^{206}Bi $\varepsilon+\beta^+$ decay 1972Ma63,1972Ka30

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

Parent: ^{206}Bi: E=0.0; J$^\pi$=6$^+$; T$_{1/2}$=6.243 d *3*; Q(ε)=3757 *8*; %ε+%β^+ decay=100
^{206}Bi-J$^\pi$,T$_{1/2}$: From ^{206}Bi Adopted Levels.
^{206}Bi-Q($\varepsilon+\beta^+$): From 2021Wa16.
1972Ma63: Chemically purified and isotopically separated ^{206}Bi source was produced in (p,xn) reactions with E$_p$=30.5 MeV on a lead target. Detectors: two 35-cm^3 Ge(Li) detectors, 7-cm^3 Ge(Li) detector. Measure γ-ray singles and $\gamma\gamma$ coin.
1972Ka30: Chemically purified ^{206}Bi source. Decay was studied with high-resolution, iron-free β spectrometer and a 35 cm^3 Ge(Li) detector.
See also: 1971Ka16, 1970AlZV, 1971Al03, 1971Ru01, 1973Ka35, 1977Ko47, 1977Mc01, 1980Ba19.
The level scheme is taken from 1972Ma63 and 1972Ka30.

^{206}Pb Levels

E(level)†	J$^\pi$‡	T$_{1/2}$‡	Comments
0.0	0$^+$		
803.10 *5*	2$^+$	8.17 ps *8*	μ=−0.02 *14* μ: From g=−0.01 *7* using $\gamma\gamma$ perturbed angular correlation (1970Za03).
1340.55 *6*	3$^+$		
1684.04 *6*	4$^+$		
1997.70 *7*	4$^+$		
2200.22 *7*	7$^-$	125.1 μs *12*	T$_{1/2}$: Values from ^{206}Bi ε decay are 145 μs *15* (1953Al47), 128 μs *5* (1957To22), 123 μs *4* (1957As65), 123 μs *3* (1960Be36), 130.5 μs *15* (1962Th12), and 123.3 μs *11* (1968Ta13).
2384.23 *7*	6$^-$	30 ps *10*	μ=+0.78 *42* μ: From g=+0.13 *7* using $\gamma\gamma$ perturbed angular correlation (1970Za03). T$_{1/2}$: From 1963Si12.
2391.40? *9*			
2647.86 *8*	3$^-$	0.087 ps *21*	
2782.25 *7*	5$^-$		
2826.38 *7*	(4)$^-$		
2864.61 *8*	7$^-$		
2939.55 *7*	6$^-$		
3016.49 *7*	5$^-$		
3225.47 *8*	(6,7)$^-$		
3244.31 *7*	4$^-$		
3279.28 *7*	5$^-$		Probable dominant configuration: $\nu(f^{-1}_{5/2},g^{+1}_{9/2})$.
3402.71 *7*	5$^-$		Probable dominant configuration: $\nu(f^{-1}_{5/2},g^{+1}_{9/2})$.
3562.93 *7*	5$^-$		

† From least-squares fit to Eγ.
‡ Froma Adopted Levels, unless otherwise stated.

ε,β^+ radiations

av Eβ: Additional information 2.

E(decay)	E(level)	Iε†@	Log *ft*#	I($\varepsilon+\beta^+$)‡@	Comments
(194 *8*)	3562.93	2.42 *5*	7.18 *6*	2.42 *5*	εK=0.603 *16*; εL=0.290 *11*; εM+=0.1068 *38*
(354 *8*)	3402.71	49.2 *4*	6.581 *32*	49.2 *4*	εK=0.7288 *28*; εL=0.2016 *20*; εM+=0.0697 *7*
(478 *8*)	3279.28	43.8 *3*	6.946 *24*	43.8 *3*	εK=0.7562 *14*; εL=0.1821 *9*; εM+=0.06170 *36*

Continued on next page (footnotes at end of table)

^{206}Bi $\varepsilon+\beta^+$ decay 1972Ma63,1972Ka30 (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ [@]	Iε [†@]	Log *ft* [#]	I($\varepsilon+\beta^+$) [‡@]	Comments
(532 *8*)	3225.47		0.252 *15*	9.294 *34*	0.252 *15*	εK=0.7634 *11*; εL=0.1770 *7*; εM+=0.05964 *30*
(817 *8*)	2939.55		0.11 *11*	≥9.6	0.11 *11*	εK=0.78373 *45*; εL=0.16245 *29*; εM+=0.05382 *15*
(892 *8*)	2864.61		0.262 *15*	9.781 *29*	0.262 *15*	εK=0.78665 *38*; εL=0.16036 *25*; εM+=0.05299 *14*
(975 *8*)	2782.25		3.57 *27*	8.730 *36*	3.57 *27*	εK=0.78929 *33*; εL=0.15848 *21*; εM+=0.05223 *13*
(1373 *8*)	2384.23	3.996×10^{-5}	0.3 *9*	≥8.8	0.3 *9*	av Eβ=178.0 *37*; εK=0.79714 *20*; εL=0.15276 *12*; εM+=0.04996 *10*
(1557 *8*)	2200.22	0.0013 *8*	1.6 *10*	9.51 *27*	1.6 *10*	av Eβ=261.1 *36*; εK=0.79881 *18*; εL=0.15108 *10*; εM+=0.04930 *9*

† Note that 1962Pe08 measured a total positron intensity of 0.00084 *14* and assumed it was feeding the 1684-keV level. Such a feeding cannot be accounted for by the γ intensity balance. Their end-point was 977 keV *33*.

‡ From transition intensity balances.

Additional information 1.

@ Absolute intensity per 100 decays.

$\gamma(^{206}$Pb)

Iγ normalization: From I(γ+ce)(803γ)=100% and by assuming no direct $\varepsilon+\beta^+$ feeding to the ground state (ΔJ=6 transition).

E_γ [†]	I_γ [†&]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [#]	α [@]	Comments
34.954[‡] *18*	0.0172 *10*	3279.28	5⁻	3244.31	4⁻	M1+E2	0.023 *18*	38.2 *12*	α(L)=29.2 *9*; α(M)=6.86 *22* α(N)=1.74 *6*; α(O)=0.347 *10*; α(P)=0.0367 *6* %Iγ=0.0170 *10* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(L1)[34.954γ]=55.6 *31*, theoretical (BRICC) α(L1)[34.954γ]=25.9 *4*, using δ=0.023 *18*, and α(K)[803.1γ]=0.00803 *11*. Mult.: L1:L2:M:N=55.6 *31*: 6.30 *41*: 13.9 *23*: 3.74 *61* (1972Ka30).
44.110[‡] *18*	0.0075 *9*	2826.38	(4)⁻	2782.25	5⁻	M1(+E2)	0.04 *4*	19.4 *13*	α(L)=14.8 *10*; α(M)=3.49 *26* α(N)=0.89 *7*; α(O)=0.176 *12*; α(P)=0.0185 *4* %Iγ=0.0074 *9* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(L1)[44.11γ]=12.2 *15*, theoretical (BRICC) α[44.11γ]=13.01 *19*, using δ=0.04 *4*, and α(K)[803.1γ]=0.00803 *11*. Mult.: L1:L2:M=12.2 *15*:1.37 *40*: 2.61 *84* (1972Ka30).
123.42 *3*	0.023 *2*	3402.71	5⁻	3279.28	5⁻	M1+E2	0.18 *13*	5.05 *16*	α(K)=4.06 *22*; α(L)=0.75 *5*; α(M)=0.178 *15* α(N)=0.045 *4*; α(O)=0.0090 *6*; α(P)=0.000917 *14* %Iγ=0.0228 *20* Mult.: K:L1:L2:M=11.5 *24*: 2.58 *14*: 0.270 *76*: 0.51 *13* (1972Ka30); α_K(exp)=4.05 *110* (1972Ma63).
157.52 *10*	0.036 *4*	2939.55	6⁻	2782.25	5⁻	M1(+E2)	<0.32	2.49 *8*	α(K)=2.01 *9*; α(L)=0.370 *10*; α(M)=0.0874 *30* α(N)=0.0222 *7*; α(O)=0.00439 *12*; α(P)=0.000451 *10* %Iγ=0.036 *4* Mult.: K:L1:L2:M=6.4 *13*:1.03 *12*: 0.123 *51*: 0.234 *59* (1972Ka30); α_K(exp)=1.44 *50* (1972Ma63).
158.386 *21*	0.083 *8*	3402.71	5⁻	3244.31	4⁻	M1(+E2)	<0.2	2.50 *5*	α(K)=2.03 *4*; α(L)=0.359 *6*; α(M)=0.0844 *16* α(N)=0.0215 *4*; α(O)=0.00426 *7*; α(P)=0.000448 *7* %Iγ=0.082 *8* Mult.: K:L1:L2:M=27.3 *15*: 4.39 *22*: 0.460 *90*: 1.14 *14* (1972Ka30); α_K(exp)=2.66 *37* (1972Ma63).
184.02 *3*	16.0 *3*	2384.23	6⁻	2200.22	7⁻	M1(+E2)	−0.006 *31*	1.654 *23*	α(K)=1.350 *19*; α(L)=0.2325 *33*; α(M)=0.0545 *8* α(N)=0.01385 *19*; α(O)=0.00276 *4*; α(P)=0.000295 *4* %Iγ=15.84 *30* Mult.: K:L1:L2:L3:M:N:O=3350 *130*:509 *21*:55.0 *25*:3.67 *19*: 135 *5*: 33.7 *19*:7.59 *44* (1972Ka30); α_K(exp)=1.69 *10* (1972Ma63); γγ(θ) in 1980Ba19. δ: Other: −0.013 *25* (1980Ba19).

$^{206}_{82}$Pb$_{124}$-3

^{206}Bi ε+β$^+$ decay 1972Ma63,1972Ka30 (continued)

γ(^{206}Pb) (continued)

Eγ†	Iγ†&	Ei(level)	J^π_i	E_f	J^π_f	Mult.#	δ#	α@	Comments
190.04‡ 3	0.022 19	3016.49	5⁻	2826.38	(4)⁻	[M1,E2]		1.0 5	α(K)=0.7 5; α(L)=0.226 14; α(M)=0.056 7 α(N)=0.0143 16; α(O)=0.00270 18; α(P)=2.1×10^{-4} 6 %Iγ=0.022 19 Iγ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[190.04γ]=1.90 22, theoretical (BRICC) α(K)[190.04γ]=0.7 6 and α(K)[803.1γ]=0.00803 11.
202.44 10	0.044 4	2200.22	7⁻	1997.70	4⁺	E3		3.78 5	α(K)=0.426 6; α(L)=2.470 35; α(M)=0.678 10 α(N)=0.1726 25; α(O)=0.0311 4; α(P)=0.001533 22 %Iγ=0.044 4 Mult.: K:L1:L2:L3:M2:M3:N:O=2.25 18:0.684 23:7.87 44:3.78 21: 3.46 20: 0.907 94:1.24 12: 0.223 50 (1972Ka30); $α_K$(exp)=0.414 78 (1972Ma63).
227.65‡a 20	0.003 3	3244.31	4⁻	3016.49	5⁻	[M1,E2]		0.59 32	%Iγ=0.003 3 α(K)=0.43 31; α(L)=0.120 8; α(M)=0.0297 5 α(N)=0.00751 15; α(O)=0.00143 9; α(P)=1.2×10^{-4} 5 Eγ: Uncertainty increased 4σ by the evaluator. Iγ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[227.65γ]=0.153 70, theoretical (BRICC) α(K)[227.65γ]=0.4 4 and α(K)[803.1γ]=0.00803 11.
234.26 7	0.244 12	3016.49	5⁻	2782.25	5⁻	M1(+E2)	<0.19	0.832 16	α(K)=0.678 14; α(L)=0.1178 17; α(M)=0.0276 4 α(N)=0.00702 10; α(O)=0.001398 20; α(P)=0.0001484 26 %Iγ=0.242 12 Mult.: K:L1:L2:M:N=25.3 12:3.78 21: 0.404 38: 0.86 16: 0.200 76 (1972Ka30); $α_K$(exp)=0.840 85 (1972Ma63).
ˣ257.31‡ 5									
262.71 5	3.05 5	3279.28	5⁻	3016.49	5⁻	M1+E2	0.13 10	0.607 17	α(K)=0.495 16; α(L)=0.0855 14; α(M)=0.02005 31 α(N)=0.00510 8; α(O)=0.001015 17; α(P)=0.0001079 27 %Iγ=3.02 5 Mult.: K:L1:L2:M:N:O=208 9:33.9 18: 3.58 20: 7.93 43: 2.84 17: 0.507 62 (1972Ka30); $α_K$(exp)=0.551 35 (1972Ma63).
283.75‡ 6	0.005 4	3562.93	5⁻	3279.28	5⁻	[M1,E2]		0.32 18	α(K)=0.24 17; α(L)=0.058 11; α(M)=0.0142 21 α(N)=0.0036 5; α(O)=0.00069 13; α(P)=6.1×10^{-5} 27 %Iγ=0.005 4 Iγ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[283.75γ]=0.156 68, theoretical (BRICC) α(K)[283.75γ]=0.018 10 and α(K)[803.1γ]=0.00803 11.
313.67 7	0.363 10	1997.70	4⁺	1684.04	4⁺	M1+E2	−0.22 7	0.365 10	α(K)=0.297 9; α(L)=0.0517 10; α(M)=0.01214 21 α(N)=0.00308 5; α(O)=0.000614 11; α(P)=6.48×10^{-5} 16 %Iγ=0.359 10 Mult.: K:N=14.80 75:0.101 34 (1972Ka30); $α_K$(exp)=0.330 27

$^{206}_{82}Pb_{124}$-4

$\gamma(^{206}Pb)$ (continued)

E_γ [†]	I_γ [†&]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [#]	δ [#]	α [@]	Comments
									(1972Ma63). δ: From adopted gammas.
339.85[‡] *6*	0.13 *9*	3279.28	5^-	2939.55	6^-	[M1,E2]		0.19 *11*	α(K)=0.15 *10*; α(L)=0.033 *9*; α(M)=0.0080 *19* α(N)=0.0020 *5*; α(O)=3.9×10^{-4} *11*; α(P)=3.6×10^{-5} *18* %Iγ=0.13 *9* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[339.85γ]=2.48 *27*, theoretical (BRICC) α(K)[339.85γ]=0.15 *10* and α(K)[803.1γ]=0.00803 *11*.
343.51 *3*	23.7 *3*	1684.04	4^+	1340.55	3^+	M1(+E2)	+0.001 *3*	0.295 *4*	α(K)=0.2413 *34*; α(L)=0.0411 *6*; α(M)=0.00961 *13* α(N)=0.002443 *34*; α(O)=0.000487 *7*; α(P)=5.21×10^{-5} *7* %Iγ=23.46 *30* Mult.: $\gamma(\theta)$ in 1973Ka35; $\gamma\gamma(\theta)$ in 1977Mc01; $\gamma\gamma(\theta)$ in 1980Ba19; K:L1:L2:L3:M:N:O=675 *27*:108 *4*:11.3 *6*:0.797 *59*:42.4 *18*: 10.6 *4*:1.71 *7* (1972Ka30); α_K(exp)=0.230 *13* (1972Ma63). δ: Others: 0.002 *20* (1977Mc01) and 0.085 *63* (1980Ba19).
360.82[‡] *6*	0.006 *5*	3225.47	$(6,7)^-$	2864.61	7^-	[M1,E2]		0.16 *10*	α(K)=0.13 *8*; α(L)=0.028 *8*; α(M)=0.0066 *18* α(N)=0.0017 *5*; α(O)=3.3×10^{-4} *10*; α(P)=3.0×10^{-5} *15* %Iγ=0.006 *5* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[360.82γ]=0.089 *41*, theoretical (BRICC) α(K)[360.82γ]=0.13 *9* and α(K)[803.1γ]=0.00803 *11*.
^{x}380.83[‡] *6*									
386.20 *7*	0.522 *10*	3402.71	5^-	3016.49	5^-	M1+E2	0.15 *11*	0.212 *7*	α(K)=0.173 *6*; α(L)=0.0295 *7*; α(M)=0.00692 *16* α(N)=0.00176 *4*; α(O)=0.000350 *9*; α(P)=3.73×10^{-5} *12* %Iγ=0.517 *10* Mult.: K:L1:L2=11.0 *5*: 2.35 *15*: 0.177 *17* (1972Ka30); α_K(exp)=0.171 *12* (1972Ma63).
398.00 *3*	10.86 *10*	2782.25	5^-	2384.23	6^-	M1+E2	0.038 *9*	0.1981 *28*	α(K)=0.1622 *23*; α(L)=0.0275 *4*; α(M)=0.00644 *9* α(N)=0.001635 *23*; α(O)=0.000326 *5*; α(P)=3.49×10^{-5} *5* %Iγ=10.75 *10* I_γ: Authors in 1972Ma63 reported Iγ=10.86 *1*, but the evaluator assumed that the uncertainty is a typo and increased it. Mult.: K:L1:L2:L3:M:N:O=208 *8*:32.9 *15*:3.58 *27*:0.235 *42*: 8.33 *45*: 2.23 *12*: 0.357 *36* (1972Ka30); $\gamma(\theta)$ in 1973Ka35; α_K(exp)=0.155 *5* (1972Ma63); $\gamma\gamma(\theta)$ in 1980Ba19. δ: Other: +0.038 *3* (1973Ka35) and 0.028 *42* (1980Ba19).
434.89 *10*	0.023 *2*	2826.38	$(4)^-$	2391.40?		M1,E2		0.10 *6*	α(K)=0.08 *5*; α(L)=0.016 *6*; α(M)=0.0038 *13* α(N)=9.7×10^{-4} *32*; α(O)=1.9×10^{-4} *7*; α(P)=1.8×10^{-5} *9* %Iγ=0.0228 *20* Mult.: α_K(exp)=0.049 *17* (1972Ma63).

γ(^{206}Pb) (continued)

E_γ †	I_γ †&	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ#	α@	Comments
442.14 *10*	0.038 *4*	2826.38	(4)$^-$	2384.23	6$^-$	(E2)		0.0398 *6*	α(K)=0.0270 *4*; α(L)=0.00960 *13*; α(M)=0.002407 *34* α(N)=0.000609 *9*; α(O)=0.0001143 *16*; α(P)=8.45×10^{-6} *12* %Iγ=0.038 *4* Mult.: α_K(exp)=0.038 *16* (1972Ma63).
443.20‡ *7*	0.011 *9*	3225.47	(6,7)$^-$	2782.25	5$^-$	[M1,E2]		0.09 *5*	α(K)=0.07 *5*; α(L)=0.015 *6*; α(M)=0.0036 *12* α(N)=9.1×10^{-4} *31*; α(O)=1.8×10^{-4} *7*; α(P)=1.7×10^{-5} *9* %Iγ=0.011 *9* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[443.20γ]=0.153 *70*, theoretical (BRICC) α(K)[443.20γ]=0.07 *5* and α(K)[803.1γ]=0.00803 *11*.
452.84 *8*	0.158 *8*	3279.28	5$^-$	2826.38	(4)$^-$	M1(+E2)	<0.27	0.137 *4*	α(K)=0.1120 *34*; α(L)=0.0191 *4*; α(M)=0.00447 *10* α(N)=0.001135 *26*; α(O)=0.000226 *5*; α(P)=2.41×10^{-5} *7* %Iγ=0.156 *8* Mult.: K:L1=2.56 *15*: 0.426 *42* (1972Ka30); α_K(exp)=0.131 *15* (1972Ma63).
462.92 *10*	0.054 *5*	3402.71	5$^-$	2939.55	6$^-$	M1(+E2)	<0.7	0.117 *16*	α(K)=0.095 *14*; α(L)=0.0167 *17*; α(M)=0.0039 *4* α(N)=0.00100 *9*; α(O)=0.000198 *20*; α(P)=2.07×10^{-5} *26* %Iγ=0.053 *5* Mult.: K:M:N=1.07 *11*: 0.0429 *86*: 0.0180 *60* (1972Ka30); α_K(exp)=0.16 *4* (1972Ma63).
480.38 *10*	0.090 *9*	2864.61	7$^-$	2384.23	6$^-$	M1(+E2)	<0.4	0.114 *6*	α(K)=0.093 *5*; α(L)=0.0160 *7*; α(M)=0.00374 *15* α(N)=0.00095 *4*; α(O)=0.000189 *8*; α(P)=2.01×10^{-5} *10* %Iγ=0.089 *9* Mult.: K:L1+L2=1.26 *9*:0.204 *39* (1972Ka30); α_K(exp)=0.113 *22* (1972Ma63).
497.06 *4*	15.48 *15*	3279.28	5$^-$	2782.25	5$^-$	M1+E2	−0.09 *5*	0.1090 *18*	α(K)=0.0893 *15*; α(L)=0.01508 *23*; α(M)=0.00352 *5* α(N)=0.000896 *14*; α(O)=0.0001786 *27*; α(P)=1.912×10^{-5} *31* %Iγ=15.32 *15* Mult.: K:L1+L2:L3:M:N=169 *7*: 28.6 *14*: 0.189 *21*: 6.75 *35*: 2.10 *20* (1972Ka30); α_K(exp)=0.088 *5* (1972Ma63). δ: Others: −0.09 *2* (1973Ka35), −0.02 *11* (1980Ba19), −0.194 *21* (1977Mc01).
516.18 *4*	41.2 *4*	2200.22	7$^-$	1684.04	4$^+$	E3		0.0886 *12*	α(K)=0.0483 *7*; α(L)=0.0301 *4*; α(M)=0.00782 *11* α(N)=0.001988 *28*; α(O)=0.000370 *5*; α(P)=2.64×10^{-5} *4* %Iγ=40.8 *4* Mult.: K:L1:L2:L3:M:N+O=242 *10*:48.1 *24*:90.9 *39*:23.1 *11*: 42.9 *20*: 13.3 *7* (1972Ka30); α_K(exp)=0.048 *2* (1972Ma63). δ: Other: 0.013 *23* (1980Ba19).
537.45 *4*	30.8 *3*	1340.55	3$^+$	803.10	2$^+$	M1(+E2)	+0.001 *5*	0.0892 *12*	α(K)=0.0731 *10*; α(L)=0.01230 *17*; α(M)=0.00287 *4*

$^{206}_{82}Pb_{124}$-6

γ(^{206}Pb) (continued)

E_γ [†]	I_γ [†&]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [#]	α [@]	Comments
									α(N)=0.000730 *10*; α(O)=0.0001456 *20*; α(P)=1.561×10^{-5} *22* %Iγ=30.49 *30* Mult.: ce-ce(θ) measurements of 1964Sa37 indicate that the 537γ is of predominantly M1 character; $\gamma(\theta)$ in 1973Ka35; $\gamma\gamma(\theta)$ in 1977Mc01; $\gamma\gamma(\theta)$ in 1980Ba19; K:L1+L2:L3:M:N+O=257 *10*:46.3 *21*:0.253 *33*:8.43 *44*:3.23 *18* (1972Ka30); α_K(exp)=0.068 *3* (1972Ma63). δ: Others: −0.221 *80* (1977Mc01) and −0.05 *10* (1980Ba19).
555.30 *10*	0.038 *4*	2939.55	6$^-$	2384.23	6$^-$	M1+E2	1.0 *+8−4*	0.052 *16*	α(K)=0.042 *13*; α(L)=0.0080 *17*; α(M)=0.0019 *4* α(N)=0.00048 *10*; α(O)=9.5×10^{-5} *20*; α(P)=9.4×10^{-6} *26* %Iγ=0.038 *4* Mult.: α_K(exp)=0.041 *13* (1972Ma63).
^{x}573.72 [‡] *9*									
576.36 *10*	0.113 *10*	3402.71	5$^-$	2826.38	(4)$^-$	M1(+E2)	<0.7	0.065 *9*	α(K)=0.053 *8*; α(L)=0.0092 *10*; α(M)=0.00217 *22* α(N)=0.00055 *6*; α(O)=0.000109 *12*; α(P)=1.15×10^{-5} *15* %Iγ=0.112 *10* Mult.: K:L1+L2:M:N=0.892 *52*: 0.140 *30*: 0.045 *12*: 0.0110 *29* (1972Ka30); α_K(exp)=0.064 *10* (1972Ma63).
581.97 *8*	0.490 *25*	2782.25	5$^-$	2200.22	7$^-$	E2		0.02061 *29*	α(K)=0.01516 *21*; α(L)=0.00413 *6*; α(M)=0.001015 *14* α(N)=0.000257 *4*; α(O)=4.90×10^{-5} *7*; α(P)=4.06×10^{-6} *6* %Iγ=0.485 *25* Mult.: K:L1+L2:M:N=1.13 *7*:0.352 *60*: 0.057 *15*:0.020 *11*: (1972Ka30).
620.48 *5*	5.82 *6*	3402.71	5$^-$	2782.25	5$^-$	M1+E2	−0.082 *22*	0.0609 *9*	α(K)=0.0500 *7*; α(L)=0.00837 *12*; α(M)=0.001955 *28* α(N)=0.000497 *7*; α(O)=9.91×10^{-5} *14*; α(P)=1.062×10^{-5} *15* %Iγ=5.76 *6* Mult.: K:L1+L2:L3:NO=38.8 *17*: 6.39 *35*: 0.035 *14*: 0.471 *32* (1972Ka30); α_K(exp)=0.054 *3* (1972Ma63). δ: Others: −0.33 *29* (1980Ba19) and −0.082 *10* (1977Mc01).
632.25 *5*	4.52 *5*	3016.49	5$^-$	2384.23	6$^-$	M1+E2	−0.12 *4*	0.0577 *9*	α(K)=0.0473 *8*; α(L)=0.00793 *12*; α(M)=0.001852 *28* α(N)=0.000470 *7*; α(O)=9.38×10^{-5} *14*; α(P)=1.006×10^{-5} *16* %Iγ=4.47 *5* Mult.: K:L1:M:N:O=24.5 *12*:3.91 *45*: 1.11 *7*: 0.308 *23*: 0.112 *22* (1972Ka30); α_K(exp)=0.044 *3* (1972Ma63). δ: Other: −0.12 *2* [1980Ba19, $\gamma\gamma(\theta)$].
657.16 *5*	1.93 *3*	1997.70	4$^+$	1340.55	3$^+$	M1+E2	0.15 *3*	0.0518 *8*	α(K)=0.0425 *7*; α(L)=0.00713 *11*; α(M)=0.001665 *25* α(N)=0.000423 *6*; α(O)=8.43×10^{-5} *13*; α(P)=9.03×10^{-6} *14* %Iγ=1.910 *30* Mult.: K:L1+L2:L3:M:N=10.2 *5*:1.71 *10*:0.033 *19*:0.431 *35*: 0.141 *30* (1972Ka30); α_K(exp)=0.043 *3* (1972Ma63). δ: From adopted gammas.

From ENSDF

$\gamma(^{206}$Pb) (continued)

E_γ [†]	I_γ [†&]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[#]	α[@]	Comments
664.17 *10*	0.099 *5*	2864.61	7⁻	2200.22	7⁻	M1(+E2)	<0.9	0.043 *8*	α(K)=0.035 *7*; α(L)=0.0061 *9*; α(M)=0.00143 *21* α(N)=0.00036 *5*; α(O)=7.2×10^{-5} *11*; α(P)=7.6×10^{-6} *13* %Iγ=0.098 *5* Mult.: K:L1+L2:M=0.540 *95*:0.088 *22*: 0.0221 *60* (1972Ka30); α_K(exp)=0.044 *11* (1972Ma63).
739.24 *8*	0.159 *8*	2939.55	6⁻	2200.22	7⁻	M1(+E2)	<0.5	0.0361 *27*	α(K)=0.0296 *23*; α(L)=0.00498 *32*; α(M)=0.00117 *7* α(N)=0.000296 *19*; α(O)=5.9×10^{-5} *4*; α(P)=6.3×10^{-6} *5* %Iγ=0.157 *8* Mult.: K:L1+L2:M=0.622 *40*:0.142 *37*: 0.030 *13* (1972Ka30); α_K(exp)=0.032 *4* (1972Ma63).
754.96 *7*	0.533 *10*	3402.71	5⁻	2647.86	3⁻	E2		0.01172 *16*	α(K)=0.00904 *13*; α(L)=0.002035 *29*; α(M)=0.000492 *7* α(N)=0.0001247 *17*; α(O)=2.408×10^{-5} *34*; α(P)=2.174×10^{-6} *30* %Iγ=0.528 *10* Mult.: K:L1+L2=0.571 *52*: 0.135 *45* (1972Ka30); α_K(exp)=0.0087 *10* (1972Ma63).
780.66[‡] *10*	0.05 *3*	3562.93	5⁻	2782.25	5⁻	[M1,E2]		0.022 *11*	α(K)=0.018 *10*; α(L)=0.0032 *14*; α(M)=7.6×10^{-4} *31* α(N)=1.9×10^{-4} *8*; α(O)=3.8×10^{-5} *16*; α(P)=3.9×10^{-6} *19* %Iγ=0.050 *30* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[780.66γ]=0.105 *36*, theoretical (BRICC) α(K)[780.66γ]=0.24 *17* and α(K)[803.1γ]=0.00803 *11*.
784.58 *7*	0.542 *10*	2782.25	5⁻	1997.70	4⁺	E1		0.00391 *5*	α(K)=0.00326 *5*; α(L)=0.000504 *7*; α(M)=0.0001166 *16* α(N)=2.95×10^{-5} *4*; α(O)=5.83×10^{-6} *8*; α(P)=5.93×10^{-7} *8* %Iγ=0.537 *10* Mult.: K:L1+L2:L3=0.216 *46*:0.108 *27*: 0.0242 *98* (1972Ka30).
803.10 *5*	100	803.10	2⁺	0.0	0⁺	E2		0.01031 *14*	α(K)=0.00803 *11*; α(L)=0.001741 *24*; α(M)=0.000419 *6* α(N)=0.0001063 *15*; α(O)=2.059×10^{-5} *29*; α(P)=1.889×10^{-6} *26* %Iγ=98.980 *14* Mult.: ce-ce(θ) measurements of 1964Sa37 indicate that the 803γ is of E2 character; γ(θ) in 1973Ka35; K:L1+L2:L3:M:N=100:21.6 *11*:1.99 *11*:5.35 *27*:1.73*10* (1972Ka30).
816.25[‡] *10*	0.051 *20*	3016.49	5⁻	2200.22	7⁻	[E2]		0.00998 *14*	α(K)=0.00778 *11*; α(L)=0.001673 *23*; α(M)=0.000402 *6* α(N)=0.0001020 *14*; α(O)=1.977×10^{-5} *28*; α(P)=1.822×10^{-6} *26* %Iγ=0.051 *20* I_γ: Determined by the evaluator from the measured *ce* in 1972Ka30 ce(K)[816.25γ]=0.049 *19*, theoretical (BRICC) α(K)[816.25γ]=0.00778 *11* and α(K)[803.1γ]=0.00803 *11*.
841.28 *7*	0.188 *9*	3225.47	(6,7)⁻	2384.23	6⁻	M1+E2	0.6 *5*	0.023 *5*	α(K)=0.019 *4*; α(L)=0.0032 *6*; α(M)=0.00075 *14*

$^{206}_{82}$Pb$_{124}$-8

^{206}Bi $\varepsilon+\beta^+$ decay 1972Ma63,1972Ka30 (continued)

γ(^{206}Pb) (continued)

E_γ†	I_γ†&	E_i(level)	J^π_i	E_f	J^π_f	Mult.#	δ#	α@	Comments
									α(N)=0.00019 *4*; α(O)=3.8×10^{-5} *7*; α(P)=4.0×10^{-6} *9* %Iγ=0.186 *9* Mult.: K:L1:M:N=0.443 *45*:0.0730 *16*: 0.0154 *61*: 0.0166 *86* (1972Ka30); α_K(exp)=0.019 *3* (1972Ma63).
881.01 *5*	66.9 *7*	1684.04	4$^+$	803.10	2$^+$	E2		0.00855 *12*	α(K)=0.00673 *9*; α(L)=0.001389 *19*; α(M)=0.000333 *5* α(N)=8.43×10^{-5} *12*; α(O)=1.640×10^{-5} *23*; α(P)=1.540×10^{-6} *22* %Iγ=66.2 *7* Mult.: K:L1+L2:L3:M:N=55.4 *24*:11.5 *6*:0.73 *5*:2.90 *16*:0.94 *11*; α_K(exp)=0.0067 *4* (1972Ma63).
895.12 *5*	15.83 *16*	3279.28	5$^-$	2384.23	6$^-$	M1+E2	−0.030 *6*	0.02363 *33*	α(K)=0.01943 *27*; α(L)=0.00322 *5*; α(M)=0.000750 *11* α(N)=0.0001905 *27*; α(O)=3.80×10^{-5} *5*; α(P)=4.09×10^{-6} *6* %Iγ=15.67 *16* Mult.: K:L1+L2:M:N=34.0 *15*: 5.33 *28*: 1.51 *9*: 0.485 *34* (1972Ka30); α_K(exp)=0.0174 *18* (1972Ma63). δ: Others: −0.030 *3* (1973Ka35) and 0.047 *25* (1977Mc01).
915.00 *10*	0.031 *3*	3562.93	5$^-$	2647.86	3$^-$	E2		0.00793 *11*	α(K)=0.00626 *9*; α(L)=0.001269 *18*; α(M)=0.000303 *4* α(N)=7.69×10^{-5} *11*; α(O)=1.498×10^{-5} *21*; α(P)=1.418×10^{-6} *20* %Iγ=0.0307 *30* Mult.: α_K(exp)=0.0061 *16* (1972Ma63).
963.82 *9*	0.037 *4*	2647.86	3$^-$	1684.04	4$^+$	[E1]		0.00267 *4*	%Iγ=0.037 *4* α(K)=0.002229 *31*; α(L)=0.000341 *5*; α(M)=7.86×10^{-5} *11* α(N)=1.987×10^{-5} *28*; α(O)=3.94×10^{-6} *6*; α(P)=4.06×10^{-7} *6* E_γ: From the level energy difference. Eγ=964.22 keV *10* in 1972Ma63.
1018.63 *8*	7.68 *8*	3402.71	5$^-$	2384.23	6$^-$	M1+E2	−0.019 *7*	0.01696 *24*	α(K)=0.01395 *20*; α(L)=0.002300 *32*; α(M)=0.000536 *8* α(N)=0.0001362 *19*; α(O)=2.72×10^{-5} *4*; α(P)=2.92×10^{-6} *4* %Iγ=7.60 *8* Mult.: K:L1+L2:M:N=13.5 *7*: 2.78 *14*: 0.671 *36*: 0.206 *15* (1972Ka30); α_K(exp)=0.0142 *10* (1972Ma63). δ: Others: −0.018 *3* (1973Ka35) and 0.055 *20* (1977Mc01).
1025.30 *10*	0.043 *4*	3225.47	(6,7)$^-$	2200.22	7$^-$	M1(+E2)	<0.9	0.0144 *23*	α(K)=0.0118 *19*; α(L)=0.00197 *29*; α(M)=0.00046 *7* α(N)=0.000117 *17*; α(O)=2.33×10^{-5} *34*; α(P)=2.5×10^{-6} *4* %Iγ=0.043 *4* Mult.: α_K(exp)=0.0143 *46* (1972Ma63).
^{x}1047.55 *10*	0.057 *6*								%Iγ=0.056 *6*
^{x}1059.64‡ *16*									
^{x}1071.88‡ *16*									

γ(^{206}Pb) (continued)

E_γ †	I_γ †&	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	α @	Comments
^{x}1093.31 *10*	0.071 *7*							%Iγ=0.070 *7*
1098.26 *7*	13.65 *15*	2782.25	5$^-$	1684.04	4$^+$	E1	2.12×10^{-3} *3*	α(K)=0.001768 *25*; α(L)=0.000268 *4*; α(M)=6.18×10^{-5} *9* α(N)=1.562×10^{-5} *22*; α(O)=3.10×10^{-6} *4*; α(P)=3.22×10^{-7} *5* %Iγ=13.51 *15* Mult.: K:L1+L2:L3:M:N=3.60 *19*:0.472 *26*: 0.0207 *32*:0.120 *9*: 0.0310 *45* (1972Ka30); α_K(exp)=0.0021 *2* (1972Ma63).
1142.37 *10*	0.112 *5*	2826.38	(4)$^-$	1684.04	4$^+$	E1	1.98×10^{-3} *3*	α(K)=0.001650 *23*; α(L)=0.0002495 *35*; α(M)=5.75×10^{-5} *8* α(N)=1.454×10^{-5} *20*; α(O)=2.89×10^{-6} *4*; α(P)=3.00×10^{-7} *4*; α(IPF)=3.57×10^{-6} *5* %Iγ=0.111 *5* Mult.: α_K(exp)=0.0016 *4* (1972Ma63).
^{x}1166.70‡ *16*								
1180.70 *10*	0.067 *7*	2864.61	7$^-$	1684.04	4$^+$	[E3]	0.01066 *15*	α(K)=0.00813 *11*; α(L)=0.001918 *27*; α(M)=0.000467 *7* α(N)=0.0001186 *17*; α(O)=2.303×10^{-5} *32*; α(P)=2.168×10^{-6} *30*; α(IPF)=7.28×10^{-7} *10* %Iγ=0.066 *7*
1194.69 *8*	0.280 *15*	1997.70	4$^+$	803.10	2$^+$	E2	0.00474 *7*	α(K)=0.00382 *5*; α(L)=0.000696 *10*; α(M)=0.0001643 *23* α(N)=4.16×10^{-5} *6*; α(O)=8.18×10^{-6} *11*; α(P)=8.13×10^{-7} *11*; α(IPF)=3.43×10^{-6} *5* %Iγ=0.277 *15* Mult.: K:L1+L2=0.132 *16*:0.0387 *99*(1972Ka30); α_K(exp)=0.0038 *7* (1972Ma63).
1202.58 *10*	0.106 *6*	3402.71	5$^-$	2200.22	7$^-$	E2	0.00468 *7*	α(K)=0.00378 *5*; α(L)=0.000686 *10*; α(M)=0.0001619 *23* α(N)=4.10×10^{-5} *6*; α(O)=8.07×10^{-6} *11*; α(P)=8.03×10^{-7} *11*; α(IPF)=4.06×10^{-6} *6* %Iγ=0.105 *6* Mult.: K:L1+L2=0.0397 *73*: 0.0299 *79* (1972Ka30).
^{x}1208.76 *10*	0.050 *5*							%Iγ=0.050 *5*
1246.46 *10*	0.085 *8*	3244.31	4$^-$	1997.70	4$^+$	(E1)	1.73×10^{-3} *2*	α(K)=0.001417 *20*; α(L)=0.0002134 *30*; α(M)=4.91×10^{-5} *7* α(N)=1.243×10^{-5} *17*; α(O)=2.470×10^{-6} *35*; α(P)=2.58×10^{-7} *4*; α(IPF)=3.13×10^{-5} *4* %Iγ=0.084 *8* Mult.: α_K(exp)=0.0025 *9* by the evaluator from Ice(K)[803γ] and Ice(K)[1246γ] in 1972Ka30, Iγ(803γ) and Iγ(1246γ) from 1972Ma63, and α(K,exp)[803γ]=0.00803 *11*.
1281.81 *10*	0.066 *7*	3279.28	5$^-$	1997.70	4$^+$	[E1]	1.66×10^{-3} *2*	α(K)=0.001350 *19*; α(L)=0.0002030 *28*; α(M)=4.67×10^{-5} *7* α(N)=1.183×10^{-5} *17*; α(O)=2.351×10^{-6} *33*; α(P)=2.457×10^{-7} *34*; α(IPF)=4.49×10^{-5} *6* %Iγ=0.065 *7*
1332.33 *10*	0.285 *15*	3016.49	5$^-$	1684.04	4$^+$	E1	1.58×10^{-3} *2*	α(K)=0.001264 *18*; α(L)=0.0001896 *27*; α(M)=4.37×10^{-5} *6*

$^{206}_{82}$Pb$_{124}$-10

γ(^{206}Pb) (continued)

E_γ†	I_γ†&	E_i(level)	J^π_i	E_f	J^π_f	Mult.#	α@	Comments
								α(N)=1.105×10^{-5} *15*; α(O)=2.196×10^{-6} *31*; α(P)=2.299×10^{-7} *32*; α(IPF)=6.78×10^{-5} *10* %Iγ=0.282 *15* Mult.: α_K(exp)=0.0015 *3* (1972Ma63).
^{x}1393.65‡ *16*								
1405.01 *8*	1.450 *25*	3402.71	5⁻	1997.70	4⁺	E1	1.49×10^{-3} *2*	α(K)=0.001154 *16*; α(L)=0.0001728 *24*; α(M)=3.98×10^{-5} *6* α(N)=1.006×10^{-5} *14*; α(O)=2.001×10^{-6} *28*; α(P)=2.099×10^{-7} *29*; α(IPF)=0.0001091 *15* %Iγ=1.435 *25* Mult.: K:L1+L2:M=0.249 *14*: 0.0227 *48*: 0.0065 *25* (1972Ka30); α_K(exp)=0.0014 *2* (1972Ma63).
^{x}1420.22 *10*	0.043 *4*							%Iγ=0.043 *4*
^{x}1466.63‡ *17*								
^{x}1496.18 *8*	0.178 *10*							%Iγ=0.176 *10*
1560.30 *8*	0.382 *20*	3244.31	4⁻	1684.04	4⁺	E1	1.37×10^{-3} *2*	α(K)=0.000968 *14*; α(L)=0.0001442 *20*; α(M)=3.32×10^{-5} *5* α(N)=8.39×10^{-6} *12*; α(O)=1.671×10^{-6} *23*; α(P)=1.759×10^{-7} *25*; α(IPF)=0.0002117 *30* %Iγ=0.378 *20* Mult.: K:L1+L2=0.0485 *85*:0.0056 *28* (1972Ka30); α_K(exp)=0.00102 *23* by the evaluator from Ice(K)[803γ] and Ice(K)[1560γ] in 1972Ka30, Iγ(803γ) and Iγ(1560γ) from 1972Ma63, and α(K,exp)[803γ]=0.00803 *11*.
1565.34 *8*	0.307 *15*	3562.93	5⁻	1997.70	4⁺	E1	1.36×10^{-3} *2*	α(K)=0.000962 *13*; α(L)=0.0001434 *20*; α(M)=3.30×10^{-5} *5* α(N)=8.35×10^{-6} *12*; α(O)=1.662×10^{-6} *23*; α(P)=1.750×10^{-7} *25*; α(IPF)=0.0002152 *30* %Iγ=0.304 *15* Mult.: K:L1+L2=0.0358 *56*: 0.0037 *20* (1972Ka30).
1588.2 *1*	0.041 *4*	2391.40?		803.10	2⁺			%Iγ=0.041 *4* Mult.: α_K(exp)=0.0071 *21* (1972Ma63) consistent with Mult=M2+E3 or E4.
1595.27 *8*	5.07 *6*	3279.28	5⁻	1684.04	4⁺	E1	1.35×10^{-3} *2*	α(K)=0.000933 *13*; α(L)=0.0001389 *19*; α(M)=3.19×10^{-5} *4* α(N)=8.08×10^{-6} *11*; α(O)=1.609×10^{-6} *23*; α(P)=1.695×10^{-7} *24*; α(IPF)=0.0002363 *33* %Iγ=5.02 *6* Mult.: K:L1+L2:M:N=0.654 *33*: 0.0426 *55*: 0.0094 *29*: 0.0033 *17* (1972Ka30); α_K(exp)=0.0010 *1* (1972Ma63).
1718.70 *7*	32.2 *4*	3402.71	5⁻	1684.04	4⁺	E1	1.31×10^{-3} *2*	α(K)=0.000824 *12*; α(L)=0.0001223 *17*; α(M)=2.81×10^{-5} *4* α(N)=7.12×10^{-6} *10*; α(O)=1.417×10^{-6} *20*; α(P)=1.497×10^{-7} *21*; α(IPF)=0.000326 *5* %Iγ=31.9 *4* Mult.: K:L1+L2:M:N=3.12 *16*: 0.142 *8*: 0.0371 *24*: 0.0092 *13* (1972Ka30); α_K(exp)=0.00078 *5* (1972Ma63).

$^{206}_{82}$Pb$_{124}$-11

γ(^{206}Pb) (continued)

E_γ [†]	I_γ [†&]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [@]	Comments
								α: Measured internal pair conversion coefficient β_π=3.06 x 10^{-4} *15* (1998Wu02).
1844.49 *10*	0.575 *25*	2647.86	3^-	803.10	2^+	E1	1.29×10^{-3} *2*	α(K)=0.000733 *10*; α(L)=0.0001086 *15*; α(M)=2.494×10^{-5} *35* α(N)=6.31×10^{-6} *9*; α(O)=1.258×10^{-6} *18*; α(P)=1.332×10^{-7} *19*; α(IPF)=0.000417 *6* %Iγ=0.569 *25* Mult.: α_K(exp)=0.00071 *11* (1972Ma63). α: Measured internal pair conversion coefficient β_π=4.65×10^{-4} *15* for the combined 1844-, 1879-, and 1904-keV transitions (1998Wu02).
1878.65 *8*	2.03 *4*	3562.93	5^-	1684.04	4^+	E1	1.29×10^{-3} *2*	α(K)=0.000711 *10*; α(L)=0.0001053 *15*; α(M)=2.419×10^{-5} *34* α(N)=6.12×10^{-6} *9*; α(O)=1.220×10^{-6} *17*; α(P)=1.292×10^{-7} *18*; α(IPF)=0.000442 *6* %Iγ=2.01 *4* Mult.: K:L1+L2=0.150 *11*: 0.0381 *91* (1972Ka30); α_K(exp)=0.00060 *6* (1972Ma63).
1903.56 *10*	0.353 *15*	3244.31	4^-	1340.55	3^+	E1	1.29×10^{-3} *2*	α(K)=0.000696 *10*; α(L)=0.0001030 *14*; α(M)=2.366×10^{-5} *33* α(N)=5.99×10^{-6} *8*; α(O)=1.193×10^{-6} *17*; α(P)=1.264×10^{-7} *18*; α(IPF)=0.000460 *6* %Iγ=0.349 *15* Mult.: α_K(exp)=0.00071 *17* (1972Ma63).
^{x}1963.2 *3*	0.011 *2*							%Iγ=0.0109 *20*
2022.8 *2*	0.013 *2*	2826.38	$(4)^-$	803.10	2^+	M2,E3	0.0054 *18*	α(K)=0.0043 *15*; α(L)=7.4×10^{-4} *23*; α(M)=1.7×10^{-4} *5* α(N)=4.4×10^{-5} *14*; α(O)=8.8×10^{-6} *28*; α(P)=9.3×10^{-7} *31*; α(IPF)=0.000187 *25* %Iγ=0.0129 *20* Mult.: α_K(exp)=0.0047 *27* (1972Ma63). Mult.: ce data allow M2,M3,E3 but placement in level scheme precludes M3.
2441.21 *9*	0.005 *2*	3244.31	4^-	803.10	2^+	[M2]	0.00484 *7*	%Iγ=0.0050 *20* α(K)=0.00365 *5*; α(L)=0.000608 *9*; α(M)=0.0001421 *20* α(N)=3.61×10^{-5} *5*; α(O)=7.21×10^{-6} *10*; α(P)=7.76×10^{-7} *11*; α(IPF)=0.000396 *6* E_γ: From the level energy difference. Eγ=2439.0 keV *4* in 1972Ma63.
2476.18 *9*	0.015 *2*	3279.28	5^-	803.10	2^+	[E3]	0.00264 *4*	%Iγ=0.0149 *20* α(K)=0.001895 *27*; α(L)=0.000328 *5*; α(M)=7.70×10^{-5} *11* α(N)=1.955×10^{-5} *27*; α(O)=3.88×10^{-6} *5*; α(P)=4.04×10^{-7} *6*; α(IPF)=0.000320 *4* E_γ: From the level energy difference. Eγ=2476.7 keV *2* in 1972Ma63.
2599.6 *2*	0.131 *10*	3402.71	5^-	803.10	2^+	(E3)	2.48×10^{-3} *4*	α(K)=0.001727 *24*; α(L)=0.000296 *4*; α(M)=6.93×10^{-5} *10* α(N)=1.760×10^{-5} *25*; α(O)=3.49×10^{-6} *5*; α(P)=3.65×10^{-7} *5*; α(IPF)=0.000365 *5*

$^{206}_{82}Pb_{124}$-12

γ(^{206}Pb) (continued)

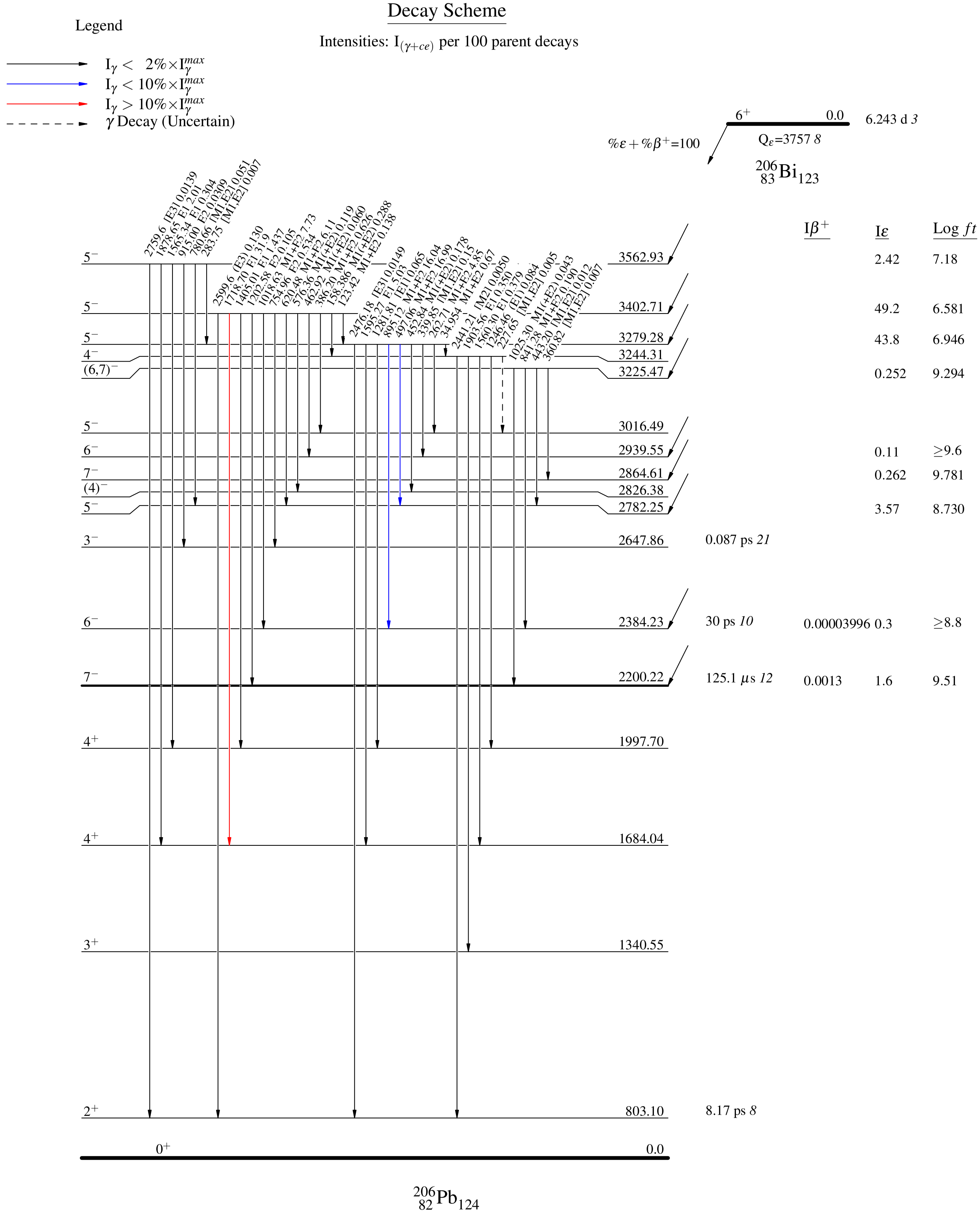
E_γ [†]	I_γ [†&]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [#]	α [@]	Comments
								%Iγ=0.130 *10* Mult.: α_K(exp)=0.0014 *5* (1972Ma63) allow M1 or E3, but the decay scheme requires E3.
2759.6 *10*	0.014 *2*	3562.93	5^-	803.10	2^+	[E3]	2.30×10^{-3} *3*	α(K)=0.001539 *22*; α(L)=0.000260 *4*; α(M)=6.10×10^{-5} *9* α(N)=1.547×10^{-5} *22*; α(O)=3.07×10^{-6} *4*; α(P)=3.23×10^{-7} *5*; α(IPF)=0.000424 *6* %Iγ=0.0139 *20*

† From 1972Ma63, unless otherwise stated.
‡ From 1972Ka30. Not seen by 1972Ma63.
# From adopted gammas. The ^{206}Bi ε decay data are from subshell ratios (1972Ka30) and/or α(K)exp (1972Ma63, based on ce data of 1972Ka30), normalized to α(K)exp(803γ).
@ Additional information 3.
& For absolute intensity per 100 decays, multiply by 0.98980 *14*.
[a] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

^{206}Bi $\varepsilon+\beta^+$ decay 1972Ma63,1972Ka30

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays



^{206}Bi ε+β^+ decay 1972Ma63,1972Ka30

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays