520.4	(33/2 ⁺)	581.2 2 595.1 2 634.7 2 676.6 2	7 4 7 4 100 15 7	4939.2 (29/2 ⁺) 4925.3 (29/2 ⁺) 4885.6 (29/2 ⁺) 4843.9 (31/2 ⁻)				E_γ, I_γ : from 1997Pe06 . E_γ, I_γ : from 1997Pe06 . E_γ, I_γ : from 1997Pe06 . E_γ, I_γ : from 1997Pe06 .	
5559.4	(35/2 ⁺)	1025.1 10	100	4534.3	(31/2 ⁺)	(E2) [‡]	0.00213	$\alpha(\text{K})=0.00181$ 3; $\alpha(\text{L})=0.000248$ 4; $\alpha(\text{M})=5.26\times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.361\times 10^{-5}$ 20 $\alpha(\text{N})=1.173\times 10^{-5}$ 17; $\alpha(\text{O})=1.77\times 10^{-6}$ 3; $\alpha(\text{P})=1.098\times 10^{-7}$ 16	
5596.8	(33/2 ⁺)	401.5 2	100 50	5195.3	(31/2)				

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
5596.8	(33/2 ⁺)	1062.5 10	83 33	4534.3	(31/2 ⁺)	(M1) [‡]	0.00294	$\alpha(\text{K})=0.00252$ 4; $\alpha(\text{L})=0.000329$ 5; $\alpha(\text{M})=6.93\times 10^{-5}$ 10; $\alpha(\text{N}+..)=1.81\times 10^{-5}$ 3 $\alpha(\text{N})=1.552\times 10^{-5}$ 22; $\alpha(\text{O})=2.37\times 10^{-6}$ 4; $\alpha(\text{P})=1.585\times 10^{-7}$ 23
5701.8	(35/2 ⁻)	754.0 5	100	4947.8	(33/2 ⁻)	(M1) [‡]	0.00664	$\alpha(\text{K})=0.00570$ 8; $\alpha(\text{L})=0.000750$ 11; $\alpha(\text{M})=0.0001583$ 23; $\alpha(\text{N}+..)=4.12\times 10^{-5}$ 6 $\alpha(\text{N})=3.55\times 10^{-5}$ 5; $\alpha(\text{O})=5.41\times 10^{-6}$ 8; $\alpha(\text{P})=3.60\times 10^{-7}$ 5
5788.4	(37/2 ⁻)	372.1 2	100	5416.3	(35/2 ⁻)	(M1) [‡]	0.0389	$\alpha(\text{K})=0.0332$ 5; $\alpha(\text{L})=0.00448$ 7; $\alpha(\text{M})=0.000949$ 14; $\alpha(\text{N}+..)=0.000247$ 4 $\alpha(\text{N})=0.000213$ 3; $\alpha(\text{O})=3.24\times 10^{-5}$ 5; $\alpha(\text{P})=2.12\times 10^{-6}$ 3
5813.0	(37/2 ⁻)	440.4 2	100	5372.6	(35/2 ⁻)	(M1) [‡]	0.0252	$\alpha(\text{K})=0.0216$ 3; $\alpha(\text{L})=0.00289$ 4; $\alpha(\text{M})=0.000612$ 9; $\alpha(\text{N}+..)=0.0001594$ 23 $\alpha(\text{N})=0.0001371$ 20; $\alpha(\text{O})=2.09\times 10^{-5}$ 3; $\alpha(\text{P})=1.376\times 10^{-6}$ 20
5823.5	(37/2 ⁻)	903.2 2 875.7 2	13 5 100	4909.8 (33/2 ⁻) 4947.8 (33/2 ⁻)	(E2) [‡]	0.00299	$\alpha(\text{K})=0.00254$ 4; $\alpha(\text{L})=0.000357$ 5; $\alpha(\text{M})=7.59\times 10^{-5}$ 11; $\alpha(\text{N}+..)=1.96\times 10^{-5}$ 3 $\alpha(\text{N})=1.691\times 10^{-5}$ 24; $\alpha(\text{O})=2.53\times 10^{-6}$ 4; $\alpha(\text{P})=1.532\times 10^{-7}$ 22	
5853.7	(35/2 ⁺)	257.0 5	100	5596.8	(33/2 ⁺)	(M1) [‡]	0.1031	$\alpha(\text{K})=0.0879$ 14; $\alpha(\text{L})=0.01200$ 18; $\alpha(\text{M})=0.00254$ 4; $\alpha(\text{N}+..)=0.000662$ 10 $\alpha(\text{N})=0.000569$ 9; $\alpha(\text{O})=8.66\times 10^{-5}$ 13; $\alpha(\text{P})=5.65\times 10^{-6}$ 9
5952.1	(35/2 ⁺)	1125.4 10 1417.8 10	8 8 100	4727.9 (31/2 ⁺) 4534.3 (31/2 ⁺)	(E2) [‡]	1.15×10 ⁻³	$\alpha(\text{K})=0.000945$ 14; $\alpha(\text{L})=0.0001242$ 18; $\alpha(\text{M})=2.62\times 10^{-5}$ 4; $\alpha(\text{N}+..)=5.69\times 10^{-5}$ 9 $\alpha(\text{N})=5.86\times 10^{-6}$ 9; $\alpha(\text{O})=8.88\times 10^{-7}$ 13; $\alpha(\text{P})=5.74\times 10^{-8}$ 8; $\alpha(\text{IPF})=5.01\times 10^{-5}$ 8	
6020.6	(37/2 ⁺)	605.4 2 995.4 2	100 33 67 33	5415.2 (35/2 ⁺) 5025.2 (33/2 ⁺)				
6079.5	(39/2 ⁺)	899.3 2	100	5180.2 (35/2 ⁺)				
6161.0	(37/2 ⁺)	307.3 2	100	5853.7 (35/2 ⁺)	(M1) [‡]	0.0641	$\alpha(\text{K})=0.0547$ 8; $\alpha(\text{L})=0.00743$ 11; $\alpha(\text{M})=0.001573$ 23; $\alpha(\text{N}+..)=0.000410$ 6 $\alpha(\text{N})=0.000352$ 5; $\alpha(\text{O})=5.36\times 10^{-5}$ 8; $\alpha(\text{P})=3.51\times 10^{-6}$ 5	
6194.4	(39/2 ⁻)	381.4 2	100 16	5813.0 (37/2 ⁻)	(M1) [‡]	0.0365	$\alpha(\text{K})=0.0312$ 5; $\alpha(\text{L})=0.00420$ 6; $\alpha(\text{M})=0.000889$ 13; $\alpha(\text{N}+..)=0.000232$ 4 $\alpha(\text{N})=0.000199$ 3; $\alpha(\text{O})=3.03\times 10^{-5}$ 5; $\alpha(\text{P})=1.99\times 10^{-6}$ 3	
6198.9	(37/2 ⁺)	821.8 2 678.5 2	23 6 100	5372.6 (35/2 ⁻) 5520.4 (33/2 ⁺)				E_γ : from 1997Pe06 .
6263.7	(39/2 ⁻)	475.3 2	100	5788.4 (37/2 ⁻)	(M1) [‡]	0.0208	$\alpha(\text{K})=0.01779$ 25; $\alpha(\text{L})=0.00238$ 4; $\alpha(\text{M})=0.000503$ 7; $\alpha(\text{N}+..)=0.0001310$ 19 $\alpha(\text{N})=0.0001127$ 16; $\alpha(\text{O})=1.718\times 10^{-5}$ 25; $\alpha(\text{P})=1.133\times 10^{-6}$ 16	
6359.6	(39/2 ⁻)	536.1 2	52	5823.5 (37/2 ⁻)	(M1) [‡]	0.01537	$\alpha(\text{K})=0.01315$ 19; $\alpha(\text{L})=0.001752$ 25; $\alpha(\text{M})=0.000370$ 6;	

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
								$\alpha(\text{N}+..)=9.64\times 10^{-5}$ 14 $\alpha(\text{N})=8.30\times 10^{-5}$ 12; $\alpha(\text{O})=1.265\times 10^{-5}$ 18; $\alpha(\text{P})=8.36\times 10^{-7}$ 12
6359.6	(39/2 ⁻)	657.8 2	100	5701.8	(35/2 ⁻)	(E2) [‡]	0.00582	$\alpha(\text{K})=0.00489$ 7; $\alpha(\text{L})=0.000734$ 11; $\alpha(\text{M})=0.0001569$ 22; $\alpha(\text{N}+..)=4.04\times 10^{-5}$ 6 $\alpha(\text{N})=3.49\times 10^{-5}$ 5; $\alpha(\text{O})=5.17\times 10^{-6}$ 8; $\alpha(\text{P})=2.92\times 10^{-7}$ 4
6471.8	(39/2 ⁺)	912.4 2	100	5559.4	(35/2 ⁺)			
6479.0	(39/2 ⁺)	1063.8 5	100	5415.2	(35/2 ⁺)	(E2) [‡]	0.00197	$\alpha(\text{K})=0.001678$ 24; $\alpha(\text{L})=0.000229$ 4; $\alpha(\text{M})=4.84\times 10^{-5}$ 7; $\alpha(\text{N}+..)=1.253\times 10^{-5}$ 18 $\alpha(\text{N})=1.080\times 10^{-5}$ 16; $\alpha(\text{O})=1.628\times 10^{-6}$ 23; $\alpha(\text{P})=1.017\times 10^{-7}$ 15
6515.8	(39/2 ⁺)	354.7 2	100	6161.0	(37/2 ⁺)	(M1) [‡]	0.0441	$\alpha(\text{K})=0.0376$ 6; $\alpha(\text{L})=0.00508$ 8; $\alpha(\text{M})=0.001076$ 16; $\alpha(\text{N}+..)=0.000280$ 4 $\alpha(\text{N})=0.000241$ 4; $\alpha(\text{O})=3.67\times 10^{-5}$ 6; $\alpha(\text{P})=2.41\times 10^{-6}$ 4
6531.7	(39/2 ⁺)	370.9 2	100	6161.0	(37/2 ⁺)	(M1) [‡]	0.0392	$\alpha(\text{K})=0.0335$ 5; $\alpha(\text{L})=0.00452$ 7; $\alpha(\text{M})=0.000957$ 14; $\alpha(\text{N}+..)=0.000249$ 4 $\alpha(\text{N})=0.000214$ 3; $\alpha(\text{O})=3.26\times 10^{-5}$ 5; $\alpha(\text{P})=2.14\times 10^{-6}$ 3
6644.4	(39/2 ⁺)	692.3 2	100	5952.1	(35/2 ⁺)	(E2) [‡]	0.00514	$\alpha(\text{K})=0.00433$ 6; $\alpha(\text{L})=0.000642$ 9; $\alpha(\text{M})=0.0001369$ 20; $\alpha(\text{N}+..)=3.52\times 10^{-5}$ 5 $\alpha(\text{N})=3.05\times 10^{-5}$ 5; $\alpha(\text{O})=4.52\times 10^{-6}$ 7; $\alpha(\text{P})=2.59\times 10^{-7}$ 4
6669.5	(41/2 ⁻)	475.1 2	100 33	6194.4	(39/2 ⁻)	(M1) [‡]	0.0208	$\alpha(\text{K})=0.0178$ 3; $\alpha(\text{L})=0.00238$ 4; $\alpha(\text{M})=0.000504$ 7; $\alpha(\text{N}+..)=0.0001312$ 19 $\alpha(\text{N})=0.0001128$ 16; $\alpha(\text{O})=1.720\times 10^{-5}$ 25; $\alpha(\text{P})=1.134\times 10^{-6}$ 16
		856.5 2	33 13	5813.0	(37/2 ⁻)			
6795.2	(41/2 ⁻)	531.5 2	100	6263.7	(39/2 ⁻)	(M1) [‡]	0.01570	$\alpha(\text{K})=0.01344$ 19; $\alpha(\text{L})=0.00179$ 3; $\alpha(\text{M})=0.000378$ 6; $\alpha(\text{N}+..)=9.86\times 10^{-5}$ 14 $\alpha(\text{N})=8.48\times 10^{-5}$ 12; $\alpha(\text{O})=1.293\times 10^{-5}$ 19; $\alpha(\text{P})=8.54\times 10^{-7}$ 12
6851.3	(41/2 ⁻)	1027.8 5	100	5823.5	(37/2 ⁻)	(E2) [‡]	0.00212	$\alpha(\text{K})=0.00180$ 3; $\alpha(\text{L})=0.000247$ 4; $\alpha(\text{M})=5.23\times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.353\times 10^{-5}$ 19 $\alpha(\text{N})=1.166\times 10^{-5}$ 17; $\alpha(\text{O})=1.756\times 10^{-6}$ 25; $\alpha(\text{P})=1.092\times 10^{-7}$ 16
6916.4	(41/2 ⁺)	384.8 2	67 22	6531.7	(39/2 ⁺)	(M1) [‡]	0.0357	$\alpha(\text{K})=0.0305$ 5; $\alpha(\text{L})=0.00411$ 6; $\alpha(\text{M})=0.000869$ 13; $\alpha(\text{N}+..)=0.000226$ 4 $\alpha(\text{N})=0.000195$ 3; $\alpha(\text{O})=2.97\times 10^{-5}$ 5; $\alpha(\text{P})=1.95\times 10^{-6}$ 3
		400.4 2	100 33	6515.8	(39/2 ⁺)	(M1) [‡]	0.0322	$\alpha(\text{K})=0.0275$ 4; $\alpha(\text{L})=0.00370$ 6; $\alpha(\text{M})=0.000783$ 11; $\alpha(\text{N}+..)=0.000204$ 3 $\alpha(\text{N})=0.0001755$ 25; $\alpha(\text{O})=2.67\times 10^{-5}$ 4; $\alpha(\text{P})=1.757\times 10^{-6}$ 25 E_γ : from 1997Pe06 .
6940.5	(41/2 ⁺)	741.6 2	100	6198.9	(37/2 ⁺)			
7081.1	(41/2 ⁺)	1060.5 10	100	6020.6	(37/2 ⁺)			
7100.8	(43/2 ⁻)	431.3 2	100 18	6669.5	(41/2 ⁻)	(M1) [‡]	0.0266	$\alpha(\text{K})=0.0228$ 4; $\alpha(\text{L})=0.00305$ 5; $\alpha(\text{M})=0.000646$ 9; $\alpha(\text{N}+..)=0.0001682$ 24 $\alpha(\text{N})=0.0001447$ 21; $\alpha(\text{O})=2.21\times 10^{-5}$ 3; $\alpha(\text{P})=1.451\times 10^{-6}$ 21
		906.4 2	91 27	6194.4	(39/2 ⁻)			
7187.3	(43/2 ⁻)	827.7 2	100	6359.6	(39/2 ⁻)	(E2) [‡]	0.00339	$\alpha(\text{K})=0.00287$ 4; $\alpha(\text{L})=0.000409$ 6; $\alpha(\text{M})=8.70\times 10^{-5}$ 13; $\alpha(\text{N}+..)=2.25\times 10^{-5}$ 4 $\alpha(\text{N})=1.94\times 10^{-5}$ 3; $\alpha(\text{O})=2.90\times 10^{-6}$ 4; $\alpha(\text{P})=1.733\times 10^{-7}$ 25
7196.6	(43/2 ⁺)	552.2 2	100	6644.4	(39/2 ⁺)			
7314.5	(43/2 ⁻)	519.3 2	100	6795.2	(41/2 ⁻)	(M1) [‡]	0.01664	$\alpha(\text{K})=0.01424$ 20; $\alpha(\text{L})=0.00190$ 3; $\alpha(\text{M})=0.000401$ 6; $\alpha(\text{N}+..)=0.0001045$ 15 $\alpha(\text{N})=8.99\times 10^{-5}$ 13; $\alpha(\text{O})=1.371\times 10^{-5}$ 20; $\alpha(\text{P})=9.05\times 10^{-7}$ 13
7339.6	(43/2 ⁺)	423.2 2	100	6916.4	(41/2 ⁺)	(M1) [‡]	0.0279	$\alpha(\text{K})=0.0239$ 4; $\alpha(\text{L})=0.00321$ 5; $\alpha(\text{M})=0.000679$ 10; $\alpha(\text{N}+..)=0.0001767$ 25 $\alpha(\text{N})=0.0001520$ 22; $\alpha(\text{O})=2.32\times 10^{-5}$ 4; $\alpha(\text{P})=1.524\times 10^{-6}$ 22

Adopted Levels, Gammas (continued)

$\gamma(^{137}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\&$	Comments
7586.4	(43/2 ⁺)	1114.6 10	100	6471.8	(39/2 ⁺)			
7652.2	(45/2 ⁻)	551.4 2	100 33	7100.8	(43/2 ⁻)			
		982.7 2	67 33	6669.5	(41/2 ⁻)			
7702.6	(45/2 ⁻)	388.1 2	100	7314.5	(43/2 ⁻)	(M1) [‡]	0.0349	$\alpha(\text{K})=0.0298$ 5; $\alpha(\text{L})=0.00402$ 6; $\alpha(\text{M})=0.000850$ 12; $\alpha(\text{N}+..)=0.000221$ 4 $\alpha(\text{N})=0.000190$ 3; $\alpha(\text{O})=2.90\times 10^{-5}$ 4; $\alpha(\text{P})=1.90\times 10^{-6}$ 3 E_γ : from 1997Pe06 .
7742.9	(45/2 ⁺)	802.4 2	100	6940.5	(41/2 ⁺)			
7797.2	(45/2 ⁺)	457.6 2	100	7339.6	(43/2 ⁺)	(M1) [‡]	0.0229	B(M1)(W.u.)=1.5 10 $\alpha(\text{K})=0.0196$ 3; $\alpha(\text{L})=0.00262$ 4; $\alpha(\text{M})=0.000555$ 8; $\alpha(\text{N}+..)=0.0001444$ 21 $\alpha(\text{N})=0.0001242$ 18; $\alpha(\text{O})=1.89\times 10^{-5}$ 3; $\alpha(\text{P})=1.247\times 10^{-6}$ 18
8040.8	(45/2 ⁻)	1189.5 10	100	6851.3	(41/2 ⁻)			
8187.7	(47/2 ⁻)	1000.4 10	100	7187.3	(43/2 ⁻)	(E2) [‡]	0.00224	$\alpha(\text{K})=0.00191$ 3; $\alpha(\text{L})=0.000262$ 4; $\alpha(\text{M})=5.56\times 10^{-5}$ 8; $\alpha(\text{N}+..)=1.438\times 10^{-5}$ 21 $\alpha(\text{N})=1.240\times 10^{-5}$ 18; $\alpha(\text{O})=1.87\times 10^{-6}$ 3; $\alpha(\text{P})=1.155\times 10^{-7}$ 17
8197.4	(47/2 ⁻)	494.8 2	100	7702.6	(45/2 ⁻)	(M1) [‡]	0.0188	$\alpha(\text{K})=0.01607$ 23; $\alpha(\text{L})=0.00215$ 3; $\alpha(\text{M})=0.000454$ 7; $\alpha(\text{N}+..)=0.0001182$ 17 $\alpha(\text{N})=0.0001017$ 15; $\alpha(\text{O})=1.550\times 10^{-5}$ 22; $\alpha(\text{P})=1.023\times 10^{-6}$ 15
8325.4	(47/2 ⁺)	528.2 2	100	7797.2	(45/2 ⁺)			
8349.2	(47/2 ⁻)	697.0 5	100 33	7652.2	(45/2 ⁻)			
		1248.4 10	67 33	7100.8	(43/2 ⁻)			
8604.4	(49/2 ⁺)	861.5 2	100	7742.9	(45/2 ⁺)			E_γ : from 1997Pe06 .
8745.6	(49/2 ⁻)	548.1 2	100	8197.4	(47/2 ⁻)			
8922.3	(49/2 ⁺)	596.9 2	100	8325.4	(47/2 ⁺)			
9337.8	(51/2 ⁻)	592.2 2	100	8745.6	(49/2 ⁻)			
9365.1	(49/2 ⁻)	1324.3 10	100	8040.8	(45/2 ⁻)			
9372.6	(51/2 ⁻)	1184.9 10	100	8187.7	(47/2 ⁻)			
9411.8	(49/2 ⁻)	1371 1	100	8040.8	(45/2 ⁻)			
9525.0	(53/2 ⁺)	920.6 2	100	8604.4	(49/2 ⁺)			E_γ : from 1997Pe06 .
9568.8	(51/2 ⁺)	646.5 2	100	8922.3	(49/2 ⁺)			
10272.4	(53/2 ⁺)	703.6 2	100	9568.8	(51/2 ⁺)			
10508.9	(57/2 ⁺)	983.9 2	100	9525.0	(53/2 ⁺)			E_γ : from 1997Pe06 .
10729.4	(55/2 ⁻)	1356.8 10	100	9372.6	(51/2 ⁻)			
11558.7	(61/2 ⁺)	1049.8 5	100	10508.9	(57/2 ⁺)			E_γ : from 1997Pe06 .
12673.9	(65/2 ⁺)	1115.2 5	100	11558.7	(61/2 ⁺)			E_γ : from 1997Pe06 .
13851.8	(69/2 ⁺)	1177.9 5	100	12673.9	(65/2 ⁺)			E_γ : from 1997Pe06 .
15090.3	(73/2 ⁺)	1238.5 10	100	13851.8	(69/2 ⁺)			E_γ : from 1997Pe06 .
16389.1	(77/2 ⁺)	1298.7 10	100	15090.3	(73/2 ⁺)			E_γ : from 1997Pe06 .
17751.4	(81/2 ⁺)	1362.3 10	100	16389.1	(77/2 ⁺)			
19184.8	(85/2 ⁺)	1433.4 10	100	17751.4	(81/2 ⁺)			
20695.8	(89/2 ⁺)	1511 1	100	19184.8	(85/2 ⁺)			
22289	(93/2 ⁺)	1593 1	100	20695.8	(89/2 ⁺)			
23972	(97/2 ⁺)	1683 1	100	22289	(93/2 ⁺)			

Adopted Levels, Gammas (continued) $\gamma(^{137}\text{Nd})$ (continued)

[†] From $^{110}\text{Pd}(^{30}\text{Si}, 3n\gamma), ^{123}\text{Sb}(^{19}\text{F}, 5n\gamma)$ ([1997Pe06](#)), unless otherwise noted.

[‡] From R(DCO) values in $^{110}\text{Pd}(^{30}\text{Si}, 3n\gamma), ^{123}\text{Sb}(^{19}\text{F}, 5n\gamma)$, unless otherwise specified.

[#] From conversion electron data in ^{137}Pm ε Decay ([1975No08](#)).

[@] From ^{137}Pm ε decay ([1975No08](#)).

[&] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

^a Multiply placed with undivided intensity.

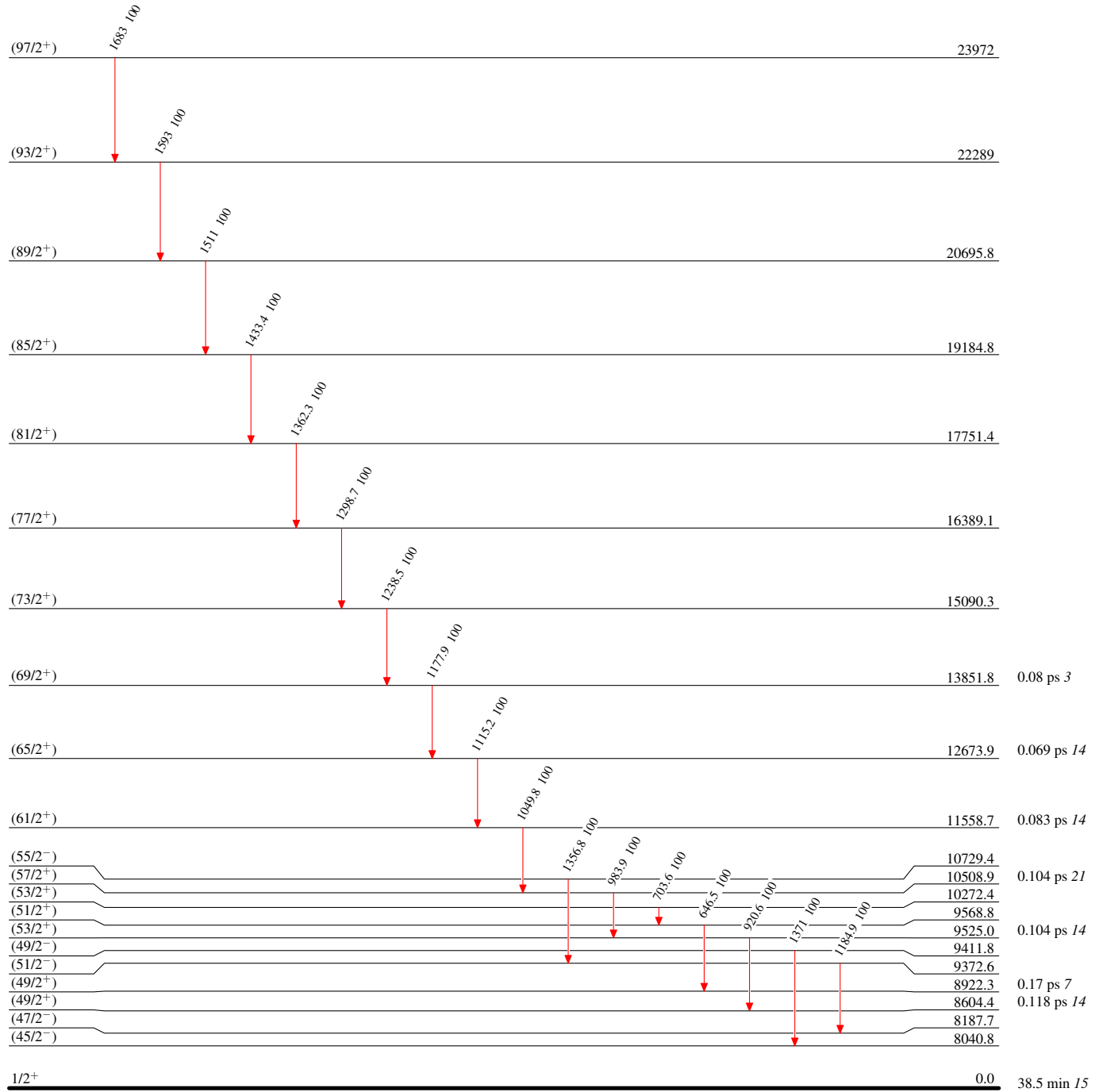
^b Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$



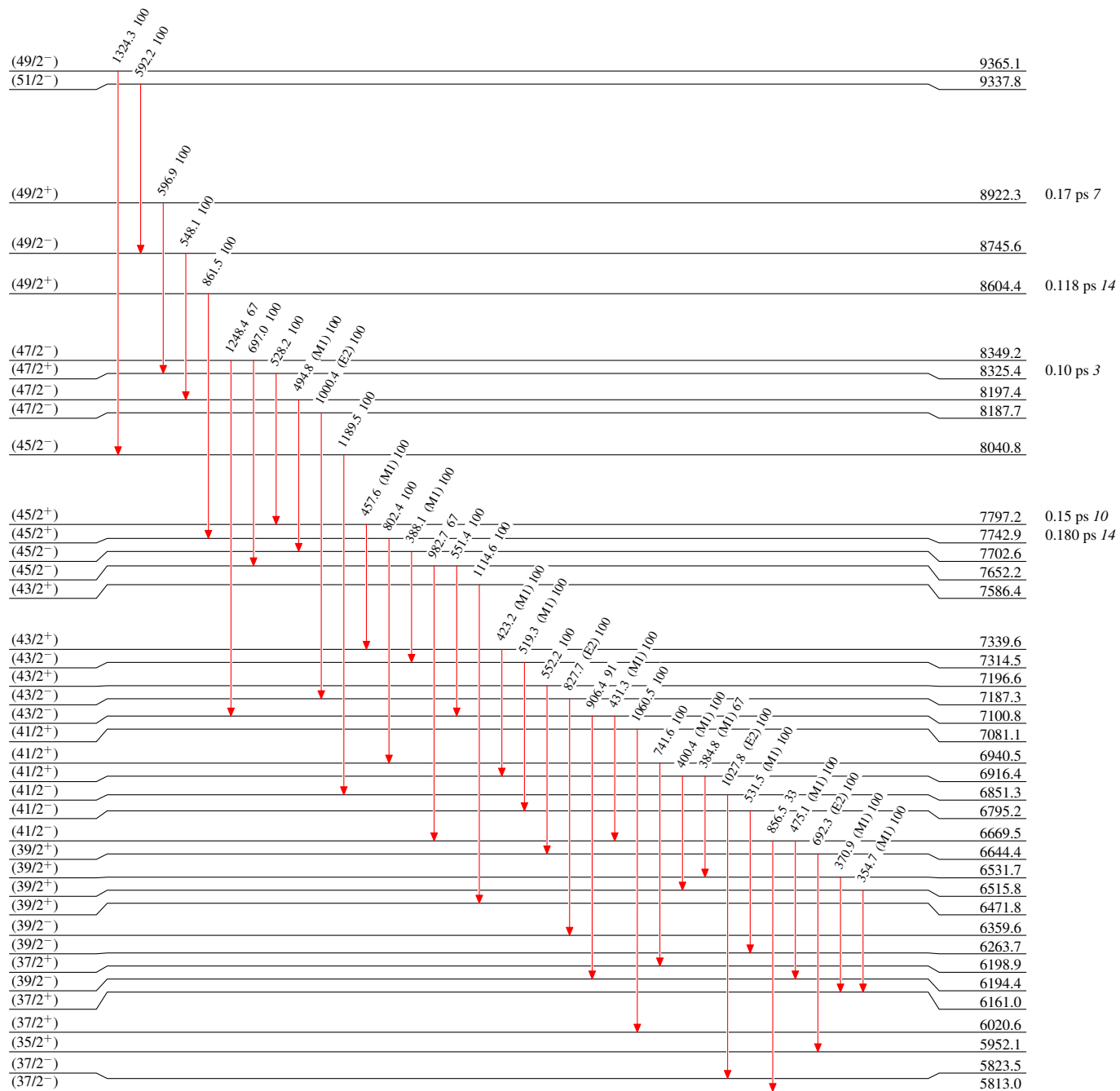
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$

1/2⁺

0.0

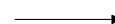
38.5 min 15

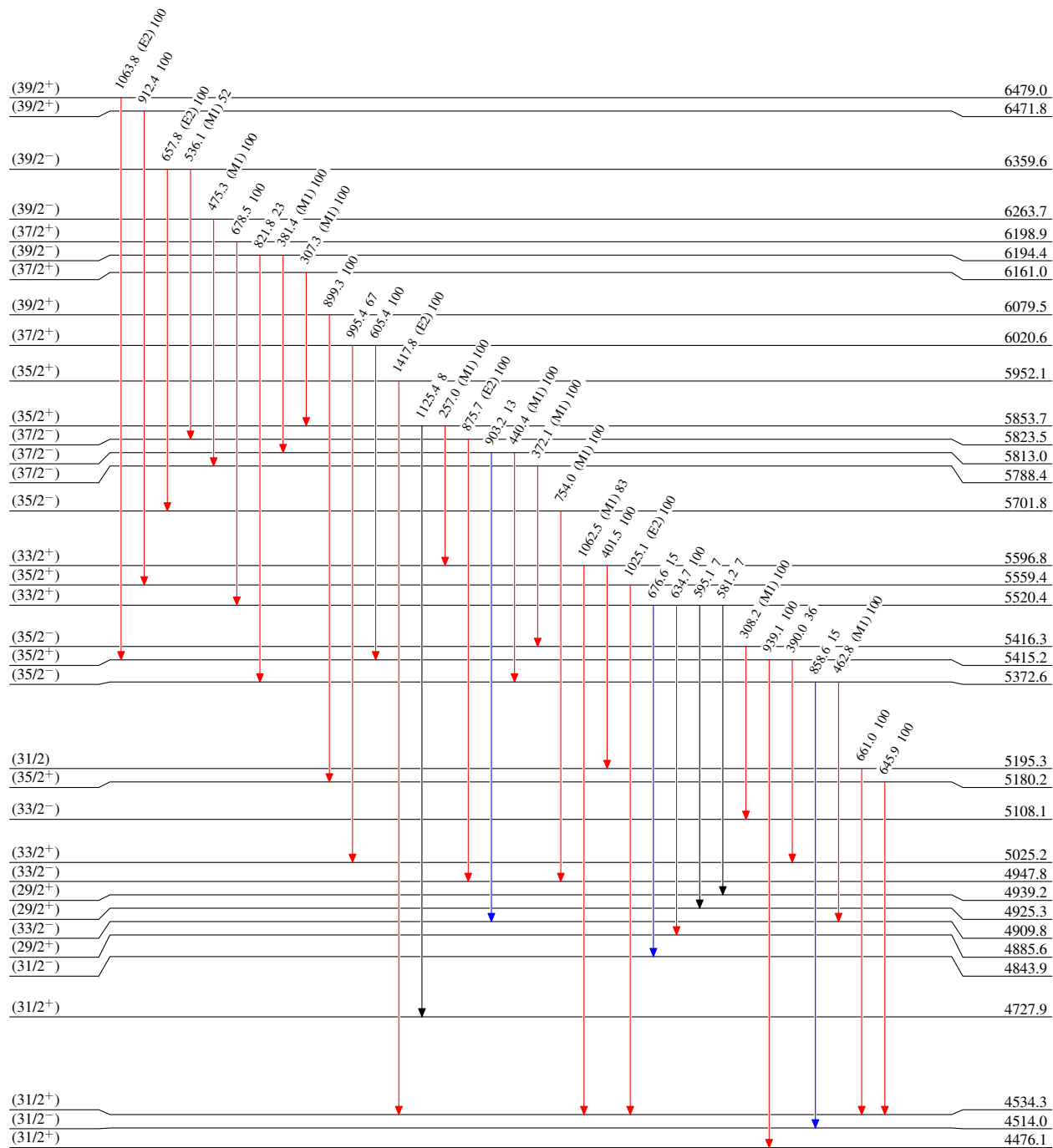
 $^{137}_{60}\text{Nd}_{77}$

Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

1/2⁺

0.0

38.5 min 15

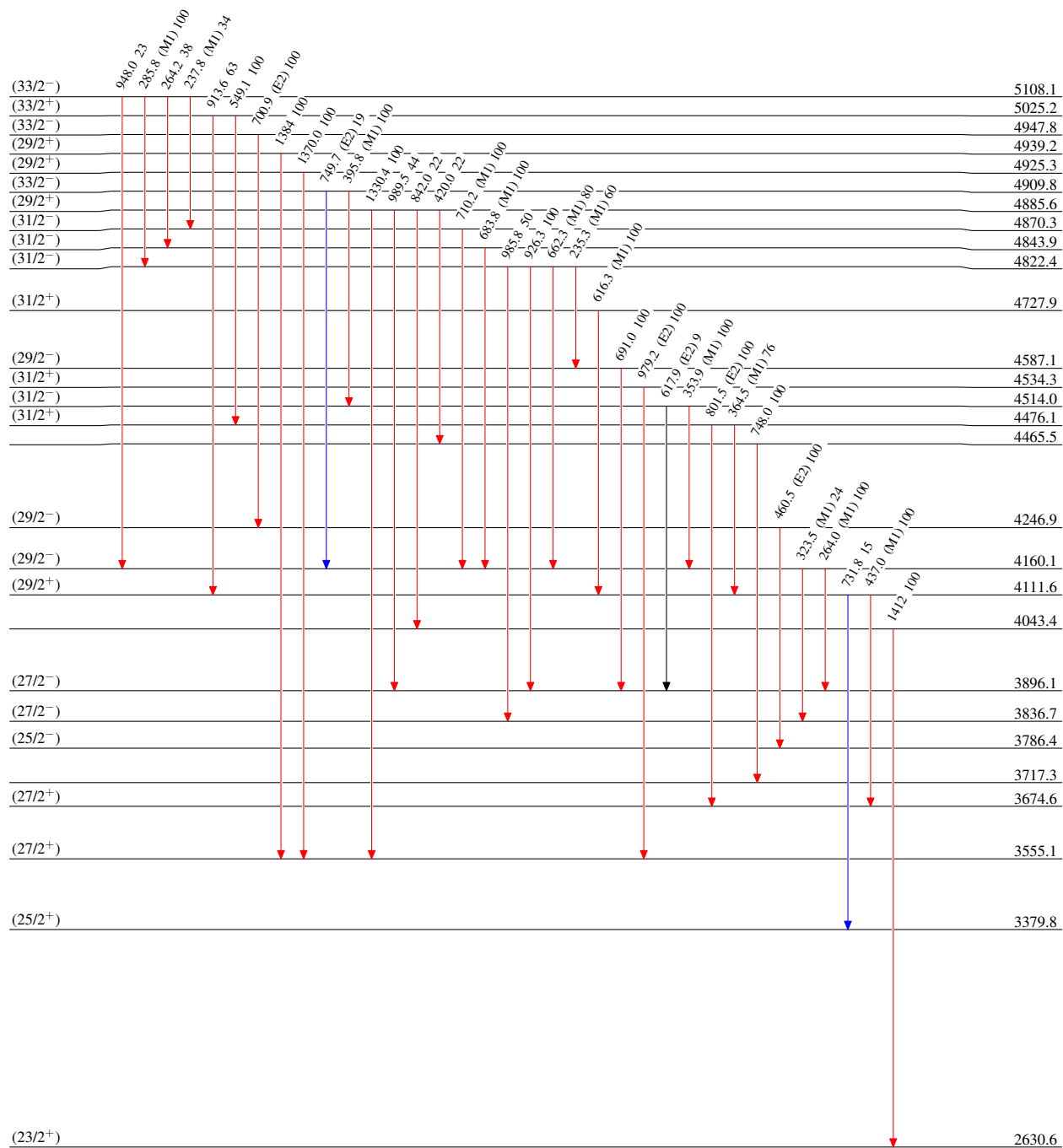
 $^{137}_{60}\text{Nd}_{77}$

Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

1/2⁺

0.0

38.5 min 15

 $^{137}_{60}\text{Nd}_{77}$

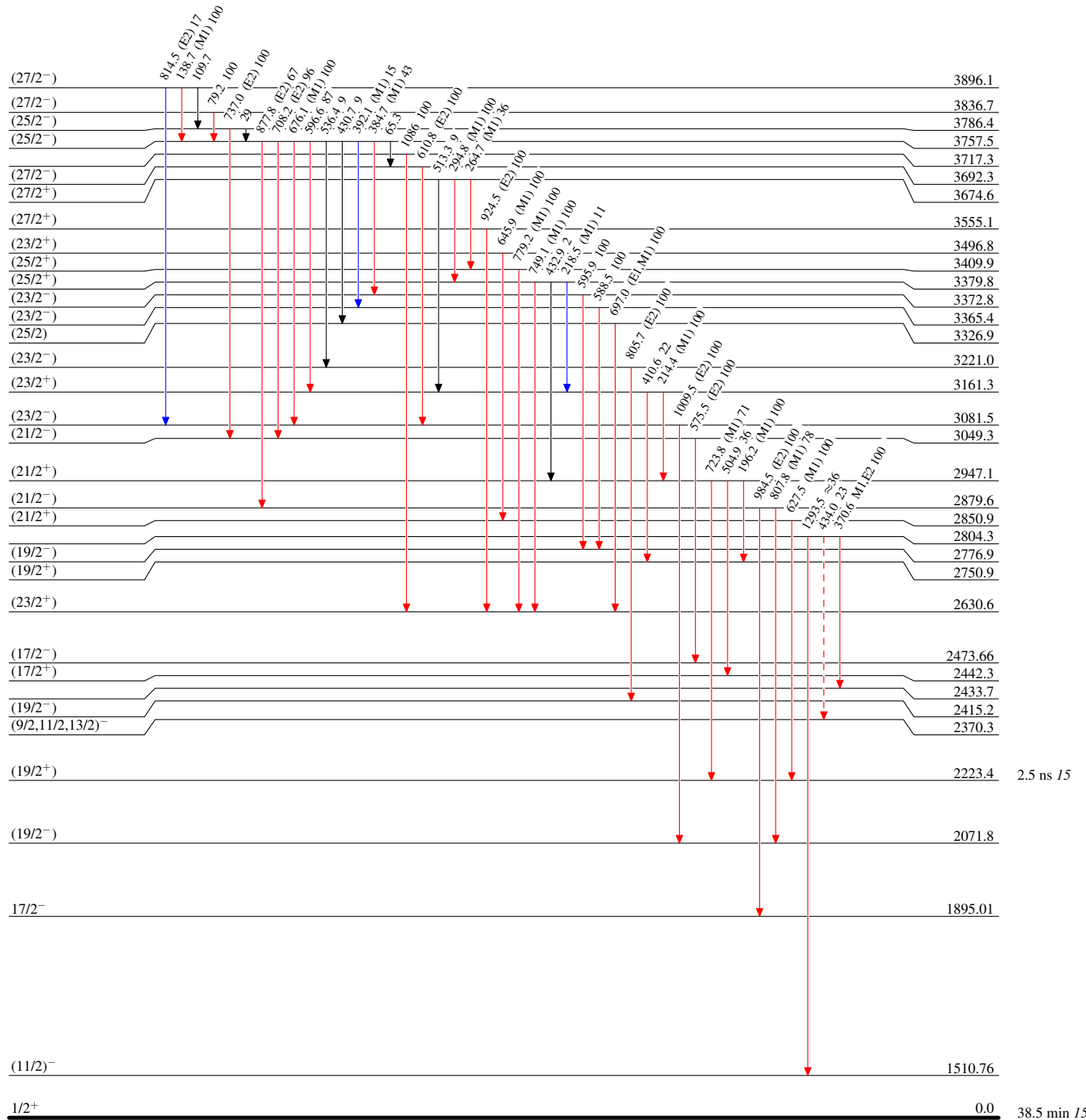
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ γ Decay (Uncertain)

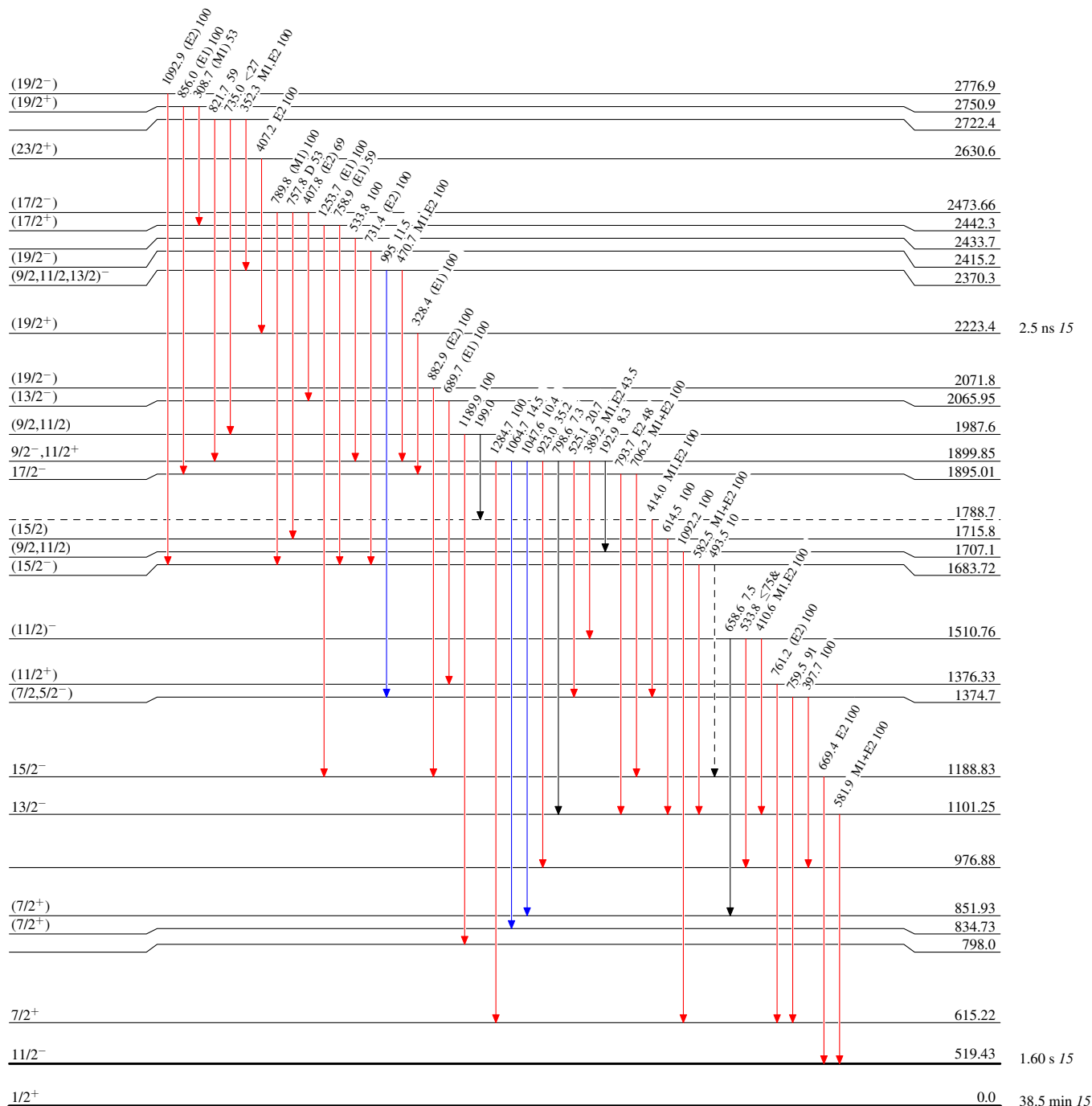


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified
& 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)

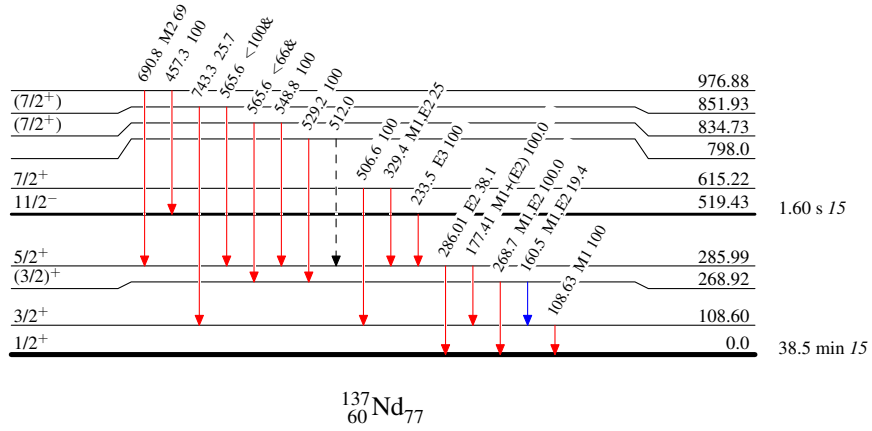


Adopted Levels, Gammas**Level Scheme (continued)**

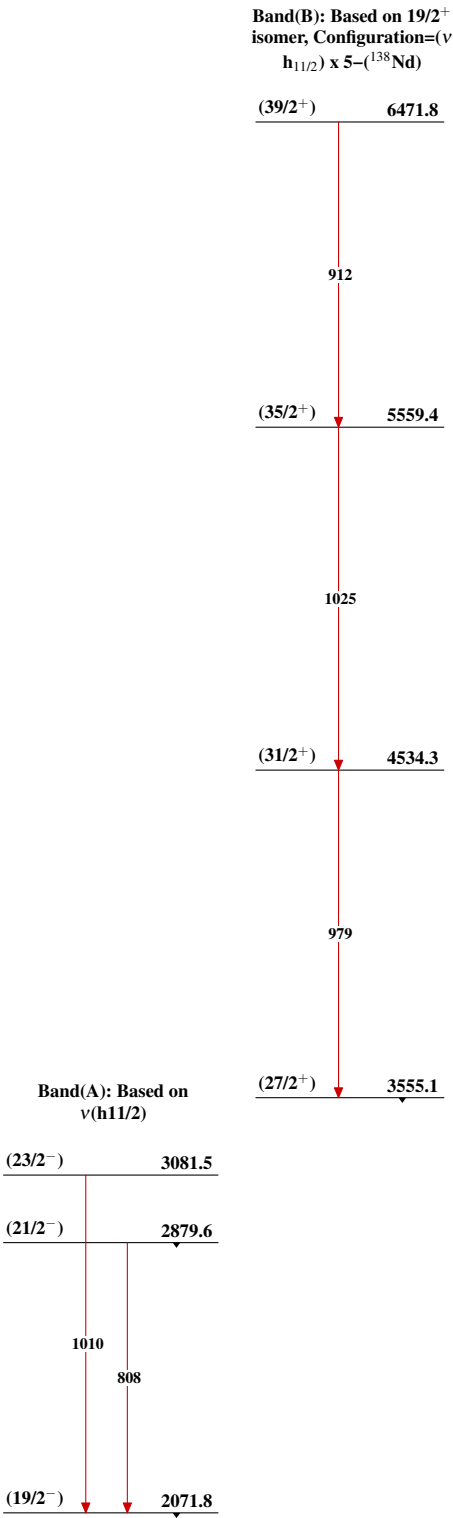
Intensities: Type not specified
& Multiply placed: undivided intensity given

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)

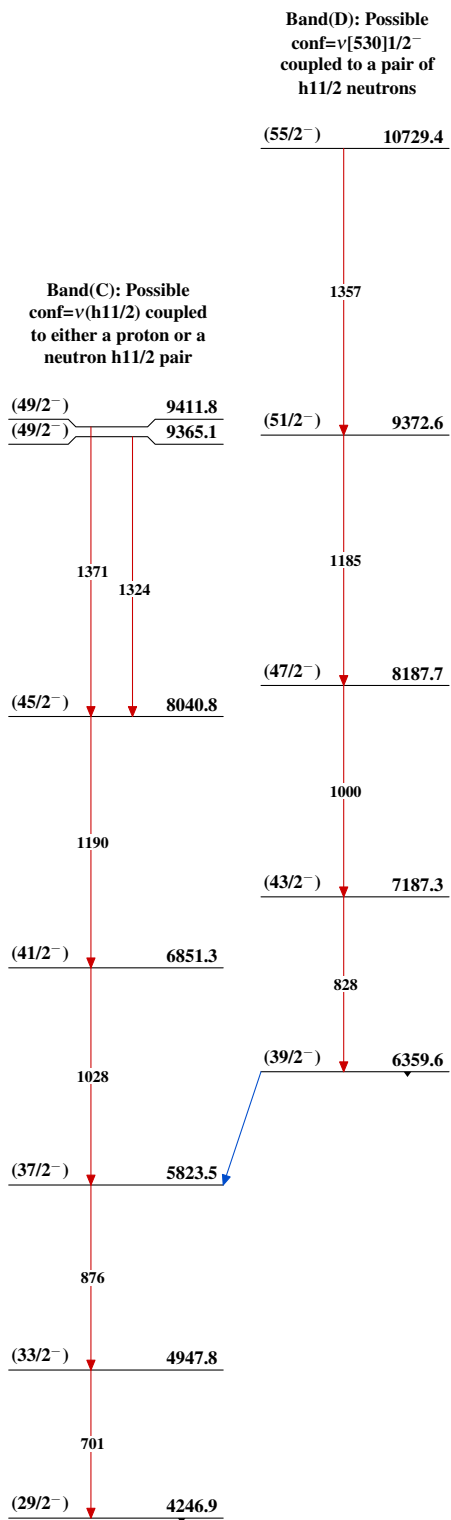
 $^{137}_{60}\text{Nd}_{77}$

Adopted Levels, Gammas



¹³⁷Nd₆₀

Adopted Levels, Gammas (continued)


 $^{137}_{60}\text{Nd}_{77}$

Band(I): Highly deformed band

 $^{137}_{60}\text{Nd}_{77}$