Adopted Levels, Gammas

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

Q(β^-)=−3262 *14*; S(n)=6917 *8*; S(p)=6095 *7*; Q(α)=2335 *7* 2021Wa16

^{203}Pb Levels

Cross Reference (XREF) Flags

A	^{203}Pb IT decay (6.21 s)	E	^{202}Hg(α,3nγ)	I	^{205}Pb(p,t)
B	^{203}Pb IT decay (480 ms)	F	^{204}Hg(α,5nγ)	J	^{209}Bi(π^-,6nγ)
C	^{203}Bi ε decay	G	^{197}Au(^{209}Bi,Xγ)		
D	^{207}Po α decay	H	^{204}Pb(d,t)		

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0	5/2$^-$	51.92 h *3*	ABCDEF HIJ	%ε=100 μ=+0.6841 *6*; Q=+0.10 *5* J$^\pi$: L(p,t)=0; systematics of neighboring ^{205}Po (N=121) isotope; μ. T$_{1/2}$: Weighted average of 51.88 h *2* (1980Ho17), 51.92 h *4* (2014Un01, 2002Un02,1982HoZJ), 51.99 h *3* (average of 51.94 h *1*, 52.01 h *4* and 52.02 h *6* in 2001Li17) and 52.02 h *5* (1971Ch54). Others: 52.1 h *2* (1961Pe12), 52.0 h *5* (1941Fa04), 52 h *1* (1954Pr04) and 52.1 h *2* (1958Ba04). μ: Recommended in 2019StZV. μ=+0.6864 *5* in 1986An06 using the measurement by 1983Th03 and the laser induced fluorescence technique. Q: From 1986An06, 2016St14, based on the measurement by 1983Th03 using the laser-induced fluorescence technique. configuration: Dominant $\nu(f_{5/2}^{-1})$. δ<r^2>(203,208)=−0.3045 fm^2 *25* (1986An06).
126.5 *3*	1/2$^-$	75 ns *3*	C E HIJ	XREF: H(120). J$^\pi$: L(p,t)=2; 126.5γ E2 to 5/2$^-$. T$_{1/2}$: From 126γ(t) in 1961Be29 (^{203}Bi ε decay). Superseded T$_{1/2}$=55 ns *5* in 1960Be19 (^{203}Bi ε decay). configuration: Dominant $\nu(p_{1/2}^{-1})$.
186.6 *3*	3/2$^-$		C E HI	XREF: H(190). J$^\pi$: 60.13γ M1 to 1/2$^-$; 186.6γ M1(+E2) to 5/2$^-$. configuration: Dominant $\nu(p_{3/2}^{-1})$.
595.1# *5*	3/2$^-$		C E I	J$^\pi$: 468.8γ M1+E2 to 1/2$^-$; 595.3γ E2+M1 to 1/2$^-$. L(p,t)=2.
775# *5*	(1/2)$^-$		I	J$^\pi$: L(p,t)=2.
820.26# *22*	7/2$^-$		ABC E I	XREF: I(819). J$^\pi$: 633.8γ to 3/2$^-$; 820.2γ E2+M1 to 5/2$^-$. L(p,t)=2.
825.11 *10*	13/2$^+$	6.21 s *8*	ABC EF HIJ	%IT=100 XREF: H(820)I(834). J$^\pi$: 825.2γ M4 to 5/2$^-$. T$_{1/2}$: Weighted average of 6.7 s *4* (1955Fi30), 6.5 s *5* (1956St05), 6.09 s *10* (1957As65), 7.1 s *5* (1958Fr53), 6.4 s *2* (1977Li04). configuration: Dominant $\nu(i_{13/2}^{-1})$.
866.4# *5*	5/2$^-$		C E IJ	XREF: I(864). J$^\pi$: 271.1γ E2+M1 to 3/2$^-$; 740.1γ E2 to 1/2$^-$; 866.5γ E2(+M1) to 5/2$^-$. L(p,t)=2.
896.9# *3*	9/2$^-$		C E IJ	XREF: I(895). J$^\pi$: 896.9γ E2 to 5/2$^-$. L(p,t)=2.
909? *10*			I	
933.1 *3*	(5/2)$^-$		C E IJ	XREF: I(930). J$^\pi$: 746.45γ M1+E2 to 3/2$^-$; 933.4γ M1 to 5/2$^-$.

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Adopted Levels, Gammas (continued)

^{203}Pb Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
				configuration: Admixture of $\nu(p^{-1}_{1/2})\otimes 2^+$ and $\nu(p^{-1}_{3/2})\otimes 2^+$.
969 *10*			I	
1033.76 *24*	7/2⁻		C HI	XREF: H(1030)I(1032). Jπ: 136.8γ M1+E2 to 9/2⁻; 847.2γ E2 to 3/2⁻.
1084 *7*			I	L(p,t)=(2).
1161.0 *4*	(7/2)⁻		C E I	XREF: I(1160). Jπ: 264.2γ M1+E2 to 9/2⁻; 974.3γ to 3/2⁻; L(p,t)=2.
1177 *10*			I	
1198.5 *4*	9/2⁻		C IJ	XREF: I(1195). Jπ: 378.0γ M1 to 7/2⁻; 1198.6γ E2 to 5/2⁻.
1203.0 *5*	(7/2)⁻		C IJ	XREF: I(1216). Jπ: 306.1γ to 9/2⁻; 1203.1γ M1(+E2) to 5/2⁻.
1262? *7*			I	
1536.5 *4*	(7/2)⁻		C h	XREF: h(1560). Jπ: 375.1γ M1+E2 to (7/2)⁻; 1350.3γ to 3/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
1547.6 *3*	9/2⁺		C	Jπ: 513.5γ E1 to 7/2⁻, 722.4γ E2 to 13/2⁺.
1560 *20*	7/2⁻		h	E(level),Jπ: From ^{204}Pb(d,t). configuration: Dominant $\nu(f^{-1}_{7/2})$.
1592.8 *6*	(7/2)⁻		C	Jπ: 558.9γ M1 to 7/2⁻; 1592.7γ M1+E2 to 5/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
1641.5@ *4*	9/2⁺		C E	Jπ: 816.3γ E2 to 13/2⁺.
1663.62@ *14*	17/2⁺		B EF J	Jπ: 838.5γ E2 to 13/2⁺.
1682.6 *5*	(7/2)⁻		C	Jπ: 483.8γ to 9/2⁻; 1496.2γ to 3/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
1802.3 *4*	(7/2)⁺		C	Jπ: 869.2γ E1 to 5/2⁻; absence of transitions to J^π=3/2⁻ levels.
1894.9 *8*	(9/2⁺)		C	Jπ: 861.2γ to 7/2⁻; 1070.1γ (E2) to 13/2⁺.
1921.99& *17*	21/2⁺	42 ns *3*	B EF J	μ=−0.641 *21*; Q=0.85 *3* Jπ: 258.4γ E2 to 17/2⁺. $T_{1/2}$: From γγ(t) in ^{202}Hg(α,3nγ) (1977Sa18) using time spectrum produced by gating on the 258.2γ (below the isomer) and 239.6γ and 873.6γ (above the isomer). Other: 56 ns *1* from 258.2γ(t) and 838.3γ(t) in ^{202}Hg(α,3nγ) (1986Ja21), but this value seems to be less accurate given the possible contribution from the J^π=(25/2⁻) isomer ($T_{1/2}$=122 ns *4*). μ: using measured g-factor=−0.061 *2* in ^{202}Hg(α,3nγ) (1986Ja21,2014StZZ) with the in-beam time differential perturbed angular distribution technique. However, there is a possible contribution from the J^π=(25/2⁻) isomer ($T_{1/2}$=122 ns *4*). Q: From 2016St14, using the time-dependent perturbed angular distribution technique.
1943.82& *20*	19/2⁺		B E	Jπ: 21.8γ to 21/2⁺; 280.2γ M1 to 17/2⁺.
2034.1 *5*	(7/2)⁺		C	Jπ: 392.5γ M1+E2 to 9/2⁺; 1000.3γ E1 to 7/2⁻.
2048.6 *5*	(9/2⁺)		C	Jπ: 1223.7γ E2 to 13/2⁺; 1228.4γ to 7/2⁻.
2078.8 *5*	(11/2)⁺		C	Jπ: 531.2γ to 9/2⁺; 542.8γ to (7/2)⁻; 1253.8γ M1 to 13/2⁺.
2117.62 *22*	(19/2)⁺		B E	Jπ: 173.9γ J to J (M1) to 19/2⁺.
2161.31 *21*	(21/2)⁺		B EF J	Jπ: 239.4γ J to J M1 to 21/2⁺.
2250 *20*			H	E(level): From ^{204}Pb(d,t).
2371.8 *4*	(7/2)⁺		C	Jπ: 477.0γ to (9/2)⁺; 569.3γ M1 to (7/2)⁺; 1438.1γ (E1) to 5/2⁻.
2387.9 *4*	(9/2)⁺		C	Jπ: 746.45γ M1(+E2) to 9/2⁺; 1184.4γ to 7/2⁻; 1562.7γ to 13/2⁺.
2472.2 *5*	(9/2⁺,11/2⁻)		C	Jπ: 924.5γ to 9/2⁺; 1311.0γ to 7/2⁻; 1646.8γ to 13/2⁺.
2568.8 *5*	9/2⁺		C	Jπ: 1743.5γ to 13/2⁺; 1748.5γ E1 to 7/2⁻.
2620.0 *7*	(7/2⁺,9/2⁺)		C	Jπ: 1421.1γ to 9/2⁻; 1800.1γ (E1) to 7/2⁻.
2667.7 *3*	(7/2,9/2)⁺		C	Jπ: 633.8γ E2+M1 to (7/2)⁺; 1120.2γ (M1) to 9/2⁺; 1506.7γ E1 to

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Adopted Levels, Gammas (continued)

^{203}Pb Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
				7/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2713.3 *3*	9/2⁺		C	Jπ: 1679.6γ E1 to 7/2⁻; 1888.0γ E2 to 13/2⁺; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2748.5 *11*	(11/2⁻)		C	Jπ: 1928.2γ (E2) to 7/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2753.6 *3*	(9/2)⁺		C	Jπ: 381.7γ M1(+E2) to (7/2)⁺; 674.8γ to (11/2)⁺; 1112.0γ M1(+E2) to 9/2⁺; 1719.7γ E1 to 9/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2774.6 *6*	(7/2,9/2⁻)		C H	XREF: H(2770). Jπ: 880.0γ to (9/2⁺); 1091.7γ to (7/2)⁻; 1576.0γ to 9/2⁻; 1841.9γ to to 5/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2794.1 *5*	(9/2)⁺		C	Jπ: 406.3γ M1(+E2) to (9/2)⁺; 1246.1γ M1+E2 to 9/2⁺; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2795.77 *19*	23/2⁺		B EF J	Jπ: 634.5γ M1 to (21/2)⁺; 873.8γ M1+E2 to 21/2⁺; 678.1γ to (19/2⁺). configuration: Dominant $\nu(p^{-1}_{1/2},f^{-3}_{5/2},f^{-1}_{7/2},i^{-2}_{13/2})$ with $\nu(f^{-1}_{5/2},f^{-1}_{7/2},i^{-2}_{13/2})\otimes 2^+$ admixtures.
2821.1 *5*	(7/2,9/2)⁺		C	Jπ: 252.2γ E2+M1 to (9/2)⁺; 2000.7γ E1 to 7/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2870.5 *5*	(7/2,9/2)⁺		C	Jπ: 157.3γ to 9/2⁺; 498.5γ M1+E2 to (7/2)⁺; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
2923.3 *11*	(21/2⁻)		E	Jπ: 979.5γ D to 19/2⁺; shell-model predictions.
2923.3+x	(25/2⁻)	122 ns *4*	E	μ=−0.74 *4* Additional information 1. E(level): Based on the observed delayed component for the 979.5γ, but no direct decay to the J^π=(21/2⁻) level is observed in ^{202}Hg(α,3nγ). Jπ: Tentative assignment based on shell-model predictions. $T_{1/2}$: From 280γ(t) and 979γ(t) in ^{202}Hg(α,3nγ) (1988Ro08). μ: Using g-factor=−0.059 *3* (1988Ro08,2014StZZ) deduced using the in-beam time differential perturbed angular distribution technique. configuration: $\nu(p^{-1}_{1/2},i^{-2}_{13/2})$.
2949.12 *24*	29/2⁻	480 ms *7*	B EFG J	%IT=100 Jπ: 154.3γ E3 to 23/2⁺; 1027.0γ M4 to 21/2⁺. $T_{1/2}$: Weighted average from γ(t) for 838.7γ (475 ms *12*),258.6γ (487 ms *10*), 874.0γ (475 ms *19*), 634.2γ (466 ms *40*) and 153.4γ (471 ms *71*). This value is consistent with that deduced from γ(t) for the weak 1027.5γ (441 ms *49*), 853.8γ (535 ms *71*) and 174.0γ (458 ms *82*), as well as for the doublet 239.6γ (460 ms *110*) deduced using a two isomer fit. All data are from 1977Li04 in ^{204}Hg(α,5nγ). configuration: $\nu(f^{-1}_{5/2},i^{-2}_{13/2})$.
2964.5? *11*	(7/2,9/2,11/2⁻)		C	Jπ: 2144.2γ to 7/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
3006.6 *6*	(9/2⁺,11/2)		C	Jπ: 212.5γ to (9/2)⁺; 2181.6γ to 13/2⁺; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
3016.7 *5*	(7/2,9/2)⁻		C	Jπ: 1983.1γ M1+E2 to 7/2⁻; 2084.0γ to 5/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
3044.9 *6*	(7/2,9/2)⁺		C	Jπ: 331.3γ to 9/2⁺; 2011.4γ E1 to 7/2⁻; direct feeding in ^{203}Bi ε decay (J^π=9/2⁻).
3689.5[a] *5*	(31/2⁻)		E G	Jπ: 740.5γ M1 to 29/2⁻.
3910.3[a] *5*	(33/2⁻)		E G	Jπ: 961.0γ (E2) to 29/2⁻.
4054.7 *5*	(31/2⁻)		E G	Jπ: 1105.6γ to 29/2⁻.
4457.2 *5*	(33/2⁺)		E G	Jπ: 402.6γ E1 to (31/2⁻); 546.7γ (E1) to (33/2⁻). configuration: Configuration: $\nu(i^{-3}_{13/2})$.
5025.3 *7*	(37/2⁺)	2.5 ns *3*	E G	Jπ: 568.1γ E2 to (33/2⁺).

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Adopted Levels, Gammas (continued)

^{203}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
			$T_{1/2}$: From 568γ-1529γ(Δt) and centroid-shift method in ^{197}Au(^{209}Bi,Xγ) (2020Wa24). configuration: Probably admixture of $\nu(p^{-1}_{1/2},f^{-1}_{5/2},i^{-3}_{13/2})$ and $\nu(p^{-1}_{1/2},p^{-1}_{3/2},i^{-3}_{13/2})$.
5296.3 *13*		E	
5571.3 *13*		E	
6081.0 *9*	(39/2)	G	
6554.0 *9*	(41/2)	G	
6625.2 *10*		G	
6700.4 *10*		G	

[†] From a least-square fit to Eγ, unless otherwise stated.
[‡] From the deduced γ-ray transition multipolarities, multiple decay branches, and L(p,t) and L(d,t).
[#] Dominant configuration: $\nu(f^{-1}_{5/2})\otimes 2^+$.
[@] Dominant configuration: $\nu(i^{-1}_{13/2})\otimes 2^+$.
[&] Dominant configuration: $\nu(i^{-1}_{13/2})\otimes 4^+$.
[a] Dominant configuration: $\nu(f^{-1}_{5/2},i^{-2}_{13/2})\otimes 2^+$.

Adopted Levels, Gammas (continued)

γ(^{203}Pb)

E_i(level)	J_i^π	E_γ [†]	I_γ [†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
126.5	1/2⁻	126.5 *10*	100	0	5/2⁻	E2		2.38 *9*	B(E2)(W.u.)=0.97 *6* α(K)=0.426 *8*; α(L)=1.46 *6*; α(M)=0.385 *16* α(N)=0.097 *4*; α(O)=0.0174 *7*; α(P)=0.00073 *3* Mult.: K/L=0.17 *2*, L1/L2<0.16, L2/L3=1.41 *11* (1960St21); (L1+L2)/L3=1.5 *6* (1958No30).
186.6	3/2⁻	60.13 *5*	10.5 *19*	126.5	1/2⁻	M1		7.64	α(L)=5.84 *9*; α(M)=1.371 *20* α(N)=0.349 *5*; α(O)=0.0695 *10*; α(P)=0.00742 *11* Mult.: L1/L2=9.2 *10*, L3/L2<0.2 (1960St21).
		186.6 *5*	100 *5*	0	5/2⁻	M1(+E2)	<0.26	1.56 *5*	α(K)=1.26 *4*; α(L)=0.225 *4*; α(M)=0.0529 *10* α(N)=0.01344 *25*; α(O)=0.00267 *5*; α(P)=0.000279 *7* Mult.: α(K)exp=1.29 *12*(1976Ri10); K/L=5.8 *4*, L1/L2=8.7 *15*, L1/L3>20 (1960Be19); K/L=5.0 *15* (1958No30).
595.1	3/2⁻	468.8 *10*	48 *10*	126.5	1/2⁻	M1+E2	0.6 *4*	0.103 *23*	α(K)=0.083 *20*; α(L)=0.0151 *23*; α(M)=0.0036 *6* α(N)=0.00091 *13*; α(O)=0.00018 *3*; α(P)=1.8×10^{-5} *4* Mult.: α(K)exp=0.084 *16* (1976Ri10).
		595.3 *10*	100 *19*	0	5/2⁻	E2+M1	2.9 *3*	0.0247 *12*	α(K)=0.0189 *10*; α(L)=0.00445 *14*; α(M)=0.00108 *4* α(N)=0.000274 *9*; α(O)=5.28×10^{-5} *17*; α(P)=4.69×10^{-6} *20* Mult.: α(K)exp=0.019 *3* (1976Ri10). Other: A_2=−0.11 *5*, A_4=0.27 *8* in ^{202}Hg(α,3nγ).
820.26	7/2⁻	633.8[c] *3*	≤4.6	186.6	3/2⁻				
		820.2 *5*	100 *5*	0	5/2⁻	E2+M1	5.4 *3*	0.01053 *17*	α(K)=0.0128 *4*; α(L)=0.00329 *10* α(K)=0.00826 *14*; α(L)=0.00173 *3*; α(M)=0.000416 *7* α(N)=0.0001053 *16*; α(O)=2.05×10^{-5} *3*; α(P)=1.91×10^{-6} *3* Mult.: α(K)exp=0.0083 *9* (1976Ri10), K/L=4.5 *15* (1958No30) and K/(L1+L2)=4.9 *10* (1960St21). Other: A_2=−0.05 *7*, A_4=−0.54 *9* in ^{202}Hg(α,3nγ).
825.11	13/2⁺	(4.9 *3*)	1.32×10^{-9} *14*	820.26	7/2⁻	[E3]		7.0×10^{9} *4*	B(E3)(W.u.)=0.011 *+7−4* E_γ: From level energy difference. I_γ: From ^{203}Pb IT decay (480 ms).
		825.1[‡] *1*	100[‡] *5*	0	5/2⁻	M4		0.299	α(K)=0.216 *3*; α(L)=0.0628 *9*; α(M)=0.01586 *23* α(N)=0.00407 *6*; α(O)=0.000795 *12*; α(P)=7.35×10^{-5} *11* B(M4)(W.u.)=3.35 *5* Mult.: Other:α(K)exp and K/L γ(θ) in ^{204}Hg(α,5nγ); α(K)exp in ^{203}Pb IT decay (6.21 s).
866.4	5/2⁻	271.1 *10*	9.6 *18*	595.1	3/2⁻	E2+M1	1.7 *3*	0.26 *4*	α(K)=0.18 *3*; α(L)=0.0618 *22*; α(M)=0.0155 *5* α(N)=0.00392 *12*; α(O)=0.00074 *3*; α(P)=5.5×10^{-5} *5* Mult.: α(K)exp=0.18 *5* (1976Ri10).
		740.1 *10*	26 *6*	126.5	1/2⁻	E2		0.01222	α(K)=0.00940 *14*; α(L)=0.00214 *3*; α(M)=0.000519 *8* α(N)=0.0001314 *19*; α(O)=2.54×10^{-5} *4*; α(P)=2.28×10^{-6} *4* Mult.: α(K)exp=0.014 *7* (1976Ri10).
		866.5 *10*	100 *20*	0	5/2⁻	E2(+M1)		0.0257	α(K)=0.0211 *3*; α(L)=0.00350 *5*; α(M)=0.000817 *12* α(N)=0.000207 *3*; α(O)=4.14×10^{-5} *6*; α(P)=4.45×10^{-6} *7* Mult.: α(K)exp=0.0070 *16* (1976Ri10).

$^{203}_{82}Pb_{121}$-5

Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ[a]	α[b]	Comments
896.9	9/2⁻	896.9 *5*	100	0	5/2⁻	E2		0.00825	α(K)=0.00651 *10*; α(L)=0.001331 *19*; α(M)=0.000319 *5* α(N)=8.07×10^{-5} *12*; α(O)=1.571×10^{-5} *22*; α(P)=1.481×10^{-6} *21* Mult.: α(K)exp=0.0075 *9* (1976Ri10).
933.1	(5/2)⁻	746.45 *2*	80 *16*	186.6	3/2⁻	M1+E2	0.5 *4*	0.033 *7*	α(K)=0.027 *6*; α(L)=0.0046 *8*; α(M)=0.00107 *18* α(N)=0.00027 *5*; α(O)=5.4×10^{-5} *9*; α(P)=5.7×10^{-6} *11* Mult.: α(K)exp=0.027 *5* (1976Ri10).
		933.4 *10*	100 *20*	0	5/2⁻	M1		0.0212	α(K)=0.01746 *25*; α(L)=0.00289 *5*; α(M)=0.000673 *10* α(N)=0.0001709 *25*; α(O)=3.41×10^{-5} *5*; α(P)=3.67×10^{-6} *6* Mult.: α(K)exp=0.022 *3* (1976Ri10).
1033.76	7/2⁻	100.5 *10*	0.64 *13*	933.1	(5/2)⁻				
		136.8 *10*	2.8 *6*	896.9	9/2⁻	M1+E2	1.4 *3*	2.45 *25*	α(K)=1.3 *4*; α(L)=0.86 *7*; α(M)=0.221 *18* α(N)=0.056 *5*; α(O)=0.0102 *8*; α(P)=0.00058 *3* Mult.: α(K)exp=1.33 *23* (1976Ri10).
		847.2 *5*	96 *5*	186.6	3/2⁻	E2		0.00925	α(K)=0.00725 *11*; α(L)=0.001527 *22*; α(M)=0.000367 *6* α(N)=9.29×10^{-5} *13*; α(O)=1.80×10^{-5} *3*; α(P)=1.677×10^{-6} *24* Mult.: α(K)exp=0.0070 *16* (1976Ri10).
		1033.7 *5*	100 *5*	0	5/2⁻	M1+E2	0.58 *25*	0.0138 *16*	α(K)=0.0113 *14*; α(L)=0.00190 *20*; α(M)=0.00044 *5* α(N)=0.000113 *12*; α(O)=2.24×10^{-5} *24*; α(P)=2.4×10^{-6} *3* Mult.: α(K)exp=0.0114 *13* (1976Ri10); K/L=5.0 *10* (1958No30); K/L>4.8 (1960St21).
1161.0	(7/2)⁻	264.2 *5*	100 *5*	896.9	9/2⁻	M1+E2	0.5 *3*	0.52 *9*	α(K)=0.41 *8*; α(L)=0.080 *5*; α(M)=0.0190 *8* α(N)=0.00483 *21*; α(O)=0.00095 *6*; α(P)=9.4×10^{-5} *13* Mult.: α(K)exp=0.44 *5* (1976Ri10); K/L=5.0 *15* (1958No30); K/(L1+L2)=5.2 *5* (1960St21). Other: A_2=−0.39 *5*, A_4=0.11 *8* in ^{202}Hg(α,3nγ).
		974.3[c] *10*	1.6 *3*	186.6	3/2⁻			0.00709	α=0.00709; α(K)=0.00561 *17*; α(L)=0.00111 *4*
1198.5	9/2⁻	378.0 *10*	14 *3*	820.26	7/2⁻	M1		0.228	α(K)=0.186 *3*; α(L)=0.0317 *5*; α(M)=0.00741 *12* α(N)=0.00188 *3*; α(O)=0.000375 *6*; α(P)=4.02×10^{-5} *7* Mult.: α(K)exp=0.20 *4* (1976Ri10).
		1198.6 *10*	100 *21*	0	5/2⁻	E2		0.00471	α(K)=0.00380 *6*; α(L)=0.000691 *10*; α(M)=0.0001631 *23* α(N)=4.13×10^{-5} *6*; α(O)=8.13×10^{-6} *12*; α(P)=8.08×10^{-7} *12*; α(IPF)=3.73×10^{-6} *10* Mult.: α(K)exp=0.004 *1* (1976Ri10).
1203.0	(7/2)⁻	306.1 *10*	1.9 *4*	896.9	9/2⁻				
		1203.1 *10*	100 *19*	0	5/2⁻	M1(+E2)	0.5 *5*	0.0098 *20*	α(K)=0.0081 *17*; α(L)=0.00133 *25*; α(M)=0.00031 *6* α(N)=7.9×10^{-5} *15*; α(O)=1.6×10^{-5} *3*; α(P)=1.7×10^{-6} *4*; α(IPF)=6.7×10^{-6} *10* Mult.: α(K)exp=0.0080 *16* (1976Ri10).
1536.5	(7/2)⁻	375.1 *10*	4.7 *9*	1161.0	(7/2)⁻	M1+E2	1.7 *3*	0.105 *14*	α(K)=0.078 *13*; α(L)=0.0208 *13*; α(M)=0.0051 *3* α(N)=0.00129 *8*; α(O)=0.000247 *16*; α(P)=2.07×10^{-5} *23* Mult.: α(K)exp=0.078 *16* (1976Ri10).
		1350.3 *10*	1.5 *3*	186.6	3/2⁻				

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. &	δ a	α b	Comments
1536.5	(7/2)$^-$	1536.5 *5*	100 *5*	0	5/2$^-$	M1(+E2)	0.7 *7*	0.0051 *11*	α(K)=0.0041 *9*; α(L)=0.00067 *13*; α(M)=0.00016 *3* α(N)=4.0×10^{-5} *8*; α(O)=7.9×10^{-6} *16*; α(P)=8.5×10^{-7} *18*; α(IPF)=0.000111 *18* Mult.: α(K)exp=0.0041 *8* (1976Ri10); K/L=6.0 *15* (1958No30).
1547.6	9/2$^+$	349.1 *10*	2.7 *6*	1198.5	9/2$^-$				
		513.5 *10*	<21	1033.76	7/2$^-$	E1		0.00905	α(K)=0.00748 *11*; α(L)=0.001200 *18*; α(M)=0.000279 *4* α(N)=7.04×10^{-5} *11*; α(O)=1.382×10^{-5} *21*; α(P)=1.359×10^{-6} *20* Mult.: α(K)exp=0.014 *3* (1976Ri10).
		651.5 *10*	0.93 *19*	896.9	9/2$^-$				
		722.4 *5*	100 *5*	825.11	13/2$^+$	E2		0.01285	α(K)=0.00985 *14*; α(L)=0.00228 *4*; α(M)=0.000553 *8* α(N)=0.0001401 *20*; α(O)=2.70×10^{-5} *4*; α(P)=2.41×10^{-6} *4* Mult.: K/L=3.3 *10* (1958No30).
1592.8	(7/2)$^-$	558.9 *10*	15 *3*	1033.76	7/2$^-$	M1		0.0805	α(K)=0.0660 *10*; α(L)=0.01108 *17*; α(M)=0.00259 *4* α(N)=0.000658 *10*; α(O)=0.0001312 *20*; α(P)=1.407×10^{-5} *21* Mult.: α(K)exp=0.083 *21* (1976Ri10).
		772.7 *10*	19 *4*	820.26	7/2$^-$				
		1592.7 *10*	100 *19*	0	5/2$^-$	M1+E2	1.3 *8*	0.0039 *12*	α(K)=0.0031 *10*; α(L)=0.00051 *15*; α(M)=0.00012 *4* α(N)=3.0×10^{-5} *9*; α(O)=6.0×10^{-6} *18*; α(P)=6.4×10^{-7} *20*; α(IPF)=0.00012 *3* Mult.: α(K)exp=0.0031 *8* (1976Ri10).
1641.5	9/2$^+$	816.3 *5*	100	825.11	13/2$^+$	E2		0.00998	α(K)=0.00778 *11*; α(L)=0.001672 *24*; α(M)=0.000402 *6* α(N)=0.0001020 *15*; α(O)=1.98×10^{-5} *3*; α(P)=1.82×10^{-6} *3* Mult.: α(K)exp=0.0090 *14* (1976Ri10).
1663.62	17/2$^+$	838.5‡ *1*	100‡	825.11	13/2$^+$	E2		0.00945	α(K)=0.00739 *11*; α(L)=0.001566 *22*; α(M)=0.000376 *6* α(N)=9.53×10^{-5} *14*; α(O)=1.85×10^{-5} *3*; α(P)=1.716×10^{-6} *24* Mult.: A_2=0.11 *6*, A_4=0.03 *8* in ^{202}Hg(α,3nγ); α(K)exp=0.0082 *14* (1979Mc02) and α(K)exp=0.0067 *9* (1977Li04) in ^{204}Hg(α,5nγ).
1682.6	(7/2)$^-$	483.8 *10*	50 *10*	1198.5	9/2$^-$				
		1087.8 *10*	72 *17*	595.1	3/2$^-$				
		1496.2 *10*	100 *22*	186.6	3/2$^-$				
1802.3	(7/2)$^+$	120.0 *10*	6.1 *13*	1682.6	(7/2)$^-$				
		768.8 *10*	45 *10*	1033.76	7/2$^-$				
		869.2 *10*	55 *13*	933.1	(5/2)$^-$	E1		0.00323	α(K)=0.00269 *4*; α(L)=0.000414 *6*; α(M)=9.56×10^{-5} *14* α(N)=2.42×10^{-5} *4*; α(O)=4.79×10^{-6} *7*; α(P)=4.90×10^{-7} *7* Mult.: α(K)exp=0.006 *4* (1976Ri10).
		936.0 *10*	81 *16*	866.4	5/2$^-$	E1		0.00282	α(K)=0.00235 *4*; α(L)=0.000360 *5*; α(M)=8.31×10^{-5} *12* α(N)=2.10×10^{-5} *3*; α(O)=4.16×10^{-6} *6*; α(P)=4.28×10^{-7} *6* Mult.: α(K)exp=0.0045 *21* (1976Ri10).
		1802.3 *10*	100 *19*	0	5/2$^-$				
1894.9	(9/2$^+$)	861.2 *10*	19 *4*	1033.76	7/2$^-$				
		1070.1[c] *10*	100 *21*	825.11	13/2$^+$	(E2)		0.00584	α(K)=0.00468 *7*; α(L)=0.000886 *13*; α(M)=0.000210 *3*

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(N)=5.33×10^{-5} *8*; α(O)=1.043×10^{-5} *15*; α(P)=1.019×10^{-6} *15* Mult.: α(K)exp=0.0053 *17* (1976Ri10), but contaminated by 1068.3γ.
1921.99	21/2$^+$	258.4[‡] *1*	100[‡]	1663.62	17/2$^+$	E2		0.183	B(E2)(W.u.)=0.140 *+11−10* α(K)=0.0924 *13*; α(L)=0.0676 *10*; α(M)=0.01749 *25* α(N)=0.00442 *7*; α(O)=0.000807 *12*; α(P)=4.58×10^{-5} *7* Mult.: K/L=1.2 *1* and α(K)exp=0.074 *10* (1979Mc02); α(L)exp=0.0047 *24* and α(exp)=0.19 *9* (1977Li04) in ^{204}Hg(α,5nγ).
1943.82	19/2$^+$	(21.8 *3*)	1.0 *8*	1921.99	21/2$^+$				E_γ: From level energy difference. I_γ: From ^{203}Pb IT decay (480 ms).
		280.2[‡] *2*	100[‡]	1663.62	17/2$^+$	M1		0.514	α(K)=0.420 *6*; α(L)=0.0719 *11*; α(M)=0.01683 *24* α(N)=0.00428 *6*; α(O)=0.000853 *12*; α(P)=9.12×10^{-5} *13* Mult.: A_2=−0.29 *5*, A_4=−0.17 *8* in ^{202}Hg(α,3nγ).
2034.1	(7/2)$^+$	392.5 *10*	34 *7*	1641.5	9/2$^+$	M1+E2	0.7 *3*	0.16 *3*	α(K)=0.12 *3*; α(L)=0.024 *3*; α(M)=0.0057 *6* α(N)=0.00144 *16*; α(O)=0.00028 *4*; α(P)=2.8×10^{-5} *5* Mult.: α(K)exp=0.122 *23* (1976Ri10).
		486.6 *10*	11.8 *24*	1547.6	9/2$^+$				
		1000.3 *10*	100 *21*	1033.76	7/2$^-$	E1		0.00250	α(K)=0.00209 *3*; α(L)=0.000318 *5*; α(M)=7.34×10^{-5} *11* α(N)=1.86×10^{-5} *3*; α(O)=3.68×10^{-6} *6*; α(P)=3.80×10^{-7} *6* Mult.: α(K)exp=0.0030 *16* (1976Ri10).
		1166.9[c] *10*	16 *3*	866.4	5/2$^-$				
2048.6	(9/2$^+$)	501.4 *10*	25 *5*	1547.6	9/2$^+$				
		1151.5 *10*	19 *4*	896.9	9/2$^-$				
		1223.7 *10*	100 *20*	825.11	13/2$^+$	E2		0.00453	α(K)=0.00366 *6*; α(L)=0.000661 *10*; α(M)=0.0001559 *22* α(N)=3.95×10^{-5} *6*; α(O)=7.77×10^{-6} *11*; α(P)=7.75×10^{-7} *11*; α(IPF)=6.03×10^{-6} *14* Mult.: α(K)exp=0.0028 *12* (1976Ri10).
		1228.4[c] *10*	30 *6*	820.26	7/2$^-$				
2078.8	(11/2)$^+$	531.2 *10*	7.4 *14*	1547.6	9/2$^+$				
		542.8[c] *10*	18.1 *19*	1536.5	(7/2)$^-$				
		1253.8 *10*	100 *19*	825.11	13/2$^+$	M1		0.00999 *15*	α(K)=0.00822 *12*; α(L)=0.001346 *19*; α(M)=0.000314 *5* α(N)=7.96×10^{-5} *12*; α(O)=1.590×10^{-5} *23*; α(P)=1.713×10^{-6} *25*; α(IPF)=1.67×10^{-5} *4* Mult.: α(K)exp=0.0067 *32* (1976Ri10).
2117.62	(19/2)$^+$	173.9[‡] *3*	100[‡] *15*	1943.82	19/2$^+$	(M1)		1.94	α(K)=1.582 *24*; α(L)=0.273 *4*; α(M)=0.0639 *10* α(N)=0.01625 *25*; α(O)=0.00324 *5*; α(P)=0.000346 *6* Mult.: A_2=0.16 *6*, A_4=0.14 *8* in ^{202}Hg(α,3nγ); J to J transition.
		453.8[‡] *3*	77[‡] *15*	1663.62	17/2$^+$				
2161.31	(21/2)$^+$	217.4[‡] *3*	7.0[‡] *16*	1943.82	19/2$^+$				
		239.4[‡] *2*	100[‡] *5*	1921.99	21/2$^+$	M1		0.794	α(K)=0.648 *10*; α(L)=0.1112 *16*; α(M)=0.0260 *4*

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ[a]	α[b]	Comments
									α(N)=0.00662 *10*; α(O)=0.001319 *19*; α(P)=0.0001410 *20* Mult.: A_2=0.20 *6*, A_4=0.01 *8*; α(exp)=0.66 *18* (1977Sa18); in ^{202}Hg(α,3nγ); J to J transition.
2371.8	(7/2)$^+$	337.9 *10*	14 *3*	2034.1	(7/2)$^+$				
		477.0 *10*	7.1 *12*	1894.9	(9/2$^+$)				
		569.3 *10*	100 *20*	1802.3	(7/2)$^+$	M1		0.0767	α(K)=0.0629 *10*; α(L)=0.01055 *16*; α(M)=0.00247 *4* α(N)=0.000626 *10*; α(O)=0.0001249 *19*; α(P)=1.340×10^{-5} *20* Mult.: α(K)exp=0.068 *7* (1976Ri10).
		1337.3 *10*	31 *6*	1033.76	7/2$^-$				
		1438.1 *10*	54 *10*	933.1	(5/2)$^-$	(E1)		1.46×10^{-3}	α(K)=0.001109 *16*; α(L)=0.0001659 *24*; α(M)=3.82×10^{-5} *6* α(N)=9.66×10^{-6} *14*; α(O)=1.92×10^{-6} *3*; α(P)=2.02×10^{-7} *3*; α(IPF)=0.0001298 *20* Mult.: α(K)exp=0.00036 *20* (1976Ri10). E2 multipolarity cannot be unambiguously excluded.
		2372.3 *10*	3.4 *7*	0	5/2$^-$				
2387.9	(9/2)$^+$	339.7 *10*	14 *3*	2048.6	(9/2$^+$)				
		746.45 *2*	100	1641.5	9/2$^+$	M1(+E2)	0.5 *4*	0.033 *7*	α(K)=0.027 *6*; α(L)=0.0046 *8*; α(M)=0.00107 *18* α(N)=0.00027 *5*; α(O)=5.4×10^{-5} *9*; α(P)=5.7×10^{-6} *11* Mult.: α(K)exp=0.027 *5* (1976Ri10).
		1184.4[c] *10*	44 *8*	1203.0	(7/2)$^-$			0.00186	α=0.00186; α(K)=0.00155 *5*; α(L)=0.00023 *1* α(K)exp=0.007 *3* (1976Ri10). M1 and E2 multipolarities cannot be unambiguously excluded.
		1562.7 *10*	12.1 *23*	825.11	13/2$^+$			0.00236	α=0.00236; α(K)=0.00236 *7*
2472.2	(9/2$^+$,11/2$^-$)	924.5 *10*	100 *21*	1547.6	9/2$^+$				
		1274.2 *10*	47 *9*	1198.5	9/2$^-$				
		1311.0 *10*	62 *12*	1161.0	(7/2)$^-$				
		1646.8 *10*	52 *10*	825.11	13/2$^+$				
2568.8	9/2$^+$	490.2 *10*	5.8 *11*	2078.8	(11/2)$^+$				
		1365.5 *10*	6.6 *13*	1203.0	(7/2)$^-$				
		1370.1 *10*	19 *4*	1198.5	9/2$^-$				
		1407.9 *10*	50 *9*	1161.0	(7/2)$^-$				
		1743.5 *10*	13 *3*	825.11	13/2$^+$				
		1748.5 *10*	100 *20*	820.26	7/2$^-$	E1		1.30×10^{-3}	α(K)=0.000801 *12*; α(L)=0.0001188 *17*; α(M)=2.73×10^{-5} *4* α(N)=6.91×10^{-6} *10*; α(O)=1.376×10^{-6} *20*; α(P)=1.455×10^{-7} *21*; α(IPF)=0.000348 *5* Mult.: α(K)exp=0.00034 *17* (1976Ri10).
2620.0	(7/2$^+$,9/2$^+$)	1417.1 *10*	21 *4*	1203.0	(7/2)$^-$				
		1421.1 *10*	27 *5*	1198.5	9/2$^-$				
		1800.1 *10*	100 *19*	820.26	7/2$^-$	(E1)		1.30×10^{-3}	α(K)=0.000763 *11*; α(L)=0.0001131 *16*;

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(M)=2.60×10^{-5} *4* α(N)=6.58×10^{-6} *10*; α(O)=1.311×10^{-6} *19*; α(P)=1.386×10^{-7} *20*; α(IPF)=0.000385 *6* Mult.: α(K)exp=0.00066 *25* (1976Ri10). Value interfered by that for the 1802.3γ.
2667.7	(7/2,9/2)$^+$	295.8 *10*	0.73 *16*	2371.8	(7/2)$^+$				
		633.8 *10*	11.7 *23*	2034.1	(7/2)$^+$	E2+M1	1.9 *4*	0.026 *4*	α(K)=0.020 *4*; α(L)=0.0043 *5*; α(M)=0.00102 *10* α(N)=0.000259 *25*; α(O)=5.1×10^{-5} *5*; α(P)=4.8×10^{-6} *7* Mult.: α(K)exp=0.020 *5* (1976Ri10).
		985.0 *10*	2.6 *5*	1682.6	(7/2)$^-$				
		1074.8 *10*	2.5 *5*	1592.8	(7/2)$^-$				
		1120.2 *10*	6.2 *13*	1547.6	9/2$^+$	(M1)		0.01330	α(K)=0.01095 *16*; α(L)=0.00180 *3*; α(M)=0.000419 *6* α(N)=0.0001065 *16*; α(O)=2.13×10^{-5} *3*; α(P)=2.29×10^{-6} *4*; α(IPF)=6.3×10^{-7} *3* Mult.: α(K)exp=0.018 *8* (1976Ri10).
		1464.8 *10*	5.4 *10*	1203.0	(7/2)$^-$				
		1469.2 *10*	3.9 *8*	1198.5	9/2$^-$				
		1506.7 *5*	32.1 *16*	1161.0	(7/2)$^-$	E1		1.40×10^{-3}	α(K)=0.001026 *15*; α(L)=0.0001531 *22*; α(M)=3.52×10^{-5} *5* α(N)=8.91×10^{-6} *13*; α(O)=1.774×10^{-6} *25*; α(P)=1.87×10^{-7} *3*; α(IPF)=0.0001748 *25* Mult.: α(K)exp=0.0011 *3* (1976Ri10).
		1634.0 *10*	5.7 *10*	1033.76	7/2$^-$				
		1770.7 *10*	4.4 *10*	896.9	9/2$^-$				
		1847.3 *5*	100 *5*	820.26	7/2$^-$	E1		1.29×10^{-3}	α(K)=0.000731 *11*; α(L)=0.0001083 *16*; α(M)=2.49×10^{-5} *4* α(N)=6.30×10^{-6} *9*; α(O)=1.255×10^{-6} *18*; α(P)=1.328×10^{-7} *19*; α(IPF)=0.000420 *6* Mult.: α(K)exp=0.00053 *9* (1976Ri10); α(K)exp=0.00074 *21* (1958No30).
		2668.2 *10*	0.52 *10*	0	5/2$^-$				
2713.3	9/2$^+$	325.5 *10*	0.74 *14*	2387.9	(9/2)$^+$				
		665.0 *10*	1.22 *24*	2048.6	(9/2$^+$)				
		1177.0 *10*	1.25 *24*	1536.5	(7/2)$^-$				
		1510.4 *10*	4.0 *8*	1203.0	(7/2)$^-$				
		1552.6 *10*	17 *3*	1161.0	(7/2)$^-$	(E1)		1.37×10^{-3}	α(K)=0.000976 *14*; α(L)=0.0001454 *21*; α(M)=3.35×10^{-5} *5* α(N)=8.47×10^{-6} *12*; α(O)=1.685×10^{-6} *24*; α(P)=1.774×10^{-7} *25*; α(IPF)=0.000206 *3* Mult.: α(K)exp=0.00074 *5* (1976Ri10). Value interfered by that for the 1550.6γ.
		1679.6 *5*	100 *5*	1033.76	7/2$^-$	E1		1.32×10^{-3}	α(K)=0.000856 *12*; α(L)=0.0001272 *18*; α(M)=2.92×10^{-5} *4* α(N)=7.40×10^{-6} *11*; α(O)=1.474×10^{-6} *21*; α(P)=1.556×10^{-7} *22*; α(IPF)=0.000297 *5* Mult.: α(K)exp=0.00073 *12* (1976Ri10).

$^{203}_{82}Pb_{121}$-10

Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ a	α b	Comments
2713.3	9/2+	1779.1 *10*	0.47 *10*	933.1	(5/2)−				
		1816.4 *10*	4.7 *10*	896.9	9/2−				
		1888.0 *10*	22 *4*	825.11	13/2+	E2		0.00224	α(K)=0.001670 *24*; α(L)=0.000273 *4*; α(M)=6.36×10^{-5} *9* α(N)=1.612×10^{-5} *23*; α(O)=3.20×10^{-6} *5*; α(P)=3.34×10^{-7} *5*; α(IPF)=0.000214 *3* Mult.: α(K)exp=0.0015 *2* (1976Ri10).
		1893.0 *5*	93 *5*	820.26	7/2−	(E1)		1.29×10^{-3}	α(K)=0.000702 *10*; α(L)=0.0001039 *15*; α(M)=2.39×10^{-5} *4* α(N)=6.04×10^{-6} *9*; α(O)=1.205×10^{-6} *17*; α(P)=1.276×10^{-7} *18*; α(IPF)=0.000453 *7* Mult.: α(K)exp=0.00056 *9* (1976Ri10).
		2118.2c *10*	2.0 *4*	595.1	3/2−				
		2527.2c *10*	0.34 *7*	186.6	3/2−				
		2713.0 *10*	0.27 *7*	0	5/2−				
2748.5	(11/2−)	1928.2 *10*	100	820.26	7/2−	(E2)		0.00218	α(K)=0.001608 *23*; α(L)=0.000262 *4*; α(M)=6.10×10^{-5} *9* α(N)=1.546×10^{-5} *22*; α(O)=3.07×10^{-6} *5*; α(P)=3.21×10^{-7} *5*; α(IPF)=0.000232 *4* Mult.: α(K)exp=0.0013 *4* (1976Ri10).
2753.6	(9/2)+	381.7 *10*	37 *8*	2371.8	(7/2)+	M1(+E2)	0.5 *4*	0.19 *4*	α(K)=0.15 *4*; α(L)=0.028 *4*; α(M)=0.0066 *8* α(N)=0.00167 *21*; α(O)=0.00033 *5*; α(P)=3.4×10^{-5} *7* Mult.: α(K)exp=0.15 *3* (1976Ri10); K/L=5.0 *15* (1958No30).
		674.8 *10*	3.0 *6*	2078.8	(11/2)+				
		704.4 *10*	4.2 *9*	2048.6	(9/2+)				
		719.0 *10*	11 *3*	2034.1	(7/2)+	M1(+E2)	0.7 *7*	0.032 *10*	α(K)=0.026 *8*; α(L)=0.0046 *12*; α(M)=0.0011 *3* α(N)=0.00027 *7*; α(O)=5.4×10^{-5} *14*; α(P)=5.7×10^{-6} *16* Mult.: α(K)exp=0.026 *8* (1976Ri10).
		951.6 *10*	6.7 *13*	1802.3	(7/2)+				
		1112.0 *10*	21 *4*	1641.5	9/2+	M1(+E2)	<1.3	0.011 *3*	α(K)=0.0090 *22*; α(L)=0.0015 *4*; α(M)=0.00035 *8* α(N)=9.0×10^{-5} *19*; α(O)=1.8×10^{-5} *4*; α(P)=1.9×10^{-6} *5*; α(IPF)=3.9×10^{-7} *7* Mult.: α(K)exp=0.010 *3* (1976Ri10).
		1206.2 *10*	4.4 *9*	1547.6	9/2+				
		1550.6 *10*	23 *4*	1203.0	(7/2)−	(E1)		1.37×10^{-3}	α(K)=0.000978 *14*; α(L)=0.0001458 *21*; α(M)=3.35×10^{-5} *5* α(N)=8.48×10^{-6} *12*; α(O)=1.689×10^{-6} *24*; α(P)=1.778×10^{-7} *25*; α(IPF)=0.000205 *3* Mult.: α(K)exp=0.00074 *5* (1976Ri10). Value interfered by that for the 1552.6γ.
		1719.7 *5*	100 *4*	1033.76	7/2−	E1		1.31×10^{-3}	α(K)=0.000823 *12*; α(L)=0.0001222 *18*;

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(M)=2.81×10^{-5} *4* α(N)=7.11×10^{-6} *10*; α(O)=1.416×10^{-6} *20*; α(P)=1.496×10^{-7} *21*; α(IPF)=0.000327 *5* Mult.: α(K)exp=0.00068 *24* (1976Ri10).
2753.6	(9/2)$^+$	1856.5 *10*	8.5 *17*	896.9	9/2$^-$				
		2158.9 *10*	1.1 *3*	595.1	3/2$^-$				
		2567.4 *10*	0.87 *17*	186.6	3/2$^-$				
2774.6	(7/2,9/2$^-$)	880.0[c] *10*	19 *4*	1894.9	(9/2$^+$)				
		1091.7 *10*	36 *7*	1682.6	(7/2)$^-$				
		1576.0 *10*	29 *6*	1198.5	9/2$^-$				
		1841.9 *10*	100 *19*	933.1	(5/2)$^-$				
		1908.2 *10*	72 *14*	866.4	5/2$^-$				
2794.1	(9/2)$^+$	322.0 *10*	28 *6*	2472.2	(9/2$^+$,11/2$^-$)				
		406.3 *10*	69 *14*	2387.9	(9/2)$^+$	M1(+E2)	0.5 *5*	0.16 *5*	α(K)=0.13 *4*; α(L)=0.023 *4*; α(M)=0.0055 *9* α(N)=0.00140 *23*; α(O)=0.00028 *5*; α(P)=2.9×10^{-5} *7* Mult.: α(K)exp=0.13 *4* (1976Ri10).
		421.8 *10*	72 *17*	2371.8	(7/2)$^+$	E2+M1	2.4 *6*	0.063 *11*	α(K)=0.046 *10*; α(L)=0.0130 *11*; α(M)=0.00322 *25* α(N)=0.00082 *7*; α(O)=0.000155 *13*; α(P)=1.27×10^{-5} *18* Mult.: α(K)exp=0.046 *5* (1976Ri10).
		1153.5 *10*	37 *7*	1641.5	9/2$^+$				
		1246.1 *10*	100 *22*	1547.6	9/2$^+$	M1+E2	0.6 *4*	0.0086 *14*	α(K)=0.0071 *12*; α(L)=0.00117 *18*; α(M)=0.00027 *4* α(N)=7.0×10^{-5} *11*; α(O)=1.39×10^{-5} *21*; α(P)=1.48×10^{-6} *24*; α(IPF)=1.33×10^{-5} *16* Mult.: α(K)exp=0.0072 *10* (1976Ri10).
2795.77	23/2$^+$	634.5[‡] *2*	41.3[‡] *22*	2161.31	(21/2)$^+$	M1		0.0577	α(K)=0.0474 *7*; α(L)=0.00792 *12*; α(M)=0.00185 *3* α(N)=0.000470 *7*; α(O)=9.37×10^{-5} *14*; α(P)=1.006×10^{-5} *15* Mult.: From A_2=−0.08 *6*, A_4=0.31 *8* in ^{202}Hg(α,3nγ) and K/L=5.8 *13* and α(K)exp=0.053 *11* (1979Mc02); α(K)exp=0.054 *6* (1977Li04) in ^{204}Hg(α,5nγ).
		678.1[‡] *2*	7.2[‡] *8*	2117.62	(19/2)$^+$				
		851.9[‡] *3*	8.8[‡] *8*	1943.82	19/2$^+$				
		873.8[‡] *1*	100[‡] *5*	1921.99	21/2$^+$	M1+E2	1.4 *3*	0.0143 *19*	α(K)=0.0115 *16*; α(L)=0.00210 *24*; α(M)=0.00049 *6* α(N)=0.000126 *14*; α(O)=2.5×10^{-5} *3*; α(P)=2.5×10^{-6} *4* Mult.,δ: From K/L=6.1 *14* and α(K)exp=0.011 *1* (1979Mc02). Other: α(K)exp=0.0056 *11* (1977Li04); Other: A_2=−0.02 *5*, A_4=0.05 *8* in ^{202}Hg(α,3nγ).
2821.1	(7/2,9/2)$^+$	252.2 *10*	12.5 *25*	2568.8	9/2$^+$	E2+M1	1.4 *4*	0.36 *8*	α(K)=0.25 *8*; α(L)=0.082 *4*; α(M)=0.0204 *7* α(N)=0.00516 *18*; α(O)=0.00097 *5*; α(P)=7.4×10^{-5} *12* Mult.: α(K)exp=0.26 *5* (1976Ri10).

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
2821.1	(7/2,9/2)$^+$	432.5 *10*	16 *3*	2387.9	(9/2)$^+$				
		449.9 *10*	4.6 *11*	2371.8	(7/2)$^+$				
		1787.6 *10*	23 *5*	1033.76	7/2$^-$				
		2000.7 *10*	100 *21*	820.26	7/2$^-$	E1		1.30×10^{-3}	α(K)=0.000642 *9*; α(L)=9.48×10^{-5} *14*; α(M)=2.18×10^{-5} *3* α(N)=5.51×10^{-6} *8*; α(O)=1.098×10^{-6} *16*; α(P)=1.165×10^{-7} *17*; α(IPF)=0.000530 *8* Mult.: α(K)exp=0.00046 *21* (1976Ri10).
2870.5	(7/2,9/2)$^+$	157.3 *10*	9.1 *18*	2713.3	9/2$^+$				
		202.2 *10*	11.4 *23*	2667.7	(7/2,9/2)$^+$	E2+M1	1.4 *4*	0.70 *14*	α(K)=0.46 *15*; α(L)=0.183 *5*; α(M)=0.0461 *16* α(N)=0.0117 *4*; α(O)=0.00218 *6*; α(P)=0.000150 *19* Mult.: α(K)exp=0.46 *8* (1976Ri10).
		498.5 *10*	100 *18*	2371.8	(7/2)$^+$	M1+E2	0.5 *2*	0.093 *11*	α(K)=0.076 *9*; α(L)=0.0133 *12*; α(M)=0.00314 *25* α(N)=0.00080 *7*; α(O)=0.000158 *14*; α(P)=1.65×10^{-5} *17* Mult.: α(K)exp=0.077 *8* (1976Ri10).
		1068.3 *10*	91 *19*	1802.3	(7/2)$^+$	E2+M1	3.4 *9*	0.0066 *6*	α(K)=0.0053 *5*; α(L)=0.00098 *7*; α(M)=0.000232 *16* α(N)=5.9×10^{-5} *4*; α(O)=1.16×10^{-5} *8*; α(P)=1.15×10^{-6} *10* Mult.: α(K)exp=0.0053 *17* (1976Ri10). Value interfered by that for the 1070.1γ.
		1188.2 *10*	20 *4*	1682.6	(7/2)$^-$				
2923.3	(21/2$^-$)	979.5[#]	100[#]	1943.82	19/2$^+$	D			Mult.: From A_2=0.02 *6*, A_4=−0.04 *7* in ^{202}Hg(α,3nγ).
2949.12	29/2$^-$	153.4[‡] *2*	37.3[‡] *20*	2795.77	23/2$^+$	E3		15.50	B(E3)(W.u.)=0.0264 *+6−7* α(K)=0.686 *10*; α(L)=10.87 *17*; α(M)=3.03 *5* α(N)=0.772 *13*; α(O)=0.1381 *22*; α(P)=0.00629 *10* Mult.: K/L<0.7 and α(L)exp=9.9 *15* (1979Mc02); α(exp)=14.8 *18* (1977Li04) in ^{204}Hg(α,5nγ).
		1027.0[‡] *3*	100[‡] *5*	1921.99	21/2$^+$	M4		0.1412	B(M4)(W.u.)=1.15 *8* α(K)=0.1054 *15*; α(L)=0.0270 *4*; α(M)=0.00672 *10* α(N)=0.001721 *25*; α(O)=0.000338 *5*; α(P)=3.25×10^{-5} *5* Mult.: K/L=3.9 *4* and α(K)exp=0.106 *18* (1979Mc02); α(K)exp=0.12 *1* (1977Li04) in ^{204}Hg(α,5nγ).
2964.5?	(7/2,9/2,11/2$^-$)	2144.2 *10*	100	820.26	7/2$^-$				

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Adopted Levels, Gammas (continued)

γ(^{203}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ[a]	α[b]	Comments
3006.6	(9/2$^+$,11/2)	212.5 *10*	76 *15*	2794.1	(9/2)$^+$				
		618.7 *10*	100 *20*	2387.9	(9/2)$^+$				
		927.7 *10*	55 *11*	2078.8	(11/2)$^+$				
		2181.6 *10*	38 *7*	825.11	13/2$^+$				
3016.7	(7/2,9/2)$^-$	196.1[c] *10*	9.7 *20*	2821.1	(7/2,9/2)$^+$				
		982.3 *10*	20 *4*	2034.1	(7/2)$^+$				
		1214.3 *10*	25 *5*	1802.3	(7/2)$^+$				
		1983.1 *10*	100 *20*	1033.76	7/2$^-$	M1+E2	4 *3*	0.0022 *7*	α(K)=0.0016 *5*; α(L)=0.00026 *8*; α(M)=6.0×10^{-5} *18* α(N)=1.5×10^{-5} *5*; α(O)=3.0×10^{-6} *9*; α(P)=3.2×10^{-7} *10*; α(IPF)=0.00027 *8* Mult.: α(K)exp=0.0016 *7* (1976Ri10).
		2084.0 *10*	6.7 *13*	933.1	(5/2)$^-$				
		2196.3 *10*	2.7 *7*	820.26	7/2$^-$				
3044.9	(7/2,9/2)$^+$	331.3 *10*	11.7 *23*	2713.3	9/2$^+$				
		657.9[c] *10*	12.5 *25*	2387.9	(9/2)$^+$				
		2011.4 *10*	100 *20*	1033.76	7/2$^-$	E1		1.30×10^{-3}	α(K)=0.000636 *9*; α(L)=9.39×10^{-5} *14*; α(M)=2.16×10^{-5} *3* α(N)=5.46×10^{-6} *8*; α(O)=1.089×10^{-6} *16*; α(P)=1.155×10^{-7} *17*; α(IPF)=0.000538 *8* Mult.: α(K)exp=0.00052 *14* (1976Ri10).
		2224.8 *10*	9.3 *18*	820.26	7/2$^-$				
3689.5	(31/2$^-$)	740.5[@] *5*	100[@]	2949.12	29/2$^-$	M1		0.0386	α(K)=0.0317 *5*; α(L)=0.00528 *8*; α(M)=0.001231 *18* α(N)=0.000313 *5*; α(O)=6.24×10^{-5} *9*; α(P)=6.70×10^{-6} *10* Mult.: From A_2=−0.70 *4*, A_4=0.22 *7* in ^{202}Hg(α,3nγ); DCO=0.64 *6* in ^{197}Au(^{209}Bi,Xγ).
3910.3	(33/2$^-$)	961.0[@] *5*	100[@]	2949.12	29/2$^-$	(E2)			Mult.: DCO=1.05 *9* in ^{197}Au(^{209}Bi,Xγ).
4054.7	(31/2$^-$)	1105.6[@] *5*	100[@]	2949.12	29/2$^-$	M1		0.01375	α(K)=0.01132 *16*; α(L)=0.00186 *3*; α(M)=0.000434 *6* α(N)=0.0001102 *16*; α(O)=2.20×10^{-5} *3*; α(P)=2.37×10^{-6} *4*; α(IPF)=3.43×10^{-7} *9* Mult.: From A_2=−1.21 *3*, A_4=−0.24 *8* in ^{202}Hg(α,3nγ).
4457.2	(33/2$^+$)	402.6[@] *5*	100[@] *5*	4054.7	(31/2$^-$)	E1		0.01517	α(K)=0.01249 *18*; α(L)=0.00205 *3*; α(M)=0.000477 *7* α(N)=0.0001204 *18*; α(O)=2.35×10^{-5} *4*; α(P)=2.26×10^{-6} *4* Mult.: From A_2=−0.15 *5*, A_4=0.01 *8* in ^{202}Hg(α,3nγ); DCO=0.62 *4* in ^{197}Au(^{209}Bi,Xγ).
		546.7[@] *5*	98[@] *5*	3910.3	(33/2$^-$)	(E1)		0.00794	α(K)=0.00658 *10*; α(L)=0.001049 *16*; α(M)=0.000243 *4* α(N)=6.15×10^{-5} *9*; α(O)=1.209×10^{-5} *18*;

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Adopted Levels, Gammas (continued)

$\gamma(^{203}Pb)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
								α(P)=1.195×10^{-6} *18* Mult.: From A_2=0.12 *4*, A_4=−0.15 *6*; J to J transition in ^{202}Hg(α,3nγ).
4457.2	(33/2$^+$)	767.8[@] *5*	48.8[@] *24*	3689.5	(31/2$^-$)	E1	0.00408	α(K)=0.00339 *5*; α(L)=0.000527 *8*; α(M)=0.0001218 *18* α(N)=3.08×10^{-5} *5*; α(O)=6.08×10^{-6} *9*; α(P)=6.18×10^{-7} *9* Mult.: From A_2=−0.25 *5*, A_4=0.34 *7* in ^{202}Hg(α,3nγ).
5025.3	(37/2$^+$)	568.1[@] *5*	100[@]	4457.2	(33/2$^+$)	E2	0.02177 *31*	α(K)=0.01592 *22*; α(L)=0.00443 *6*; α(M)=0.001090 *16* α(N)=0.000276 *4*; α(O)=5.25×10^{-5} *7*; α(P)=4.32×10^{-6} *6* B(E2)(W.u.)=0.053 *+7−6* Mult.: From A_2=0.27 *9*, A_4=0.31 *9* in ^{202}Hg(α,3nγ).
5296.3		271[#]	100[#]	5025.3	(37/2$^+$)			
5571.3		546[#]	100[#]	5025.3	(37/2$^+$)			
6081.0	(39/2)	1055.7[@] *5*	100[@]	5025.3	(37/2$^+$)			
6554.0	(41/2)	1528.7[@] *5*	100[@]	5025.3	(37/2$^+$)	(Q)		Mult.: DCO=0.86 *8* in ^{197}Au(^{209}Bi,Xγ).
6625.2		544.2[@] *5*	100[@]	6081.0	(39/2)			
6700.4		619.4[@] *5*	100[@]	6081.0	(39/2)			

[†] From ^{203}Bi ε, unless otherwise stated.
[‡] From ^{203}Pb IT decay (480 ms).
[#] From ^{202}Hg(α,3nγ).
[@] From ^{197}Au(^{209}Bi,Xγ).
[&] From α(K)exp, α(L)exp and sub-shell ratios in ^{203}Bi ε decay, unless otherwise stated.
[a] Using the briccmixing program and the α(K)exp and subshell ratios data in ^{203}Bi ε decay, unless otherwise stated.
[b] Additional information 2.
[c] Placement of transition in the level scheme is uncertain.

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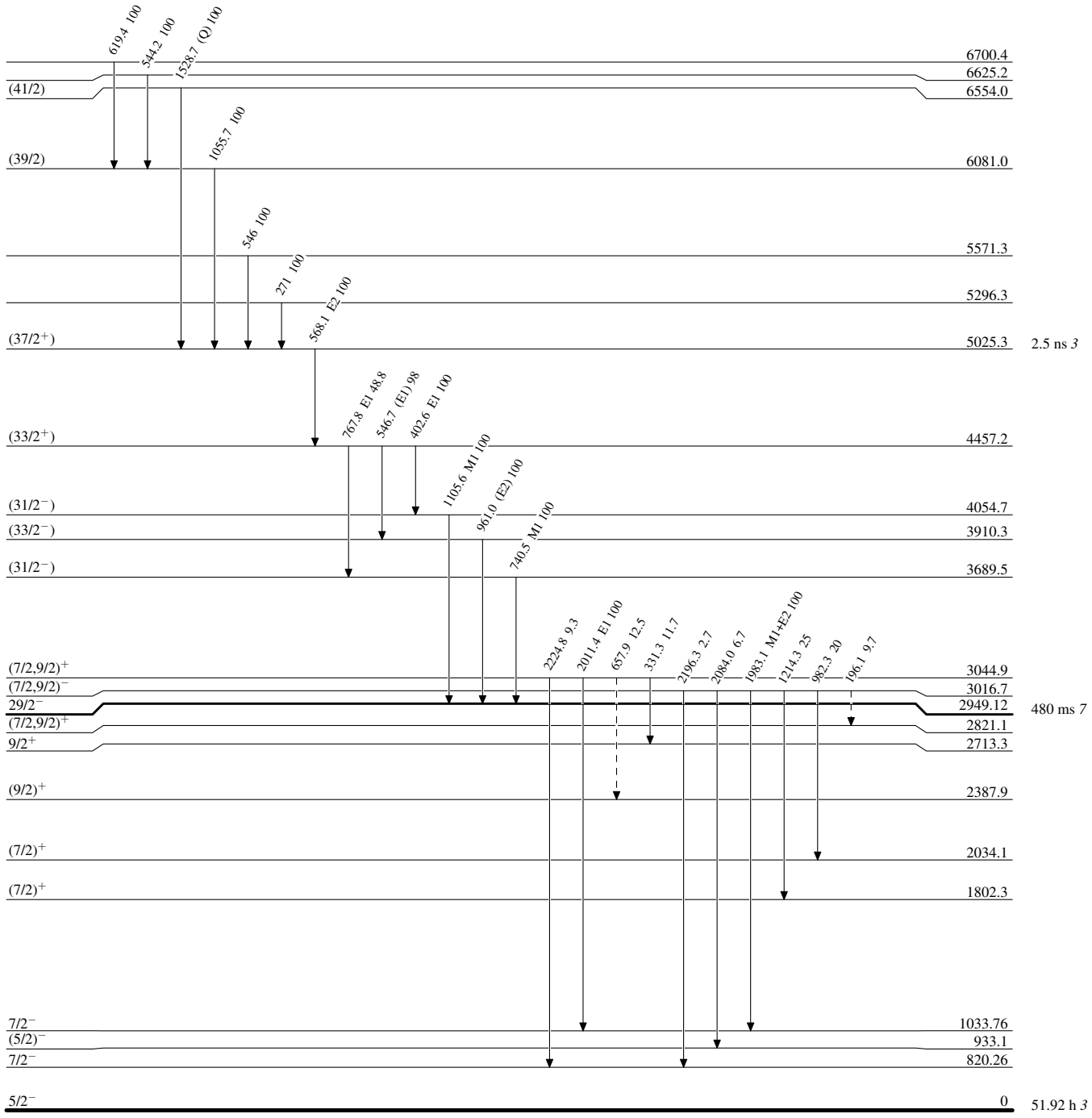
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



$^{203}_{82}Pb_{121}$

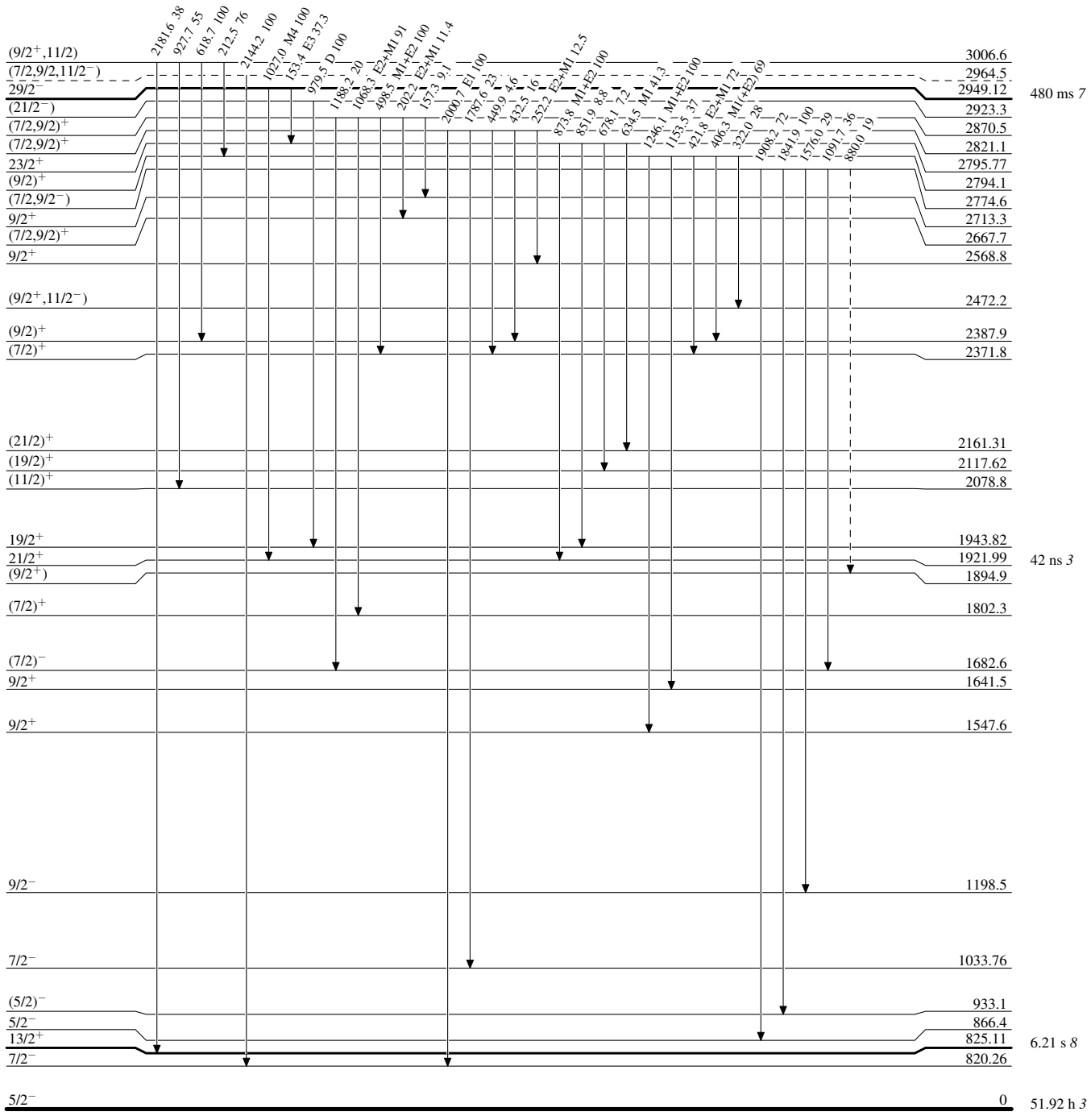
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



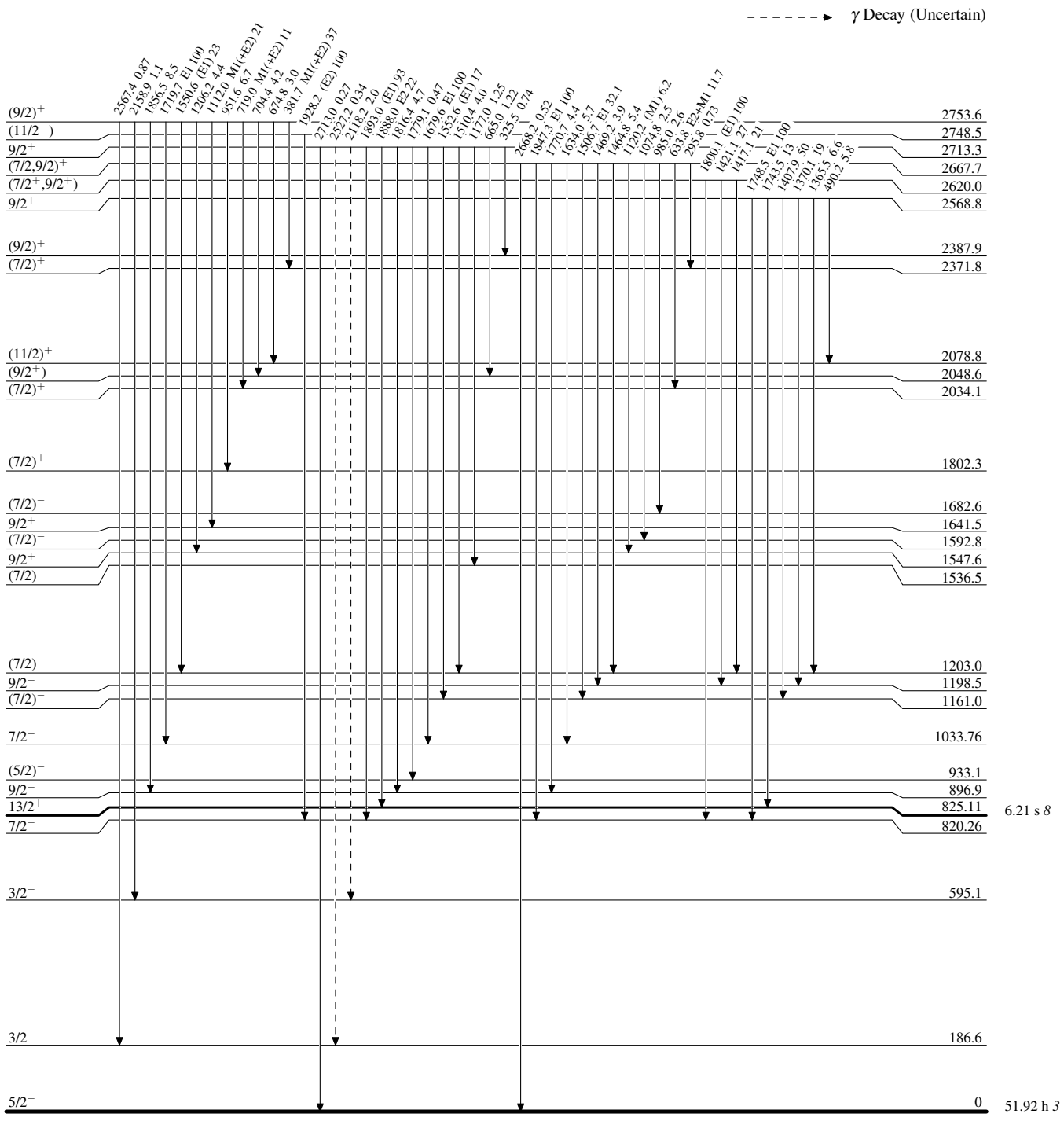
$^{203}_{82}Pb_{121}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{203}_{82}Pb_{121}$

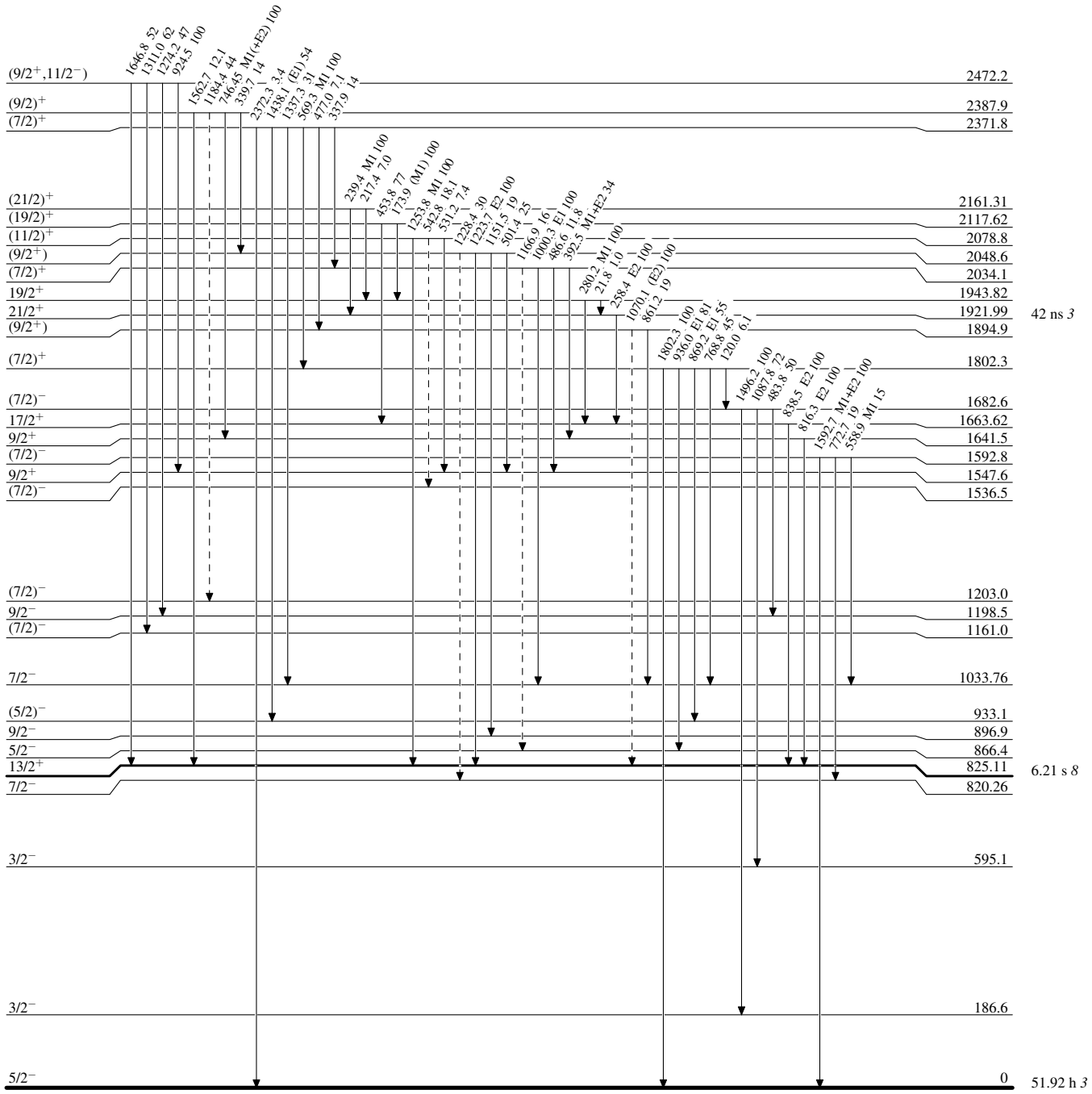
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{203}_{82}Pb_{121}$

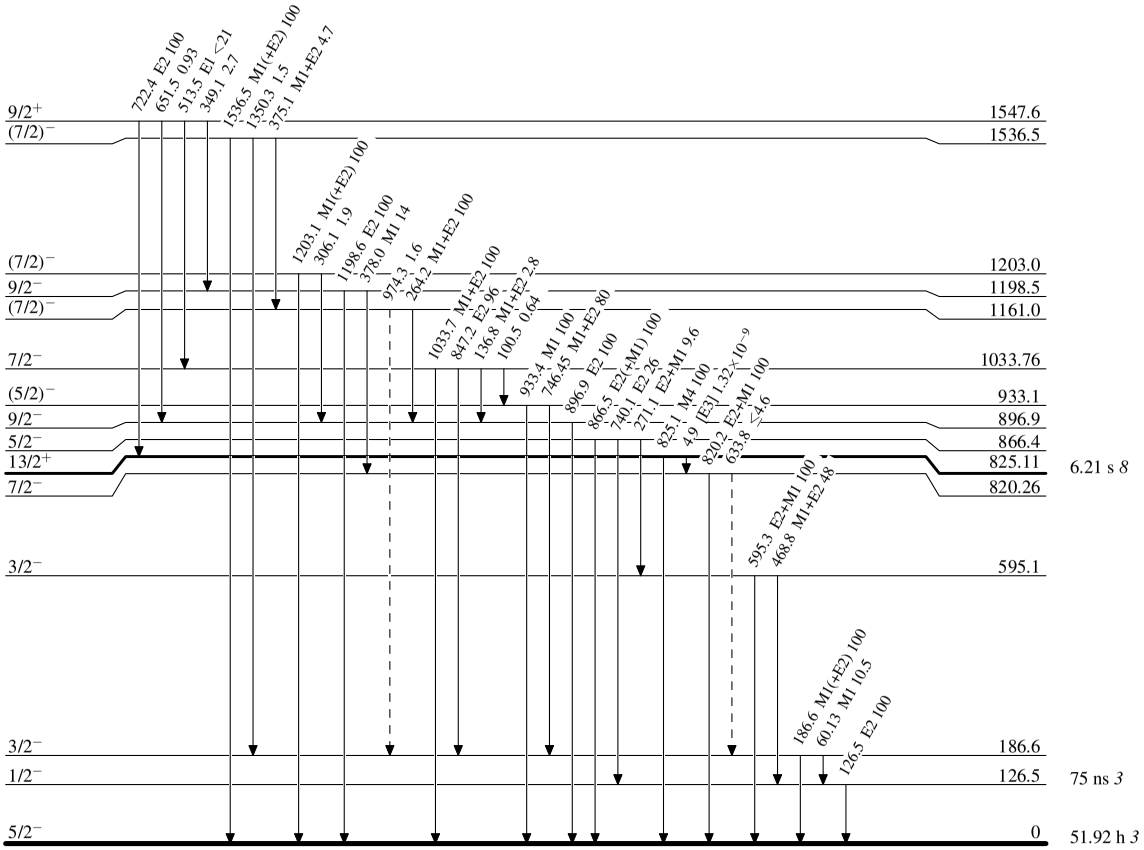
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{203}_{82}Pb_{121}$