

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93,599 (2001)	1-Dec-2000

$Q(\beta^-)=550.3$; $S(n)=6526.8$ 16; $S(p)=4703.3$; $Q(\alpha)=850.7$ 2012Wa38

Note: Current evaluation has used the following Q record 550.5 25 6526.7 15 4703.0 22 849 7 1995Au04.

1985Ho01: $^{144}\text{Nd}(\text{}^3\text{He},t)$, $E=12.398$ MeV 15 studied IAS, total width=45 keV 7, escape width=8.0 keV 14, spreading width=52 keV 5, p-escape probability=17.8% 19.

There are 2 high-spin data sets, 1993Gl03 and 1994ZhZW. Their main discrepancy is the decay from the 3349 keV state, where the 221 keV + 459 keV sequence in 1993Gl03 is reversed in 1994ZhZW.

 ^{144}Pm LevelsCross Reference (XREF) Flags

A	$^{141}\text{Pr}(\alpha, n\gamma)$, $^{144}\text{Nd}(p, n\gamma)$	D	$^{14}\text{N}(^{136}\text{Xe}, 6n\gamma)$
B	$^{143}\text{Nd}(\text{}^3\text{He}, d)(\alpha, t)$	E	(HI, $xn\gamma$)
C	$^{130}\text{Te}(^{19}\text{F}, 5n\gamma)$	F	^{148}Eu α decay

E(level) [‡]	J^π [†]	$T_{1/2}$	XREF	Comments
0.0	5^-	363 d 14	ABCDE	$\% \varepsilon + \% \beta^+ = 100$ $\% \beta^+ \leq 7.4 \times 10^{-6}$ from 511 keV-511 keV-697 keV gammasphere measurement (1998Za03). $T_{1/2}$: weighted average: 377 d 16 (1963Pa21), 349 d 16 (1964Bu13). J^π : $\log f^{lu} t < 8.5$ for ε to $4^{(+)}$, 6^+ levels in ^{144}Nd ; $L(p)=2$ in proton-transfer reactions, target $J^\pi=7/2^-$ (1976Ma27). $\mu=1.69$ 14 (1989Ra17), Static Nuclear Orientation technique.
60.727 15	$(4)^-$		AB	
66.64 4	$(3)^-$		AB	
80.03 3	$(2)^-$		AB	
171.802 10	$(6)^-$		ABCDE	
195.433 15	$(5)^-$		AB	
207.37 4	$(4)^-$		AB	
232.401 20	$(6)^-$		ABCDE	
249.91 3	$(1)^-$		AB	
279.286 25	$(3)^-$		AB	
363.25 3	$(2)^-$		AB	
514.32 4	$(7)^-$		ABCDE	
785.03 12			A	
840.90 5	$(9)^+$	0.78 μs 20	ABCDE	J^π : configuration= $(\nu 2f_{7/2})+(\pi 1h_{11/2})$. This parallel-coupling isomer has been also observed in other $N=83$ nuclei like ^{146}Eu and ^{148}Tb . M2 γ (326 keV) to $(7)^-$ and E3 γ (669 keV) to $(6)^-$. $T_{1/2}$: from 1993Mu03.
875.75 11	-		AB	
896.31 13			C	
899.09 14	$(2,3)^+$		AB	
942.99 11			A	
948.11 21	$(4,5)^+$		AB	
979 3	$(^-)$		B	
1021.81 11	$(2,3)^+$		AB	
1080.21 17	$(4^-, 5^-)$		AB	
1104 2	$+$		B	
1127 2	$+$		B	
1184 2	$-$		B	
1214 2	$+$		B	
1243 3			B	

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Adopted Levels, Gammas (continued) ^{144}Pm Levels (continued)

E(level) [‡]	J ^π [†]	XREF	Comments
1273.81 8	(10 ⁺)	CD	J ^π : M1+E2 γ (433 keV) to (9 ⁺) isomer.
1278 5		B	
1337.4 4		A	
1377 2		B	
1426 4		B	
1451 3	+	B	
1455.34 9	(8)	C	
1468 5		B	
1501 3		B	
1543 6		B	
1609 3		B	
1640 5		B	
1654 5		B	
1704.81 8	(10 ⁺)	CD	J ^π : M1+E2 γ (864 KeV) to (9 ⁺) isomer.
1711.16 8	(9 ⁻)	C	
1850.73 9	(9)	C	
1985.14 8	(10 ⁻)	C	J ^π : M1 γ (274 keV) to (9 ⁻) state.
2072.23 10	(11 ⁻)	CD	J ^π : M1 γ (87 keV) to (10 ⁻) state and E1 γ (367 keV) to (10 ⁺) state.
2269.53 11	(12 ⁻)	CD	J ^π : M1 γ (197 keV) to (11 ⁻).
2312.11 9	(11 ⁺)	CD	J ^π : M1+E2 γ (1038 keV) to (10 ⁺) and E2 γ (1471 keV) to (9 ⁺).
2610.03 10		C	
2647.11 10	(12)	C	J ^π : D(+Q) γ to (11 ⁺) and Q γ (10 ⁺).
2668.10 11	(12 ⁺)	CD	J ^π : M1 γ (356 keV) to (11 ⁺).
2774.41 10	(13 ⁺)	CD	J ^π : E2 γ (462 keV) to (11 ⁺) and E1 γ (505 keV) to (12 ⁻).
2889.4 6		D	
3059.85 12	(14 ⁺)	CD	J ^π : M1+E2 transition to (13 ⁺) state.
3127.59 12	(13)	C	J ^π : (D+Q) γ (460 keV) to (12 ⁻).
3348.56 12	(14)	CD	J ^π : D+Q γ (574 keV) to (13 ⁺).
3408.4 10		D	
3431.05 12	(14 ⁻)	CD	J ^π : Q(+O) γ (1161 keV) to (12 ⁻).
3510.76 13	(15 ⁺)	CD	J ^π : M1 γ (451 keV) to (14 ⁺).
3615.86 12	(14)	C	
3727.4 15		D	
3794.98 12	(15)	CD	J ^π : D+Q γ (364 keV) to (14 ⁻).
3899.36 12	(15 ⁻)	CD	J ^π : M1+E2 γ (468 keV) to (14 ⁻).
3904.37 13		CD	
4035.0 9		D	
4118.56 13	(16 ⁻)	CD	J ^π : M1 γ (219 keV) to (15 ⁻).
4227.36 14	(16)	C	J ^π : E2 γ (1168 keV) to (14 ⁺).
4328.2 8		D	
4505.06 16	(17)	CD	J ^π : D+Q γ (387 keV) to (16 ⁻).
4557.16 15	(17 ⁺)	C	J ^π : E2 γ (1046 keV) to (15 ⁺).
4659.0 11		D	
4717.2 8		D	
4818.76 17	(18)	C	J ^π : D(+Q) γ (262 keV) to (17 ⁺).
5060.4 10		D	
5118.65 19		CD	
5351.46 17	(19)	C	J ^π : D+Q γ (532 keV) to (18).
5454.0 10		D	
5457.4 15		D	
5850.46 20	(20)	C	J ^π : D(+Q) γ (499 keV) to (19).
6264.0 7		D	
6347.5 12		D	
7105.7 15		D	
7558.6 15		D	
7972.1 16		D	

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Adopted Levels, Gammas (continued)

¹⁴⁴Pm Levels (continued)

<u>E(level)[‡]</u>	<u>J^π[†]</u>	<u>T_{1/2}</u>	<u>XREF</u>	<u>Comments</u>
8510.3 19			D	
8595.8 22	(25 to 35)	≈2.7 μs	D	T _{1/2} : from 1994ZhZW.

[†] Assignments for levels below 600 keV are based upon expected configuration=((ν 2f_{7/2})+(π 2d_{5/2})+(π 1g_{7/2})); while coupling with (π,2d_{3/2}) (π,1h_{11/2}) orbitals are expected at higher energies.

[‡] From least square fit to levels where γ information is available; if ΔEγ was unknown, a value of 1 keV was used.

Adopted Levels, Gammas (continued)

$\gamma(^{144}\text{Pm})$

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\alpha^\ddagger$	Comments
60.727	(4) ⁻	60.74 2	100	0.0	5 ⁻			
66.64	(3) ⁻	(5.89)		60.727	(4) ⁻			
80.03	(2) ⁻	(13.4)		66.64	(3) ⁻			
171.802	(6) ⁻	171.80 1	100	0.0	5 ⁻	E2(+M1)	0.342	$\alpha(\text{K})=0.26$ 3; $\alpha(\text{L})=0.060$ 20; $\alpha(\text{M})=0.013$ 5; $\alpha(\text{N}+..)=0.0036$ 12 E _γ : weighted average between 1975Ma04 and 1993Gl03 values.
195.433	(5) ⁻	134.71 1	100 5	60.727	(4) ⁻			
		195.42 2	22.3 11	0.0	5 ⁻			
207.37	(4) ⁻	140.73 1	100	66.64	(3) ⁻			
232.401	(6) ⁻	232.41 2	100	0.0	5 ⁻	(M1+E2)	0.137 13	$\alpha(\text{K})=0.110$ 17; $\alpha(\text{L})=0.021$ 4; $\alpha(\text{M})=0.0045$ 8; $\alpha(\text{N}+..)=0.00123$ 19 E _γ : weighted average between 1975Ma04 and 1993Gl03 values.
249.91	(1) ⁻	169.88 1	100	80.03	(2) ⁻			
279.286	(3) ⁻	71.96 3	18.2 18	207.37	(4) ⁻			
		199.25 1	36.8 18	80.03	(2) ⁻			
		212.62 5	7.3 9	66.64	(3) ⁻			
		218.56 2	100 4	60.727	(4) ⁻			
363.25	(2) ⁻	83.99 3	64 5	279.286	(3) ⁻			
		113.35 2	26.3 14	249.91	(1) ⁻			
		283.16 9	56 6	80.03	(2) ⁻			
		296.54 4	100 7	66.64	(3) ⁻			
514.32	(7) ⁻	281.97 6	100 3	232.401	(6) ⁻	(M1+E2)	0.078 12	$\alpha(\text{K})=0.064$ 12; $\alpha(\text{L})=0.0109$ 6; $\alpha(\text{M})=0.00237$ 16; $\alpha(\text{N}+..)=0.00065$ 4 E _γ , I _γ : weighted average between 1975Ma04 and 1993Gl03 values.
		342.40 6	61 6	171.802	(6) ⁻	(M1+E2)	0.045 9	$\alpha(\text{K})=0.037$ 9; $\alpha(\text{L})=0.0060$ 2; $\alpha(\text{M})=0.00129$ 3; $\alpha(\text{N}+..)=0.00035$ 1 E _γ , I _γ : weighted average between 1975Ma04 and 1993Gl03 values.
785.03		718.60 20	100	66.64	(3) ⁻			
840.90	(9) ⁺	326.55 5	100	514.32	(7) ⁻	M2	0.244	B(M2)(W.u.)=0.19 5 $\alpha(\text{K})=0.201$ 6; $\alpha(\text{L})=0.0336$ 10; $\alpha(\text{M})=0.00729$ 22; $\alpha(\text{N}+..)=0.00203$ 7 E _γ : weighted average between 1975Ma04 and 1993Gl03 values; I _γ from 1996Zh26.
		608.7	8.2	232.401	(6) ⁻	E3	0.0188	B(E3)(W.u.)=1.6 5 $\alpha(\text{K})=0.0146$ 5; $\alpha(\text{L})=0.00315$ 10 Not observed by 1975Ma04 nor 1993Gl03. E, I _γ ; from 1996Zh26. Additional information 1.
		669.15 8	97.3	171.802	(6) ⁻	E3	0.0143	B(E3)(W.u.)=7.6 20 $\alpha(\text{K})=0.0113$ 4; $\alpha(\text{L})=0.00227$ 7 E _γ : weighted average between 1975Ma04 and 1993Gl03 values; I _γ from 1996Zh26. Additional information 2.
875.75	-	809.10 10	100 7	66.64	(3) ⁻			
		815.0 10	<17	60.727	(4) ⁻			
896.31		(55.4)		840.90	(9) ⁺			E _γ : from level-energy difference. γ not observed since below the energy detection threshold.

Adopted Levels, Gammas (continued)

<u>$\gamma(^{144}\text{Pm})$ (continued)</u>									
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ	$\alpha^\ddagger$	Comments
899.09	(2,3) ⁺	535.2 3	25 8	363.25	(2) ⁻				
		819.21 15	100 8	80.03	(2) ⁻				
942.99		158.00 8	8.6 18	785.03					
		862.89 23	97 7	80.03	(2) ⁻				
		876.40 17	100 11	66.64	(3) ⁻				
948.11	(4,5) ⁺	887.2 5	53 12	60.727	(4) ⁻				
		948.15 23	100 10	0.0	5 ⁻				
1021.81	(2,3) ⁺	78.84 6	13.7 16	942.99					
		941.58 18	100 10	80.03	(2) ⁻				
1080.21	(4 ⁻ ,5 ⁻)	908.42 17	100 7	171.802	(6) ⁻				
		1080.0 7	22 5	0.0	5 ⁻				
1273.81	(10 ⁺)	377.5 [†] 1	52.1 [†] 24	896.31					Seen only by 1993GI03 .
		432.9 [†] 1	100 [†] 4	840.90	(9) ⁺	M1+E2	+0.249 8	0.0285	$\alpha(\text{K})=0.0242$; $\alpha(\text{L})=0.00332$; $\alpha(\text{M})=0.00070$; $\alpha(\text{N}+..)=0.00019$
1337.4		1058.1 4	100	279.286	(3) ⁻				
1455.34	(8)	1223.0 1	100	232.401	(6) ⁻				
1704.81	(10 ⁺)	431.0 [†] 1	100 [†] 6	1273.81	(10 ⁺)	(M1+E2)		0.024 6	$\alpha(\text{K})=0.020$ 5; $\alpha(\text{L})=0.0030$ 4; $\alpha(\text{M})=0.00065$ 7; $\alpha(\text{N}+..)=0.00018$ 2
		863.9 [†] 1	38.0 [†] 17	840.90	(9) ⁺	M1+E2	+0.252 10	0.00518 1	$\alpha(\text{K})=0.00440$ 1; $\alpha(\text{L})=0.00058$
1711.16	(9 ⁻)	255.9 1	22.9 18	1455.34	(8)	D+Q	+0.11 7		
		1196.8 1	100 4	514.32	(7) ⁻	(E2+M3)	-0.11 3	0.00175 7	$\alpha(\text{K})=0.00148$ 6; $\alpha(\text{L})=0.00020$ 1 Additional information 3 .
1850.73	(9)	1336.4 1	100	514.32	(7) ⁻				
1985.14	(10 ⁻)	134.4 1	13.3 18	1850.73	(9)				
		274.0 1	100 5	1711.16	(9 ⁻)	M1(+E2)	+0.004 23	0.096	$\alpha(\text{K})=0.0817$; $\alpha(\text{L})=0.0112$; $\alpha(\text{M})=0.00238$; $\alpha(\text{N}+..)=0.00066$
2072.23	(11 ⁻)	87.1 [†] 1	52 [†] 5	1985.14	(10 ⁻)	M1		2.34	$\alpha(\text{K})=1.98$ 6; $\alpha(\text{L})=0.280$ 9; $\alpha(\text{M})=0.0594$ 18; $\alpha(\text{N}+..)=0.0169$ 5 Seen only by 1993GI03 .
		367.4 [†] 1	100 [†] 5	1704.81	(10 ⁺)	E1(+M2)	-0.039 22	0.0088 4	$\alpha(\text{K})=0.0075$ 3; $\alpha(\text{L})=0.00100$ 5; $\alpha(\text{M})=0.00021$ 1
2269.53	(12 ⁻)	197.3 [†] 1	100 [†]	2072.23	(11 ⁻)	M1(+E2)	-0.01 8	0.234	$\alpha(\text{K})=0.199$; $\alpha(\text{L})=0.0275$ 2; $\alpha(\text{M})=0.00583$ 4; $\alpha(\text{N}+..)=0.00165$ 1
2312.11	(11 ⁺)	1038.3 [†] 1	100 [†] 5	1273.81	(10 ⁺)	M1+E2	+0.233	0.00336	$\alpha(\text{K})=0.00286$ 9; $\alpha(\text{L})=0.00038$ 1
		1471.2 [†] 1	46.4 [†] 20	840.90	(9) ⁺	E2(+M3)	-0.089 19	0.00113 2	$\alpha(\text{K})=0.00096$ 2; $\alpha(\text{L})=0.00013$ Additional information 4 .
2610.03		624.9 1	88 10	1985.14	(10 ⁻)				
		1336.2 1	100 16	1273.81	(10 ⁺)				
2647.11	(12)	335.0 1	72 5	2312.11	(11 ⁺)	D(+Q)	-0.03 8		
		942.3 1	100 5	1704.81	(10 ⁺)	Q(+O)	-0.07 5		

Adopted Levels, Gammas (continued)

$\gamma(^{144}\text{Pm})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ	$\alpha^\ddagger$	Comments
2668.10	(12 ⁺)	(58.1)		2610.03					Seen only by 1993Gl03 E; from level-energy difference. γ not observed since below the energy detection threshold.
2774.41	(13 ⁺)	356.0 [†] 1	100 [†]	2312.11 (11 ⁺)		M1(+E2)	+0.014 17	0.0481	$\alpha(\text{K})=0.0410$; $\alpha(\text{L})=0.00560$; $\alpha(\text{M})=0.00119$; $\alpha(\text{N}+..)=0.00033$
		106.3 [†] 1	100 [†] 6	2668.10 (12 ⁺)					
		127.3 [†] 1	11 [†] 3	2647.11 (12)					
		462.3 [†] 1	33.6 [†] 17	2312.11 (11 ⁺)		E2(+M3)	-0.09 4	0.0170 19	Seen only by 1993Gl03 . $\alpha(\text{K})=0.0139$ 16; $\alpha(\text{L})=0.0024$ 3; $\alpha(\text{M})=0.00053$ 7; $\alpha(\text{N}+..)=0.00014$ 2
2889.4		504.9 [†] 1	34.5 [†] 17	2269.53 (12 ⁻)		E1(+M2)	+0.02 5	0.0041 3	Seen only by 1993Gl03 . Additional information 5 . $\alpha(\text{K})=0.00348$ 22; $\alpha(\text{L})=0.00046$ 4
		221		2668.10 (12 ⁺)					See comment regarding 1993Gl03 and 1994ZhZW discrepancy at top of the document.
3059.85	(14 ⁺)	620 285.4 [†] 1	100 [†]	2269.53 (12 ⁻) 2774.41 (13 ⁺)		M1+E2	+0.052 18	0.086	$\alpha(\text{K})=0.0732$ 1; $\alpha(\text{L})=0.0101$; $\alpha(\text{M})=0.00214$; $\alpha(\text{N}+..)=0.00059$
3127.59	(13)	353.2 1 459.5 1	37 7 100 5	2774.41 (13 ⁺) 2668.10 (12 ⁺)		(D+Q)			See comment regarding 1993Gl03 and 1994ZhZW discrepancy at top of the document.
3348.56	(14)	221.0 [†] 1 459	93 [†] 7	3127.59 (13) 2889.4					From 1993Gl03 . See comment regarding 1993Gl03 and 1994ZhZW discrepancy at top of the document. From 1994ZhZW . See comment regarding 1993Gl03 and 1994ZhZW discrepancy at top of the document.
3408.4		574.2 [†] 1 634	100 [†] 7 100	2774.41 (13 ⁺) 2774.41 (13 ⁺)		D+Q	+0.05 3		
3431.05	(14 ⁻)	1161.5 [†] 1	100 [†]	2269.53 (12 ⁻)		Q(+O)	-0.084 22		
3510.76	(15 ⁺)	450.9 [†] 1	100 [†]	3059.85 (14 ⁺)		M1		0.0262	$\alpha(\text{K})=0.0224$ 7; $\alpha(\text{L})=0.00303$ 9; $\alpha(\text{M})=0.00064$ 2; $\alpha(\text{N}+..)=0.00018$ 1
3615.86	(14)	1346.3 1	100	2269.53 (12 ⁻)					
3727.4		319	100	3408.4					
3794.98	(15)	363.9 [†] 1 446.5 [†] 1 735.1 [†] 1	13.8 [†] 19 86 [†] 4 100 [†] 6	3431.05 (14 ⁻) 3348.56 (14) 3059.85 (14 ⁺)		D+Q	+0.04 7		Seen only by 1993Gl03 .
3899.36	(15 ⁻)	283.5 [†] 1 468.3 [†] 1	>23 [†] 100 [†] 4	3615.86 (14) 3431.05 (14 ⁻)		D(+Q) M1+E2	-0.03 14 +0.09 3	0.0237 1	Seen only by 1993Gl03 . $\alpha(\text{K})=0.0202$ 1; $\alpha(\text{L})=0.00274$ 1; $\alpha(\text{M})=0.00058$; $\alpha(\text{N}+..)=0.00016$
3904.37		839.5 [†] 1	26 [†] 8	3059.85 (14 ⁺)					Seen only by 1993Gl03 .
		109.4 [†] 1	100 [†] 5	3794.98 (15)					
		288.5 [†] 1	>24 [†]	3615.86 (14)		(D+Q)	-0.07 9		Seen only by 1993Gl03 .

Adopted Levels, Gammas (continued)

$\gamma(^{144}\text{Pm})$ (continued)									
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ	$\alpha^\ddagger$	Comments
3904.37		393.6 [†] 1	74 [†] 5	3510.76	(15 ⁺)	(D+Q)	-0.18 8		Seen only by 1993GI03 .
4035.0		605	100	3431.05	(14 ⁻)				
4118.56	(16 ⁻)	219.2 [†] 1	91 [†] 5	3899.36	(15 ⁻)	M1		0.175	$\alpha(\text{K})=0.149$ 5; $\alpha(\text{L})=0.0206$ 7; $\alpha(\text{M})=0.00437$ 13; $\alpha(\text{N}+..)=0.00123$ 4
		323.6 [†] 1	26 [†] 3	3794.98	(15)				Seen only by 1993GI03 .
		607.8 [†] 1	100 [†] 6	3510.76	(15 ⁺)				
4227.36	(16)	1167.5 1	100	3059.85	(14 ⁺)	E2(+M3)	-0.09 4	0.00180 9	$\alpha(\text{K})=0.00153$ 8; $\alpha(\text{L})=0.00021$ 1
									Additional information 6 .
4328.2		423	100	3904.37					
4505.06	(17)	386.5 [†] 1	100 [†]	4118.56	(16 ⁻)	D+Q	+0.030 24		
4557.16	(17 ⁺)	329.8 1	75 4	4227.36	(16)	D(+Q)	+0.02 4		Seen only by 1993GI03 .
		1046.4 1	100 4	3510.76	(15 ⁺)	E2(+M3)	-0.070 25	0.00223 6	$\alpha(\text{K})=0.00188$ 5; $\alpha(\text{L})=0.00026$ 1
									Additional information 7 .
4659.0		625	100	4035.0					
4717.2		812	100	3904.37					
4818.76	(18)	261.6 1	100	4557.16	(17 ⁺)	D(+Q)	-0.04 5		
5060.4		1156	100	3904.37					
5118.65		613.6 [†] 1	100 [†]	4505.06	(17)				
5351.46	(19)	532.7 1	46 2	4818.76	(18)	D+Q	+0.08 4		
		794.3 1	100 9	4557.16	(17 ⁺)				
5454.0		796	100	4659.0					
5457.4		397	100	5060.4					
5850.46	(20)	499.0 1	100	5351.46	(19)	D(+Q)	+0.02 3		
6264.0		811		5454.0					
		1146		5118.65					
		1546		4717.2					
		1935		4328.2					
6347.5		83.5	100	6264.0					
7105.7		758.2	100	6347.5					
7558.6		1211.1	100	6347.5					
7972.1		413.5		7558.6					
		866.4		7105.7					
8510.3		538.2	100	7972.1					
8595.8	(25 to 35)	85.5	100	8510.3					

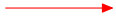
[†] γ from [1993GI03](#).

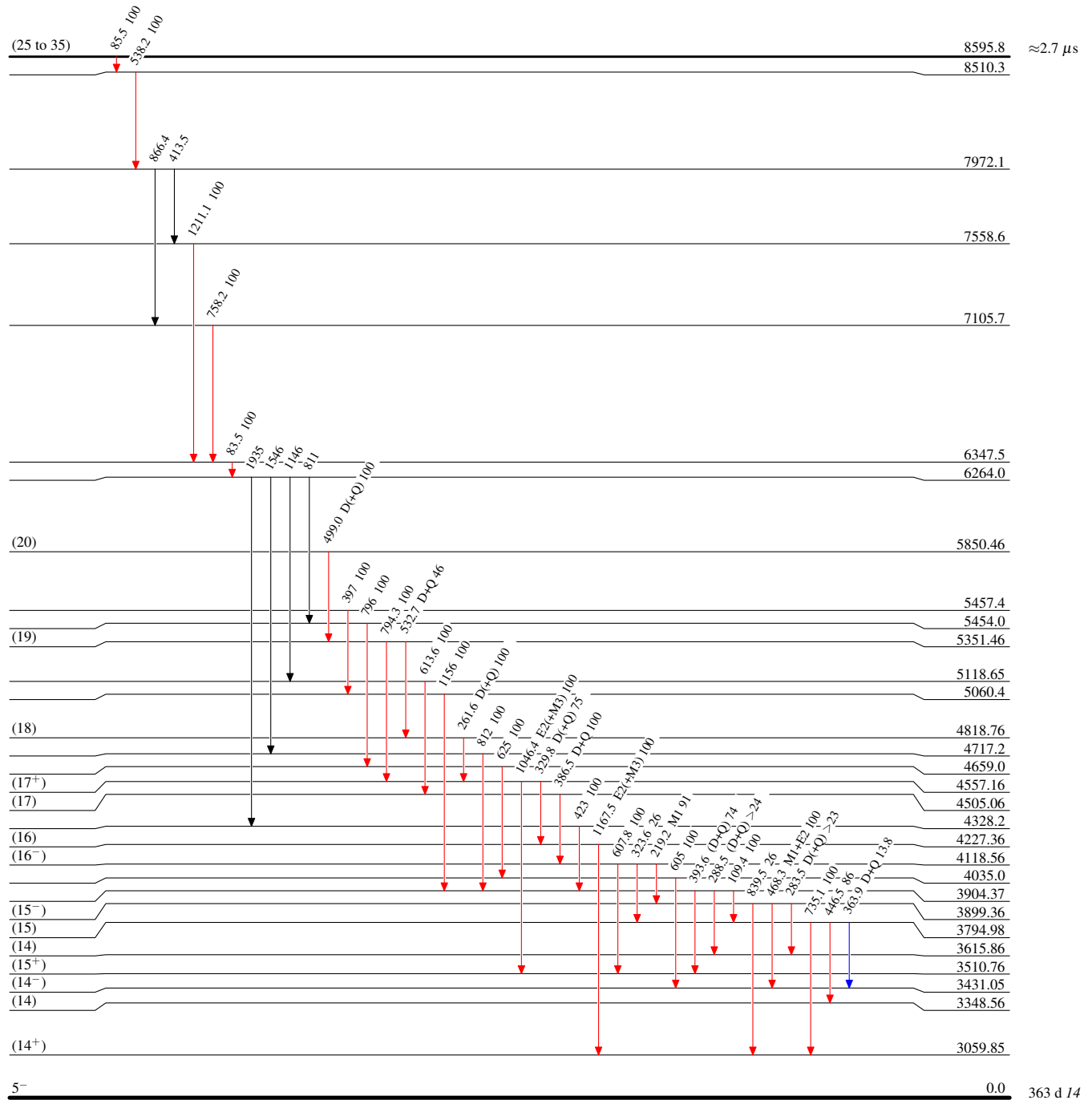
[‡] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

Adopted Levels, GammasLevel Scheme

Intensities: Type not specified

Legend

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

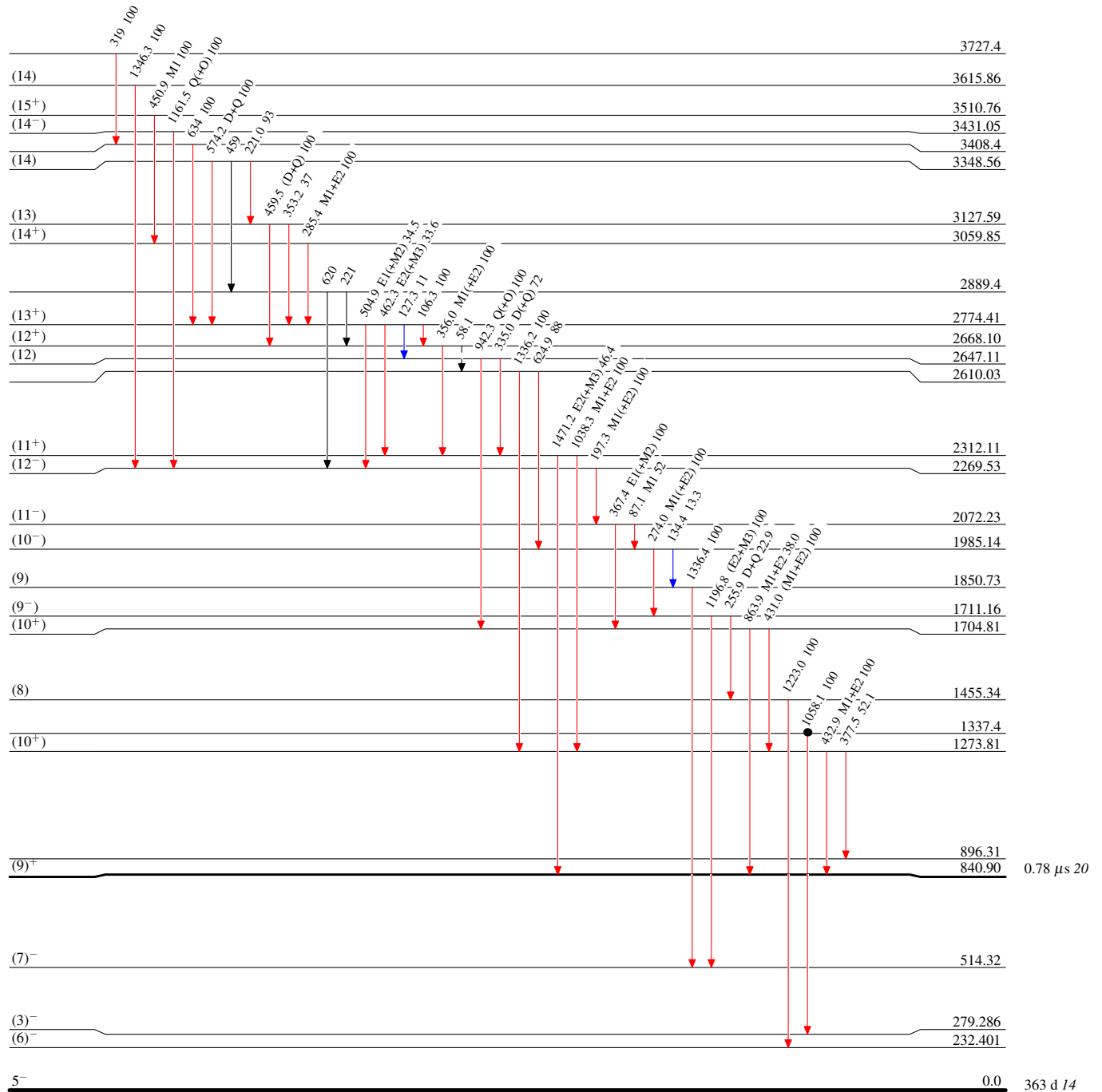


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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



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

Intensities: Type not specified

Legend

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

