^{203}Po ε decay 1972Al25

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 177, 509, 2021	4-Jul-2021

Parent: ^{203}Po: E=0; J^π=5/2$^-$; $T_{1/2}$=36.7 min *5*; Q(ε)=4214 *14*; %ε+%$β^+$ decay=99.89 *2*

1972Al25: Mass separated source produced using ^{209}Bi(p,7n) reaction E(p)=110 MeV; Detectors: Ge(Li), Si(Li); Measured: γ-ray singles; γγ coin; α(K)exp, Eγ, Iγ.

Others: 1969Al10, 1969Ho37, 1970DaZM, 1970Jo26.

1976Ko13 reports on ε decay of the J^π=13/2$^+$ isomer in ^{203}Po. However, the reported daughter levels and gammas are not associated with ^{203}Bi, and hence, it is concluded by the evaluator that these results are unreliable.

^{203}Bi Levels

E(level)†	J^π‡	$T_{1/2}$‡	Comments
0#	9/2$^-$		
883.39@ *19*	11/2$^-$		
893.54@ *8*	5/2$^-$		
908.72@ *7*	7/2$^-$		
1090.98& *7*	7/2$^-$		
1098.21a *9*	1/2$^+$	305 ms *5*	
1123.72 *8*	(7/2)$^-$		
1277.18 *19*	(7/2)$^-$		
1312.97b *9*	3/2$^+$	410 ps *30*	$T_{1/2}$: From 175ce(K)−215ce(K)(Δt) in 1986Be07.
1352.84 *8*	7/2$^-$		
1488.14c *10*	5/2$^+$		
1609.82 *13*	(5/2)$^-$		
2135.88 *10*	(3/2,5/2)$^+$		
2231.16 *11*	(3/2,5/2)$^+$		
2287.06? *12*	(3/2,5/2$^+$)		
2566.72? *14*	(3/2$^-$,5/2,7/2)		
2689.45? *10*	(3/2$^-$,5/2,7/2)		
2752.14 *14*	(3/2,5/2,7/2)		
3130.52 *17*	(3/2,5/2$^+$)		

† From a least-squares fit to Eγ.
‡ From Adopted Levels, unless otherwise stated.
# Configuration=π($h^{+1}_{9/2}$).
@ Configuration=π($h^{+1}_{9/2}$)⊗2$^+$.
& Configuration=π($f^{+1}_{7/2}$).
a Configuration=π($s^{+1}_{1/2}$).
b Configuration=π($d^{+1}_{3/2}$).
c Configuration=π($d^{+1}_{5/2}$).

ε,$β^+$ radiations

E(decay)	E(level)	Iβ+ †	Iε†	Log *ft*	I(ε+β+)†	Comments
(1083 *14*)	3130.52		1.98 *20*	6.64 *5*	1.98 *20*	εK=0.7868 *4*; εL=0.1598 *3*; εM+=0.05340 *11*
(1462 *14*)	2752.14		0.93 *12*	7.25 *6*	0.93 *12*	εK=0.7932 *2*; εL=0.1549 *2*; εM+=0.05148 *6*
(1525‡ *14*)	2689.45?	0.00118 *21*	1.92 *23*	6.97 *6*	1.92 *23*	av Eβ=249.0 *68*; εK=0.7938 *2*; εL=0.1544 *2*; εM+=0.05125 *6*
(1647‡ *14*)	2566.72?	0.0024 *4*	1.59 *23*	7.12 *7*	1.59 *23*	av Eβ=303.8 *67*; εK=0.7944; εL=0.1533 *2*;

Continued on next page (footnotes at end of table)

^{203}Po ε decay 1972Al25 (continued)

ε,β+ radiations (continued)

E(decay)	E(level)	Iβ+ †	Iε†	Log *ft*	I(ε+β+)†	Comments
						εM+=0.05083 *5*
(1927‡ *14*)	2287.06?	0.0080 *11*	1.31 *16*	7.35 *6*	1.32 *16*	av Eβ=427.1 *68*; εK=0.7931 *2*; εL=0.1509 *2*; εM+=0.04994 *5*
(1983 *14*)	2231.16	0.037 *3*	4.9 *3*	6.80 *3*	4.9 *3*	av Eβ=451.6 *66*; εK=0.7923 *3*; εL=0.1504 *2*; εM+=0.04975 *5*
(2078 *14*)	2135.88	0.099 *7*	9.4 *5*	6.560 *25*	9.5 *5*	av Eβ=493.3 *66*; εK=0.7906 *4*; εL=0.1495 *2*; εM+=0.04943 *6*
(2604 *14*)	1609.82	0.086 *8*	2.07 *17*	7.42 *4*	2.16 *18*	av Eβ=723.3 *66*; εK=0.7696 *9*; εL=0.14339 *22*; εM+=0.04729 *8*
(2726 *14*)	1488.14	0.28 *5*	5.3 *10*	7.05 *8*	5.6 *10*	av Eβ=776.7 *66*; εK=0.7619 *11*; εL=0.14158 *24*; εM+=0.04667 *8*
(2861 *14*)	1352.84	0.18 *4*	2.7 *6*	7.39 *9*	2.9 *6*	av Eβ=836.1 *66*; εK=0.7520 *12*; εL=0.1394 *3*; εM+=0.04592 *9*
(2901 *14*)	1312.97	0.59 *13*	8.2 *18*	6.92 *10*	8.8 *19*	av Eβ=853.6 *66*; εK=0.7488 *13*; εL=0.1387 *3*; εM+=0.04569 *9*
(2937 *14*)	1277.18	0.26 *12*	3.4 *16*	7.31 *20*	3.7 *17*	av Eβ=869.4 *66*; εK=0.7459 *13*; εL=0.1380 *3*; εM+=0.04548 *9*
(3090 *14*)	1123.72	1.76 *15*	18.2 *15*	6.63 *4*	20.0 *16*	av Eβ=936.9 *67*; εK=0.7323 *15*; εL=0.1352 *3*; εM+=0.04451 *10*
(3116 *14*)	1098.21	0.1 *1*	5 *3*	8.8[1u] *3*	5 *3*	av Eβ=936.2 *63*; εK=0.7711 *5*; εL=0.14968 *17*; εM+=0.04970 *6*
(3123 *14*)	1090.98	1.42 *20*	14.0 *20*	6.75 *7*	15.4 *22*	av Eβ=951.3 *67*; εK=0.7292 *15*; εL=0.1345 *3*; εM+=0.04430 *10*
(3305 *14*)	908.72	1.0 *3*	8 *3*	7.05 *15*	9.0 *30*	av Eβ=1031.8 *67*; εK=0.7106 *17*; εL=0.1308 *4*; εM+=0.04303 *11*
(3320 *14*)	893.54	0.40 *19*	3.0 *14*	7.47 *21*	3.4 *16*	av Eβ=1038.6 *67*; εK=0.7090 *17*; εL=0.1304 *4*; εM+=0.04292 *11*

† Absolute intensity per 100 decays.
‡ Existence of this branch is questionable.

^{203}Po ε decay 1972Al25 (continued)

γ(^{203}Bi)

Iγ normalization: Using ΣI(γ+ce)(to g.s.)=100% and by assuming that there is no direct feeding to the g.s.

E_γ †	I_γ †a	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	δ‡	α&	Comments
x140.2# 2	0.5 2								%Iγ=0.28 11
175.2 1	5.4 5	1488.14	5/2+	1312.97	3/2+	M1(+E2)	0.2 2	2.02 14	%Iγ=2.97 28 α(K)=1.63 15; α(L)=0.296 9; α(M)=0.070 3 α(N)=0.0179 8; α(O)=0.00365 12; α(P)=0.000427 9 Mult.,δ: α(K)exp=1.9 2. Others: α(K)exp=1.6 1, K/L=5 (1969Al10).
182.3 1	0.2 1	1090.98	7/2−	908.72	7/2−	M1		1.85	%Iγ=0.11 5 α(K)=1.506 22; α(L)=0.262 4; α(M)=0.0617 9 α(N)=0.01579 23; α(O)=0.00323 5; α(P)=0.000384 6 Mult.: α(K)exp=1.9 2 (1972Al25); α(K)exp=1.8 3 (1969Al10).
186.5 5	≤4.9	1277.18	(7/2)−	1090.98	7/2−	M1(+E2)	<1.5	1.3 4	%Iγ≤2.69 α(K)=1.0 5; α(L)=0.258 13; α(M)=0.063 6 α(N)=0.0162 15; α(O)=0.00318 18; α(P)=0.00033 3 Eγ,Iγ,Mult.,δ: From adopted gammas. Eγ was not observed in ^{203}Po ε decay.
189.5 1	7.0 6	1098.21	1/2+	908.72	7/2−	E3		5.63	%Iγ=3.84 34 α(K)=0.473 7; α(L)=3.79 6; α(M)=1.050 15 α(N)=0.270 4; α(O)=0.0501 8; α(P)=0.00397 6 Mult.: α(K)exp=0.49 5 (1972Al25); α(K)exp=0.47 4 (1969Al10).
197.4 2	1.0 3	1090.98	7/2−	893.54	5/2−	M1+E2	−0.3	1.396	%Iγ=0.55 17 α(K)=1.120 16; α(L)=0.211 3; α(M)=0.0500 8 α(N)=0.01279 19; α(O)=0.00259 4; α(P)=0.000300 5 Mult.: α(K)exp=1.5 5(1972Al25); α(K)exp=1.4 1 (1969Al10). δ: From adopted gammas.
204.7 1	0.9 3	1098.21	1/2+	893.54	5/2−	M2+E3	3.4 4	4.04 8	%Iγ=0.49 16 α(K)=0.74 9; α(L)=2.43 5; α(M)=0.668 12 α(N)=0.171 3; α(O)=0.0320 6; α(P)=0.00260 4 Mult.,δ: α(K)exp=0.8 3 (1972Al25); α(K)exp=0.75 6, K/L=0.3 (1969Al10).
214.8 1	26 2	1123.72	(7/2)−	908.72	7/2−	M1+E2	3.9 1	0.401 7	%Iγ=14.3 11 α(K)=0.193 4; α(L)=0.1557 22; α(M)=0.0405 6 α(N)=0.01032 15; α(O)=0.00194 3; α(P)=0.0001653 24 Mult.,δ: α(K)exp=0.21 2 (1972Al25); α(K)exp=0.18 2, K/L=1.2 (1969Al10).
214.8 1	26 2	1312.97	3/2+	1098.21	1/2+	M1+E2	3.6 +10−6	0.409 24	%Iγ=14.3 11 α(K)=0.201 24; α(L)=0.1558 23; α(M)=0.0405 6 α(N)=0.01032 15; α(O)=0.00194 3; α(P)=0.000166 4 Mult.,δ: α(K)exp=0.21 2. Others: α(K)exp=0.18 2, K/L=1.2 (1969Al10).
240.4 5	0.85 9	1123.72	(7/2)−	883.39	11/2−	(E2)		0.241	%Iγ=0.47 5

$^{203}_{83}Bi_{120}$-3

^{203}Po ε decay 1972Al25 (continued)

γ(^{203}Bi) (continued)

E_γ[†]	I_γ[†a]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]	α[&]	Comments
									α(K)=0.1101 *17*; α(L)=0.0975 *16*; α(M)=0.0255 *5* α(N)=0.00648 *11*; α(O)=0.001217 *20*; α(P)=0.0001027 *17* E_γ,I_γ,Mult.: From adopted gammas. Eγ was not observed in ^{203}Po ε decay.
261.8 *1*	2.1 *7*	1352.84	7/2$^-$	1090.98	7/2$^-$	M1+E2	1.6 *3*	0.32 *5*	%Iγ=1.2 *4* α(K)=0.22 *5*; α(L)=0.077 *3*; α(M)=0.0192 *5* α(N)=0.00491 *13*; α(O)=0.00095 *3*; α(P)=9.2×10^{-5} *6* Mult.,δ: From adopted gammas.
[x]336.9[@] *4*	8[@] *3*								%Iγ=4.4 *16*
389.9 *2*	2.0 *2*	1488.14	5/2$^+$	1098.21	1/2$^+$	E2		0.0575	%Iγ=1.10 *11* α(K)=0.0366 *6*; α(L)=0.01575 *23*; α(M)=0.00400 *6* α(N)=0.001020 *15*; α(O)=0.000196 *3*; α(P)=1.83×10^{-5} *3* Mult.: α(K)exp=0.048 *11*. Others: α(K)exp=0.034 *11* (1969Al10).
419.3 *1*	4.4 *4*	1312.97	3/2$^+$	893.54	5/2$^-$	E1		0.01439	%Iγ=2.42 *22* α(K)=0.01183 *17*; α(L)=0.00196 *3*; α(M)=0.000457 *7* α(N)=0.0001160 *17*; α(O)=2.33×10^{-5} *4*; α(P)=2.63×10^{-6} *4* Mult.: α(K)exp≤0.012. Others: α(K)exp=0.008 *5* (1969Al10).
[x]443.4 *3*	0.5 *2*					(M1)		0.1614	%Iγ=0.27 *11* α(K)=0.1319 *19*; α(L)=0.0226 *4*; α(M)=0.00529 *8* α(N)=0.001354 *20*; α(O)=0.000277 *4*; α(P)=3.30×10^{-5} *5* Mult.: α(K)exp=0.10 *6*.
486.1 *1*	3.8 *3*	1609.82	(5/2)$^-$	1123.72	(7/2)$^-$	E2		0.0329	%Iγ=2.09 *17* α(K)=0.0228 *4*; α(L)=0.00761 *11*; α(M)=0.00191 *3* α(N)=0.000486 *7*; α(O)=9.43×10^{-5} *14*; α(P)=9.24×10^{-6} *13* E_γ: Placement from 1982Lo14. Mult.: α(K)exp=0.029 *8*. Others: α(K)exp=0.022 *6* (1969Al10).
[x]512.5[@] *3*	20[@] *3*								%Iγ=11.0 *17*
647.7 *1*	3.7 *3*	2135.88	(3/2,5/2)$^+$	1488.14	5/2$^+$	M1(+E2)	<0.5	0.055 *5*	%Iγ=2.03 *17* α(K)=0.045 *4*; α(L)=0.0077 *5*; α(M)=0.00181 *12* α(N)=0.00046 *3*; α(O)=9.5×10^{-5} *7*; α(P)=1.12×10^{-5} *8* Mult.,δ: α(K)exp=0.051 *8*. Others: α(K)exp=0.04 *1* (1969Al10).
743.0 *1*	1.1 *2*	2231.16	(3/2,5/2)$^+$	1488.14	5/2$^+$	M1(+E2)	<1.9	0.030 *12*	%Iγ=0.60 *11* α(K)=0.024 *10*; α(L)=0.0044 *14*; α(M)=0.0010 *3* α(N)=0.00026 *8*; α(O)=5.4×10^{-5} *17*; α(P)=6.3×10^{-6} *22* Mult.,δ: α(K)exp=0.033 *18*.
[x]779.0 *1*	1.1 *2*								%Iγ=0.60 *11*
799.0 *1*	≈1.1	2287.06?	(3/2,5/2$^+$)	1488.14	5/2$^+$				%Iγ≈0.604 E_γ: From Figure 4 of 1972Al25. I_γ: Estimated by the evaluator from Figure 4 of 1972Al25, compared to Iγ(743.0γ)=1.1.
822.9 *1*	4.3 *3*	2135.88	(3/2,5/2)$^+$	1312.97	3/2$^+$	M1(+E2)	<1.2	0.025 *7*	%Iγ=2.36 *17* α(K)=0.021 *6*; α(L)=0.0036 *8*; α(M)=0.00085 *18*

$^{203}_{83}Bi_{120}$-4

^{203}Po ε decay 1972Al25 (continued)

γ(^{203}Bi) (continued)

E_γ [†]	I_γ [†a]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]	α[&]	Comments
									α(N)=0.00022 *5*; α(O)=4.4×10^{-5} *10*; α(P)=5.2×10^{-6} *12* Mult.,δ: α(K)exp=0.023 *10*.
883.4 *2*	3.9 *18*	883.39	11/2$^-$	0	9/2$^-$				%Iγ=2.1 *10* E_γ: From adopted gammas. Eγ=883.5 keV *10* in 1969Ho37. I_γ: From Iγ(883.4γ)/Iγ(1091.9γ)=0.11 *5* in 1969Ho37 and Iγ(1091.9γ)=35 *2* in 1972Al25.
893.5 *1*	34 *2*	893.54	5/2$^-$	0	9/2$^-$	E2		0.00873	%Iγ=18.7 *9* α(K)=0.00684 *10*; α(L)=0.001434 *20*; α(M)=0.000345 *5* α(N)=8.80×10^{-5} *13*; α(O)=1.758×10^{-5} *25*; α(P)=1.93×10^{-6} *3* Mult.: α(K)exp=0.0076 *20* (1972Al25).
908.6 *1*	100	908.72	7/2$^-$	0	9/2$^-$	M1+E2	0.96 *20*	0.0169 *19*	%Iγ=54.9 *10* α(K)=0.0137 *16*; α(L)=0.00242 *23*; α(M)=0.00057 *6* α(N)=0.000146 *14*; α(O)=3.0×10^{-5} *3*; α(P)=3.5×10^{-6} *4* Mult.,δ: α(K)exp=0.017 *2* (1972Al25) and α(K)exp=0.013 *1*, K/L=5 (1969Al10).
918.1 *1*	1.5 *2*	2231.16	(3/2,5/2)$^+$	1312.97	3/2$^+$	[M1,E2]		0.0240	%Iγ=0.82 *11* α(K)=0.0197 *3*; α(L)=0.00329 *5*; α(M)=0.000770 *11* α(N)=0.000197 *3*; α(O)=4.03×10^{-5} *6*; α(P)=4.81×10^{-6} *7*
[x]955.3 *4*	0.6 *1*								%Iγ=0.33 *6*
973.9 *2*	0.9 *2*	2287.06?	(3/2,5/2$^+$)	1312.97	3/2$^+$				%Iγ=0.49 *11*
[x]1026.4[@] *4*	18[@] *4*								%Iγ=9.9 *22*
1037.7 *4*	0.5 *2*	2135.88	(3/2,5/2)$^+$	1098.21	1/2$^+$	[M1,E2]		0.01748	%Iγ=0.27 *11* α(K)=0.01435 *21*; α(L)=0.00239 *4*; α(M)=0.000560 *8* α(N)=0.0001431 *20*; α(O)=2.93×10^{-5} *5*; α(P)=3.50×10^{-6} *5*
1090.9 *1*	35 *2*	1090.98	7/2$^-$	0	9/2$^-$	M1+E2	0.51 *22*	0.0134 *14*	%Iγ=19.2 *9* α(K)=0.0110 *12*; α(L)=0.00186 *17*; α(M)=0.00043 *4* α(N)=0.000111 *10*; α(O)=2.27×10^{-5} *21*; α(P)=2.7×10^{-6} *3* Mult.,δ: from α(K)exp=0.011 *1* (1969Al10). Other: α(K)exp=0.0019 *6* (1972Al25).
[x]1096.0 *5*	1.4 *2*								%Iγ=0.77 *11*
1098.1[b]	<0.007	1098.21	1/2$^+$	0	9/2$^-$	[M4]		0.1210	%Iγ<0.00384 α(K)=0.0905 *13*; α(L)=0.0230 *4*; α(M)=0.00570 *8* α(N)=0.001471 *21*; α(O)=0.000297 *5*; α(P)=3.35×10^{-5} *5* E_γ,I_γ: From adopted gammas. Not seen in ^{203}Po ε decay.
1123.9 *1*	2.9 *3*	1123.72	(7/2)$^-$	0	9/2$^-$	M1+E2	3.6 *8*	0.0062 *4*	%Iγ=1.59 *16* α(K)=0.0050 *3*; α(L)=0.00093 *5*; α(M)=0.000220 *11* α(N)=5.6×10^{-5} *3*; α(O)=1.13×10^{-5} *6*; α(P)=1.29×10^{-6} *8*; α(IPF)=4.05×10^{-7} *16* Mult.,δ: From adopted gammas.
1133.1 *2*	1.0 *2*	2231.16	(3/2,5/2)$^+$	1098.21	1/2$^+$	[M1,E2]		0.01394	%Iγ=0.55 *11* α(K)=0.01145 *16*; α(L)=0.00191 *3*; α(M)=0.000446 *7* α(N)=0.0001139 *16*; α(O)=2.33×10^{-5} *4*; α(P)=2.79×10^{-6} *4*; α(IPF)=1.031×10^{-6} *17*

$^{203}_{83}Bi_{120}$-5

^{203}Po ε decay 1972Al25 (continued)

γ(^{203}Bi) (continued)

E_γ[†]	I_γ[†a]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]	α[&]	Comments
[x]1138.1[#] 4	0.3 1								%Iγ=0.16 5
[x]1150.1[#] 4	0.4 2								%Iγ=0.22 11
[x]1178.2 2	0.6 2								%Iγ=0.33 11
1188.7[#] 2	0.4 2	2287.06?	(3/2,5/2$^+$)	1098.21	1/2$^+$				%Iγ=0.22 11
1201.6[#] 4	0.4 2	2689.45?	(3/2$^-$,5/2,7/2)	1488.14	5/2$^+$				%Iγ=0.22 11
1242.4 1	8.4 5	2135.88	(3/2,5/2)$^+$	893.54	5/2$^-$	E1		0.00181	%Iγ=4.61 29 α(K)=0.001484 21; α(L)=0.000225 4; α(M)=5.21×10^{-5} 8 α(N)=1.326×10^{-5} 19; α(O)=2.70×10^{-6} 4; α(P)=3.20×10^{-7} 5; α(IPF)=2.91×10^{-5} 4 Mult.: α(K)exp=0.0019 6.
1264.0 1	1.7 2	2752.14	(3/2,5/2,7/2)	1488.14	5/2$^+$				%Iγ=0.93 11
1277.1 2	1.1 2	1277.18	(7/2)$^-$	0	9/2$^-$	M1(+E2)	<1.6	0.0082 22	%Iγ=0.60 11 α(K)=0.0067 18; α(L)=0.0011 3; α(M)=0.00026 7 α(N)=6.7×10^{-5} 17; α(O)=1.4×10^{-5} 4; α(P)=1.6×10^{-6} 5; α(IPF)=1.9×10^{-5} 4 E_γ: Placement from 1982Lo14. Mult.,δ: From adopted gammas.
[x]1307.2[#] 4	0.5 4								%Iγ=0.27 22
[x]1314.5 3	0.9 3								%Iγ=0.49 16
1337.9 2	5.3 4	2231.16	(3/2,5/2)$^+$	893.54	5/2$^-$	[E1]		1.63×10^{-3}	%Iγ=2.91 23 α(K)=0.001306 19; α(L)=0.000198 3; α(M)=4.57×10^{-5} 7 α(N)=1.163×10^{-5} 17; α(O)=2.37×10^{-6} 4; α(P)=2.81×10^{-7} 4; α(IPF)=6.95×10^{-5} 10
1352.9 1	2.5 3	1352.84	7/2$^-$	0	9/2$^-$	M1		0.00890	%Iγ=1.37 16 α(K)=0.00728 11; α(L)=0.001205 17; α(M)=0.000282 4 α(N)=7.20×10^{-5} 10; α(O)=1.473×10^{-5} 21; α(P)=1.764×10^{-6} 25; α(IPF)=4.48×10^{-5} 7 Mult.: From adopted gammas.
[x]1416.7[#] 8	0.7 4								%Iγ=0.38 22
[x]1419.5[#] 8	0.3 2								%Iγ=0.16 11
[x]1466.0[#] 5	0.7 3								%Iγ=0.38 16
1475.7 2	1.1 3	2566.72?	(3/2$^-$,5/2,7/2)	1090.98	7/2$^-$				%Iγ=0.60 17
[x]1490.3[#] 4	0.8 4								%Iγ=0.44 22
[x]1511.4 3	0.8 2								%Iγ=0.44 11
[x]1552.2 4	0.8 3								%Iγ=0.44 16
[x]1568.5 4	1.0 3								%Iγ=0.55 17
1598.5[#] 3	0.9 2	2689.45?	(3/2$^-$,5/2,7/2)	1090.98	7/2$^-$				%Iγ=0.49 11
[x]1601.7[#] 5	0.4 1								%Iγ=0.22 6
[x]1615.3[#] 6	0.4 1								%Iγ=0.22 6
[x]1622.2 3	0.9 2								%Iγ=0.49 11

$^{203}_{83}Bi_{120}$-6

γ(^{203}Bi) (continued)

E_γ †	I_γ †a	E_i(level)	J_i^π	E_f	J_f^π	Comments
1658.1 *2*	0.9 *2*	2566.72?	(3/2$^-$,5/2,7/2)	908.72	7/2$^-$	%Iγ=0.49 *11*
x1666.3# *5*	0.4 *1*					%Iγ=0.22 *6*
1673.0 *3*	0.9 *2*	2566.72?	(3/2$^-$,5/2,7/2)	893.54	5/2$^-$	%Iγ=0.49 *11*
x1716.2# *6*	0.6 *2*					%Iγ=0.33 *11*
x1758.3# *4*	0.2 *2*					%Iγ=0.11 *11*
1780.7 *1*	1.2 *2*	2689.45?	(3/2$^-$,5/2,7/2)	908.72	7/2$^-$	%Iγ=0.66 *11*
1795.9 *2*	1.0 *2*	2689.45?	(3/2$^-$,5/2,7/2)	893.54	5/2$^-$	%Iγ=0.55 *11*
x1804.9# *4*	0.4 *1*					%Iγ=0.22 *6*
1817.5 *3*	1.9 *2*	3130.52	(3/2,5/2$^+$)	1312.97	3/2$^+$	%Iγ=1.04 *11*
x1830.1# *7*	0.5 *1*					%Iγ=0.27 *6*
x1909.8# *4*	0.1 *1*					%Iγ=0.05 *5*
x1914.2# *3*	0.2 *1*					%Iγ=0.11 *5*
x1930.8# *5*	1.6 *4*					%Iγ=0.88 *22*
x1936.2# *6*	0.3 *1*					%Iγ=0.16 *5*
x1960.4# *5*	0.2 *1*					%Iγ=0.11 *5*
x1970.7# *4*	0.3 *1*					%Iγ=0.16 *5*
x1991.0# *3*	0.2 *1*					%Iγ=0.11 *5*
x2029.5 *3*	1.0 *2*					%Iγ=0.55 *11*
2032.5 *3*	0.7 *2*	3130.52	(3/2,5/2$^+$)	1098.21	1/2$^+$	%Iγ=0.38 *11*
x2086.8# *3*	0.4 *2*					%Iγ=0.22 *11*
x2189.4# *7*	0.2 *1*					%Iγ=0.11 *5*
x2197.7# *3*	0.4 *1*					%Iγ=0.22 *6*
2236.9 *2*	1.0 *2*	3130.52	(3/2,5/2$^+$)	893.54	5/2$^-$	%Iγ=0.55 *11*
x2373.7# *3*	0.4 *2*					%Iγ=0.22 *11*
x2477.7# *6*	0.2 *1*					%Iγ=0.11 *5*
x2529.5# *4*	0.3 *1*					%Iγ=0.16 *5*
x2665.6# *6*	0.1 *1*					%Iγ=0.05 *5*
x2728.8# *4*	0.2 *1*					%Iγ=0.11 *5*
x2916.4# *4*	0.4 *1*					%Iγ=0.22 *6*
x2952.2# *4*	0.3 *1*					%Iγ=0.16 *5*

† From 1972Al25, unless otherwise stated.
‡ From α(K)exp and K/Lexp in 1972Al25 and 1969Al10, unless otherwise stated.
# Weak transitions tentatively assigned to ^{203}Bi (1972Al25).
@ Reported only by 1970Jo26. The assignment to ^{203}Bi is tentative.

$^{203}_{83}Bi_{120}$-7

γ(^{203}Bi) (continued)

& Additional information 1.

a For absolute intensity per 100 decays, multiply by 0.549 *10*.

b Placement of transition in the level scheme is uncertain.

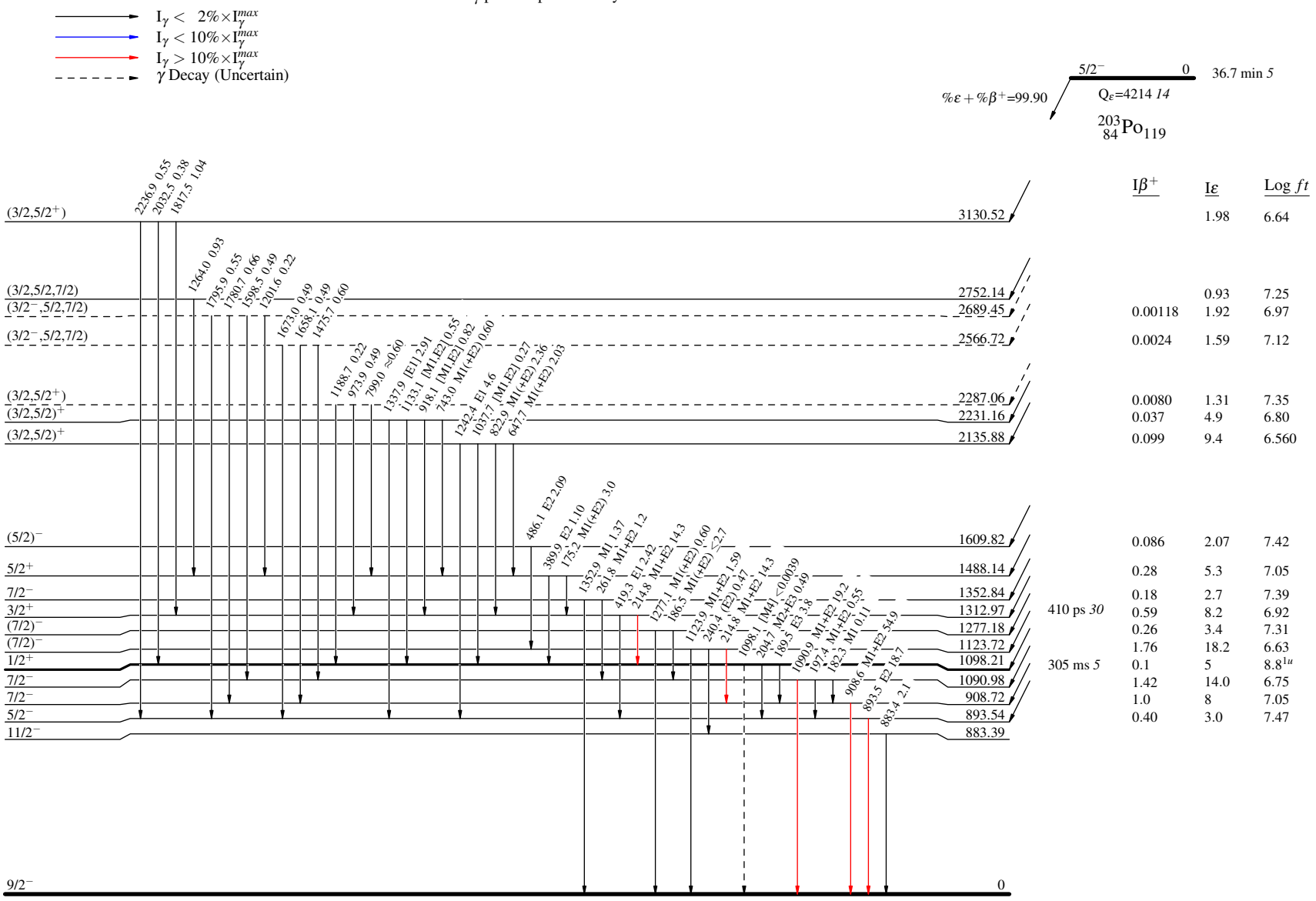
x γ ray not placed in level scheme.

$^{203}_{83}$Bi$_{120}$-8

^{203}Po ε decay 1972Al25

Decay Scheme

Intensities: I_γ per 100 parent decays



$^{203}_{83}Bi_{120}$

$^{203}_{83}Bi_{120}$-9