^{141}Ba β^- decay 2022Ru06,1986Fa08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

Parent: ^{141}Ba: E=0.0; $J^\pi=3/2^-$; $T_{1/2}=18.27$ min *7*; $Q(\beta^-)=3197$ *7*; $\%\beta^-$ decay=100

Measured: γ, $\gamma\gamma$ (2022Ru06,1986Fa08,1979Pr01,1977TaZZ,1970Mc22,1970Be43,1968Al06), ce (1979Pr01,1970Be43), $\gamma\gamma(\theta)$ (2022Ru06,1986Fa08), Iγ (1997Gr09 by total absorption γ-ray spectrometer (TAGS)), Eγ (1979Bo26, by curved crystal spectrometer).

Level scheme is that of 2022Ru06, in general good agreement with that previously established by 1986Fa08.

^{141}La Levels

No evidence for the 2774.3, 2441.1 and 2293.7 levels proposed by 1986Fa08 was found by 2022Ru06 by relocating the transitions that depopulate those levels.

E(level)	J^π †	$T_{1/2}$ †	Comments
0.0	$7/2^{(+)}$	3.92 h *3*	
190.329 *5*	$5/2^{(+)}$	1.27 ns *+6−10*	$T_{1/2}$: from $\beta\gamma$ coin (1970Be43).
304.190 *4*	$5/2^{(+)}$		
467.281 *11*	$3/2^{(+)}$		
580.11 *7*	$1/2^{(+)}$		
647.864 *20*	$3/2^{(+)}$		
685.35 *9*	$3/2^{(+)},5/2^{(+)}$		
826.37 *8*	$5/2^{(+)},3/2^{(+)}$		
831.62 *6*	$3/2^{(+)},5/2^{(+)}$		
929.38 *6*	$5/2^{(+)},3/2^{(+)}$		
991.93 *8*	$3/2^{(-)}$		
1039.43 *8*	$5/2^{(+)},3/2^{(+)}$		
1066.51 *7*	$3/2^{(-)}$		
1171.93 *7*	$1/2^{(+)}$		
1188.90 *13*			
1426.31 *7*	$3/2^{(-)}$		
1501.51 *8*	$5/2^{(+)},3/2^{(+)}$		
1547.62 *16*	$1/2^{(+)}$		
1551.39 *12*			
1565.94 *23*			
1605.47 *15*			
1628.11 *7*	$3/2^{(-)}$		
1716.43 *13*	$1/2^{(+)},3/2,5/2^{(+)}$		
1740.67 *8*	$5/2^{(+)},3/2^{(+)}$		
1844.21 *9*	$3/2^{(-)}$		
1872.54 *7*	$1/2^{(+)}$		
1925.95 *7*	$3/2^{(-)}$		
2180.32 *10*	$3/2^{(-)}$		
2216.51 *9*	$1/2^{(+)}$		
2327.16 *10*	$3/2^{(-)}$		
2345.2 *3*			
2375.79 *10*	$3/2^{(-)},1/2^{(-)}$		
2385.62 *9*	$3/2^{(-)}$		
2468.69 *7*	$5/2^{(+)},3/2^{(+)}$		
2485.7 *3*			
2700.32 *13*	$1/2^{(+)},3/2,5/2^{(+)}$		
2772.40 *16*	$1/2^{(+)},3/2,5/2$		

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^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

^{141}La Levels (continued)

E(level)	J^π †
2808.4 *3*	1/2,3/2,5/2$^{(+)}$
2955.9 *3*	1/2$^{(+)}$,3/2,5/2

† Adopted values.

β^- radiations

In comments: %Iβ intensities based on TAGS (1997Gr09), unless mentioned otherwise.

E(decay)	E(level)	Iβ^- †	Log *ft*	Comments
(241 *7*)	2955.9	0.0036 *8*	6.97 *11*	av Eβ=67.1 *22*
(389 *7*)	2808.4	0.0081 *11*	7.29 *7*	av Eβ=114.4 *24*
(425 *7*)	2772.40	0.0228 *19*	6.97 *5*	av Eβ=126.5 *24*
(497 *7*)	2700.32	0.042 *3*	6.93 *4*	av Eβ=151.4 *25*
(711 *7*)	2485.7	0.0076 *11*	8.21 *7*	av Eβ=229.9 *27*
(728 *7*)	2468.69	0.78 *4*	6.24 *3*	av Eβ=236.3 *27* Iβ^-: 0.28.
(811 *7*)	2385.62	0.266 *15*	6.87 *3*	av Eβ=268.3 *28*
(821 *7*)	2375.79	0.72 *4*	6.46 *3*	av Eβ=272.1 *28*
(852 *7*)	2345.2	0.0099 *7*	8.38 *4*	av Eβ=284.1 *28*
(870 *7*)	2327.16	0.222 *12*	7.06 *3*	av Eβ=291.2 *28*
(981 *7*)	2216.51	0.67 *4*	6.77 *3*	av Eβ=335.4 *29*
(1017 *7*)	2180.32	0.486 *25*	6.964 *25*	av Eβ=350.0 *29*
(1271 *7*)	1925.95	1.94 *10*	6.724 *25*	av Eβ=455.5 *30* Iβ^-: 0.46.
(1325 *7*)	1872.54	3.64 *18*	6.518 *24*	av Eβ=478.1 *30* Iβ^-: 4.61.
(1353 *7*)	1844.21	2.32 *12*	6.749 *25*	av Eβ=490.2 *30* Iβ^-: 2.31.
(1456 *7*)	1740.67	1.94 *10*	6.949 *24*	av Eβ=534.6 *31* Iβ^-: 2.21.
(1481 *7*)	1716.43	0.108 *7*	8.23 *3*	av Eβ=545.0 *31* Iβ^-: 0.074.
(1569 *7*)	1628.11	2.90 *15*	6.899 *24*	av Eβ=583.4 *31* Iβ^-: 3.32.
(1592 *7*)	1605.47	0.112 *7*	8.34 *3*	av Eβ=593.2 *31*
(1631 *7*)	1565.94	0.106 *7*	8.40 *3*	av Eβ=610.5 *31* Iβ^-: 0.028.
(1649 *7*)	1547.62	0.167 *10*	8.22 *3*	av Eβ=618.5 *31*
(1696 *7*)	1501.51	6.2 *3*	6.701 *23*	av Eβ=638.8 *31* Iβ^-: 6.18.
(1771 *7*)	1426.31	0.454 *25*	7.910 *25*	av Eβ=671.9 *31*
(2008 *7*)	1188.90	0.261 *15*	8.37 *3*	av Eβ=777.6 *32*
(2025 *7*)	1171.93	1.32 *7*	7.678 *24*	av Eβ=785.2 *32* Iβ^-: 1.38.
(2131 *7*)	1066.51	3.71 *20*	7.317 *25*	av Eβ=832.6 *32* Iβ^-: 3.9.
(2158 *7*)	1039.43	0.093 *11*	8.94 *6*	av Eβ=844.8 *32*
(2205 *7*)	991.93	0.016 *10*	9.7 *3*	av Eβ=866.3 *32*
(2268 *7*)	929.38	12.6 *7*	6.896 *25*	av Eβ=894.6 *32* E(decay): Eβ=2370 (1962Fr04), 2354 *45* (1972AdZV). Iβ^-: 11.99.
(2365 *7*)	831.62	2.24 *12*	7.720 *24*	av Eβ=939.0 *32*

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^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

β^- radiations (continued)

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
				Iβ^-: 1.84.
(2371 *7*)	826.37	0.80 *5*	8.17 *3*	av Eβ=941.4 *32* Iβ^-: 0.28.
(2512 *7*)	685.35	0.330 *21*	8.66 *3*	av Eβ=1005.6 *32* Iβ^-: 0.184.
(2549 *7*)	647.864	25.0 *13*	6.805 *24*	av Eβ=1022.8 *32* Iβ^-: 23.06. E(decay): Eβ=2610 (1962Fr04), 2588 *41* (1972AdZV).
(2617 *7*)	580.11	0.63 *7*	8.45 *5*	av Eβ=1053.8 *32* Iβ^-: 0.65.
(2730 *7*)	467.281	18.8 *11*	7.05 *3*	av Eβ=1105.6 *33* Eβ=2840 (1962Fr04), 2734 *39* (1972AdZV). Iβ^-: 19.37.
(3007 *7*)	190.329	7.4 *13*	7.63 *8*	av Eβ=1233.2 *33* E(decay): Eβ=3100 *100* (1962Fr04). Iβ^-: 10.15.
(3197 *7*)	0.0	4 *4*	9.4[1*u*] *5*	av Eβ=1305.3 *32* Iβ^-: Other: 4.4% *22* from 1979Pr01, who determined Iγ relative to I(1354γ) in ^{141}Ce daughter using the absolute intensity for 1354γ that they determined following the procedure given by their previous paper, 1976Ot03, and considering %Iβ(^{141}Ce g.s.)≈95 from 1951Du19. Iβ^-: 1.7 *15*.

[†] Absolute intensity per 100 decays.

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$

Iγ normalization: Calculated by 2022Ru06 from their measured realtive intensity ratio of 190γ (in ^{141}La) and 1354γ (in ^{141}Ce daughter), and %Iγ(1354γ)=1.64 *7* from 1981Ge04. This value (1.64 *7*) was determined by 1981Ge04 by comparison of the growth and decay of the 145γ (in ^{141}Pr, ^{141}Ce′s daughter) with respect to the 1354γ. 1981Ge04 also report a more precise measurement by a 4π β-γ method, %Iγ(1354γ)=1.643 *22*, adopting finally %Iγ(1354γ)=1.643 *21*, which gives a more precise value of the noramalization factor, 0.0448 *11*, which can alternatively be used to calculate %Iγ values listed in the table. This is in good agreement with 0.0455 *13* obtained by 2014Ni18 evalution from 1986Fa08 data and γ feeding to the g.s. of 4.4% *22* from 1979Pr01.

Unplaced γ′s are from 1986Fa08 unless noted otherwise.

α(K)exp were derived from simultaneous measurement of Iγ and Ice(K) normalized to α(K)exp for standard γ transitions (1979Pr01).

E$_\gamma$ [†]	I$_\gamma$ [‡] [b]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult. [#]	δ [@]	α [a]	Comments
67.52 [c] *32*	<0.05	647.864	3/2$^{(+)}$	580.11	1/2$^{(+)}$				%Iγ<0.0022
113.14 *21*	17.4 *5*	580.11	1/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	−0.16 *11*	0.774 *25*	α(K)=0.655 *13*; α(L)=0.095 *11*; α(M)=0.0198 *26* α(N)=0.0043 *5*; α(O)=0.00070 *7*; α(P)=5.06×10^{-5} *8* %Iγ=0.78 *4*
114.10 *22*	2.43 *5*	304.190	5/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.8 *2*	0.94 *6*	α(K)=0.705 *25*; α(L)=0.184 *32*; α(M)=0.040 *7* α(N)=0.0086 *15*; α(O)=0.00128 *21*; α(P)=4.77×10^{-5} *9* %Iγ=0.109 *6*
146.4 *2*	0.40 *3*	831.62	3/2$^{(+)}$,5/2$^{(+)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]		0.44 *8*	α(K)=0.343 *29*; α(L)=0.08 *4*; α(M)=0.017 *8* α(N)=0.0037 *17*; α(O)=5.5×10^{-4} *24*; α(P)=2.31×10^{-5} *15* %Iγ=0.0179 *16*
160.51 *23*	0.71 *4*	991.93	3/2$^{(-)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[E1]		0.0636 *9*	α(K)=0.0545 *8*; α(L)=0.00725 *11*; α(M)=0.001496 *22* α(N)=0.000325 *5*; α(O)=5.16×10^{-5} *8*; α(P)=3.53×10^{-6} *5* %Iγ=0.0318 *23*
163.26 *20*	9.92 *25*	467.281	3/2$^{(+)}$	304.190	5/2$^{(+)}$	M1+E2	0.035 *13*	0.273 *4*	α(K)=0.2331 *34*; α(L)=0.0314 *5*; α(M)=0.00652 *9* α(N)=0.001432 *21*; α(O)=0.0002330 *34*; α(P)=1.812×10^{-5} *26* %Iγ=0.444 *24*
165.87 *25*	0.55 *3*	991.93	3/2$^{(-)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[E1]		0.0581 *8*	α(K)=0.0498 *7*; α(L)=0.00661 *10*; α(M)=0.001365 *20* α(N)=0.000297 *4*; α(O)=4.72×10^{-5} *7*;

$^{141}_{57}La_{84}$-4

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ[†]	I_γ[‡][b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
									α(P)=3.24×10^{-6} *5* %Iγ=0.0246 *18*
180.81 *21*	12.2 *3*	647.864	3/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	−0.8 *6*	0.223 *16*	α(K)=0.181 *5*; α(L)=0.033 *9*; α(M)=0.0071 *20* α(N)=0.0015 *4*; α(O)=0.00024 *6*; α(P)=1.28×10^{-5} *8* %Iγ=0.55 *3*
190.328 *5*	1000 *20*	190.329	5/2$^{(+)}$	0.0	7/2$^{(+)}$	M1(+E2)	0.007 *11*	0.1788 *25*	α(K)=0.1530 *21*; α(L)=0.02048 *29*; α(M)=0.00425 *6* α(N)=0.000935 *13*; α(O)=0.0001521 *21*; α(P)=1.188×10^{-5} *17* %Iγ=44.8 *23* E_γ: from 1979Bo26. Other: 190.47 *20* (2022Ru06). Mult.: α(K)exp=0.172 *25* (1979Pr01), 0.169 *15* (1970Be43), K/L=8.1 *8* (1970Be43), δ≤0.3.
213.28 *24*	0.36 *5*	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[M1+E2]		0.137 *6*	α(K)=0.1117 *17*; α(L)=0.020 *5*; α(M)=0.0043 *12* α(N)=9.3×10^{-4} *25*; α(O)=0.000144 *32*; α(P)=7.9×10^{-6} *9* %Iγ=0.0161 *24*
235.01 *22*	1.08 *5*	1066.51	3/2$^{(-)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[E1]		0.02262 *32*	α(K)=0.01942 *28*; α(L)=0.00254 *4*; α(M)=0.000523 *7* α(N)=0.0001142 *16*; α(O)=1.828×10^{-5} *26*; α(P)=1.307×10^{-6} *19* %Iγ=0.048 *3*
242.67 *21*	1.72 *7*	1171.93	1/2$^{(+)}$	929.38	5/2$^{(+)}$,3/2$^{(+)}$	[E2]		0.0932 *13*	α(K)=0.0736 *11*; α(L)=0.01547 *22*; α(M)=0.00332 *5* α(N)=0.000714 *10*; α(O)=0.0001079 *15*; α(P)=4.75×10^{-6} *7* %Iγ=0.077 *5*
254.45 *20*	0.23 *2*	1426.31	3/2$^{(-)}$	1171.93	1/2$^{(+)}$	[E1]		0.01832 *26*	α(K)=0.01574 *22*; α(L)=0.002048 *29*; α(M)=0.000423 *6* α(N)=9.23×10^{-5} *13*; α(O)=1.479×10^{-5} *21*; α(P)=1.066×10^{-6} *15* %Iγ=0.0103 *10*
[x]255.1[&] *6*	0.2 *1*								%Iγ=0.009 *5*
259.53 *20*	0.42 *3*	1188.90		929.38	5/2$^{(+)}$,3/2$^{(+)}$				%Iγ=0.0188 *16*
276.95 *1*	527 *11*	467.281	3/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.448 *12*	0.0645 *9*	α(K)=0.0547 *8*; α(L)=0.00775 *11*;

$^{141}_{57}La_{84}$-5

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
									α(M)=0.001617 *23* α(N)=0.000354 *5*; α(O)=5.69×10^{-5} *8*; α(P)=4.13×10^{-6} *6* %Iγ=23.6 *12* E_γ: from 1979Bo26. Other: 277.01 *20* (2022Ru06). Mult.: α(K)exp=0.053 *8* (1979Pr01).
281.60 *21*	2.75 *10*	929.38	5/2$^{(+)}$,3/2$^{(+)}$	647.864	3/2$^{(+)}$	[M1+E2]		0.0599 *26*	α(K)=0.050 *4*; α(L)=0.0080 *9*; α(M)=0.00169 *22* α(N)=0.00037 *4*; α(O)=5.8×10^{-5} *5*; α(P)=3.6×10^{-6} *5* %Iγ=0.123 *7*
304.190 *4*	583 *11*	304.190	5/2$^{(+)}$	0.0	7/2$^{(+)}$	M1+E2	−0.44 *8*	0.0500 *8*	α(K)=0.0425 *7*; α(L)=0.00593 *10*; α(M)=0.001236 *21* α(N)=0.000271 *5*; α(O)=4.37×10^{-5} *7*; α(P)=3.22×10^{-6} *7* %Iγ=26.1 *13* E_γ: from 1979Bo26. Other: 304.23 *20* (2022Ru06). Mult.: α(K)exp=0.034 *5* (1979Pr01).
321.39 *20*	0.20 *1*	1872.54	1/2$^{(+)}$	1551.39					%Iγ=0.0090 *6*
343.67 *2*	338 *7*	647.864	3/2$^{(+)}$	304.190	5/2$^{(+)}$	M1+E2	0.026 *2*	0.0371 *5*	α(K)=0.0318 *4*; α(L)=0.00418 *6*; α(M)=0.000867 *12* α(N)=0.0001907 *27*; α(O)=3.11×10^{-5} *4*; α(P)=2.450×10^{-6} *34* %Iγ=15.1 *8* E_γ: from 1979Bo26. Other: 343.68 *20* (2022Ru06). Mult.: α(K)exp=0.022 *3* (1979Pr01).
349.28 *20*	7.6 *2*	929.38	5/2$^{(+)}$,3/2$^{(+)}$	580.11	1/2$^{(+)}$	[E2]		0.0292 *4*	α(K)=0.02394 *34*; α(L)=0.00418 *6*; α(M)=0.000887 *13* α(N)=0.0001920 *27*; α(O)=2.97×10^{-5} *4*; α(P)=1.634×10^{-6} *23* %Iγ=0.341 *18*
353.94 *24*	0.26 *2*	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]		0.0312 *32*	α(K)=0.0263 *33*; α(L)=0.00394 *8*; α(M)=0.000825 *25* α(N)=0.000180 *4*; α(O)=2.86×10^{-5} *4*; α(P)=1.92×10^{-6} *35* %Iγ=0.0117 *11*
359.82 *20*	0.28 *2*	1426.31	3/2$^{(-)}$	1066.51	3/2$^{(-)}$	[M1+E2]		0.0298 *31*	α(K)=0.0251 *32*; α(L)=0.00375 *6*;

$\gamma(^{141}La)$ (continued)

E_γ †	I_γ ‡ b	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	δ @	α a	Comments
									α(M)=0.000785 *19* α(N)=0.0001713 *33*; α(O)=2.72×10^{-5} *5*; α(P)=1.84×10^{-6} *34* %Iγ=0.0125 *11*
364.32 *21*	14.0 *3*	831.62	3/2$^{(+)}$,5/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	0.11 *9*	0.0318 *5*	α(K)=0.0273 *4*; α(L)=0.00359 *5*; α(M)=0.000745 *11* α(N)=0.0001638 *23*; α(O)=2.67×10^{-5} *4*; α(P)=2.099×10^{-6} *34* %Iγ=0.63 *3*
381.20 *21*	3.06 *9*	685.35	3/2$^{(+)}$,5/2$^{(+)}$	304.190	5/2$^{(+)}$	M1+E2	−0.21 *2*	0.0281 *4*	α(K)=0.02412 *34*; α(L)=0.00319 *4*; α(M)=0.000662 *9* α(N)=0.0001455 *20*; α(O)=2.367×10^{-5} *33*; α(P)=1.849×10^{-6} *26* %Iγ=0.137 *8*
389.74 *20*	30.6 *7*	580.11	1/2$^{(+)}$	190.329	5/2$^{(+)}$	E2		0.02101 *30*	α(K)=0.01734 *24*; α(L)=0.00290 *4*; α(M)=0.000613 *9* α(N)=0.0001329 *19*; α(O)=2.069×10^{-5} *29*; α(P)=1.200×10^{-6} *17* %Iγ=1.37 *7*
418.60 *21*	1.39 *5*	1066.51	3/2$^{(-)}$	647.864	3/2$^{(+)}$	[E1]		0.00519 *7*	α(K)=0.00447 *6*; α(L)=0.000571 *8*; α(M)=0.0001178 *17* α(N)=2.58×10^{-5} *4*; α(O)=4.17×10^{-6} *6*; α(P)=3.13×10^{-7} *4* %Iγ=0.062 *4*
x441.1 & *4*	0.7 *2*								%Iγ=0.031 *9*
449.7 *2*	0.47 *4*	2375.79	3/2$^{(-)}$,1/2$^{(-)}$	1925.95	3/2$^{(-)}$	[M1+E2]		0.0163 *24*	α(K)=0.0138 *22*; α(L)=0.00196 *13*; α(M)=0.000409 *24* α(N)=9.0×10^{-5} *6*; α(O)=1.43×10^{-5} *12*; α(P)=1.02×10^{-6} *21* %Iγ=0.0211 *21*
456.48 *22*	2.14 *9*	1628.11	3/2$^{(-)}$	1171.93	1/2$^{(+)}$	[E1]		0.00423 *6*	α(K)=0.00364 *5*; α(L)=0.000464 *7*; α(M)=9.56×10^{-5} *13* α(N)=2.093×10^{-5} *29*; α(O)=3.38×10^{-6} *5*; α(P)=2.56×10^{-7} *4* %Iγ=0.096 *6*
457.51 *20*	112 *2*	647.864	3/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.75 *6*	0.01619 *29*	α(K)=0.01378 *25*; α(L)=0.001905 *28*; α(M)=0.000397 *6* α(N)=8.69×10^{-5} *13*; α(O)=1.400×10^{-5} *22*; α(P)=1.032×10^{-6} *21* %Iγ=5.0 *3*
462.06 *20*	113 *2*	929.38	5/2$^{(+)}$,3/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	0.025 *11*	0.01742 *24*	Mult.: α(K)exp=0.015 *3* (1979Pr01). α(K)=0.01497 *21*; α(L)=0.001948 *27*; α(M)=0.000404 *6*

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡] [b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
									α(N)=8.87×10^{-5} *12*; α(O)=1.448×10^{-5} *20*; α(P)=1.147×10^{-6} *16* %Iγ=5.1 *3*
462.23 *22*	0.81 *3*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	[M1+E2]		0.0151 *23*	Mult.: α(K)exp=0.016 *4* (1979Pr01). α(K)=0.0128 *21*; α(L)=0.00182 *13*; α(M)=0.000379 *25* α(N)=8.3×10^{-5} *6*; α(O)=1.33×10^{-5} *12*; α(P)=9.5×10^{-7} *20* %Iγ=0.0363 *22*
467.22 *20*	125 *3*	467.281	3/2$^{(+)}$	0.0	7/2$^{(+)}$	E2		0.01245 *17*	α(K)=0.01039 *15*; α(L)=0.001629 *23*; α(M)=0.000343 *5* α(N)=7.46×10^{-5} *10*; α(O)=1.172×10^{-5} *16*; α(P)=7.32×10^{-7} *10* %Iγ=5.6 *3*
486.35 *22*	1.60 *6*	1066.51	3/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]		0.00364 *5*	Mult.: α(K)exp=0.008 *2* (1979Pr01). α(K)=0.00314 *4*; α(L)=0.000399 *6*; α(M)=8.22×10^{-5} *12* α(N)=1.801×10^{-5} *25*; α(O)=2.91×10^{-6} *4*; α(P)=2.215×10^{-7} *31* %Iγ=0.072 *4*
496.87 *20*	0.73 *5*	1426.31	3/2$^{(-)}$	929.38	5/2$^{(+)}$,3/2$^{(+)}$	[E1]		0.00347 *5*	α(K)=0.00299 *4*; α(L)=0.000379 *5*; α(M)=7.82×10^{-5} *11* α(N)=1.713×10^{-5} *24*; α(O)=2.77×10^{-6} *4*; α(P)=2.110×10^{-7} *30* %Iγ=0.033 *3*
509.63 *20*	1.67 *7*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	991.93	3/2$^{(-)}$	[E1]		0.00327 *5*	α(K)=0.00282 *4*; α(L)=0.000358 *5*; α(M)=7.37×10^{-5} *10* α(N)=1.615×10^{-5} *23*; α(O)=2.61×10^{-6} *4*; α(P)=1.993×10^{-7} *28* %Iγ=0.075 *5*
522.74 *20*	16.1 *4*	826.37	5/2$^{(+)}$,3/2$^{(+)}$	304.190	5/2$^{(+)}$	M1+E2	0.16 *3*	0.01271 *18*	α(K)=0.01092 *16*; α(L)=0.001420 *20*; α(M)=0.000294 *4* α(N)=6.46×10^{-5} *9*; α(O)=1.055×10^{-5} *15*; α(P)=8.34×10^{-7} *12* %Iγ=0.72 *4*
523.98 *20*	10.1 *3*	1171.93	1/2$^{(+)}$	647.864	3/2$^{(+)}$	M1+E2	−0.6 *2*	0.0118 *5*	α(K)=0.0101 *4*; α(L)=0.00135 *4*; α(M)=0.000280 *8* α(N)=6.14×10^{-5} *17*; α(O)=9.96×10^{-6} *31*; α(P)=7.6×10^{-7} *4* %Iγ=0.45 *3*

$\gamma(^{141}La)$ (continued)

E_γ[†]	I_γ[‡][b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
527.33 *20*	8.2 *2*	831.62	3/2(+),5/2(+)	304.190	5/2(+)	M1+E2	−1.3 *2*	0.01026 *32*	α(K)=0.00871 *29*; α(L)=0.001231 *27*; α(M)=0.000257 *5* α(N)=5.62×10^{-5} *12*; α(O)=9.00×10^{-6} *22*; α(P)=6.41×10^{-7} *25* %Iγ=0.367 *20*
542.5 *2*	0.95 *6*	2468.69	5/2(+),3/2(+)	1925.95	3/2(−)	[E1]		0.00284 *4*	α(K)=0.002449 *34*; α(L)=0.000310 *4*; α(M)=6.38×10^{-5} *9* α(N)=1.398×10^{-5} *20*; α(O)=2.266×10^{-6} *32*; α(P)=1.734×10^{-7} *24* %Iγ=0.043 *3*
[x]551.0	2.1 *3*								%Iγ=0.094 *14*
561.48 *21*	2.76 *9*	1628.11	3/2(−)	1066.51	3/2(−)	M1+E2	−0.8 *5*	0.0095 *10*	α(K)=0.0081 *9*; α(L)=0.00110 *8*; α(M)=0.000228 *15* α(N)=4.99×10^{-5} *35*; α(O)=8.1×10^{-6} *6*; α(P)=6.1×10^{-7} *8* %Iγ=0.124 *7*
572.10 *21*	6.17 *17*	1039.43	5/2(+),3/2(+)	467.281	3/2(+)	M1(+E2)	0.01 *2*	0.01024 *14*	α(K)=0.00881 *12*; α(L)=0.001138 *16*; α(M)=0.0002355 *33* α(N)=5.18×10^{-5} *7*; α(O)=8.46×10^{-6} *12*; α(P)=6.73×10^{-7} *9* %Iγ=0.276 *15*
588.81 *22*	0.78 *4*	1628.11	3/2(−)	1039.43	5/2(+),3/2(+)	[E1]		2.37×10^{-3} *3*	α(K)=0.002041 *29*; α(L)=0.000257 *4*; α(M)=5.30×10^{-5} *7* α(N)=1.162×10^{-5} *16*; α(O)=1.885×10^{-6} *26*; α(P)=1.449×10^{-7} *20* %Iγ=0.0349 *24*
594.63 *20*	0.76 *4*	1426.31	3/2(−)	831.62	3/2(+),5/2(+)	[E1]		2.31×10^{-3} *3*	α(K)=0.001998 *28*; α(L)=0.0002517 *35*; α(M)=5.19×10^{-5} *7* α(N)=1.137×10^{-5} *16*; α(O)=1.844×10^{-6} *26*; α(P)=1.419×10^{-7} *20* %Iγ=0.0341 *24*
599.14 *22*	5.98 *17*	1066.51	3/2(−)	467.281	3/2(+)	[E1]		2.28×10^{-3} *3*	α(K)=0.001965 *28*; α(L)=0.0002475 *35*; α(M)=5.10×10^{-5} *7* α(N)=1.118×10^{-5} *16*; α(O)=1.813×10^{-6} *25*; α(P)=1.396×10^{-7} *20* %Iγ=0.268 *15*
608.71 *20*	5.77 *17*	1188.90		580.11	1/2(+)				%Iγ=0.259 *14*
[x]611.3	0.4 *1*								%Iγ=0.018 *5*
625.08 *20*	77 *2*	929.38	5/2(+),3/2(+)	304.190	5/2(+)	M1+E2	0.51 *1*	0.00772 *11*	α(K)=0.00663 *9*; α(L)=0.000870 *12*;

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ[†]	I_γ[‡][b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
									α(M)=0.0001802 *25* α(N)=3.96×10^{-5} *6*; α(O)=6.44×10^{-6} *9*; α(P)=5.01×10^{-7} *7* %Iγ=3.45 *19*
635.91 *20*	7.0 *2*	826.37	5/2$^{(+)}$,3/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	−3.1 *16*	0.0057 *5*	α(K)=0.0048 *5*; α(L)=0.00069 *5*; α(M)=0.000144 *9* α(N)=3.14×10^{-5} *20*; α(O)=5.0×10^{-6} *4*; α(P)=3.5×10^{-7} *4* %Iγ=0.314 *17*
641.19 *20*	8.23 *22*	831.62	3/2$^{(+)}$,5/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.08 *7*	0.00773 *11*	α(K)=0.00665 *10*; α(L)=0.000857 *12*; α(M)=0.0001773 *26* α(N)=3.90×10^{-5} *6*; α(O)=6.37×10^{-6} *9*; α(P)=5.07×10^{-7} *8* %Iγ=0.369 *20*
647.78 *21*	127 *3*	647.864	3/2$^{(+)}$	0.0	7/2$^{(+)}$	E2		0.00523 *7*	α(K)=0.00443 *6*; α(L)=0.000636 *9*; α(M)=0.0001327 *19* α(N)=2.90×10^{-5} *4*; α(O)=4.62×10^{-6} *6*; α(P)=3.20×10^{-7} *4* %Iγ=5.7 *3*
655.21 *23*	0.36 *2*	1844.21	3/2$^{(-)}$	1188.90					%Iγ=0.0161 *12*
[x]655.3	0.4 *3*								%Iγ=0.018 *14*
[x]658.9[&] *5*	0.7 *3*								%Iγ=0.031 *14*
669.89 *21*	3.46 *12*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]		0.0059 *11*	α(K)=0.0050 *10*; α(L)=0.00068 *10*; α(M)=0.000140 *19* α(N)=3.1×10^{-5} *4*; α(O)=5.0×10^{-6} *8*; α(P)=3.8×10^{-7} *8* %Iγ=0.155 *9*
675.26 *21*	5.5 *2*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[M1+E2]		0.0058 *11*	α(K)=0.0049 *9*; α(L)=0.00066 *9*; α(M)=0.000138 *19* α(N)=3.0×10^{-5} *4*; α(O)=4.9×10^{-6} *7*; α(P)=3.7×10^{-7} *8* %Iγ=0.246 *15*
685.35 *22*	9.52 *26*	685.35	3/2$^{(+)}$,5/2$^{(+)}$	0.0	7/2$^{(+)}$	[E2]		0.00455 *6*	α(K)=0.00386 *5*; α(L)=0.000547 *8*; α(M)=0.0001141 *16* α(N)=2.493×10^{-5} *35*; α(O)=3.99×10^{-6} *6*; α(P)=2.79×10^{-7} *4* %Iγ=0.427 *23*
687.42 *21*	2.66 *8*	991.93	3/2$^{(-)}$	304.190	5/2$^{(+)}$	(E1)		1.69×10^{-3} *2*	α(K)=0.001464 *21*; α(L)=0.0001834 *26*; α(M)=3.78×10^{-5} *5*

$^{141}_{57}La_{84}$-10

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
									α(K)=0.001464 *21*; α(L)=0.0001834 *26*; α(M)=3.78×10^{-5} *5* α(N)=8.28×10^{-6} *12*; α(O)=1.346×10^{-6} *19*; α(P)=1.044×10^{-7} *15* %Iγ=0.119 *7*
698.61 *21*	9.3 *3*	1628.11	3/2$^{(-)}$	929.38	5/2$^{(+)}$,3/2$^{(+)}$	(E1)		1.64×10^{-3} *2*	α(K)=0.001415 *20*; α(L)=0.0001772 *25*; α(M)=3.65×10^{-5} *5* α(N)=8.00×10^{-6} *11*; α(O)=1.300×10^{-6} *18*; α(P)=1.010×10^{-7} *14* %Iγ=0.417 *24*
700.50 *22*	2.42 *10*	1872.54	1/2$^{(+)}$	1171.93	1/2$^{(+)}$	[M1+E2]		0.0053 *10*	α(K)=0.0045 *9*; α(L)=0.00060 *9*; α(M)=0.000125 *18* α(N)=2.7×10^{-5} *4*; α(O)=4.5×10^{-6} *7*; α(P)=3.4×10^{-7} *7* %Iγ=0.108 *7*
704.59 *21*	7.34 *20*	1171.93	1/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	−0.38 *2*	0.00593 *9*	α(K)=0.00510 *7*; α(L)=0.000660 *9*; α(M)=0.0001365 *20* α(N)=3.00×10^{-5} *4*; α(O)=4.89×10^{-6} *7*; α(P)=3.86×10^{-7} *6* %Iγ=0.329 *18*
721.2 *3*	0.50 *5*	1547.62	1/2$^{(+)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[E2]		0.00402 *6*	α(K)=0.00342 *5*; α(L)=0.000479 *7*; α(M)=9.98×10^{-5} *14* α(N)=2.182×10^{-5} *31*; α(O)=3.50×10^{-6} *5*; α(P)=2.478×10^{-7} *35* %Iγ=0.0224 *25*
735.07 *21*	0.18 *2*	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	304.190	5/2$^{(+)}$	[M1+E2]		0.0047 *9*	α(K)=0.0040 *8*; α(L)=0.00054 *8*; α(M)=0.000111 *16* α(N)=2.4×10^{-5} *4*; α(O)=3.9×10^{-6} *6*; α(P)=3.0×10^{-7} *6* %Iγ=0.0081 *10*
738.95 *22*	98 *2*	929.38	5/2$^{(+)}$,3/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.75 *5*	0.00489 *9*	α(K)=0.00419 *8*; α(L)=0.000550 *9*; α(M)=0.0001140 *19* α(N)=2.50×10^{-5} *4*; α(O)=4.07×10^{-6} *7*; α(P)=3.15×10^{-7} *6* %Iγ=4.39 *23*
741.06 *24*	0.36 *2*	1426.31	3/2$^{(-)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[E1]		1.45×10^{-3} *2*	α(K)=0.001252 *18*; α(L)=0.0001564 *22*; α(M)=3.22×10^{-5} *5* α(N)=7.07×10^{-6} *10*; α(O)=1.149×10^{-6} *16*; α(P)=8.95×10^{-8} *13* %Iγ=0.0161 *12*

$^{141}_{57}La_{84}$-11

$\gamma(^{141}La)$ (continued)

E_γ †	I_γ ‡ b	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	δ @	α a	Comments
748.72 *20*	0.48 *3*	1740.67	$5/2^{(+)},3/2^{(+)}$	991.93	$3/2^{(-)}$	[E1]		1.42×10^{-3} *2*	α(K)=0.001226 *17*; α(L)=0.0001531 *21*; α(M)=3.15×10^{-5} *4* α(N)=6.92×10^{-6} *10*; α(O)=1.124×10^{-6} *16*; α(P)=8.76×10^{-8} *12* %Iγ=0.0215 *17*
753.87 *22*	1.79 *8*	1925.95	$3/2^{(-)}$	1171.93	$1/2^{(+)}$	[E1]		1.40×10^{-3} *2*	α(K)=0.001209 *17*; α(L)=0.0001509 *21*; α(M)=3.11×10^{-5} *4* α(N)=6.82×10^{-6} *10*; α(O)=1.109×10^{-6} *16*; α(P)=8.64×10^{-8} *12* %Iγ=0.080 *5*
762.23 *21*	4.38 *14*	1066.51	$3/2^{(-)}$	304.190	$5/2^{(+)}$	(E1)		1.37×10^{-3} *2*	α(K)=0.001182 *17*; α(L)=0.0001475 *21*; α(M)=3.04×10^{-5} *4* α(N)=6.66×10^{-6} *9*; α(O)=1.084×10^{-6} *15*; α(P)=8.45×10^{-8} *12* %Iγ=0.196 *11*
773.83 *29*	0.51 *4*	1605.47		831.62	$3/2^{(+)},5/2^{(+)}$				%Iγ=0.0229 *21*
778.36 *21*	2.43 *9*	1426.31	$3/2^{(-)}$	647.864	$3/2^{(+)}$	[E1]		1.31×10^{-3} *2*	α(K)=0.001133 *16*; α(L)=0.0001413 *20*; α(M)=2.91×10^{-5} *4* α(N)=6.38×10^{-6} *9*; α(O)=1.038×10^{-6} *15*; α(P)=8.10×10^{-8} *11* %Iγ=0.109 *7*
x783.6 & *3*	<1.3								%Iγ<0.0582
796.36 *25*	0.65 *4*	1628.11	$3/2^{(-)}$	831.62	$3/2^{(+)},5/2^{(+)}$	[E1]		1.25×10^{-3} *2*	α(K)=0.001082 *15*; α(L)=0.0001348 *19*; α(M)=2.77×10^{-5} *4* α(N)=6.09×10^{-6} *9*; α(O)=9.90×10^{-7} *14*; α(P)=7.74×10^{-8} *11* %Iγ=0.0291 *23*
801.47 *22*	2.57 *9*	991.93	$3/2^{(-)}$	190.329	$5/2^{(+)}$	(E1)		1.24×10^{-3} *2*	α(K)=0.001068 *15*; α(L)=0.0001330 *19*; α(M)=2.74×10^{-5} *4* α(N)=6.01×10^{-6} *8*; α(O)=9.78×10^{-7} *14*; α(P)=7.64×10^{-8} *11* %Iγ=0.115 *7*
804.60 *22*	0.99 *8*	1844.21	$3/2^{(-)}$	1039.43	$5/2^{(+)},3/2^{(+)}$	[E1]		1.23×10^{-3} *2*	α(K)=0.001060 *15*; α(L)=0.0001320 *18*; α(M)=2.72×10^{-5} *4* α(N)=5.96×10^{-6} *8*; α(O)=9.70×10^{-7} *14*; α(P)=7.58×10^{-8} *11* %Iγ=0.044 *4*
805.91 *21*	1.69 *7*	1872.54	$1/2^{(+)}$	1066.51	$3/2^{(-)}$	[E1]		1.22×10^{-3} *2*	α(K)=0.001056 *15*; α(L)=0.0001315 *18*;

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
								α(M)=2.71×10^{-5} *4* α(N)=5.94×10^{-6} *8*; α(O)=9.67×10^{-7} *14*; α(P)=7.56×10^{-8} *11* %Iγ=0.076 *5*
815.96 *26*	0.21 *2*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]	0.0037 *7*	α(K)=0.0032 *6*; α(L)=0.00041 *6*; α(M)=8.6×10^{-5} *13* α(N)=1.89×10^{-5} *29*; α(O)=3.1×10^{-6} *5*; α(P)=2.4×10^{-7} *5* %Iγ=0.0094 *10*
826.55 *21*	10.8 *3*	826.37	5/2$^{(+)}$,3/2$^{(+)}$	0.0	7/2$^{(+)}$	[M1+E2]	0.0036 *6*	α(K)=0.0031 *6*; α(L)=0.00040 *6*; α(M)=8.3×10^{-5} *13* α(N)=1.83×10^{-5} *28*; α(O)=3.0×10^{-6} *5*; α(P)=2.3×10^{-7} *5* %Iγ=0.48 *3*
831.46 *20*	36.5 *8*	831.62	3/2$^{(+)}$,5/2$^{(+)}$	0.0	7/2$^{(+)}$	[E2]	0.00288 *4*	α(K)=0.002457 *34*; α(L)=0.000335 *5*; α(M)=6.97×10^{-5} *10* α(N)=1.526×10^{-5} *21*; α(O)=2.455×10^{-6} *34*; α(P)=1.791×10^{-7} *25* %Iγ=1.64 *9* E_γ: 832.537 *39* in 1979Bo26.
833.06 *21*	3.17 *5*	1872.54	1/2$^{(+)}$	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	[E2]	0.00287 *4*	α(K)=0.002446 *34*; α(L)=0.000334 *5*; α(M)=6.94×10^{-5} *10* α(N)=1.519×10^{-5} *21*; α(O)=2.443×10^{-6} *34*; α(P)=1.783×10^{-7} *25* %Iγ=0.142 *7*
840.5 *2*	1.09 *4*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	1628.11	3/2$^{(-)}$	[E1]	1.12×10^{-3} *2*	α(K)=0.000971 *14*; α(L)=0.0001208 *17*; α(M)=2.486×10^{-5} *35* α(N)=5.46×10^{-6} *8*; α(O)=8.88×10^{-7} *12*; α(P)=6.96×10^{-8} *10* %Iγ=0.049 *3*
846.21 *23*	1.4 *2*	1426.31	3/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]	1.11×10^{-3} *2*	α(K)=0.000958 *13*; α(L)=0.0001192 *17*; α(M)=2.453×10^{-5} *34* α(N)=5.38×10^{-6} *8*; α(O)=8.76×10^{-7} *12*; α(P)=6.87×10^{-8} *10* %Iγ=0.063 *10*
867.66 *21*	3.19 *10*	1171.93	1/2$^{(+)}$	304.190	5/2$^{(+)}$	E2	0.00261 *4*	α(K)=0.002232 *31*; α(L)=0.000302 *4*; α(M)=6.28×10^{-5} *9* α(N)=1.376×10^{-5} *19*; α(O)=2.216×10^{-6} *31*; α(P)=1.629×10^{-7} *23* %Iγ=0.143 *8*
876.09 *20*	77 *2*	1066.51	3/2$^{(-)}$	190.329	5/2$^{(+)}$	(E1)	1.04×10^{-3} *1*	α(K)=0.000895 *13*; α(L)=0.0001112 *16*;

$^{141}_{57}La_{84}$-13

$\gamma(^{141}La)$ (continued)

E_γ[†]	I_γ[‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[a]	Comments
								α(M)=2.288×10^{-5} *32* α(N)=5.02×10^{-6} *7*; α(O)=8.17×10^{-7} *11*; α(P)=6.42×10^{-8} *9* %Iγ=3.45 *19*
880.58 *21*	2.36 *9*	1565.94		685.35	3/2$^{(+)}$,5/2$^{(+)}$			%Iγ=0.106 *6*
880.63 *21*	3.80 *15*	1872.54	1/2$^{(+)}$	991.93	3/2$^{(-)}$	[E1]	1.02×10^{-3} *1*	α(K)=0.000886 *12*; α(L)=0.0001100 *15*; α(M)=2.264×10^{-5} *32* α(N)=4.97×10^{-6} *7*; α(O)=8.09×10^{-7} *11*; α(P)=6.35×10^{-8} *9* %Iγ=0.170 *11*
884.83 *20*	1.08 *6*	1716.43	1/2$^{(+)}$,3/2,5/2$^{(+)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$			%Iγ=0.048 *4*
909.01 *21*	2.56 *10*	1740.67	5/2$^{(+)}$,3/2$^{(+)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]	0.0029 *5*	α(K)=0.0025 *4*; α(L)=0.00032 *5*; α(M)=6.6×10^{-5} *10* α(N)=1.46×10^{-5} *22*; α(O)=2.4×10^{-6} *4*; α(P)=1.8×10^{-7} *4* %Iγ=0.115 *7*
917.32 *20*	0.56 *3*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	1551.39				%Iγ=0.0251 *18*
929.48 *24*	16.0 *3*	929.38	5/2$^{(+)}$,3/2$^{(+)}$	0.0	7/2$^{(+)}$	[M1+E2]	0.0027 *5*	α(K)=0.0023 *4*; α(L)=0.00030 *5*; α(M)=6.3×10^{-5} *10* α(N)=1.38×10^{-5} *21*; α(O)=2.2×10^{-6} *4*; α(P)=1.74×10^{-7} *34* %Iγ=0.72 *4*
943.07 *20*	16.7 *5*	1872.54	1/2$^{(+)}$	929.38	5/2$^{(+)}$,3/2$^{(+)}$	[E2]	2.17×10^{-3} *3*	α(K)=0.001858 *26*; α(L)=0.0002485 *35*; α(M)=5.16×10^{-5} *7* α(N)=1.130×10^{-5} *16*; α(O)=1.824×10^{-6} *26*; α(P)=1.358×10^{-7} *19* %Iγ=0.75 *4*
957.61 *26*	0.31 *3*	1605.47		647.864	3/2$^{(+)}$			%Iγ=0.0139 *15*
[x]959.0	1.2 *3*							%Iγ=0.054 *14*
959.05 *23*	0.89 *5*	1426.31	3/2$^{(-)}$	467.281	3/2$^{(+)}$	[E1]	8.69×10^{-4} *12*	α(K)=0.000752 *11*; α(L)=9.31×10^{-5} *13*; α(M)=1.914×10^{-5} *27* α(N)=4.20×10^{-6} *6*; α(O)=6.85×10^{-7} *10*; α(P)=5.39×10^{-8} *8* %Iγ=0.040 *3*
967.05 *20*	0.54 *3*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	[M1+E2]	0.0025 *4*	α(K)=0.0021 *4*; α(L)=0.00028 *4*; α(M)=5.7×10^{-5} *9* α(N)=1.26×10^{-5} *19*; α(O)=2.05×10^{-6} *33*; α(P)=1.59×10^{-7} *31* %Iγ=0.0242 *18*
[x]974.9[&] *7*	0.8 *3*							%Iγ=0.036 *14*

$^{141}_{57}La_{84}$-14

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
980.16 *22*	1.64 *7*	1628.11	$3/2^{(-)}$	647.864	$3/2^{(+)}$	[E1]		8.34×10^{-4} *12*	α(K)=0.000721 *10*; α(L)=8.92×10^{-5} *12*; α(M)=1.835×10^{-5} *26* α(N)=4.03×10^{-6} *6*; α(O)=6.57×10^{-7} *9*; α(P)=5.18×10^{-8} *7* %Iγ=0.074 *5*
981.52 *20*	15.7 *5*	1171.93	$1/2^{(+)}$	190.329	$5/2^{(+)}$	E2		1.99×10^{-3} *3*	α(K)=0.001704 *24*; α(L)=0.0002266 *32*; α(M)=4.70×10^{-5} *7* α(N)=1.030×10^{-5} *14*; α(O)=1.664×10^{-6} *23*; α(P)=1.247×10^{-7} *17* %Iγ=0.70 *4*
996.51 *22*	2.92 *13*	1925.95	$3/2^{(-)}$	929.38	$5/2^{(+)},3/2^{(+)}$	[E1]		8.08×10^{-4} *11*	α(K)=0.000699 *10*; α(L)=8.64×10^{-5} *12*; α(M)=1.778×10^{-5} *25* α(N)=3.90×10^{-6} *5*; α(O)=6.36×10^{-7} *9*; α(P)=5.02×10^{-8} *7* %Iγ=0.131 *9*
[x]1008.4	1.4 *3*								%Iγ=0.063 *14*
1008.45 *24*	0.93 *6*	2180.32	$3/2^{(-)}$	1171.93	$1/2^{(+)}$	[E1]		7.90×10^{-4} *11*	α(K)=0.000684 *10*; α(L)=8.45×10^{-5} *12*; α(M)=1.738×10^{-5} *24* α(N)=3.82×10^{-6} *5*; α(O)=6.22×10^{-7} *9*; α(P)=4.91×10^{-8} *7* %Iγ=0.042 *3*
1012.48 *21*	2.68 *11*	1844.21	$3/2^{(-)}$	831.62	$3/2^{(+)},5/2^{(+)}$	[E1]		7.84×10^{-4} *11*	α(K)=0.000678 *10*; α(L)=8.38×10^{-5} *12*; α(M)=1.724×10^{-5} *24* α(N)=3.79×10^{-6} *5*; α(O)=6.17×10^{-7} *9*; α(P)=4.87×10^{-8} *7* %Iγ=0.120 *8*
1034.24 *21*	7.1 *2*	1501.51	$5/2^{(+)},3/2^{(+)}$	467.281	$3/2^{(+)}$	M1+E2	0.8 *5*	0.00221 *22*	α(K)=0.00191 *19*; α(L)=0.000245 *22*; α(M)=5.1×10^{-5} *5* α(N)=1.11×10^{-5} *10*; α(O)=1.81×10^{-6} *17*; α(P)=1.43×10^{-7} *16* %Iγ=0.318 *18*
1039.48 *23*	1.53 *4*	1039.43	$5/2^{(+)},3/2^{(+)}$	0.0	$7/2^{(+)}$	[M1+E2]		0.00211 *35*	α(K)=0.00182 *31*; α(L)=0.000234 *35*; α(M)=4.8×10^{-5} *7* α(N)=1.06×10^{-5} *16*; α(O)=1.73×10^{-6} *27*; α(P)=1.36×10^{-7} *25* %Iγ=0.069 *4*
1046.18 *21*	7.0 *3*	1872.54	$1/2^{(+)}$	826.37	$5/2^{(+)},3/2^{(+)}$	[E2]		1.74×10^{-3} *2*	α(K)=0.001488 *21*; α(L)=0.0001962 *27*; α(M)=4.06×10^{-5} *6*

$^{141}_{57}La_{84}$-15

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
								α(K)=0.001488 *21*; α(L)=0.0001962 *27*; α(M)=4.06×10^{-5} *6* α(N)=8.91×10^{-6} *12*; α(O)=1.442×10^{-6} *20*; α(P)=1.090×10^{-7} *15* %Iγ=0.314 *20*
1055.23 *23*	1.18 *6*	1740.67	5/2$^{(+)}$,3/2$^{(+)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]	0.00204 *34*	α(K)=0.00176 *30*; α(L)=0.000226 *34*; α(M)=4.7×10^{-5} *7* α(N)=1.03×10^{-5} *15*; α(O)=1.67×10^{-6} *26*; α(P)=1.31×10^{-7} *24* %Iγ=0.053 *4*
[x]1066.6	2.2 *4*							%Iγ=0.099 *19*
1080.32 *28*	0.24 *2*	1547.62	1/2$^{(+)}$	467.281	3/2$^{(+)}$	[M1+E2]	0.00194 *32*	α(K)=0.00167 *28*; α(L)=0.000214 *32*; α(M)=4.4×10^{-5} *7* α(N)=9.7×10^{-6} *15*; α(O)=1.59×10^{-6} *24*; α(P)=1.24×10^{-7} *23* %Iγ=0.0108 *10*
1092.76 *22*	1.57 *7*	1740.67	5/2$^{(+)}$,3/2$^{(+)}$	647.864	3/2$^{(+)}$	[M1+E2]	0.00189 *31*	α(K)=0.00163 *27*; α(L)=0.000209 *31*; α(M)=4.3×10^{-5} *6* α(N)=9.5×10^{-6} *14*; α(O)=1.55×10^{-6} *24*; α(P)=1.21×10^{-7} *22* %Iγ=0.070 *5*
1094.36 *21*	3.62 *14*	1925.95	3/2$^{(-)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[E1]	6.78×10^{-4} *10*	α(K)=0.000587 *8*; α(L)=7.24×10^{-5} *10*; α(M)=1.489×10^{-5} *21* α(N)=3.27×10^{-6} *5*; α(O)=5.33×10^{-7} *7*; α(P)=4.22×10^{-8} *6* %Iγ=0.162 *10*
1122.13 *20*	0.35 *3*	1426.31	3/2$^{(-)}$	304.190	5/2$^{(+)}$	[E1]	6.53×10^{-4} *9*	α(K)=0.000561 *8*; α(L)=6.91×10^{-5} *10*; α(M)=1.421×10^{-5} *20* α(N)=3.12×10^{-6} *4*; α(O)=5.09×10^{-7} *7*; α(P)=4.03×10^{-8} *6*; α(IPF)=5.26×10^{-6} *8* %Iγ=0.0157 *15*
1136.24 *24*	0.92 *5*	1716.43	1/2$^{(+)}$,3/2,5/2$^{(+)}$	580.11	1/2$^{(+)}$			%Iγ=0.041 *3*
[x]1147.0	0.6 *2*							%Iγ=0.027 *9*
1155.07 *20*	0.57 *4*	2327.16	3/2$^{(-)}$	1171.93	1/2$^{(+)}$	[E1]	6.27×10^{-4} *9*	α(K)=0.000532 *7*; α(L)=6.55×10^{-5} *9*; α(M)=1.347×10^{-5} *19* α(N)=2.96×10^{-6} *4*; α(O)=4.82×10^{-7} *7*; α(P)=3.83×10^{-8} *5*; α(IPF)=1.241×10^{-5} *18* %Iγ=0.0255 *22*
1160.72 *21*	25.1 *6*	1628.11	3/2$^{(-)}$	467.281	3/2$^{(+)}$	(E1)	6.23×10^{-4} *9*	α(K)=0.000528 *7*; α(L)=6.49×10^{-5} *9*; α(M)=1.335×10^{-5} *19*

$^{141}_{57}La_{84}$-16

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	α[a]	Comments
									α(K)=0.000528 *7*; α(L)=6.49×10^{-5} *9*; α(M)=1.335×10^{-5} *19* α(N)=2.93×10^{-6} *4*; α(O)=4.78×10^{-7} *7*; α(P)=3.80×10^{-8} *5*; α(IPF)=1.409×10^{-5} *21* %Iγ=1.12 *6*
1176.91 *20*	0.77 *2*	2216.51	1/2$^{(+)}$	1039.43	5/2$^{(+)}$,3/2$^{(+)}$	[E2]		1.36×10^{-3} *2*	α(K)=0.001166 *16*; α(L)=0.0001515 *21*; α(M)=3.13×10^{-5} *4* α(N)=6.88×10^{-6} *10*; α(O)=1.115×10^{-6} *16*; α(P)=8.55×10^{-8} *12*; α(IPF)=3.87×10^{-6} *6* %Iγ=0.0345 *19*
1187.35 *26*	0.38 *3*	1872.54	1/2$^{(+)}$	685.35	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]		0.00158 *24*	α(K)=0.00136 *21*; α(L)=0.000173 *25*; α(M)=3.6×10^{-5} *5* α(N)=7.9×10^{-6} *11*; α(O)=1.28×10^{-6} *19*; α(P)=1.01×10^{-7} *17*; α(IPF)=4.79×10^{-6} *10* %Iγ=0.0170 *16*
1197.28 *22*	97 *2*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	304.190	5/2$^{(+)}$	M1+E2	−0.24 *2*	1.76×10^{-3} *3*	α(K)=0.001515 *22*; α(L)=0.0001915 *27*; α(M)=3.95×10^{-5} *6* α(N)=8.69×10^{-6} *12*; α(O)=1.422×10^{-6} *20*; α(P)=1.143×10^{-7} *16*; α(IPF)=5.76×10^{-6} *8* %Iγ=4.35 *22*
1213.57 *20*	0.50 *4*	2385.62	3/2$^{(-)}$	1171.93	1/2$^{(+)}$	[E1]		5.98×10^{-4} *8*	α(K)=0.000487 *7*; α(L)=5.98×10^{-5} *8*; α(M)=1.230×10^{-5} *17* α(N)=2.70×10^{-6} *4*; α(O)=4.41×10^{-7} *6*; α(P)=3.50×10^{-8} *5*; α(IPF)=3.57×10^{-5} *5* %Iγ=0.0224 *21*
1224.60 *20*	8.8 *2*	1872.54	1/2$^{(+)}$	647.864	3/2$^{(+)}$	[M1+E2]		0.00148 *22*	α(K)=0.00127 *19*; α(L)=0.000162 *23*; α(M)=3.3×10^{-5} *5* α(N)=7.3×10^{-6} *10*; α(O)=1.20×10^{-6} *17*; α(P)=9.5×10^{-8} *16*; α(IPF)=9.19×10^{-6} *17* %Iγ=0.394 *21*
[x]1233.2[&] *7*	0.4 *2*								%Iγ=0.018 *9*
1235.96 *20*	2.69 *10*	1426.31	3/2$^{(-)}$	190.329	5/2$^{(+)}$	(E1)		5.91×10^{-4} *8*	α(K)=0.000471 *7*; α(L)=5.79×10^{-5} *8*; α(M)=1.190×10^{-5} *17* α(N)=2.61×10^{-6} *4*; α(O)=4.27×10^{-7} *6*; α(P)=3.39×10^{-8} *5*; α(IPF)=4.66×10^{-5}

$^{141}_{57}La_{84}$-17

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
									α(K)=0.000471 *7*; α(L)=5.79×10^{-5} *8*; α(M)=1.190×10^{-5} *17* α(N)=2.61×10^{-6} *4*; α(O)=4.27×10^{-7} *6*; α(P)=3.39×10^{-8} *5*; α(IPF)=4.66×10^{-5} *7* %Iγ=0.121 *7*
1264.69 *20*	17.1 *4*	1844.21	3/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]		5.84×10^{-4} *8*	α(K)=0.000453 *6*; α(L)=5.55×10^{-5} *8*; α(M)=1.142×10^{-5} *16* α(N)=2.508×10^{-6} *35*; α(O)=4.09×10^{-7} *6*; α(P)=3.26×10^{-8} *5*; α(IPF)=6.12×10^{-5} *9* %Iγ=0.77 *4*
1273.43 *21*	11.1 *3*	1740.67	5/2$^{(+)}$,3/2$^{(+)}$	467.281	3/2$^{(+)}$	M1(+E2)	0.02 *2*	1.57×10^{-3} *2*	α(K)=0.001337 *19*; α(L)=0.0001685 *24*; α(M)=3.48×10^{-5} *5* α(N)=7.65×10^{-6} *11*; α(O)=1.252×10^{-6} *18*; α(P)=1.009×10^{-7} *14*; α(IPF)=1.643×10^{-5} *23* %Iγ=0.50 *3*
1277.98 *20*	14.1 *3*	1925.95	3/2$^{(-)}$	647.864	3/2$^{(+)}$	(E1)		5.81×10^{-4} *8*	α(K)=0.000444 *6*; α(L)=5.45×10^{-5} *8*; α(M)=1.121×10^{-5} *16* α(N)=2.462×10^{-6} *34*; α(O)=4.02×10^{-7} *6*; α(P)=3.20×10^{-8} *4*; α(IPF)=6.81×10^{-5} *10* %Iγ=0.63 *3*
1296.72 *21*	0.27 *3*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	1171.93	1/2$^{(+)}$	[E2]		1.13×10^{-3} *2*	α(K)=0.000959 *13*; α(L)=0.0001233 *17*; α(M)=2.55×10^{-5} *4* α(N)=5.60×10^{-6} *8*; α(O)=9.09×10^{-7} *13*; α(P)=7.04×10^{-8} *10*; α(IPF)=2.085×10^{-5} *29* %Iγ=0.0121 *15*
1301.29 *22*	1.69 *7*	1605.47		304.190	5/2$^{(+)}$				%Iγ=0.076 *5*
1309.23 *21*	4.07 *14*	2375.79	3/2$^{(-)}$,1/2$^{(-)}$	1066.51	3/2$^{(-)}$	M1+E2	0.6 *3*	0.00138 *7*	α(K)=0.00117 *6*; α(L)=0.000148 *7*; α(M)=3.06×10^{-5} *15* α(N)=6.73×10^{-6} *32*; α(O)=1.10×10^{-6} *5*; α(P)=8.8×10^{-8} *5*; α(IPF)=2.304×10^{-5} *33* %Iγ=0.182 *11*
1310.73 *20*	16.7 *4*	1501.51	5/2$^{(+)}$,3/2$^{(+)}$	190.329	5/2$^{(+)}$	M1+E2	0.14 *6*	1.47×10^{-3} *2*	α(K)=0.001247 *18*; α(L)=0.0001570 *23*; α(M)=3.24×10^{-5} *5* α(N)=7.13×10^{-6} *11*; α(O)=1.167×10^{-6} *17*; α(P)=9.40×10^{-8} *14*; α(IPF)=2.326×10^{-5} *33* %Iγ=0.75 *4*
1323.92 *20*	20.6 *5*	1628.11	3/2$^{(-)}$	304.190	5/2$^{(+)}$	(E1)		5.76×10^{-4} *8*	α(K)=0.000418 *6*; α(L)=5.12×10^{-5} *7*;

$^{141}_{57}La_{84}$-18

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
									α(M)=1.052×10^{-5} *15* α(N)=2.311×10^{-6} *32*; α(O)=3.77×10^{-7} *5*; α(P)=3.01×10^{-8} *4*; α(IPF)=9.38×10^{-5} *13* %Iγ=0.92 *5*
1345.83 *21*	3.54 *13*	1925.95	3/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]		5.76×10^{-4} *8*	α(K)=0.000406 *6*; α(L)=4.97×10^{-5} *7*; α(M)=1.022×10^{-5} *14* α(N)=2.245×10^{-6} *31*; α(O)=3.67×10^{-7} *5*; α(P)=2.92×10^{-8} *4*; α(IPF)=0.0001076 *15* %Iγ=0.159 *10*
x1354.6	1.6 *2*								%Iγ=0.072 *10*
x1357.1	2.3 *3*								%Iγ=0.103 *14*
1357.33 *22*	2.99 *11*	1547.62	1/2$^{(+)}$	190.329	5/2$^{(+)}$	E2		1.05×10^{-3} *2*	α(K)=0.000876 *12*; α(L)=0.0001122 *16*; α(M)=2.317×10^{-5} *32* α(N)=5.09×10^{-6} *7*; α(O)=8.27×10^{-7} *12*; α(P)=6.43×10^{-8} *9*; α(IPF)=3.43×10^{-5} *5* %Iγ=0.134 *8*
1361.32 *20*	0.63 *5*	1551.39		190.329	5/2$^{(+)}$				%Iγ=0.028 *3*
x1373.1[&] *9*	≈2								%Iγ≈0.0896
1376.86 *21*	15.4 *4*	1844.21	3/2$^{(-)}$	467.281	3/2$^{(+)}$	[E1]		5.79×10^{-4} *8*	α(K)=0.000390 *5*; α(L)=4.78×10^{-5} *7*; α(M)=9.82×10^{-6} *14* α(N)=2.157×10^{-6} *30*; α(O)=3.52×10^{-7} *5*; α(P)=2.81×10^{-8} *4*; α(IPF)=0.0001284 *18* %Iγ=0.69 *4*
1385.03 *25*	0.44 *3*	2216.51	1/2$^{(+)}$	831.62	3/2$^{(+)}$,5/2$^{(+)}$	[M1+E2]		0.00117 *15*	α(K)=0.00097 *13*; α(L)=0.000123 *16*; α(M)=2.55×10^{-5} *33* α(N)=5.6×10^{-6} *7*; α(O)=9.1×10^{-7} *12*; α(P)=7.3×10^{-8} *11*; α(IPF)=4.16×10^{-5} *6* %Iγ=0.0197 *16*
1390.35 *26*	1.14 *10*	2216.51	1/2$^{(+)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[E2]		1.01×10^{-3} *1*	α(K)=0.000835 *12*; α(L)=0.0001068 *15*; α(M)=2.205×10^{-5} *31* α(N)=4.84×10^{-6} *7*; α(O)=7.87×10^{-7} *11*; α(P)=6.13×10^{-8} *9*; α(IPF)=4.32×10^{-5} *6* %Iγ=0.051 *5*
1405.25 *20*	5.65 *17*	1872.54	1/2$^{(+)}$	467.281	3/2$^{(+)}$	M1+E2	−0.25 *2*	1.27×10^{-3} *2*	α(K)=0.001057 *15*; α(L)=0.0001329 *19*; α(M)=2.74×10^{-5} *4* α(N)=6.03×10^{-6} *9*; α(O)=9.87×10^{-7} *14*; α(P)=7.95×10^{-8} *11*; α(IPF)=4.74×10^{-5} *7* %Iγ=0.253 *14*

$^{141}_{57}La_{84}$-19

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
[x] 1421.9 [&] *8*	<0.5								%Iγ<0.022
1436.47 *20*	14.5 *3*	1740.67	$5/2^{(+)},3/2^{(+)}$	304.190	$5/2^{(+)}$	M1+E2	−0.24 *6*	1.22×10^{-3} *2*	α(K)=0.001008 *16*; α(L)=0.0001267 *19*; α(M)=2.61×10^{-5} *4* α(N)=5.75×10^{-6} *9*; α(O)=9.41×10^{-7} *15*; α(P)=7.58×10^{-8} *12*; α(IPF)=5.70×10^{-5} *8* %Iγ=0.65 *3*
1437.75 *21*	2.90 *10*	1628.11	$3/2^{(-)}$	190.329	$5/2^{(+)}$	(E1)		5.90×10^{-4} *8*	α(K)=0.000362 *5*; α(L)=4.43×10^{-5} *6*; α(M)=9.10×10^{-6} *13* α(N)=2.000×10^{-6} *28*; α(O)=3.27×10^{-7} *5*; α(P)=2.61×10^{-8} *4*; α(IPF)=0.0001719 *24* %Iγ=0.130 *8*
1446.48 *20*	1.65 *9*	2375.79	$3/2^{(-)},1/2^{(-)}$	929.38	$5/2^{(+)},3/2^{(+)}$	[E1]		5.92×10^{-4} *8*	α(K)=0.000359 *5*; α(L)=4.38×10^{-5} *6*; α(M)=9.01×10^{-6} *13* α(N)=1.980×10^{-6} *28*; α(O)=3.23×10^{-7} *5*; α(P)=2.58×10^{-8} *4*; α(IPF)=0.0001783 *25* %Iγ=0.074 *5*
1456.21 *20*	2.15 *11*	2385.62	$3/2^{(-)}$	929.38	$5/2^{(+)},3/2^{(+)}$	[E1]		5.95×10^{-4} *8*	α(K)=0.000355 *5*; α(L)=4.33×10^{-5} *6*; α(M)=8.91×10^{-6} *12* α(N)=1.957×10^{-6} *27*; α(O)=3.20×10^{-7} *4*; α(P)=2.56×10^{-8} *4*; α(IPF)=0.0001854 *26* %Iγ=0.096 *7*
1458.48 *21*	14.0 *4*	1925.95	$3/2^{(-)}$	467.281	$3/2^{(+)}$	(E1)		5.95×10^{-4} *8*	α(K)=0.000354 *5*; α(L)=4.32×10^{-5} *6*; α(M)=8.88×10^{-6} *12* α(N)=1.952×10^{-6} *27*; α(O)=3.19×10^{-7} *4*; α(P)=2.55×10^{-8} *4*; α(IPF)=0.0001870 *26* %Iγ=0.63 *4*
1476.62 *21*	0.25 *3*	2468.69	$5/2^{(+)},3/2^{(+)}$	991.93	$3/2^{(-)}$	[E1]		6.00×10^{-4} *8*	α(K)=0.000346 *5*; α(L)=4.23×10^{-5} *6*; α(M)=8.70×10^{-6} *12* α(N)=1.911×10^{-6} *27*; α(O)=3.12×10^{-7} *4*; α(P)=2.496×10^{-8} *35*; α(IPF)=0.0002004 *28* %Iγ=0.0112 *15*
1494.95 *32*	0.17 *3*	2327.16	$3/2^{(-)}$	831.62	$3/2^{(+)},5/2^{(+)}$	[E1]		6.05×10^{-4} *8*	α(K)=0.000339 *5*; α(L)=4.14×10^{-5} *6*; α(M)=8.51×10^{-6} *12* α(N)=1.871×10^{-6} *26*; α(O)=3.06×10^{-7} *4*; α(P)=2.445×10^{-8} *34*; α(IPF)=0.0002139 *30* %Iγ=0.0076 *14*

$^{141}_{57}La_{84}$-20

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
1501.79 *26*	7.14 *18*	1501.51	$5/2^{(+)},3/2^{(+)}$	0.0	$7/2^{(+)}$	[M1+E2]		0.00103 *12*	α(K)=0.00082 *10*; α(L)=0.000104 *12*; α(M)=2.14×10^{-5} *26* α(N)=4.7×10^{-6} *6*; α(O)=7.7×10^{-7} *9*; α(P)=6.1×10^{-8} *8*; α(IPF)=7.87×10^{-5} *11* %Iγ=0.320 *17*
x1525.7[&] *9*	1.1 *3*								%Iγ=0.049 *14*
1526.14 *20*	0.40 *3*	1716.43	$1/2^{(+)},3/2,5/2^{(+)}$	190.329	$5/2^{(+)}$				%Iγ=0.0179 *16*
1532.45 *25*	0.51 *3*	2180.32	$3/2^{(-)}$	647.864	$3/2^{(+)}$	[E1]		6.17×10^{-4} *9*	α(K)=0.000325 *5*; α(L)=3.97×10^{-5} *6*; α(M)=8.16×10^{-6} *11* α(N)=1.793×10^{-6} *25*; α(O)=2.93×10^{-7} *4*; α(P)=2.345×10^{-8} *33*; α(IPF)=0.0002420 *34* %Iγ=0.0229 *17*
1539.40 *20*	0.79 *6*	2468.69	$5/2^{(+)},3/2^{(+)}$	929.38	$5/2^{(+)},3/2^{(+)}$	[M1+E2]		0.00100 *11*	α(K)=0.00078 *10*; α(L)=9.8×10^{-5} *12*; α(M)=2.03×10^{-5} *24* α(N)=4.5×10^{-6} *5*; α(O)=7.3×10^{-7} *9*; α(P)=5.8×10^{-8} *8*; α(IPF)=9.24×10^{-5} *14* %Iγ=0.035 *3*
1539.80 *23*	0.94 *4*	1844.21	$3/2^{(-)}$	304.190	$5/2^{(+)}$	[E1]		6.20×10^{-4} *9*	α(K)=0.000323 *5*; α(L)=3.94×10^{-5} *6*; α(M)=8.09×10^{-6} *11* α(N)=1.779×10^{-6} *25*; α(O)=2.91×10^{-7} *4*; α(P)=2.327×10^{-8} *33*; α(IPF)=0.0002475 *35* %Iγ=0.042 *3*
x1547.1	0.7 *2*								%Iγ=0.031 *9*
1550.45 *21*	5.75 *18*	1740.67	$5/2^{(+)},3/2^{(+)}$	190.329	$5/2^{(+)}$	M1+E2	−1.3 *5*	0.00096 *5*	α(K)=0.00075 *5*; α(L)=9.4×10^{-5} *5*; α(M)=1.94×10^{-5} *11* α(N)=4.26×10^{-6} *25*; α(O)=7.0×10^{-7} *4*; α(P)=5.5×10^{-8} *4*; α(IPF)=9.64×10^{-5} *14* %Iγ=0.258 *15*
x1559.9[&] *7*	1.4 *7*								%Iγ=0.06 *3*
1568.41 *21*	4.67 *14*	1872.54	$1/2^{(+)}$	304.190	$5/2^{(+)}$	E2		8.70×10^{-4} *12*	α(K)=0.000662 *9*; α(L)=8.38×10^{-5} *12*; α(M)=1.729×10^{-5} *24* α(N)=3.80×10^{-6} *5*; α(O)=6.18×10^{-7} *9*;

$^{141}_{57}La_{84}$-21

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
								α(P)=4.86×10^{-8} *7*; α(IPF)=0.0001027 *14* %Iγ=0.209 *12*
1568.7 *2*	1.42 *6*	2216.51	1/2$^{(+)}$	647.864	3/2$^{(+)}$	[M1+E2]	0.00097 *10*	α(K)=0.00075 *9*; α(L)=9.5×10^{-5} *11*; α(M)=1.95×10^{-5} *22* α(N)=4.3×10^{-6} *5*; α(O)=7.0×10^{-7} *8*; α(P)=5.6×10^{-8} *7*; α(IPF)=0.0001035 *16* %Iγ=0.064 *4*
[x] 1588.6 [&] *7*	1.8 *9*							%Iγ=0.08 *4*
1600.19 *24*	1.13 *6*	2180.32	3/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]	6.42×10^{-4} *9*	α(K)=0.000303 *4*; α(L)=3.69×10^{-5} *5*; α(M)=7.58×10^{-6} *11* α(N)=1.667×10^{-6} *23*; α(O)=2.72×10^{-7} *4*; α(P)=2.183×10^{-8} *31*; α(IPF)=0.000293 *4* %Iγ=0.051 *4*
1621.74 *22*	1.25 *5*	1925.95	3/2$^{(-)}$	304.190	5/2$^{(+)}$	[E1]	6.51×10^{-4} *9*	α(K)=0.000296 *4*; α(L)=3.61×10^{-5} *5*; α(M)=7.42×10^{-6} *10* α(N)=1.630×10^{-6} *23*; α(O)=2.66×10^{-7} *4*; α(P)=2.135×10^{-8} *30*; α(IPF)=0.000309 *4* %Iγ=0.056 *4*
1642.39 *25*	1.16 *8*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	826.37	5/2$^{(+)}$,3/2$^{(+)}$	[M1+E2]	0.00092 *9*	α(K)=0.00068 *8*; α(L)=8.6×10^{-5} *9*; α(M)=1.77×10^{-5} *19* α(N)=3.9×10^{-6} *4*; α(O)=6.4×10^{-7} *7*; α(P)=5.1×10^{-8} *6*; α(IPF)=0.0001334 *24* %Iγ=0.052 *4*
1653.83 *20*	14.2 *3*	1844.21	3/2$^{(-)}$	190.329	5/2$^{(+)}$	(E1)	6.64×10^{-4} *9*	α(K)=0.000287 *4*; α(L)=3.49×10^{-5} *5*; α(M)=7.18×10^{-6} *10* α(N)=1.577×10^{-6} *22*; α(O)=2.58×10^{-7} *4*; α(P)=2.067×10^{-8} *29*; α(IPF)=0.000333 *5* %Iγ=0.64 *3*
1654.21 *38*	0.14 *2*	2485.7		831.62	3/2$^{(+)}$,5/2$^{(+)}$			%Iγ=0.0063 *10*
1679.28 *24*	0.69 *4*	2327.16	3/2$^{(-)}$	647.864	3/2$^{(+)}$	[E1]	6.75×10^{-4} *9*	α(K)=0.000280 *4*; α(L)=3.41×10^{-5} *5*; α(M)=6.99×10^{-6} *10* α(N)=1.537×10^{-6} *22*; α(O)=2.512×10^{-7} *35*; α(P)=2.016×10^{-8} *28*; α(IPF)=0.000353 *5* %Iγ=0.0309 *23*
1682.19 *20*	26.5 *7*	1872.54	1/2$^{(+)}$	190.329	5/2$^{(+)}$	E2	8.20×10^{-4} *11*	α(K)=0.000580 *8*; α(L)=7.30×10^{-5} *10*;

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
								α(M)=1.505×10^{-5} *21* α(N)=3.31×10^{-6} *5*; α(O)=5.39×10^{-7} *8*; α(P)=4.26×10^{-8} *6*; α(IPF)=0.0001486 *21* %Iγ=1.19 *6*
1712.98 *21*	3.89 *12*	2180.32	3/2$^{(-)}$	467.281	3/2$^{(+)}$	(E1)	6.90×10^{-4} *10*	α(K)=0.000271 *4*; α(L)=3.30×10^{-5} *5*; α(M)=6.77×10^{-6} *9* α(N)=1.487×10^{-6} *21*; α(O)=2.431×10^{-7} *34*; α(P)=1.951×10^{-8} *27*; α(IPF)=0.000378 *5* %Iγ=0.174 *10*
[x]1727.7	2.0 *2*							%Iγ=0.090 *10*
1727.99 *20*	1.52 *7*	2375.79	3/2$^{(-)}$,1/2$^{(-)}$	647.864	3/2$^{(+)}$	[E1]	6.97×10^{-4} *10*	α(K)=0.000267 *4*; α(L)=3.25×10^{-5} *5*; α(M)=6.67×10^{-6} *9* α(N)=1.466×10^{-6} *21*; α(O)=2.396×10^{-7} *34*; α(P)=1.924×10^{-8} *27*; α(IPF)=0.000389 *5* %Iγ=0.068 *5*
[x]1735.4	4.6 *8*							%Iγ=0.21 *4*
1735.69 *21*	3.41 *12*	1925.95	3/2$^{(-)}$	190.329	5/2$^{(+)}$	(E1)	7.01×10^{-4} *10*	α(K)=0.000265 *4*; α(L)=3.22×10^{-5} *5*; α(M)=6.62×10^{-6} *9* α(N)=1.455×10^{-6} *20*; α(O)=2.378×10^{-7} *33*; α(P)=1.910×10^{-8} *27*; α(IPF)=0.000395 *6* %Iγ=0.153 *9*
[x]1740.6	7.1 *6*							%Iγ=0.32 *3*
1740.67 *20*	6.19 *17*	1740.67	5/2$^{(+)}$,3/2$^{(+)}$	0.0	7/2$^{(+)}$	[M1+E2]	0.00088 *8*	α(K)=0.00061 *6*; α(L)=7.6×10^{-5} *8*; α(M)=1.57×10^{-5} *16* α(N)=3.44×10^{-6} *35*; α(O)=5.6×10^{-7} *6*; α(P)=4.5×10^{-8} *5*; α(IPF)=0.0001764 *35* %Iγ=0.277 *15*
1748.73 *22*	0.12 *2*	2216.51	1/2$^{(+)}$	467.281	3/2$^{(+)}$	[M1+E2]	0.00088 *8*	α(K)=0.00060 *6*; α(L)=7.5×10^{-5} *8*; α(M)=1.55×10^{-5} *16* α(N)=3.41×10^{-6} *35*; α(O)=5.6×10^{-7} *6*; α(P)=4.5×10^{-8} *5*; α(IPF)=0.000180 *4* %Iγ=0.0054 *9*
1770.77 *36*	0.21 *3*	2700.32	1/2$^{(+)}$,3/2,5/2$^{(+)}$	929.38	5/2$^{(+)}$,3/2$^{(+)}$			%Iγ=0.0094 *14*
[x]1795.4	12.5 *9*							%Iγ=0.56 *5*
1795.71 *21*	8.26 *26*	2375.79	3/2$^{(-)}$,1/2$^{(-)}$	580.11	1/2$^{(+)}$	[E1]	7.30×10^{-4} *10*	α(K)=0.0002508 *35*; α(L)=3.05×10^{-5} *4*; α(M)=6.26×10^{-6} *9* α(N)=1.376×10^{-6} *19*; α(O)=2.249×10^{-7} *31*; α(P)=1.808×10^{-8} *25*; α(IPF)=0.000440 *6* %Iγ=0.370 *21*

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
1805.48 *37*	0.06 *1*	2385.62	$3/2^{(-)}$	580.11	$1/2^{(+)}$	[E1]	7.34×10^{-4} *10*	α(K)=0.0002486 *35*; α(L)=3.02×10^{-5} *4*; α(M)=6.20×10^{-6} *9* α(N)=1.364×10^{-6} *19*; α(O)=2.229×10^{-7} *31*; α(P)=1.792×10^{-8} *25*; α(IPF)=0.000448 *6* %Iγ=0.0027 *5*
1820.86 *20*	1.68 *7*	2468.69	$5/2^{(+)},3/2^{(+)}$	647.864	$3/2^{(+)}$	[M1+E2]	0.00085 *7*	α(K)=0.00055 *5*; α(L)=6.9×10^{-5} *7*; α(M)=1.43×10^{-5} *14* α(N)=3.14×10^{-6} *30*; α(O)=5.1×10^{-7} *5*; α(P)=4.1×10^{-8} *4*; α(IPF)=0.000213 *5* %Iγ=0.075 *5*
[x] 1841.7[&] *8*	0.9 *5*							%Iγ=0.040 *23*
[x] 1851.9[&] *5*	1.2 *3*							%Iγ=0.054 *14*
1859.89 *22*	1.66 *7*	2327.16	$3/2^{(-)}$	467.281	$3/2^{(+)}$	[E1]	7.61×10^{-4} *11*	α(K)=0.0002370 *33*; α(L)=2.88×10^{-5} *4*; α(M)=5.91×10^{-6} *8* α(N)=1.299×10^{-6} *18*; α(O)=2.124×10^{-7} *30*; α(P)=1.708×10^{-8} *24*; α(IPF)=0.000488 *7* %Iγ=0.074 *5*
[x] 1859.9	2.0 *3*							%Iγ=0.090 *14*
1868.38 *33*	0.15 *2*	2700.32	$1/2^{(+)},3/2,5/2^{(+)}$	831.62	$3/2^{(+)},5/2^{(+)}$			%Iγ=0.0067 *10*
1876.12 *24*	0.60 *5*	2180.32	$3/2^{(-)}$	304.190	$5/2^{(+)}$	[E1]	7.69×10^{-4} *11*	α(K)=0.0002337 *33*; α(L)=2.84×10^{-5} *4*; α(M)=5.83×10^{-6} *8* α(N)=1.281×10^{-6} *18*; α(O)=2.095×10^{-7} *29*; α(P)=1.685×10^{-8} *24*; α(IPF)=0.000500 *7* %Iγ=0.027 *3*
1912.40 *21*	2.99 *10*	2216.51	$1/2^{(+)}$	304.190	$5/2^{(+)}$	E2	7.81×10^{-4} *11*	α(K)=0.000457 *6*; α(L)=5.70×10^{-5} *8*; α(M)=1.175×10^{-5} *16* α(N)=2.58×10^{-6} *4*; α(O)=4.21×10^{-7} *6*; α(P)=3.35×10^{-8} *5*; α(IPF)=0.0002524 *35* %Iγ=0.134 *8*
1918.38 *20*	1.07 *5*	2385.62	$3/2^{(-)}$	467.281	$3/2^{(+)}$	[E1]	7.91×10^{-4} *11*	α(K)=0.0002256 *32*; α(L)=2.74×10^{-5} *4*; α(M)=5.62×10^{-6} *8* α(N)=1.236×10^{-6} *17*; α(O)=2.021×10^{-7} *28*; α(P)=1.626×10^{-8} *23*; α(IPF)=0.000531 *7* %Iγ=0.048 *3*
1989.97 *21*	3.79 *12*	2180.32	$3/2^{(-)}$	190.329	$5/2^{(+)}$	(E1)	8.29×10^{-4} *12*	α(K)=0.0002128 *30*; α(L)=2.58×10^{-5} *4*; α(M)=5.30×10^{-6} *7* α(N)=1.165×10^{-6} *16*; α(O)=1.905×10^{-7} *27*; α(P)=1.534×10^{-8} *21*; α(IPF)=0.000583 *8* %Iγ=0.170 *10*

$^{141}_{57}La_{84}$-24

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡ b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	α [a]	Comments
2001.8 *5*	0.06 *1*	2468.69	$5/2^{(+)},3/2^{(+)}$	467.281	$3/2^{(+)}$	[M1+E2]		0.00083 *5*	α(K)=0.00046 *4*; α(L)=5.7×10^{-5} *5*; α(M)=1.17×10^{-5} *10* α(N)=2.58×10^{-6} *22*; α(O)=4.2×10^{-7} *4*; α(P)=3.40×10^{-8} *32*; α(IPF)=0.000301 *7* %Iγ=0.0027 *5*
2023.39 *22*	0.06 *1*	2327.16	$3/2^{(-)}$	304.190	$5/2^{(+)}$	[E1]		8.46×10^{-4} *12*	α(K)=0.0002073 *29*; α(L)=2.514×10^{-5} *35*; α(M)=5.16×10^{-6} *7* α(N)=1.134×10^{-6} *16*; α(O)=1.856×10^{-7} *26*; α(P)=1.495×10^{-8} *21*; α(IPF)=0.000607 *9* %Iγ=0.0027 *5*
[x]2026.2	9.8 *15*								%Iγ=0.44 *7*
2026.38 *21*	8.02 *23*	2216.51	$1/2^{(+)}$	190.329	$5/2^{(+)}$	E2		7.82×10^{-4} *11*	α(K)=0.000411 *6*; α(L)=5.11×10^{-5} *7*; α(M)=1.053×10^{-5} *15* α(N)=2.314×10^{-6} *32*; α(O)=3.78×10^{-7} *5*; α(P)=3.01×10^{-8} *4*; α(IPF)=0.000307 *4* %Iγ=0.359 *20*
2041.03 *27*	0.22 *1*	2345.2		304.190	$5/2^{(+)}$				%Iγ=0.0099 *7*
2052.14 *39*	0.14 *1*	2700.32	$1/2^{(+)},3/2,5/2^{(+)}$	647.864	$3/2^{(+)}$				%Iγ=0.0063 *5*
[x]2078.9[&] *12*	0.8 *4*								%Iγ=0.036 *18*
2081.35 *22*	0.37 *3*	2385.62	$3/2^{(-)}$	304.190	$5/2^{(+)}$	[E1]		8.76×10^{-4} *12*	α(K)=0.0001984 *28*; α(L)=2.404×10^{-5} *34*; α(M)=4.93×10^{-6} *7* α(N)=1.085×10^{-6} *15*; α(O)=1.774×10^{-7} *25*; α(P)=1.430×10^{-8} *20*; α(IPF)=0.000648 *9* %Iγ=0.0166 *16*
2120.04 *29*	0.28 *2*	2700.32	$1/2^{(+)},3/2,5/2^{(+)}$	580.11	$1/2^{(+)}$				%Iγ=0.0125 *11*
2124.4 *4*	0.09 *1*	2772.40	$1/2^{(+)},3/2,5/2$	647.864	$3/2^{(+)}$				%Iγ=0.0040 *5*
[x]2136.6	0.7 *2*								%Iγ=0.031 *9*
2136.81 *20*	1.81 *7*	2327.16	$3/2^{(-)}$	190.329	$5/2^{(+)}$	(E1)		9.05×10^{-4} *13*	α(K)=0.0001904 *27*; α(L)=2.306×10^{-5} *32*; α(M)=4.73×10^{-6} *7* α(N)=1.041×10^{-6} *15*; α(O)=1.702×10^{-7} *24*; α(P)=1.373×10^{-8} *19*; α(IPF)=0.000686 *10* %Iγ=0.081 *5*
2160.9 *4*	0.06 *1*	2808.4	$1/2,3/2,5/2^{(+)}$	647.864	$3/2^{(+)}$				%Iγ=0.0027 *5*
2164.51 *21*	3.66 *12*	2468.69	$5/2^{(+)},3/2^{(+)}$	304.190	$5/2^{(+)}$	M1+E2	−0.34 *18*	8.68×10^{-4} *15*	α(K)=0.000414 *8*; α(L)=5.15×10^{-5} *10*; α(M)=1.060×10^{-5} *22* α(N)=2.33×10^{-6} *5*; α(O)=3.82×10^{-7} *8*; α(P)=3.09×10^{-8} *7*; α(IPF)=0.000389 *6* %Iγ=0.164 *9*

$^{141}_{57}La_{84}$-25

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

$\gamma(^{141}La)$ (continued)

E_γ [†]	I_γ [‡] [b]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [a]	Comments
2181.32 *36*	0.03 *1*	2485.7		304.190	5/2$^{(+)}$			%Iγ=0.0013 *5*
x2195.0	2.1 *3*							%Iγ=0.094 *14*
2195.4 *2*	1.79 *7*	2385.62	3/2$^{(-)}$	190.329	5/2$^{(+)}$	(E1)	9.36×10^{-4} *13*	α(K)=0.0001826 *26*; α(L)=2.210×10^{-5} *31*; α(M)=4.54×10^{-6} *6* α(N)=9.97×10^{-7} *14*; α(O)=1.632×10^{-7} *23*; α(P)=1.317×10^{-8} *18*; α(IPF)=0.000725 *10* %Iγ=0.080 *5*
x2217.3& *5*	3.0 *12*							%Iγ=0.13 *6*
2228.04 *32*	0.12 *2*	2808.4	1/2,3/2,5/2$^{(+)}$	580.11	1/2$^{(+)}$			%Iγ=0.0054 *9*
x2269.0& *4*	<0.3							%Iγ<0.013
2278.46 *20*	1.88 *7*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	190.329	5/2$^{(+)}$	[M1+E2]	0.00085 *4*	α(K)=0.000355 *23*; α(L)=4.40×10^{-5} *29*; α(M)=9.1×10^{-6} *6* α(N)=1.99×10^{-6} *13*; α(O)=3.26×10^{-7} *22*; α(P)=2.63×10^{-8} *19*; α(IPF)=0.000439 *13* %Iγ=0.084 *5*
2304.41 *27*	0.38 *3*	2772.40	1/2$^{(+)}$,3/2,5/2	467.281	3/2$^{(+)}$			%Iγ=0.0170 *16*
2308.02 *45*	0.03 *1*	2955.9	1/2$^{(+)}$,3/2,5/2	647.864	3/2$^{(+)}$			%Iγ=0.0013 *5*
2396.68 *22*	0.04 *1*	2700.32	1/2$^{(+)}$,3/2,5/2$^{(+)}$	304.190	5/2$^{(+)}$			%Iγ=0.0018 *5*
x2463.9& *2*	0.3 *1*							%Iγ=0.013 *5*
2468.68 *22*	0.04 *1*	2772.40	1/2$^{(+)}$,3/2,5/2	304.190	5/2$^{(+)}$			%Iγ=0.0018 *5*
2468.86 *21*	4.44 *11*	2468.69	5/2$^{(+)}$,3/2$^{(+)}$	0.0	7/2$^{(+)}$	[M1+E2]	8.84×10^{-4} *35*	α(K)=0.000304 *16*; α(L)=3.75×10^{-5} *21*; α(M)=7.7×10^{-6} *4* α(N)=1.70×10^{-6} *9*; α(O)=2.78×10^{-7} *16*; α(P)=2.25×10^{-8} *14*; α(IPF)=0.000533 *16* %Iγ=0.199 *11*
2509.49 *35*	0.12 *1*	2700.32	1/2$^{(+)}$,3/2,5/2$^{(+)}$	190.329	5/2$^{(+)}$			%Iγ=0.0054 *5*
x2516.3& *10*	0.8 *3*							%Iγ=0.036 *14*
2651.7 *5*	0.03 *1*	2955.9	1/2$^{(+)}$,3/2,5/2	304.190	5/2$^{(+)}$			%Iγ=0.0013 *5*
2765.6 *5*	0.02 *1*	2955.9	1/2$^{(+)}$,3/2,5/2	190.329	5/2$^{(+)}$			%Iγ=0.0009 *5*
x2810.3& *6*	<0.3							%Iγ<0.013

† From 2022Ru06, except if noted otherwise. 0.2 keV systematic unc was added by the authors in quadrature to the statistical unc in the energy determination.

‡ From 2022Ru06, except if noted otherwise. Additional uncertainty of 2% was applied to all measured intensities, to take into account the systematic uncertainty in the efficiency calibration.

From γγ(θ) in 2022Ru06, combined with measured α(K)exp (as given in comments). 2022Ru06 adopted E2 for Q transitions (all stretched) and M1+E2 for D+Q transitions with significant Q mixing. For pure dipoles, 2022Ru06 adopted mostly E1 transitions, based on other theoretical or β decay arguments, which were adopted as tenatative by the evalutor. Same values are adopted.

$^{141}_{57}La_{84}$-26

^{141}Ba β^- decay 2022Ru06,1986Fa08 (continued)

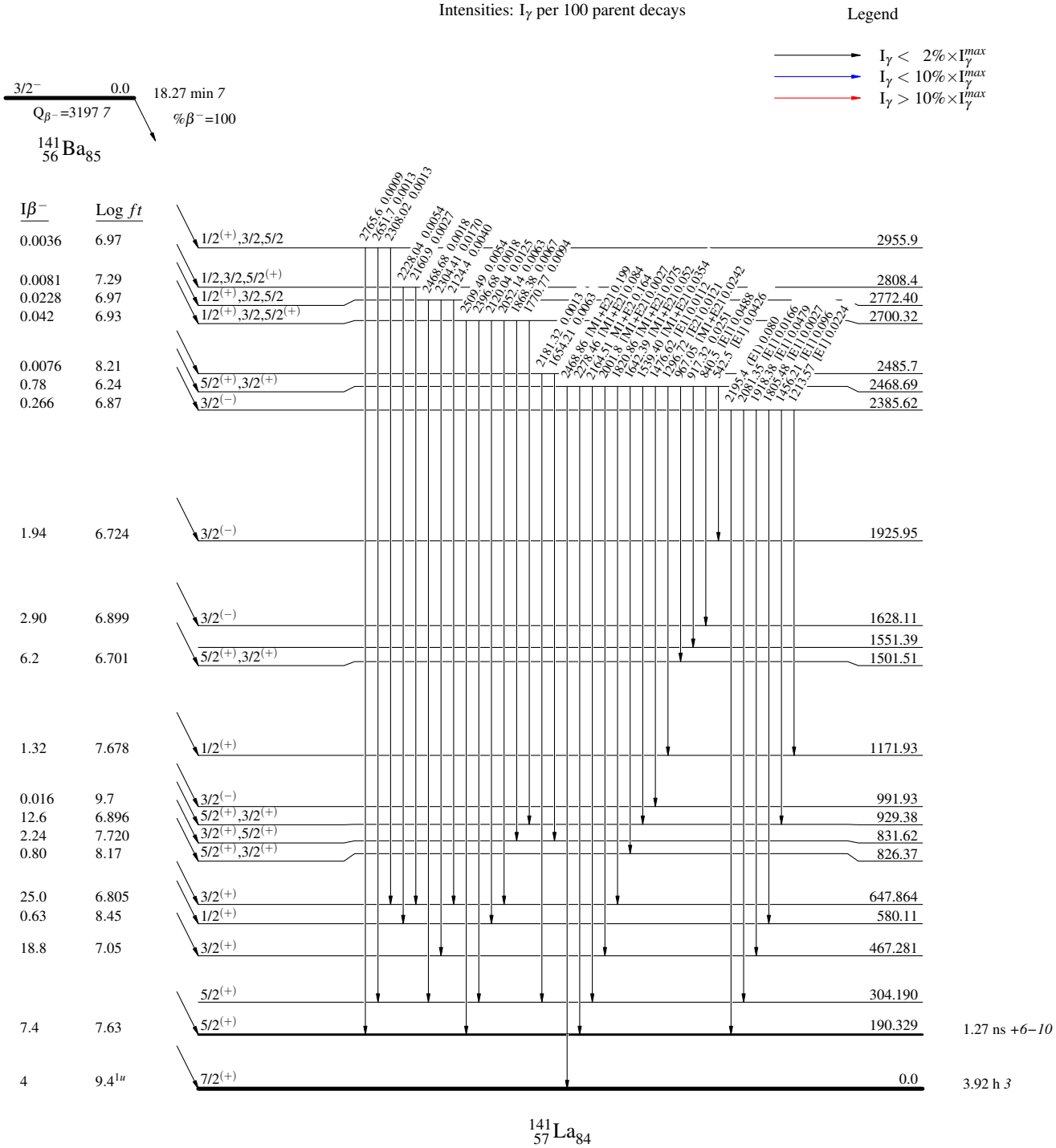
$\gamma(^{141}La)$ (continued)

@ From in $\gamma\gamma(\theta)$ in 2022Ru06, unless otherwise mentioned.
& Unplaced γ observed by 1979Pr01.
a Additional information 1.
b For absolute intensity per 100 decays, multiply by 0.0448 *21*.
c Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme

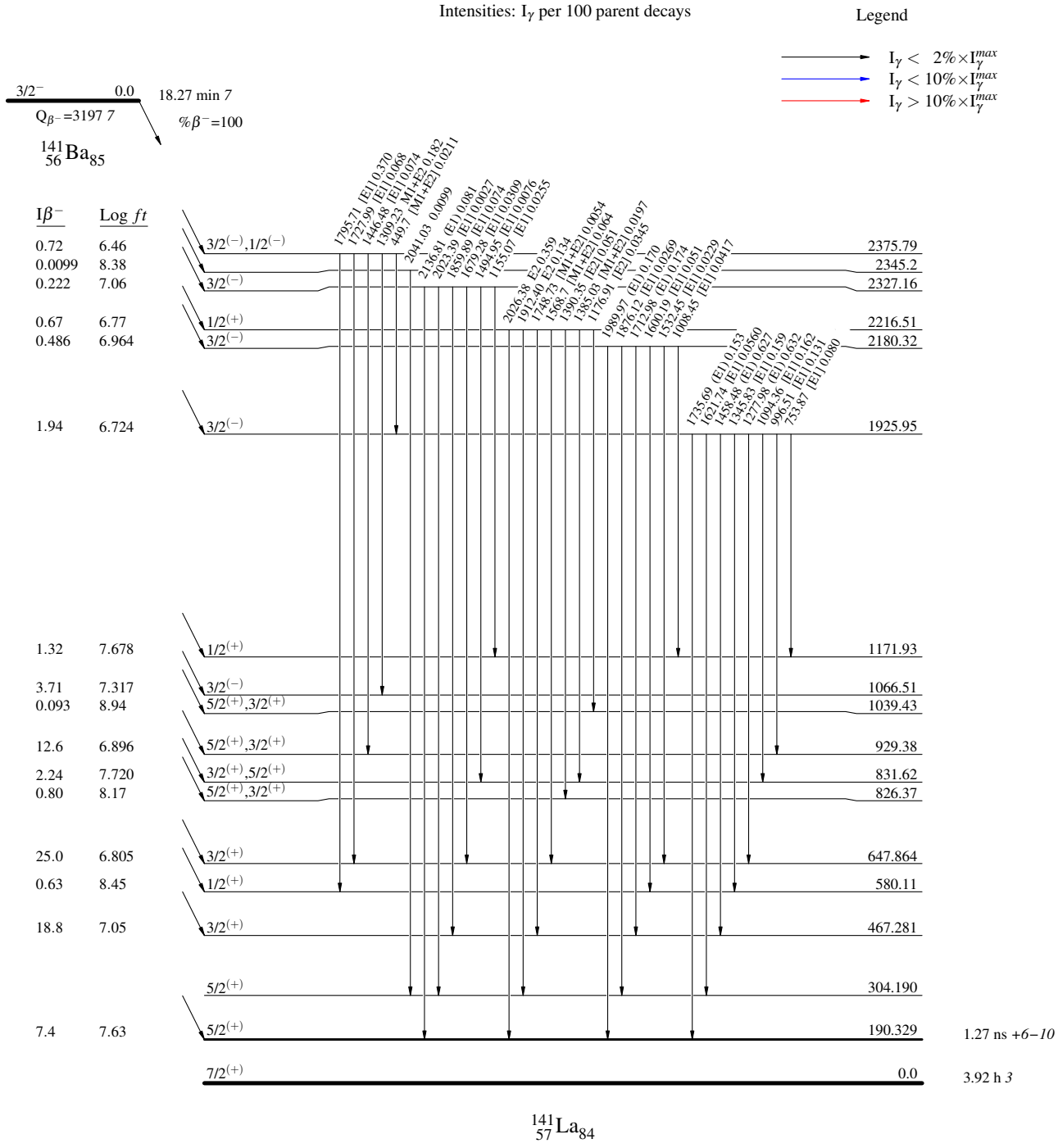
Intensities: I_γ per 100 parent decays



^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays

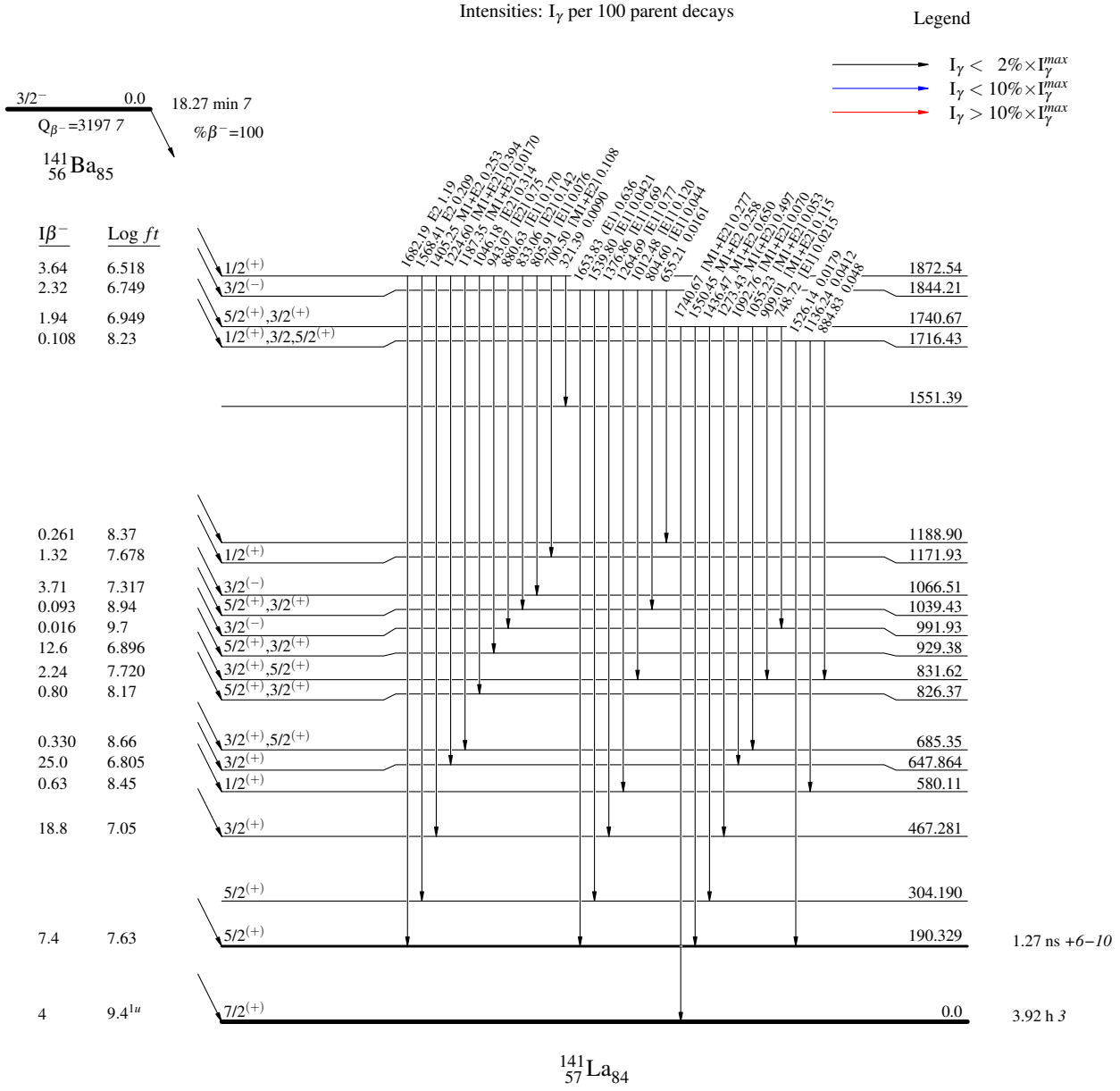


$^{141}_{57}La_{84}$

^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays

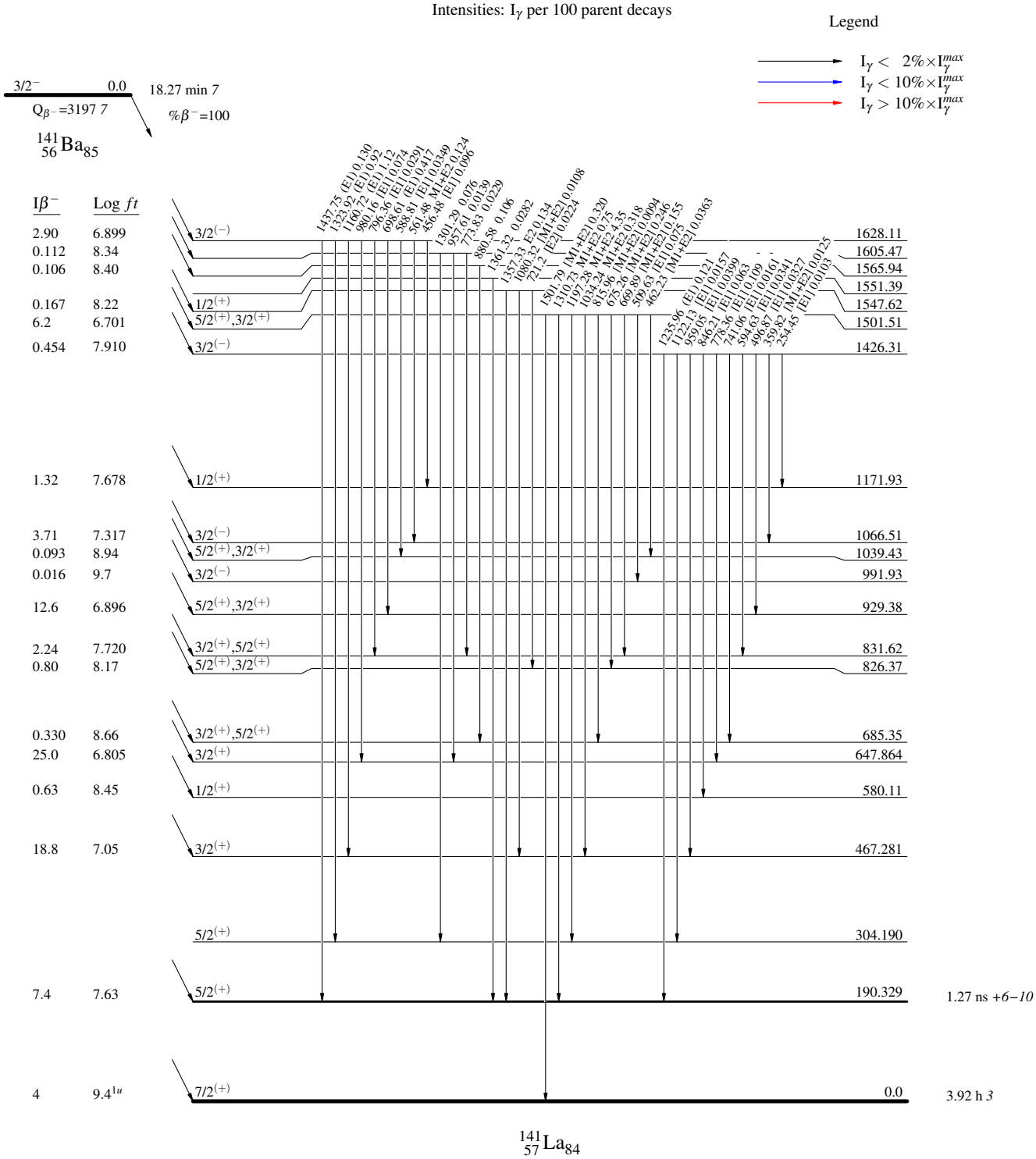


$^{141}_{57}La_{84}$

^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme (continued)

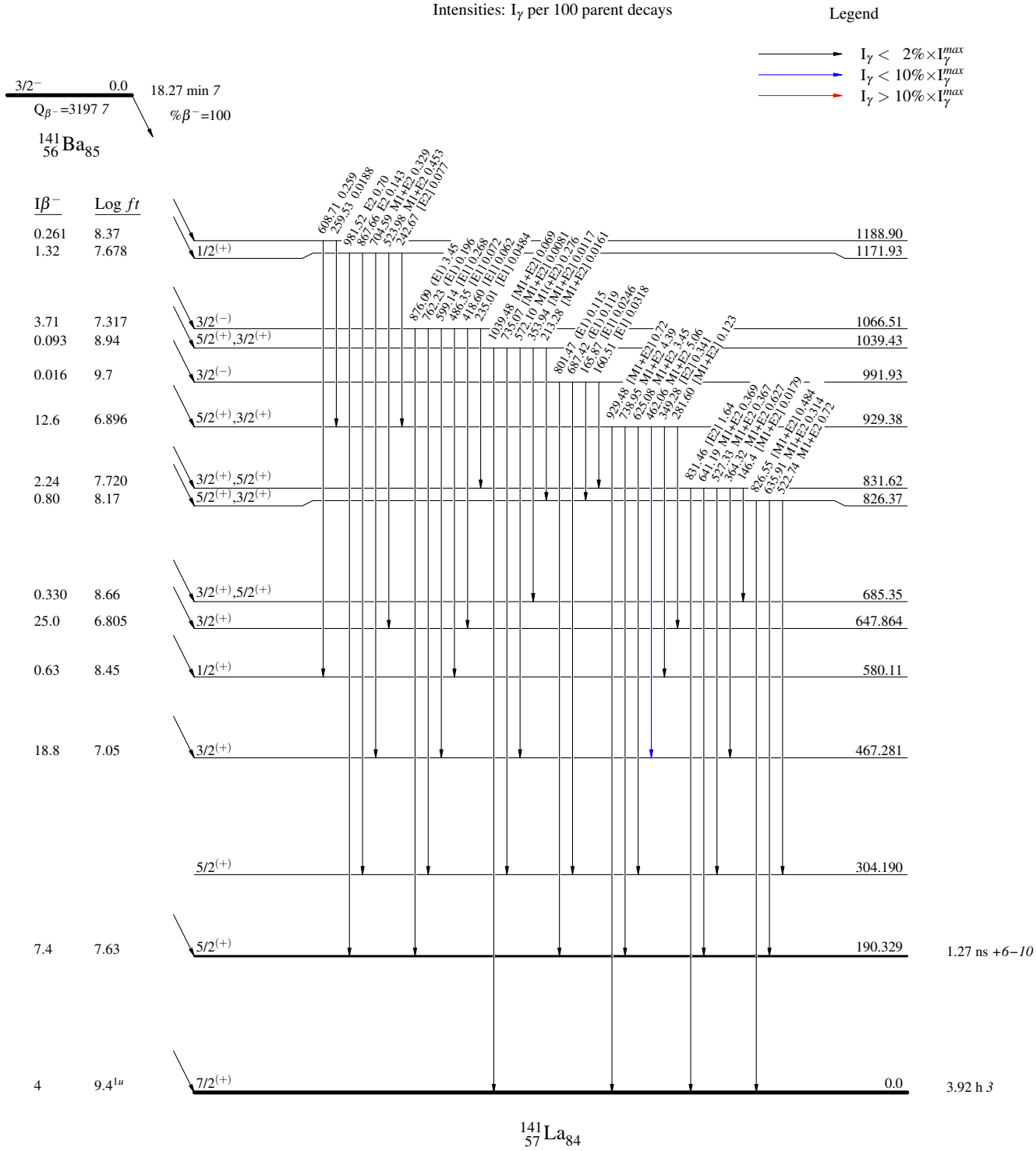
Intensities: I_γ per 100 parent decays



^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays

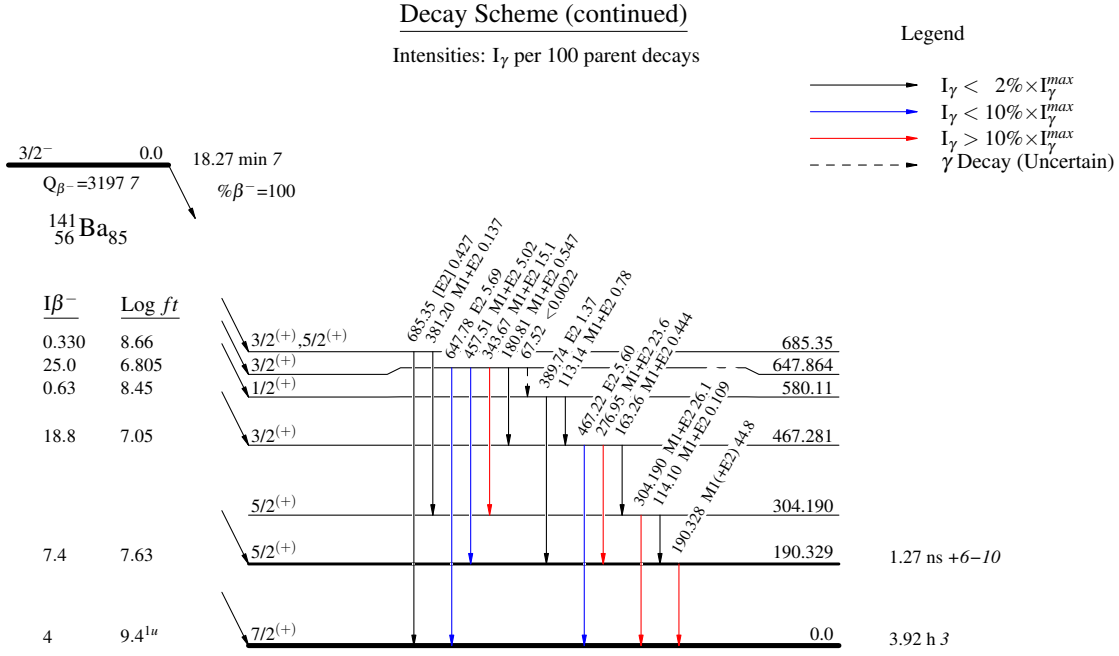


$^{141}_{57}La_{84}$

^{141}Ba β^- decay 2022Ru06,1986Fa08

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays



$^{141}_{57}La_{84}$