

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 103,1 (2004)	31-Jul-2004

$Q(\beta^-) = -8.91 \times 10^3$ 6; $S(n) = 1.139 \times 10^4$ 5; $S(p) = 4998$ 18; $Q(\alpha) = 1.35 \times 10^3$ 3 [2012Wa38](#)

Note: Current evaluation has used the following Q record $-8.91\text{E}+3$ 6 11.39×10^{35} 4998 171350 30 [2003Au03](#).

 ^{134}Nd LevelsCross Reference (XREF) Flags

A	^{134}Nd IT decay	D	^{135}Sm ε p decay
B	^{134}Pm ε decay (22 s)	E	(HI,xn γ)
C	^{134}Pm ε decay (5 s)		

E(level) ^e	J π ^f	T _{1/2} ^g	XREF	Comments
0.0 [#]	0 ⁺	8.5 min 15	ABCDE	$\% \varepsilon + \% \beta^+ = 100$ T _{1/2} : from 1970Ab07 .
294.17 [#] 16	2 ⁺	64.4 ps 18	ABCDE	$\mu = +1.23$ 36 (1989Ra17) μ : from perturbed angular distribution; recalculated for consistency with ^{146}Nd standard (1989Ra17). J π : E2 γ to 0 ⁺ , band member.
753.86 [@] 16	(2 ⁺)		BC E	J π : γ 's to 0 ⁺ , 2 ⁺ ; systematics.
788.92 [#] 21	4 ⁺	3.42 ps 7	ABCDE	J π : E2 γ to 2 ⁺ , band member.
1089.30 [@] 20	(3 ⁺)		BC E	
1313.03 [@] 21	(4 ⁺)		B E	
1383.8 4			C	
1420.06 [#] 25	6 ⁺	1.13 ps 4	AB E	J π : E2 γ to 4 ⁺ , band member.
1605.2 3			B	
1669.2 6			C	
1670.8 5			B	
1697.9 4	(5 ⁺)		B	
1910.6 [@] 3	(6 ⁺)		B E	
1956.1 [‡] 3	(5 ⁻)		B E	J π : (E1) γ to 4 ⁺ ; theoretical predictions.
2036.3 5			B	
2126.4 [#] 3	8 ⁺	0.71 ps 7	A E	J π : E2 γ to 6 ⁺ , band member.
2231.5 6			B	
2293.0 ^b 4	(8 ⁻)	410 μs 30	A E	$\% \text{IT} = 100$ J π : E1 γ to 8 ⁺ ; systematics. T _{1/2} : from 1972Pa26 . Other: 500 μs 100 (1969WaZX).
2340.6 [‡] 3	(7 ⁻)		E	
2412.5 [‡] 3	(6 ⁻)		E	J π : γ to 6 ⁺ ; theoretical predictions.
2467.2 [@] 3	(8 ⁺)	0.85 ps 21	E	
2719.9 ^b 5	(9 ⁻)		E	
2728.5 [‡] 3	(8 ⁻)	17.2 ps 12	E	
2816.9 [#] 4	10 ⁺	0.49 ps 3	E	$\mu \approx 0$ (1989OgZY) J π : E2 γ to 8 ⁺ , band member. μ : IPAD. Configuration = $(\nu \text{ h}_{11/2})^2$.
2840.8 [‡] 5	(9 ⁻)		E	
3051.9 [@] 3	(10 ⁺)	3.39 ps 16	E	

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Adopted Levels, Gammas (continued) ^{134}Nd Levels (continued)

E(level) ^e	J ^π ^f	T _{1/2} ^g	XREF	Comments
3164.4 5	(10 ⁺)		E	
3181.9 ^b 5	(10 ⁻)		E	
3200.2 [†] 4	(10 ⁻)	4.71 ps 14	E	
3436.5 [@] 4	(12 ⁺)	7.49 ps 21	E	
3453.1 [‡] 5	(11 ⁻)		E	
3482.9 [#] 4	12 ⁺	0.43 ps 3	E	J ^π : E2 γ to 10 ⁺ , band member.
3653.2 ^b 5	(11 ⁻)		E	
3863.0 [†] 5	(12 ⁻)		E	
4028.2 [@] 4	(14 ⁺)		E	
4129.6 ^b 6	(12 ⁻)		E	
4175.5 [‡] 5	(13 ⁻)		E	
4183.6 [#] 5	14 ⁺		E	J ^π : E2 γ to 12 ⁺ , band member.
4238.9 6	(12 ⁻)		E	
4371.5 5	(11 ⁻)		E	
4376.7 5	(11 ⁻)		E	
4513.1 ^d 6	(12 ⁻)		E	
4592.1 ^b 6	(13 ⁻)		E	
4607.5 [†] 5	(14 ⁻)		E	
4712.5 ^d 8	(13 ⁻)		E	
4776.7 [@] 5	(16 ⁺)	0.39 ps 8	E	
4942.6 [#] 5	16 ⁺		E	J ^π : E2 γ to 14 ⁺ , band member.
4948.0 [‡] 6	(15 ⁻)		E	
4984.4 5	(14 ⁻)		E	
4992.8 7	(14 ⁻)		E	
4999.1 ^d 9	(14 ⁻)		E	
5200.3 ^c 7	(15 ⁻)		E	
5345.9 [†] 5	(16 ⁻)		E	
5361.3 ^d 9	(15 ⁻)		E	
5456.1 ^c 8	(16 ⁻)		E	
5629.5 [@] 8	(18 ⁺)		E	
5711.1 [‡] 6	(17 ⁻)		E	
5769.5 ^c 8	(17 ⁻)		E	
5777.6 [#] 10	18 ⁺		E	J ^π : E2 γ to 16 ⁺ , band member.
5788.9 ^d 10	(16 ⁻)		E	
6082.5 [†] 6	(18 ⁻)		E	
6137.6 ^c 8	(18 ⁻)		E	
6269.9 ^d 10	(17 ⁻)		E	
6300.2 ^{&} 9	(17 ⁻)		E	
6488.1 [‡] 12	(19 ⁻)		E	
6531.5 [@] 13	(20 ⁺)		E	
6543.9 ^c 9	(19 ⁻)		E	
6710.6 [#] 14	20 ⁺		E	J ^π : E2 γ to 18 ⁺ , band member.
6786.0 ^d 10	(18 ⁻)		E	
6831.4 ^a 10	(18 ⁺)		E	
6891.5 [†] 12	(20 ⁻)		E	
6935.8 ^c 9	(20 ⁻)		E	

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Adopted Levels, Gammas (continued) ^{134}Nd Levels (continued)

E(level) ^e	J ^π ^f	XREF	Comments
6961.5? <i>11</i>	(19 ⁻)	E	Level position is uncertain since the ordering of 740-1332 cascade is not established (1996Pe10).
6965.7? <i>11</i>	(19 ⁻)	E	Level position is uncertain since the ordering of 736-1336 cascade is not established (1996Pe10).
6968.1 <i>& 9</i>	(19 ⁻)	E	
7291.8 <i>d 11</i>	(19 ⁻)	E	
7349.6 <i>c 10</i>	(21 ⁻)	E	
7358.1 <i>‡ 16</i>	(21 ⁻)	E	
7467.5 <i>@ 17</i>	(22 ⁺)	E	
7557.7 <i>a 9</i>	(20 ⁺)	E	
7701.5 <i>& 9</i>	(21 ⁻)	E	
7744.6 <i># 17</i>	(22 ⁺)	E	
7804.5 <i>† 16</i>	(22 ⁻)	E	
7813.8 <i>c 10</i>	(22 ⁻)	E	
8322.7 <i>a 14</i>	(22 ⁺)	E	
8328.1 <i>‡ 19</i>	(23 ⁻)	E	
8330.9 <i>c 10</i>	(23 ⁻)	E	
8453.5 <i>@ 19</i>	(24 ⁺)	E	
8509.6 <i>& 10</i>	(23 ⁻)	E	
8812.5 <i>† 19</i>	(24 ⁻)	E	
8869.6 <i># 20</i>	(24 ⁺)	E	
8896.6 <i>c 11</i>	(24 ⁻)	E	
9144.1 <i>a 14</i>	(24 ⁺)	E	
9371.1 <i>‡ 21</i>	(25 ⁻)	E	
9386.2 <i>& 10</i>	(25 ⁻)	E	
9501.5 <i>@ 22</i>	(26 ⁺)	E	
9510.8 <i>c 11</i>	(25 ⁻)	E	
9900.5 <i>† 21</i>	(26 ⁻)	E	
10042.7 <i>a 14</i>	(26 ⁺)	E	
10079.7 <i># 22</i>	(26 ⁺)	E	
10167.6 <i>c 11</i>	(26 ⁻)	E	
10328.3 <i>& 10</i>	(27 ⁻)	E	
10339.1 <i>‡ 23</i>	(27 ⁻)	E	
10616.5 <i>@ 24</i>	(28 ⁺)	E	
10862.0 <i>c 12</i>	(27 ⁻)	E	
11015.0 <i>a 14</i>	(28 ⁺)	E	
11049.5 <i>† 23</i>	(28 ⁻)	E	
11313.7 <i># 25</i>	(28 ⁺)	E	
11335.8 <i>& 10</i>	(29 ⁻)	E	
11366 <i>‡ 3</i>	(29 ⁻)	E	
11787 <i>@ 3</i>	(30 ⁺)	E	
12058.1 <i>a 15</i>	(30 ⁺)	E	
12247 <i>† 3</i>	(30 ⁻)	E	
12410.6 <i>& 11</i>	(31 ⁻)	E	
12469 <i>‡ 3</i>	(31 ⁻)	E	
12584 <i># 3</i>	(30 ⁺)	E	
12938 <i>@ 3</i>	(32 ⁺)	E	
13164.2 <i>a 15</i>	(32 ⁺)	E	

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Adopted Levels, Gammas (continued) ^{134}Nd Levels (continued)

E(level) ^e	J ^π ^f	XREF	E(level) ^e	J ^π ^f	XREF	E(level) ^e	J ^π ^f	XREF
13554.4 ^{&} 11	(33 ⁻)	E	16060.3 ^{&} 13	(37 ⁻)	E	18875.6 ^{&} 19	(41 ⁻)	E
13650 [‡] 3	(33 ⁻)	E	16255 [‡] 4	(37 ⁻)	E	19203 [‡] 4	(41 ⁻)	E
14122 [@] 3	(34 ⁺)	E	16700 [@] 4	(38 ⁺)	E	19521 [@] 4	(42 ⁺)	E
14322.8 ^a 15	(34 ⁺)	E	16801.8 ^a 17	(38 ⁺)	E	20410.6 ^{&} 21	(43 ⁻)	E
14770.4 ^{&} 12	(35 ⁻)	E	17427.6 ^{&} 16	(39 ⁻)	E	20807 [‡] 4	(43 ⁻)	E
14911 [‡] 3	(35 ⁻)	E	17685 [‡] 4	(39 ⁻)	E	21007 [@] 4	(44 ⁺)	E
15375 [@] 4	(36 ⁺)	E	18095 [@] 4	(40 ⁺)	E			
15532.9 ^a 16	(36 ⁺)	E	18146.9 ^a 19	(40 ⁺)	E			

[†] Band(A): even-spin negative-parity sideband.

[‡] Band(B): odd-spin negative-parity sideband.

Band(C): g.s. band.

@ Band(D): positive-parity sideband.

& Band(E): Highly deformed yrast band.

^a Band(F): Highly deformed excited band.

^b Band(G): Band based on (8⁻), 410 μs isomer.

^c Band(H): Negative parity band.

^d Band(I): Negative parity band.

^e From least-squares fit to E_γ.

^f Unless noted otherwise, based on γ decay pattern, band structure.

^g From (HL,xny), except as noted.

 $\gamma(^{134}\text{Nd})$

E _i (level)	J ^π _i	E _γ [†]	I _γ [†]	E _f	J ^π _f	Mult.	α [‡]	Comments
294.17	2 ⁺	294.2 2	100	0.0	0 ⁺	E2	0.0560	α(K)=0.0442 14; α(L)=0.0092 3; α(M)=0.00201 6; α(N+...)=0.00054 2 B(E2)(W.u.)=93 3 I _γ : from ^{134}Pm ε decay (22 s). I _γ : from ^{134}Pm ε decay (22 s).
753.86	(2 ⁺)	753.8 2	90	294.17	2 ⁺			
788.92	4 ⁺	494.7 2	100	0.0	0 ⁺	E2	0.0121	α(K)=0.0101 3; α(L)=0.00165 5; α(M)=0.00035 1 B(E2)(W.u.)=135 3
1089.30	(3 ⁺)	335.0 2	29 9	294.17	2 ⁺			
1313.03	(4 ⁺)	523.8 2	65 8	788.92	4 ⁺			
1383.8		594.7 4	60 26	788.92	4 ⁺			
1420.06	6 ⁺	1384.0 5	100 30	0.0	0 ⁺			
1605.2		631.3 2	100	788.92	4 ⁺	E2	0.00649	α(K)=0.00540 17; α(L)=0.00082 3 B(E2)(W.u.)=123 5
1669.2		516.0 3	100 14	1089.30	(3 ⁺)			
1670.8		851.3 3	34 7	753.86	(2 ⁺)			
1697.9	(5 ⁺)	1375.0 5	100	294.17	2 ⁺			
1910.6	(6 ⁺)	881.9 4	100	788.92	4 ⁺			
1956.1	(5 ⁻)	608.6 3	100	1089.30	(3 ⁺)			
2036.3		491 1	<20	1420.06	6 ⁺			
		597.3 2	100 10	1313.03	(4 ⁺)			
		1167.3 2	100	788.92	4 ⁺	(E1)	0.00071	α(K)=0.00061 2
		1247.4 4	100	788.92	4 ⁺			

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Adopted Levels, Gammas (continued)

$\gamma(^{134}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\ddagger$	Comments
2126.4	8 ⁺	706.4 2	100	1420.06	6 ⁺	E2	0.00494	$\alpha(K)=0.00413$ 13; $\alpha(L)=0.00061$ 2 B(E2)(W.u.)=111 11
2231.5		1442.6 5	100	788.92	4 ⁺			
2293.0	(8) ⁻	166.5 3	100 7	2126.4	8 ⁺	E1	0.0646	B(E1)(W.u.)=1.20×10 ⁻¹⁰ 15 $\alpha(K)=0.0550$ 17; $\alpha(L)=0.00754$ 23; $\alpha(M)=0.00157$ 5; $\alpha(N+..)=0.00044$ 1 Large hindrance factor is ascribed to $\Delta K=8$. E_γ, I_γ : from ^{134}Nd IT decay.
		874	7 2	1420.06	6 ⁺	[M2]	0.0123	B(M2)(W.u.)=3.5×10 ⁻⁷ 11 $\alpha(K)=0.0104$ 4; $\alpha(L)=0.00146$ 5 E_γ, I_γ : from ^{134}Nd IT decay. Large hindrance factor is ascribed to $\Delta K=8$.
2340.6	(7) ⁻	384.6 2	34 5	1956.1	(5) ⁻	(E2)	0.0248	$\alpha(K)=0.0201$ 6; $\alpha(L)=0.00365$ 11; $\alpha(M)=0.00079$ 2; $\alpha(N+..)=0.00021$ 1
		920.4 2	100 2	1420.06	6 ⁺	(E1)	0.00110	$\alpha(K)=0.00094$ 3; $\alpha(L)=0.00012$
2412.5	(6) ⁻	992.4 2	100	1420.06	6 ⁺			
2467.2	(8) ⁺	556.3 2	100 7	1910.6	(6) ⁺			
		1047.3 2	95 9	1420.06	6 ⁺			
2719.9	(9) ⁻	426.9 2	100	2293.0	(8) ⁻			
2728.5	(8) ⁻	316.0 2	33 4	2412.5	(6) ⁻	(E2)	0.0448	$\alpha(K)=0.0356$ 11; $\alpha(L)=0.00716$ 22; $\alpha(M)=0.00156$ 5; $\alpha(N+..)=0.00042$ 1 B(E2)(W.u.)=63 11
2816.9	10 ⁺	387.9 2	100 11	2340.6	(7) ⁻	D	0.00717	$\alpha(K)=0.00615$; $\alpha(L)=0.00081$; $\alpha(M)=0.00017$
		690.4 2	100	2126.4	8 ⁺	E2	0.00522	$\alpha(K)=0.00436$ 13; $\alpha(L)=0.00065$ 2 B(E2)(W.u.)=181 11
2840.8	(9) ⁻	500.3 5	100 3	2340.6	(7) ⁻	(E2)	0.0119	$\alpha(K)=0.0098$ 3; $\alpha(L)=0.00159$ 5
		714.1 5	23.6 9	2126.4	8 ⁺			
3051.9	(10) ⁺	584.7 2	100 7	2467.2	(8) ⁺			
		925.6 2	100 10	2126.4	8 ⁺	(E2)	0.00266	$\alpha(K)=0.00225$ 7; $\alpha(L)=0.00031$ 1 B(E2)(W.u.)=3.0 4
3164.4	(10) ⁺	1038.1 5	100	2126.4	8 ⁺			
3181.9	(10) ⁻	462.3 5	100	2719.9	(9) ⁻			
		888.9 5	100	2293.0	(8) ⁻			
3200.2	(10) ⁻	471.7 2	100	2728.5	(8) ⁻	(E2)	0.0138	$\alpha(K)=0.0114$ 4; $\alpha(L)=0.00190$ 6; $\alpha(M)=0.00041$ 1; $\alpha(N+..)=0.00011$ B(E2)(W.u.)=125 4
3436.5	(12) ⁺	384.6 2	83 4	3051.9	(10) ⁺	(E2)	0.0248	$\alpha(K)=0.0201$ 6; $\alpha(L)=0.00365$ 11; $\alpha(M)=0.00079$ 2; $\alpha(N+..)=0.00021$ 1 B(E2)(W.u.)=99 7
		619.5 2	100 6	2816.9	10 ⁺			
3453.1	(11) ⁻	612.3 2	100	2840.8	(9) ⁻	(E2)	0.00701	$\alpha(K)=0.00582$ 18; $\alpha(L)=0.00089$ 3
3482.9	12 ⁺	666.0 2	100	2816.9	10 ⁺	E2	0.00569	$\alpha(K)=0.00475$ 15; $\alpha(L)=0.00071$ 2 B(E2)(W.u.)=247 18
3653.2	(11) ⁻	471.3 5	100 6	3181.9	(10) ⁻			
		933.2 5	83 6	2719.9	(9) ⁻			
3863.0	(12) ⁻	662.8 2	100	3200.2	(10) ⁻	(E2)	0.00576	$\alpha(K)=0.00480$ 15; $\alpha(L)=0.00072$ 2
4028.2	(14) ⁺	545		3482.9	12 ⁺			
		591.7 2	100	3436.5	(12) ⁺	(E2)	0.00764	$\alpha(K)=0.00634$ 19; $\alpha(L)=0.00098$ 3
4129.6	(12) ⁻	476.5 5	76 7	3653.2	(11) ⁻			
		947.9 5	100 7	3181.9	(10) ⁻			
4175.5	(13) ⁻	722.4 2	100	3453.1	(11) ⁻	(E2)	0.00468	$\alpha(K)=0.00392$ 12; $\alpha(L)=0.00058$ 2
4183.6	14 ⁺	700.7 2	100	3482.9	12 ⁺	E2	0.00503	$\alpha(K)=0.00421$ 13; $\alpha(L)=0.00062$ 2
4238.9	(12) ⁻	785.7 5	100	3453.1	(11) ⁻			
4371.5	(11) ⁻	1207.2 5	100 12	3164.4	(10) ⁺			
		1554.3 5	53 18	2816.9	10 ⁺			

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Adopted Levels, Gammas (continued)

$\gamma(^{134}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\ddagger$	Comments
4376.7	(11 ⁻)	1212.3 5 1559.9 5	100 6 49 9	3164.4 (10 ⁺) 2816.9 10 ⁺				
4513.1	(12 ⁻)	136.4 5 141.5 5	100 17 58 11	4376.7 (11 ⁻) 4371.5 (11 ⁻)				
4592.1	(13 ⁻)	462 1 938.8 5	81 10 100 10	4129.6 (12 ⁻) 3653.2 (11 ⁻)				
4607.5	(14 ⁻)	744.5 2	100	3863.0 (12 ⁻)	(E2)	0.00436	$\alpha(\text{K})=0.00365$ 11; $\alpha(\text{L})=0.00053$ 2	
4712.5	(13 ⁻)	199.5 5	100	4513.1 (12 ⁻)				
4776.7	(16 ⁺)	748.5 2	100	4028.2 (14 ⁺)	(E2)	0.00431	$\alpha(\text{K})=0.00361$ 11; $\alpha(\text{L})=0.00053$ 2 B(E2)(W.u.)=1.5×10 ² 4	
4942.6	16 ⁺	759.0 2	100	4183.6 14 ⁺	E2	0.00417	$\alpha(\text{K})=0.00349$ 11; $\alpha(\text{L})=0.00051$ 2	
4948.0	(15 ⁻)	772.5 2	100	4175.5 (13 ⁻)	(E2)	0.00400	$\alpha(\text{K})=0.00336$ 10; $\alpha(\text{L})=0.00049$ 2	
4984.4	(14 ⁻)	392.2 5 745.5 5 808.9 5 855.1 5	52 3 7×10 ¹ 7 100 7 45 7	4592.1 (13 ⁻) 4238.9 (12 ⁻) 4175.5 (13 ⁻) 4129.6 (12 ⁻)				
4992.8	(14 ⁻)	753.9 5	100	4238.9 (12 ⁻)				
4999.1	(14 ⁻)	286.7 5	100	4712.5 (13 ⁻)				
5200.3	(15 ⁻)	207.4 5 215.9 5	4×10 ¹ 4 100 4	4992.8 (14 ⁻) 4984.4 (14 ⁻)				
5345.9	(16 ⁻)	738.4 2	100	4607.5 (14 ⁻)	(E2)	0.00445	$\alpha(\text{K})=0.00372$ 12; $\alpha(\text{L})=0.00054$ 2	
5361.3	(15 ⁻)	362.4 5 648.6 5	100 9 12.1 21	4999.1 (14 ⁻) 4712.5 (13 ⁻)				
5456.1	(16 ⁻)	255.7 5	100	5200.3 (15 ⁻)				
5629.5	(18 ⁺)	853 1	100	4776.7 (16 ⁺)	(E2)	0.00319	$\alpha(\text{K})=0.00268$ 8; $\alpha(\text{L})=0.00038$ 1	
5711.1	(17 ⁻)	763.1 2	100	4948.0 (15 ⁻)				
5769.5	(17 ⁻)	313.3 5 569.3 5	100 3 15 3	5456.1 (16 ⁻) 5200.3 (15 ⁻)				
5777.6	18 ⁺	835 1	100	4942.6 16 ⁺	E2	0.00335	$\alpha(\text{K})=0.00281$ 9; $\alpha(\text{L})=0.00040$ 1	
5788.9	(16 ⁻)	427.3 5 790 1	100 6 25 6	5361.3 (15 ⁻) 4999.1 (14 ⁻)				
6082.5	(18 ⁻)	736.6 2	100	5345.9 (16 ⁻)				
6137.6	(18 ⁻)	368.0 5 681.6 5	100 3 17 3	5769.5 (17 ⁻) 5456.1 (16 ⁻)				
6269.9	(17 ⁻)	480.9 5 908.7 5	100 7 31 8	5788.9 (16 ⁻) 5361.3 (15 ⁻)				
6300.2	(17 ⁻)	1357.5	100	4942.6 16 ⁺				
6488.1	(19 ⁻)	777	100	5711.1 (17 ⁻)				
6531.5	(20 ⁺)	902	100	5629.5 (18 ⁺)				
6543.9	(19 ⁻)	406.3 5 774.4 5	100 4 17 4	6137.6 (18 ⁻) 5769.5 (17 ⁻)				
6710.6	20 ⁺	933	100	5777.6 18 ⁺	E2	0.00262	$\alpha(\text{K})=0.00221$ 7; $\alpha(\text{L})=0.00031$ 1	
6786.0	(18 ⁻)	516.2 5 997.1 5	100 8 42 8	6269.9 (17 ⁻) 5788.9 (16 ⁻)				
6831.4	(18 ⁺)	1889	100	4942.6 16 ⁺				
6891.5	(20 ⁻)	809	100	6082.5 (18 ⁻)				
6935.8	(20 ⁻)	391.9 5 798 1	100 8 28 6	6543.9 (19 ⁻) 6137.6 (18 ⁻)				
6961.5?	(19 ⁻)	1331.9	100	5629.5 (18 ⁺)				
6965.7?	(19 ⁻)	1336.3	100	5629.5 (18 ⁺)				
6968.1	(19 ⁻)	667.9 5 1338.6	37 19 100 11	6300.2 (17 ⁻) 5629.5 (18 ⁺)	E2	0.00565	$\alpha(\text{K})=0.00471$ 15; $\alpha(\text{L})=0.00071$ 2	
7291.8	(19 ⁻)	505.7 5 1022 1	100 8 48 9	6786.0 (18 ⁻) 6269.9 (17 ⁻)				
7349.6	(21 ⁻)	413.6 5	100 10	6935.8 (20 ⁻)				

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{134}\text{Nd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	$\alpha^\ddagger$	Comments
7349.6	(21 ⁻)	806 1	24 7	6543.9	(19 ⁻)			
7358.1	(21 ⁻)	870	100	6488.1	(19 ⁻)			
7467.5	(22 ⁺)	936	100	6531.5	(20 ⁺)			
7557.7	(20 ⁺)	726.4	100 16	6831.4	(18 ⁺)			
		1780	38 13	5777.6	18 ⁺			
		1928	31 9	5629.5	(18 ⁺)			
7701.5	(21 ⁻)	733.3 3	100	6968.1	(19 ⁻)	E2	0.00452	$\alpha(\text{K})=0.00378$ 12; $\alpha(\text{L})=0.00055$ 2
		736		6965.7?	(19 ⁻)			
		740		6961.5?	(19 ⁻)			
7744.6	(22 ⁺)	1034	100	6710.6	20 ⁺			
7804.5	(22 ⁻)	913	100	6891.5	(20 ⁻)			
7813.8	(22 ⁻)	463.9 5	100 4	7349.6	(21 ⁻)			
		878.0 5	21 4	6935.8	(20 ⁻)			
8322.7	(22 ⁺)	765.1	100	7557.7	(20 ⁺)			
8328.1	(23 ⁻)	970	100	7358.1	(21 ⁻)			
8330.9	(23 ⁻)	517.1 5	100 9	7813.8	(22 ⁻)			
		981.6 5	38 10	7349.6	(21 ⁻)			
8453.5	(24 ⁺)	986	100	7467.5	(22 ⁺)			
8509.6	(23 ⁻)	808.1 2	100	7701.5	(21 ⁻)	E2	0.00361	$\alpha(\text{K})=0.00303$ 9; $\alpha(\text{L})=0.00043$ 1
8812.5	(24 ⁻)	1008	100	7804.5	(22 ⁻)			
8869.6	(24 ⁺)	1125	100	7744.6	(22 ⁺)			
8896.6	(24 ⁻)	565.7 5	100 18	8330.9	(23 ⁻)			
		1082.6 5	48 10	7813.8	(22 ⁻)			
9144.1	(24 ⁺)	821.4 3	100	8322.7	(22 ⁺)	E2	0.00347	$\alpha(\text{K})=0.00292$ 9; $\alpha(\text{L})=0.00042$ 1
9371.1	(25 ⁻)	1043	100	8328.1	(23 ⁻)			
9386.2	(25 ⁻)	876.6 2	100	8509.6	(23 ⁻)	E2	0.00300	$\alpha(\text{K})=0.00253$ 8; $\alpha(\text{L})=0.00036$ 1
9501.5	(26 ⁺)	1048	100	8453.5	(24 ⁺)			
9510.8	(25 ⁻)	614 1	100 25	8896.6	(24 ⁻)			
		1180.0 5	38 13	8330.9	(23 ⁻)			
9900.5	(26 ⁻)	1088		8812.5	(24 ⁻)			
10042.7	(26 ⁺)	898.6 2	100	9144.1	(24 ⁺)	E2	0.00284	$\alpha(\text{K})=0.00239$ 8; $\alpha(\text{L})=0.00034$ 1
10079.7	(26 ⁺)	1210	100	8869.6	(24 ⁺)			
10167.6	(26 ⁻)	657 1	100 21	9510.8	(25 ⁻)			
		1270.9 5	40 21	8896.6	(24 ⁻)			
10328.3	(27 ⁻)	942.2 2	100	9386.2	(25 ⁻)			
10339.1	(27 ⁻)	968		9371.1	(25 ⁻)			
10616.5	(28 ⁺)	1115	100	9501.5	(26 ⁺)			
10862.0	(27 ⁻)	694 1	100 18	10167.6	(26 ⁻)			
		1351.3 5	33 18	9510.8	(25 ⁻)			
11015.0	(28 ⁺)	972.3 2	100	10042.7	(26 ⁺)			
11049.5	(28 ⁻)	1149		9900.5	(26 ⁻)			
11313.7	(28 ⁺)	1234		10079.7	(26 ⁺)			
11335.8	(29 ⁻)	1007.4 2	100	10328.3	(27 ⁻)			
11366	(29 ⁻)	1027		10339.1	(27 ⁻)			
11787	(30 ⁺)	1170	100	10616.5	(28 ⁺)			
12058.1	(30 ⁺)	1043.1 2	100	11015.0	(28 ⁺)			
12247	(30 ⁻)	1197		11049.5	(28 ⁻)			
12410.6	(31 ⁻)	1074.8 3	100	11335.8	(29 ⁻)			
12469	(31 ⁻)	1103		11366	(29 ⁻)			
12584	(30 ⁺)	1270		11313.7	(28 ⁺)			
12938	(32 ⁺)	1151		11787	(30 ⁺)			
13164.2	(32 ⁺)	1106.1 3	100	12058.1	(30 ⁺)			
13554.4	(33 ⁻)	1143.8 3	100	12410.6	(31 ⁻)			
13650	(33 ⁻)	1181		12469	(31 ⁻)			
14122	(34 ⁺)	1184		12938	(32 ⁺)			

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Adopted Levels, Gammas (continued) $\gamma(^{134}\text{Nd})$ (continued)

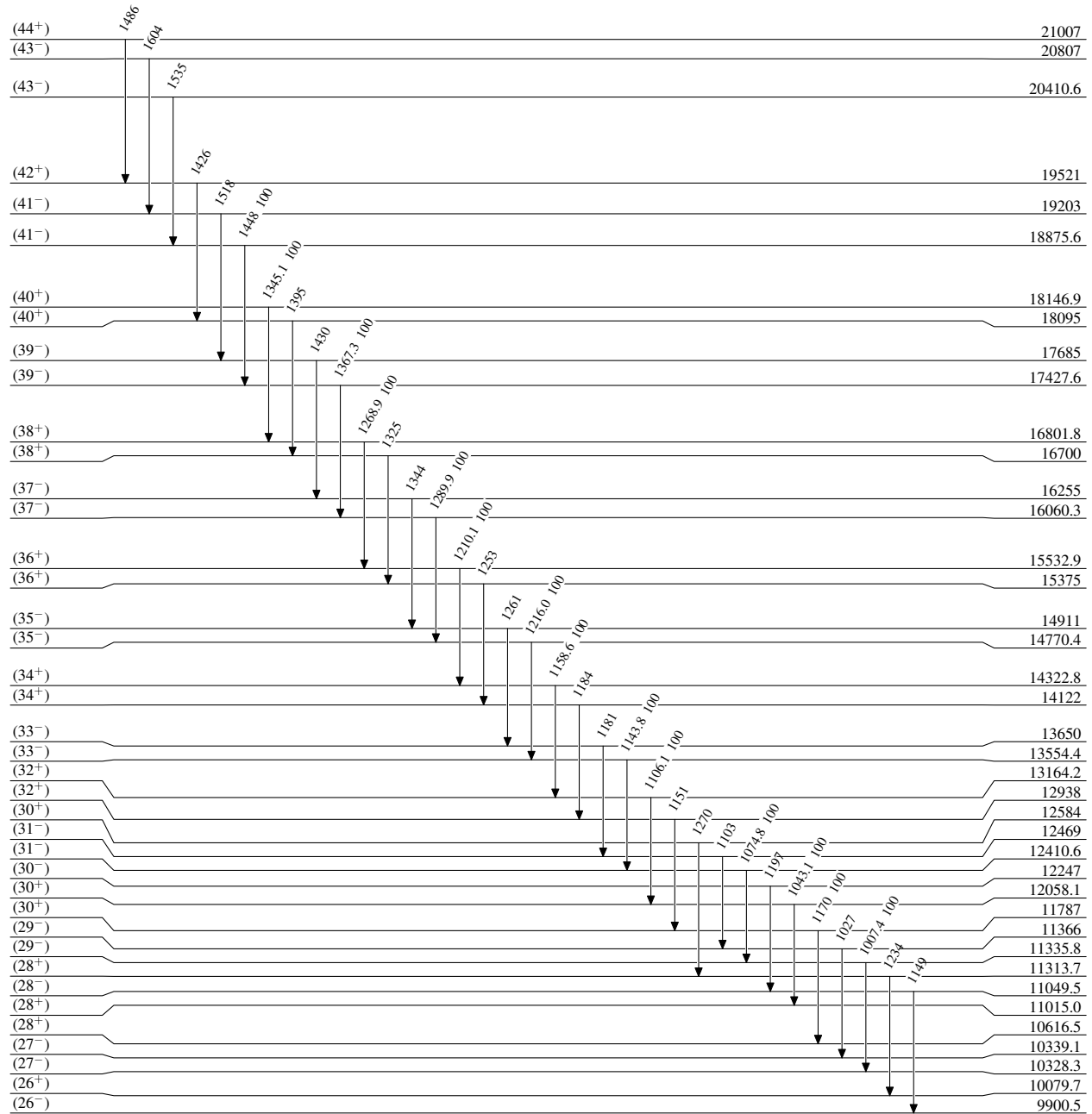
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π
14322.8	(34 ⁺)	1158.6 3	100	13164.2	(32 ⁺)	17685	(39 ⁻)	1430		16255	(37 ⁻)
14770.4	(35 ⁻)	1216.0 4	100	13554.4	(33 ⁻)	18095	(40 ⁺)	1395		16700	(38 ⁺)
14911	(35 ⁻)	1261		13650	(33 ⁻)	18146.9	(40 ⁺)	1345.1 9	100	16801.8	(38 ⁺)
15375	(36 ⁺)	1253		14122	(34 ⁺)	18875.6	(41 ⁻)	1448 1	100	17427.6	(39 ⁻)
15532.9	(36 ⁺)	1210.1 5	100	14322.8	(34 ⁺)	19203	(41 ⁻)	1518		17685	(39 ⁻)
16060.3	(37 ⁻)	1289.9 6	100	14770.4	(35 ⁻)	19521	(42 ⁺)	1426		18095	(40 ⁺)
16255	(37 ⁻)	1344		14911	(35 ⁻)	20410.6	(43 ⁻)	1535		18875.6	(41 ⁻)
16700	(38 ⁺)	1325		15375	(36 ⁺)	20807	(43 ⁻)	1604		19203	(41 ⁻)
16801.8	(38 ⁺)	1268.9 5	100	15532.9	(36 ⁺)	21007	(44 ⁺)	1486		19521	(42 ⁺)
17427.6	(39 ⁻)	1367.3 8	100	16060.3	(37 ⁻)						

[†] From (HI,xn γ), except as noted.

[‡] 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.

Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level

0⁺

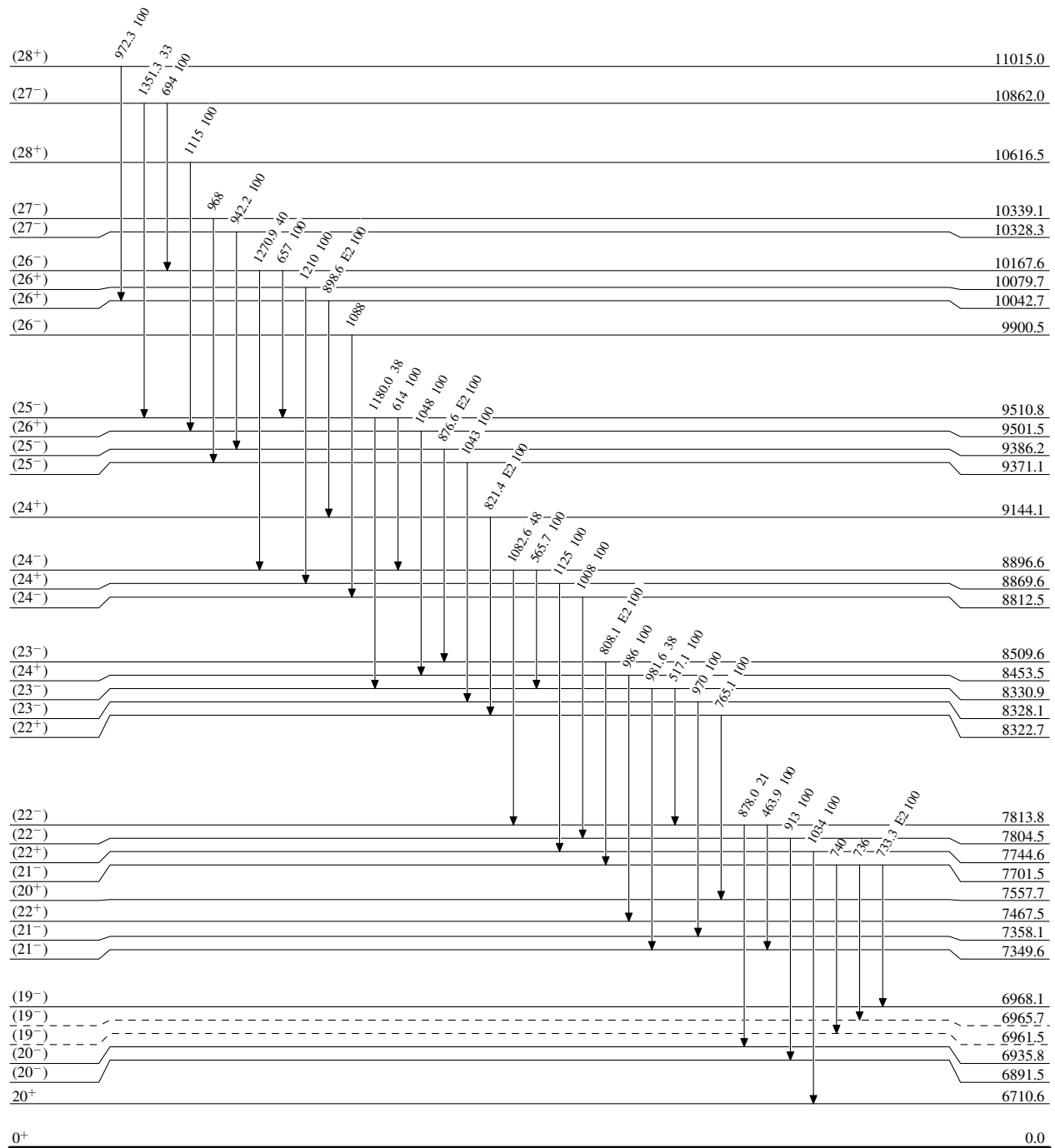
0.0

8.5 min 15

 $^{134}_{60}\text{Nd}_{74}$

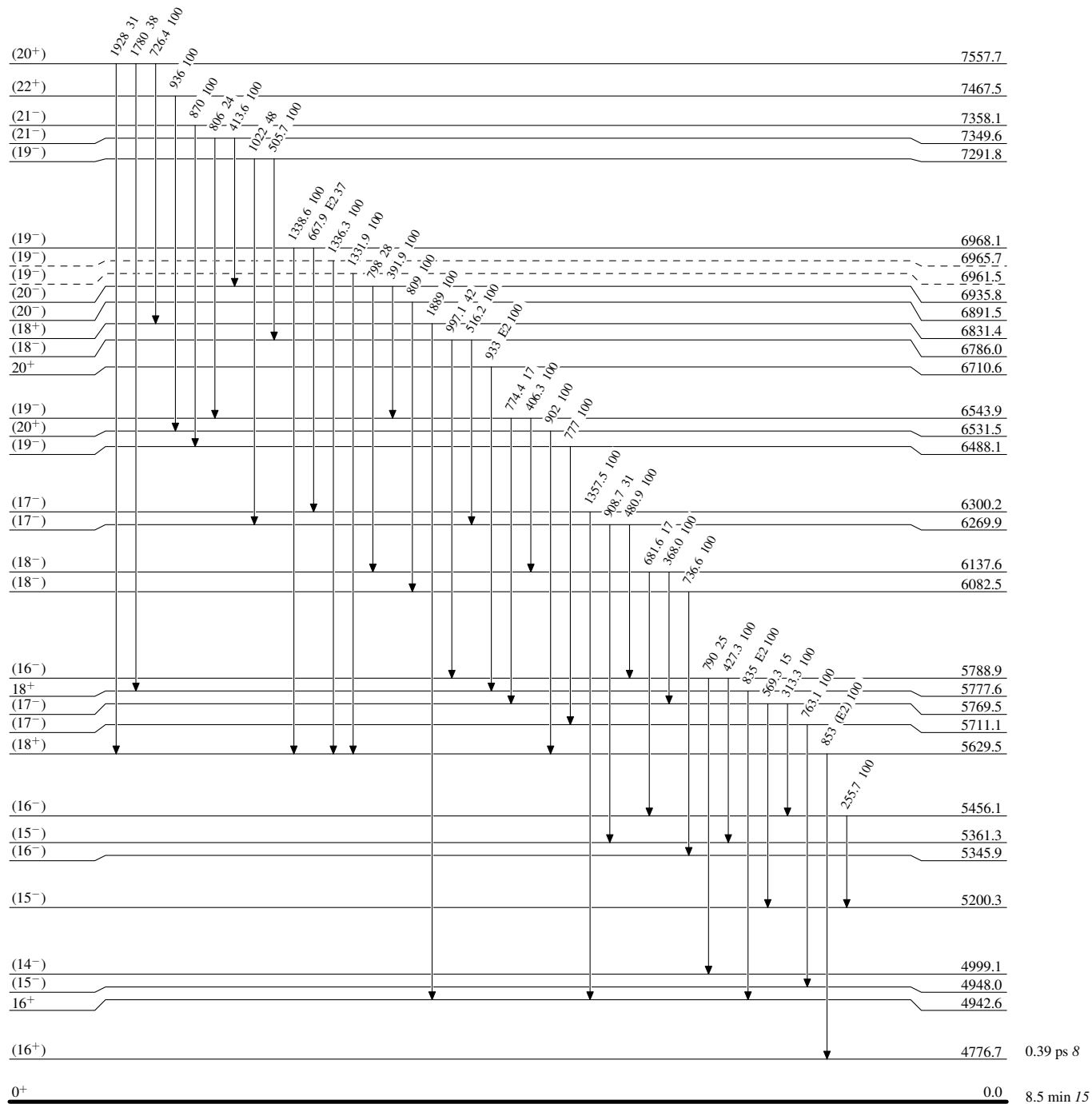
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level



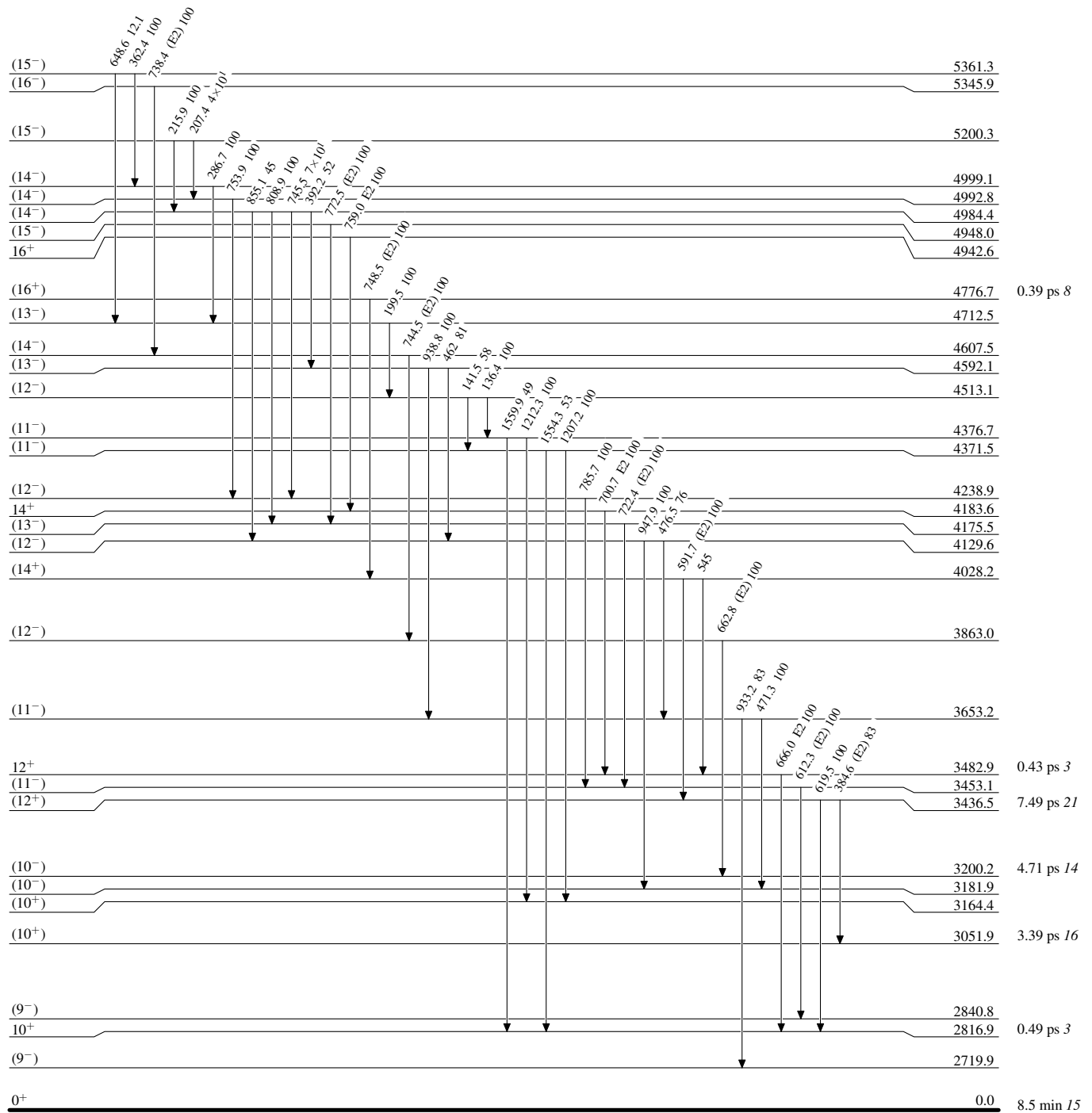
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level



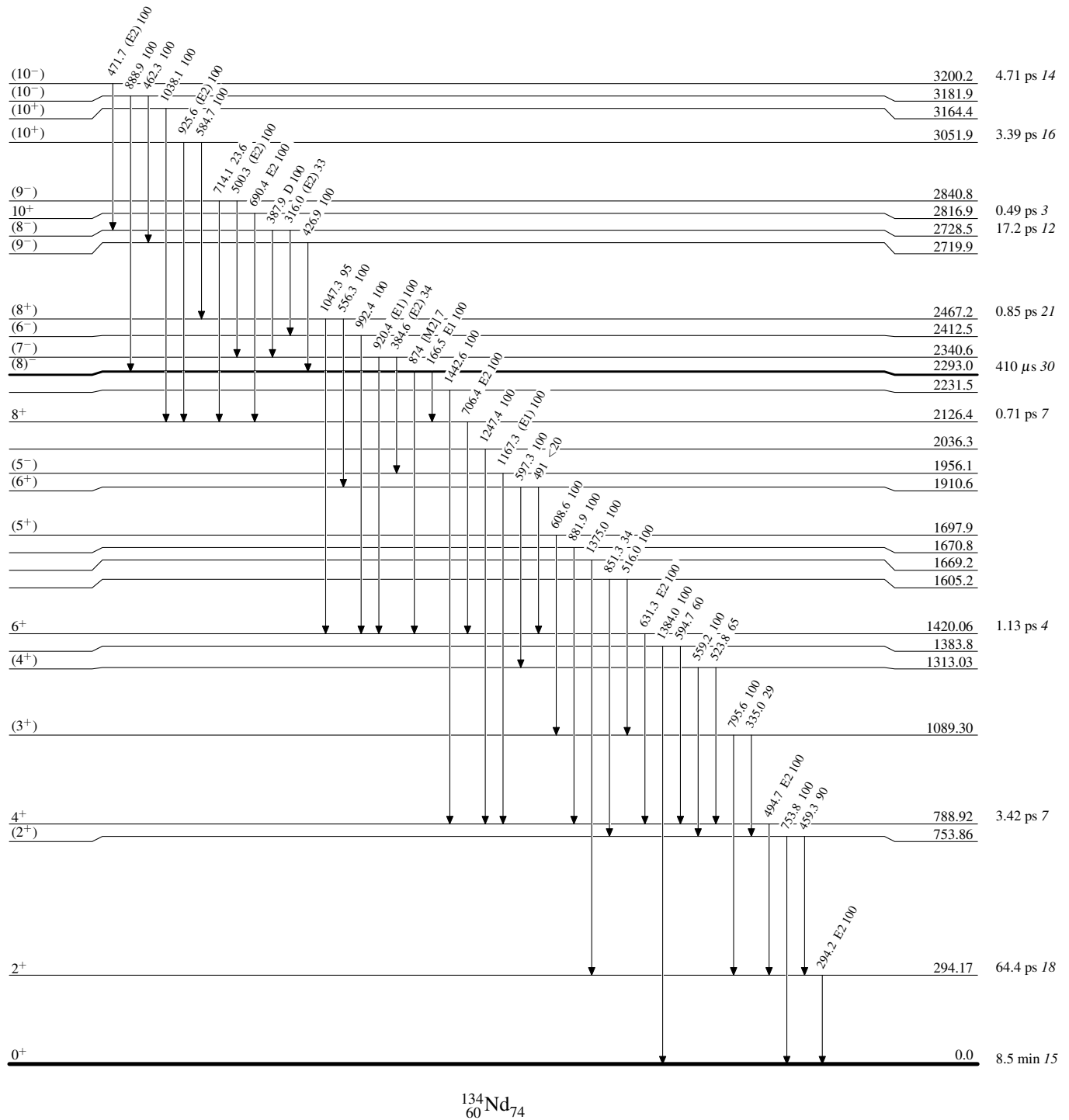
Adopted Levels, GammasLevel Scheme (continued)

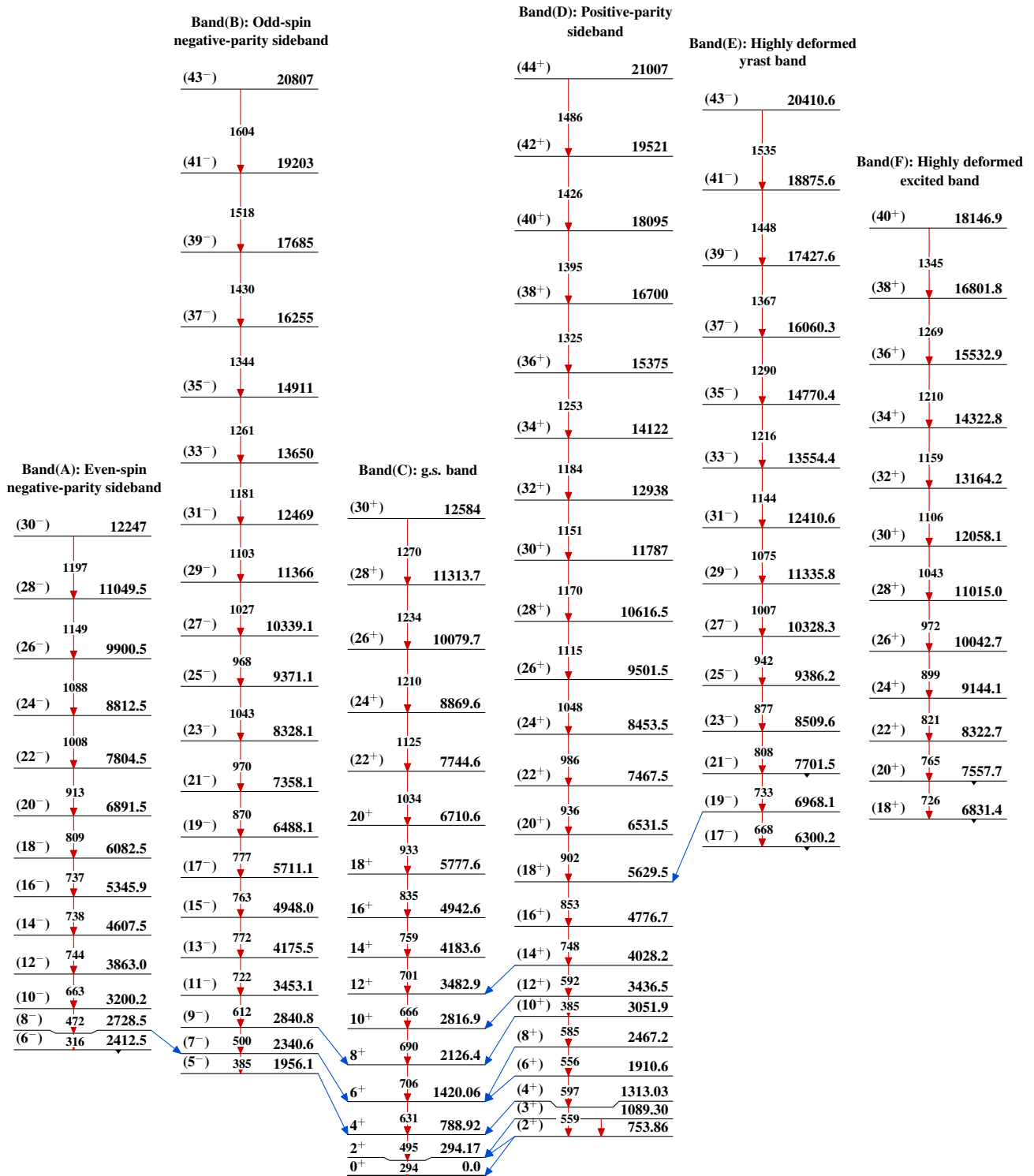
Intensities: Relative photon branching from each level



Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level

 $^{134}_{60}\text{Nd}_{74}$

Adopted Levels, Gammas

Adopted Levels, Gammas (continued)

Band(H): Negative parity band

(27 ⁻)		10862.0
	694	
(26 ⁻)	1351	10167.6
	657	
(25 ⁻)	1271	9510.8
	614	
(24 ⁻)	1180	8896.6
	566	
(23 ⁻)	1083	8330.9
	517	
(22 ⁻)	982	7813.8
	464	
(21 ⁻)	878	7349.6
	414	
(20 ⁻)	806	6935.8
	392	
(19 ⁻)	798	6543.9
	406	
(18 ⁻)	774	6137.6
	368	
(17 ⁻)	682	5769.5
	313	
(16 ⁻)	569	5456.1
(15 ⁻)	256	5200.3

Band(I): Negative parity band

(19 ⁻)		7291.8
	506	
(18 ⁻)	1022	6786.0
	516	
(17 ⁻)	997	6269.9
	481	
(16 ⁻)	909	5788.9
	427	
(15 ⁻)	790	5361.3
	362	
(14 ⁻)	649	4999.1
	287	
(13 ⁻)		4712.5
(12 ⁻)	200	4513.1

Band(G): Band based on (8⁻), 410 μs isomer

(13 ⁻)		4592.1
	462	
(12 ⁻)	939	4129.6
	476	
(11 ⁻)	948	3653.2
	471	
(10 ⁻)	933	3181.9
	462	
(9 ⁻)	889	2719.9
	427	
(8 ⁻)		2293.0