Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 166, 1 (2020)	20-Apr-2020

Q(β^-)=−2706 *5*; S(n)=6731.66 *11*; S(p)=6713.06 *21*; Q(α)=1467.4 *11* 2017Wa10

^{205}Pb Levels

Cross Reference (XREF) Flags

A	^{205}Pb IT decay (5.55 ms)	G	^{204}Pb(n,γ) E=1.95 keV	M	^{206}Pb(^{3}He,α)
B	^{205}Bi ε decay	H	^{204}Pb(d,p)	N	^{207}Pb(p,t)
C	^{209}Po α decay	I	^{204}Pb(d,pγ)	O	^{209}Bi(π^-,4nγ)
D	^{204}Hg(α,3nγ)	J	^{205}Pb(d,d′)	P	^{206}Pb(γ,n)
E	^{204}Hg(^{9}Be,xnγ)	K	^{206}Pb(p,d)	Q	^{206}Pb(n,2nγ)
F	^{204}Pb(n,γ) E=thermal	L	^{206}Pb(d,t)	R	^{209}Bi(μ^-,Xγ)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
0.0[d]	5/2−	1.70×10^7 y *9*	ABCDEFGHIJKLMNOPQR	%ε=100 μ=+0.7117 *4*; Q=+0.226 *37* Jπ: L=3 in ^{204}Pb(d,p) and ^{206}Pb(p,d); μ; systematics of single-particle states in the region. $T_{1/2}$: Using $T_{1/2}(\varepsilon L)$=2.83×10^7 y *14*, deduced from ^{205}Pb/^{204}Pb=0.005068 *62* and L-xray counting rate of 15.2 *4* dpm (1958Wi40), ω(L)=0.367 *15* (1996Sc06), and theoretical $\varepsilon L/(\varepsilon+\beta^+)$=0.5992 *14*, deduced using Q(ε)=50.6 keV *5* (2017Wa10). μ: Using the laser induced fluorescence spectroscopy in thermal atomic beam technique (1986An06,2014StZZ). Others: 0.6946 *8* (1982Th05) and 0.704 *5* (1987Ba85). Q: Using the laser induced fluorescence spectroscopy in thermal atomic beam technique (1986An06,2016St14). Others: 0.2 *4* (1987Ba85). $\Delta<r^2>$(^{208}Pb,^{205}Pb)=−0.2032 *35* (1982Th05) and −0.1967 *16* (1986An06).
2.329[e] *7*	1/2−	24.2 μs *4*	BC FGHI KL O R	XREF: I(2.96)L(2). Jπ: L=1 in ^{206}Pb(p,d) and ^{204}Pb(d,p); 2.328γ E2 to 5/2−. $T_{1/2}$: From α-e$^-$(Δt) in 1994Kr11 (^{209}Po α decay).
262.81[f] *3*	3/2−		BC FGHIJKLMN P R	Jπ: 260.50γ M1(+E2) to 1/2−; 262.8γ M1(+E2) to 5/2−; L=1 in ^{206}Pb(p,d) and ^{204}Pb(d,p).
576.20[g] *4*	3/2−		BC FGHIJKL N PQR	XREF: C(585?)N(580)P(580). Jπ: 313.43γ M1(+E2) to 3/2−, 573.85γ M1(+E2) to 1/2−; L=1 in ^{206}Pb(p,d) and ^{204}Pb(d,p).
703.443[g] *21*	7/2−		AB DE HIJK NO QR	XREF: K(?). Jπ: 127.0γ to 3/2−, 703.45γ M1+E2 to 5/2−, 310.35γ E3 from 13/2+; L=2 in ^{205}Pb(d,d′).
761.43[g] *4*	5/2−		BC F HIJKL NO R	XREF: C(789)L(750). Jπ: 185.22γ M1(+E2) to 3/2−; 759.10γ E2 to 1/2−; L=3 in ^{204}Pb(d,p) and ^{206}Pb(p,d).
803.35[g] *6*	(1/2,3/2)−		FGHIJKL N R	XREF: J(?). Jπ: 803.34γ to 5/2−, 540.6γ and 226.9γ to 3/2−; L=1 in ^{204}Pb(d,p).
987.63[g] *3*	9/2−		AB DE IJ L NO QR	XREF: L(980)N(993). Jπ: 284.15γ M1+E2 to 7/2−; 987.66γ E2 to 5/2−; L=(4) in ^{207}Pb(p,t).

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$	XREF	Comments
997.6[e] *4*	(1/2,3/2)$^{-}$		F H K	XREF: H(999). J$^{\pi}$: L=1 in ^{204}Pb(d,p) and ^{206}Pb(p,d).
1013.85[i] *3*	13/2^{+}	5.55 ms *2*	AB DE H KLM O Q	%IT=100 μ=−0.975 *40*; Q=0.30 *5* XREF: L(1010)M(1011). J$^{\pi}$: 26.22γ M2 to 9/2^{-} level; 310.35γ E3 to 7/2^{-} level; 1013.8γ M4 to 5/2^{-}; L=6 in ^{204}Pb(d,p) and ^{206}Pb(p,d). $T_{1/2}$: From 987.5γ(t) in 1971Ma59 (^{204}Hg(α,3nγ)). Others: 5.54 ms *10* (1973Sa22), 4.15 ms *15* (1960Be19), 4.8 ms *15* (1960Ve04),≈4.9 ms (1994Po20). μ: Using differential perturbed angular distributions technique (1971Ma59,2014StZZ). Q: Using quadrupole interaction observed by relaxation time measurements technique (1975Ri03,2016St14).
1043.716[h] *25*	7/2^{-}		B HI K MNO QR	J$^{\pi}$: 780.92γ E2 to 3/2^{-}, 1043.75γ M1+E2 to 5/2^{-}; L=3 in ^{204}Pb(d,p) and ^{206}Pb(p,d).
1264.73 *3*	5/2^{-}		B HI O Q	J$^{\pi}$: 221.07γ M1+E2 to 7/2^{-}, 688.50γ M1+E2 to 3/2^{-}; L=3 in ^{204}Pb(d,p).
1374.17[f] *8*	(1/2,3/2)$^{-}$		F H K N	XREF: N(1376). J$^{\pi}$: L=1 in ^{204}Pb(d,p) and ^{206}Pb(p,d);
1499.14 *4*	9/2^{-}		B N Q	J$^{\pi}$: 511.50γ M1+E2 to 9/2^{-}, 1499γ (E2) to 5/2^{-}, 704.86γ from (11/2)$^{+}$.
1541[#] *2*			N	
1575.35 *5*	9/2^{-}		B I K N	XREF: I(1576.24). J$^{\pi}$: 813.75γ E2 to 5/2^{-}; L=3 in ^{206}Pb(p,d);
1593.55 *3*	9/2^{+}		B I N	XREF: N(1595?). J$^{\pi}$: 549.84γ E1 to 7/2^{-}, 579.80γ E2 to 13/2^{+}.
1614.32 *3*	7/2^{-}		B H KLMN	XREF: L(1610)N(1616). J$^{\pi}$: 115.10γ M1+E2 to 7/2^{-}; 349.55γ M1+E2 to 5/2^{-}; 570.60γ M1(+E2) to 7/2^{-}; 626.71γ M1+E2 to 9/2^{-}; 910.90γ M1(+E2) to 7/2^{-}; 1351.52γ E2 to 3/2^{-}; 1614.30γ M1+E2 to 5/2^{-}; L=3 in ^{204}Pb(d,p) and ^{206}Pb(p,d).
1618.0 *4*	(1/2^{-},3/2^{-})		FG	J$^{\pi}$: Population by a primary γ in ^{204}Pb(n,γ) (J$^{\pi}$=1/2^{+}).
1697.45[j] *21*	17/2^{+}	<0.4 ns	DE O Q	J$^{\pi}$: 683.6γ E2 to 13/2^{+}. $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
1704.98 *4*	(7/2,9/2)$^{-}$		B I N Q	XREF: N(1700). J$^{\pi}$: 717.37γ M1+E2 to 9/2^{-}, 1001.59γ M1+E2 to 7/2^{-}; L=3 in ^{204}Pb(d,p).
1748.4 *4*	(1/2^{-},3/2^{-})		G N	XREF: N(1752). J$^{\pi}$: Population by a primary γ in ^{204}Pb(n,γ) (J$^{\pi}$=1/2^{+}).
1756.4 *3*	(7/2,9/2^{-})		B	J$^{\pi}$: Direct feeding in ^{205}Bi ε decay (J$^{\pi}$=9/2^{-}); 1756.4γ to 5/2^{-}.
1758.62 *4*	9/2^{+}		B Q	J$^{\pi}$: 744.70γ E2 to 13/2^{+}, 259.46γ to 9/2^{-}.
1764.36 *4*	7/2^{-}		B H KLM	XREF: K(1762)L(1770)M(1762). J$^{\pi}$: 170.8γ to 9/2^{+}, 1501.40γ (E2) to 3/2^{-}, 1764.30γ M1+E2 to 5/2^{-}; L=3 in ^{204}Pb(d,p) and ^{206}Pb(p,d); direct feeding in ^{205}Bi ε decay (J$^{\pi}$=9/2^{-}).
1775.80 *4*	7/2^{-}		B I	J$^{\pi}$: 788.13γ to 9/2^{-}, 1014.30γ M1+E2 to 5/2^{-}, 1199.62γ to 3/2^{-}; direct feeding in ^{205}Bi ε decay (J$^{\pi}$=9/2^{-}).
1812.05 *8*	(1/2^{-},3/2^{-})		F	J$^{\pi}$: Population by a primary γ in ^{204}Pb(n,γ) (J$^{\pi}$=1/2^{+}).
1817.99 *18*	(3/2^{-},5/2^{-})		B	J$^{\pi}$: 1815.6γ to 1/2^{-}, 1818.0γ to 5/2^{-}; 703.4γ from (5/2^{-},7/2^{-}); no direct feeding in ^{205}Bi ε decay (J$^{\pi}$=9/2^{-}).
1831[#] *2*			N	
1842.06 *5*	(13/2)$^{+}$		B H K	XREF: K(1838?).

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
				Jπ: 248.4γ to 9/2+, 828.22γ to 13/2+; L=6 in ^{204}Pb(d,p).
1920.1 *3*	(1/2−,3/2−)		FG I N	XREF: N(1921).
				Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
1965.99 *7*	(7/2,9/2−)		B N Q	XREF: N(1964?).
				Jπ: 701.16γ to 5/2−, 978.50γ to 9/2−; direct feeding in ^{205}Bi ε decay (Jπ=9/2−).
2019?[#] *3*			N	
2020.7[j] *3*	19/2+	<0.4 ns	DE O	Jπ: 323.2γ M1 to 17/2+.
				$T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
2087.2 *4*	(1/2−,3/2−)		F N	XREF: N(2091?).
				Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2117.5 *3*	(1/2−,3/2−)		FG	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2203.88 *5*	11/2+		B N Q	XREF: N(2204).
				Jπ: 444.8γ to 9/2+, 704.86γ to 9/2−, 1190.03γ M1+E2 to 13/2+; direct feeding in ^{205}Bi ε decay (Jπ=9/2−).
2252.28 *4*	(7/2)+		B HI N	XREF: N(2255).
				Jπ: 493.65γ M1(+E2) to 9/2+, 987.43γ to 5/2−, 1208.70γ E1+M2 to 7/2−; L=4 in ^{204}Pb(d,p).
2291[#] *3*			N	
2352.8 *5*	(1/2,3/2)−		F H K N	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+); L=1 in ^{204}Pb(d,p) and ^{206}Pb(p,d).
2361.0[a] *5*	(1/2−,3/2−)		F	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2420[#] *3*	(11/2−,13/2−)		N	Jπ: L=(6) in ^{207}Pb(p,t).
2485.5 *5*	(1/2−,3/2−)		F	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2488.07 *4*	(9/2)+		B	Jπ: 646.00γ to (13/2)+, 723.57γ (E1) to 7/2−, 729.40γ (M1+E2) to 9/2+.
2521.46 *13*	(7/2)−		B K	Jπ: 757.09γ to 7/2−, 1760.0γ to 5/2−; L=3 in ^{206}Pb(p,d); direct feeding in ^{205}Bi ε decay (Jπ=9/2−).
2555.7[k] *4*	(21/2+)	<0.7 ns	DE O	Jπ: 534.9γ (M1) to 19/2+; 858.3γ to 17/2+.
				$T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
2556.0 *4*	(1/2−,3/2−)		F	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2565.12[s] *3*	9/2+		B HIJk	XREF: J(2568)k(2562).
				Jπ: 1551.0γ E2 to 13/2+; 1861.7γ E1(+M2) to 7/2−; 2565.1γ M2 to 5/2−; L=3 in ^{205}Pb(d,d′); Ay(θ) in ^{204}Pb(d,p).
2565.5[a] *3*	(1/2−,3/2−)		F k	XREF: k(2562).
				Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2597[b] *5*	(7/2+,9/2+)		J N	XREF: N(2594).
				Jπ: L=(3) in ^{205}Pb(d,d′), but L=(6) in ^{207}Pb(p,t).
2606.88[s] *4*	9/2+		B HIJ	XREF: H(2607)J(2614).
				Jπ: 1013.40γ M1+E2 to 9/2+, 764.99γ to (13/2)+, 1903.45γ E1(+M2) to 7/2−, 2607.7γ M2 to 5/2−; Ay(θ) in ^{204}Pb(d,p).
2633[a] *3*	(1/2−,3/2−)		F	Jπ: Population by a primary γ in ^{204}Pb(n,γ) (Jπ=1/2+).
2634[&] *3*	(9/2+,7/2+)		H J	XREF: J(2638).
				Jπ: L=(3) in ^{205}Pb(d,d′).
2657[&] *3*	(9/2+,7/2+)		H J	Jπ: L=3 in ^{205}Pb(d,d′).
2667[b] *5*	(9/2+,7/2+)		J	Jπ: L=3 in ^{205}Pb(d,d′).
2686[b] *5*	(9/2+,7/2+)		J	Jπ: L=3 in ^{205}Pb(d,d′).
2692[@] *3*	(9/2)−		K M	Jπ: L=5 in ^{206}Pb(p,d).
2702[b] *5*	(9/2+,7/2+)		J N	XREF: N(2697).
				Jπ: L=(3) in ^{205}Pb(d,d′).
2707.72[s] *11*	9/2+		HIJ	XREF: J(2711).

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
				E(level): Doublet (2702 keV *5* and 2711 keV *5* in ^{205}Pb(d,d′). Jπ: L=(3) in ^{205}Pb(d,d′); 2004.3γ to 7/2⁻; Ay(θ) in ^{204}Pb(d,p).
2745[b] *5*	(9/2⁺,7/2⁺)		J	Jπ: L=3 in ^{205}Pb(d,d′).
2779[#] *3*			N	
2795[@] *3*	1/2⁺		K	Jπ: L=0 in ^{206}Pb(p,d).
2798[&] *2*	(9/2⁺,7/2⁺)		H J	Jπ: L=(3) in ^{205}Pb(d,d′).
2862[&] *2*			H	
2903[@] *3*	(9/2)⁻		K MN	XREF: N(2905). Jπ: L=5 in ^{206}Pb(p,d).
2931[&] *2*			H	
2993[#] *3*			N	
3010[&] *2*			H	
3043[&] *2*			H	
3074[#] *4*			N	
3091[#] *4*			N	
3119[&] *2*			H	
3160[a] *4*			F H	XREF: H(3165).
3168.0[l] *5*	21/2⁻	<0.7 ns	DE O	Jπ: 612.2γ to (21/2⁺); 1147.4γ E1 to 19/2⁺. $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
3192[#] *4*			N	
3195.8[l] *6*	25/2⁻	217 ns *5*	DE O	μ=−0.845 *14*; Q=0.63 *3* Jπ: 1175.1γ E3 to 19/2⁺; 27.8γ to 21/2⁻. $T_{1/2}$: From 684γ(t) in 1976Li09 (^{204}Hg(α,3nγ)(1976Li09)). Others: 226 ns *17* from γ(t) in 1973Be32 and 217 ns (1994Po20). μ: Using differential perturbed angular distribution technique (1976Li09,2014StZZ), Q: Using differential perturbed angular distribution technique (2016St14).
3220[c]			M	
3249[&] *3*			H	
3306[&] *3*			H	
3334[&] *2*			H M	XREF: M(3330).
3393[&] *3*			H	
3422[&] *4*			H m	XREF: m(3430).
3435[&] *2*			H m	XREF: m(3430).
3481.24 *21*			HI	
3511[&] *2*			H	
3521.2[l] *8*	(23/2⁻)		E	Jπ: 325.4γ to 25/2⁻; relative population of this level.
3533[&] *2*			H	
3566[&] *2*			H	
3592[&] *4*			H	
3613[&] *3*			H m	XREF: m(3630).
3626.1[m] *6*	29/2⁻	<0.7 ns	DE O	Jπ: 430.3γ E2 to 25/2⁻. $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
3640[@] *20*			K m	XREF: m(3630).
3651.5[m] *8*	(25/2⁻)		E	Jπ: 455.7γ to (23/2⁻).
3659[&] *2*			H m	XREF: m(3630).
3764[&] *2*			H N	XREF: N(3774).

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
3834[&] *4*		H	
3857[&] *2*		H K	XREF: K(3852?).
3889[&] *4*		H	
3910.4[m] *7*	(27/2$^-$)	DE O	J$^{\pi}$: 284.3γ to 29/2$^-$, 714.9γ to 25/2$^-$.
3933[@] *4*	(7/2)$^-$	K	J$^{\pi}$: L=3 in ^{206}Pb(p,d).
3950[&] *3*		H	
3961[&] *2*		H M	
3988[&] *2*		H	
4002[&] *2*		H	
4016[&] *3*	1/2$^+$	H K	XREF: K(4013). J$^{\pi}$: L=0 in ^{206}Pb(p,d).
4055[&] *3*	1/2$^+$	H K	XREF: K(4050). J$^{\pi}$: L=0 in ^{206}Pb(p,d).
4074[&] *3*		H	
4097[&] *2*		H	
4115.95 *11*		I	
4127[&] *2*		H	
4156[&] *2*		H M	XREF: M(4160).
4187[&] *4*		H	
4199[&] *3*		H	
4214[&] *2*		H	
4239[&] *2*		H	
4254[&] *3*		H	
4299[&] *2*		H M	XREF: M(4310).
4320.15 *22*		I	
4326[&] *2*		H	
4337.26 *10*		I	
4342[&] *2*		H	
4361[&] *2*		H	
4372[&] *2*		H	
4389[&] *2*		H	
4412[&] *2*		H	
4428[&] *4*		H	
4443[&] *3*		H	
4447.0 *3*		hI	XREF: h(4443).
4452[&] *2*		H	
4490.19 *13*		I	
4497[&] *2*		H	
4532.07 *11*		I	
4539[&] *2*		H	
4551.76 *17*		I	
4558[&] *2*		H M	XREF: M(4570).
4583.25 *17*		I	
4590[&] *2*		H	
4624[&] *2*		H	
4642[&] *4*		H	
4656[&] *5*		H	

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$	XREF	Comments
4693[&] *3*			H	
4709[&] *3*			H	
4722[&] *2*			H N	XREF: N(4715).
4745[&] *4*			H	
4760[&] *2*			H	
4777[&] *2*			H M	XREF: M(4790).
4787[&] *2*			H	
4803[&] *2*			H	
4840[&] *2*			H	
4874[&] *2*			H	
4891[&] *2*			H	
4913[&] *2*			H	
4936[&] *3*			H	
4954[&] *3*			H	
4978[&] *2*			H K	XREF: K(4984).
4990[&] *2*			H	
4995.5 *3*			I	
5004[&] *2*			H	
5014[&] *3*			H	
5040[&] *2*			H	
5064.7[n] *7*	(29/2^{+})	<3.5 ns	DE	J$^{\pi}$: 1154.4γ to (27/2^{-}), 1438.4γ to 29/2^{-}. T$_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
5065[&] *2*			H	
5075.87 *21*			I	
5083[&] *2*			H	
5100[&] *3*			H K	XREF: K(5095).
5120[&] *3*			H	
5139[&] *2*			H K	XREF: K(5145?).
5161.9[n] *7*	(33/2^{+})	63 ns *3*	DE	μ=−2.44 *8* J$^{\pi}$: 97.1γ E2 to 29/2^{+}; 1251.7γ to (27/2^{-}); 1535.6γ to 29/2^{-}. T$_{1/2}$: From 1535.6γ(t) in 1983St15. Others: 71 ns *3* from 430.4γ(t) in 1976Li09 and 63 ns (1994Po20). μ: From g=−0.148 *5* using differential perturbed angular distribution technique (1983St15,2014StZZ). Other: −2.59 *13* (g=−0.159 *8*) using the perturbed angular distributions technique (1976Li09).
5167[&] *4*			H	
5173.0 *20*			I K	XREF: K(5174).
5180[&] *3*			H	
5192[&] *3*			H	
5203.87 *8*			I	
5209[&] *2*			H	
5226[&] *4*			H	
5242[&] *3*			H	
5255.9 *5*			HI M	XREF: H(5258)M(5250).
5284.6[p] *6*	(27/2^{-})	<0.7 ns	E	J$^{\pi}$: 1658.5γ (M1) to 29/2^{-}. T$_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
5285[&] *3*			H	
5304[&] *2*			H	

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Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$	XREF	Comments
5317[&] *3*			H	
5325[&] *2*			H	
5344[&] *2*			H	
5364[&] *4*			H	
5378[&] *4*			H	
5389.8[p] *9*	(29/2$^-$)		E	J$^{\pi}$: 105γ to (27/2$^-$).
5399[&] *3*			H M	
5418[&] *2*			H	
5439[&] *2*			H	
5452[&] *4*			H	
5473[&] *3*			H	
5486[&] *3*			H	
5514[&] *4*			H	
5534[&] *3*			H	
5572[&] *3*			H	
5598[&] *2*			H	
5623[&] *3*			H	
5735.1[o] *7*	(29/2$^-$)	<0.7 ns	E	J$^{\pi}$: 450.5γ M1 to 29/2$^-$. $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
≈5760[c]			M	
5902.9[p] *7*	(31/2$^-$)	<14 ns	E	J$^{\pi}$: 167.7γ M1 to (29/2$^-$), 618.3γ E2 to (27/2$^-$). $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
6139.5[q] *9*	(33/2$^+$)		E	J$^{\pi}$: 236.6γ to (31/2$^-$).
6200[c]			M	
6318.7[r] *9*	(33/2$^-$)	<14 ns	E	J$^{\pi}$: 415.9γ to (31/2$^-$); 928.9γ to (29/2$^-$). $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
6450[c]			M	
6533.5[q] *10*	(35/2$^+$)	<14 ns	E	J$^{\pi}$: 214.8γ to (33/2$^-$). $T_{1/2}$: From ^{204}Hg(^{9}Be,xnγ) (1994Po20).
6865.8[q] *11*	(37/2$^+$)		E	J$^{\pi}$: 332.3γ to (35/2$^+$).
6900[c]			M	
7200[c]			M	
7500[c]			M	
7800[c]			M	

[†] From least-squares fit to Eγ, unless otherwise stated.
[‡] From the deduced γ-ray transition multipolarities, L values in transfer reactions, log *ft* values in ^{205}Bi ε decay, HF in ^{209}Po α decay and observed multiple decay branches. Specific arguments are given with most levels.
[#] From ^{207}Pb(p,t).
[@] From ^{206}Pb(p,d).
[&] From ^{204}Pb(d,p).
[a] From ^{204}Pb(n,γ) E=thermal.
[b] From ^{205}Pb(d,d′).
[c] From ^{206}Pb(^{3}He,α).
[d] configuration=$\nu(f^{-1}_{5/2})$.
[e] configuration=$\nu(p^{-1}_{1/2})$.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{205}Pb Levels (continued)

[f] configuration=$\nu(p^{-1}_{3/2})$.
[g] Dominant configuration=$\nu(f^{-1}_{5/2})\otimes 2^+$.
[h] Dominant configuration=$\nu(f^{-1}_{7/2})$. The assignment is tentative.
[i] configuration=$\nu(i^{-1}_{13/2})$.
[j] configuration=$\nu(i^{-1}_{13/2})\otimes 2^+$.
[k] configuration=$\nu(i^{-1}_{13/2})\otimes 4^+$.
[l] configuration=$\nu(p^{-1}_{1/2},i^{-2}_{13/2})$.
[m] configuration=$\nu(f^{-1}_{5/2},i^{-2}_{13/2})$.
[n] configuration=$\nu(i^{-3}_{13/2})$.
[o] configuration=$\nu(p^{-1}_{1/2},f^{-2}_{5/2},i^{-1}_{13/2},g^{+1}_{9/2})$.
[p] configuration=$\nu(p^{-2}_{1/2},f^{-1}_{5/2},i^{-1}_{13/2},i^{+1}_{11/2})$.
[q] configuration=$\nu(p^{-1}_{1/2},f^{-1}_{5/2},i^{-2}_{13/2},g^{+1}_{9/2})$.
[r] configuration=$\nu(p^{-1}_{1/2},f^{-2}_{5/2},i^{-1}_{13/2},i^{+1}_{11/2})$.
[s] A mixture of $\nu(g^{+1}_{9/2})$, $\nu(f^{-1}_{5/2})\otimes 3^-$ and $\nu(i^{-1}_{13/2})\otimes 4^+$ configurations.

Adopted Levels, Gammas (continued)

γ(^{205}Pb)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
2.329	1/2⁻	2.328 *7*	100	0.0	5/2⁻	E2		3.76×10^7 *8*	α(N)=3.18×10^7 *7*; α(O)=5.61×10^6 *12*; α(P)=1.60×10^5 *4* B(E2)(W.u.)=0.127 *4* Mult.: From N2/N3=0.70 *25* in 1971Jo06 (^{205}Bi ε decay).
262.81	3/2⁻	260.50 *5*	100.0 *12*	2.329	1/2⁻	M1(+E2)	≤0.14	0.624 *10*	α(K)=0.509 *9*; α(L)=0.0877 *13*; α(M)=0.0206 *3* α(N)=0.00522 *8*; α(O)=0.001041 *15*; α(P)=0.0001109 *17* I_γ: From ^{209}Po α decay. Mult.: From γγ(θ) in 1973Ah01; α(K)exp=0.50 *6* and K/L=5.5 *7* (1972Ha71); α(K)exp=0.56 *13*, average of values given in 1959St42 and 1960St24; α(K)exp=0.538 *20* (1996Sc24). δ: From α(K)exp in 1996Sc24. Other: δ=1.6 *2* from γγ(θ) in 1973Ah01.
		262.80 *5*	33.5 *8*	0.0	5/2⁻	M1(+E2)	≤0.14	0.609 *10*	α(K)=0.497 *8*; α(L)=0.0856 *13*; α(M)=0.0201 *3* α(N)=0.00510 *8*; α(O)=0.001016 *15*; α(P)=0.0001082 *17* I_γ: From ^{209}Po α decay. Mult.: From γγ(θ) in 1973Ah01; α(K)exp=0.45 *7* and K/L=5.8 *7* (1972Ha71); α(K)exp=0.40 *10* (1960St24); α(K)exp=0.524 *20* (1996Sc24). δ: From α(K)exp in 1996Sc24. Other: δ=−0.7 *2* from γγ(θ) in 1973Ah01.
576.20	3/2⁻	313.43 *20*	5.5 *15*	262.81	3/2⁻	M1(+E2)	≤0.7	0.33 *5*	α(K)=0.27 *5*; α(L)=0.049 *4*; α(M)=0.0117 *7* α(N)=0.00297 *18*; α(O)=0.00059 *4*; α(P)=6.0×10^{-5} *8* Mult.,δ: α(K)exp=0.28 *7* (1972Ha71) and 0.29 *9* (1960St24).
		573.85 *5*	100 *2*	2.329	1/2⁻	M1(+E2)	≤1.2	0.059 *16*	α(K)=0.048 *14*; α(L)=0.0086 *18*; α(M)=0.0020 *4* α(N)=0.00051 *11*; α(O)=0.000101 *21*; α(P)=1.0×10^{-5} *3* Mult.,δ: α(K)exp=0.054 *20* (1956Sc18).
		576.30 *10*	30.3 *10*	0.0	5/2⁻	[M1]		0.0742	α(K)=0.0609 *9*; α(L)=0.01021 *15*; α(M)=0.00239 *4* α(N)=0.000606 *9*; α(O)=0.0001209 *17*; α(P)=1.297×10^{-5} *19*
703.443	7/2⁻	127.0 *2*	0.0100 *20*	576.20	3/2⁻	[E2]		2.35	α(K)=0.423 *6*; α(L)=1.433 *23*; α(M)=0.378 *6* α(N)=0.0953 *15*; α(O)=0.0170 *3*; α(P)=0.000716 *12*
		703.45 *3*	100	0.0	5/2⁻	M1+E2	7.1 *8*	0.0142 *3*	α(K)=0.01088 *21*; α(L)=0.00252 *4*; α(M)=0.000610 *10* α(N)=0.0001545 *25*; α(O)=2.98×10^{-5} *5*; α(P)=2.66×10^{-6} *5* Mult.: From A_2=−0.33 *1*, A_4=0.625 *1* (1990Si13); α(K)exp=0.0110 *10* and K/L=4.6 *4* (1972Ha71); K/L=4.2 *1* (1956Sc18); α(K)exp=0.010 *3* (1956Sc18). δ: From α(K)exp and K/L, and δ=+7.2 *8* (1990Si13) and 6 *1* from 1973Ah01.
761.43	5/2⁻	185.22 *10*	9.2 *6*	576.20	3/2⁻	M1(+E2)	≤0.3	1.58 *5*	α(K)=1.28 *5*; α(L)=0.230 *4*; α(M)=0.0542 *11* α(N)=0.0138 *3*; α(O)=0.00273 *5*; α(P)=0.000284 *7* Mult.,δ: α(K)exp=1.48 *21* (1972Ha71) and 1.5 *4* (1960St24).
		498.40 *15*	9.0 *15*	262.81	3/2⁻	M1(+E2)	≤0.9	0.091 *18*	α(K)=0.074 *16*; α(L)=0.0131 *19*; α(M)=0.0031 *5* α(N)=0.00079 *11*; α(O)=0.000156 *23*; α(P)=1.6×10^{-5} *3* Mult.,δ: From α(K)exp=0.09 *3* (1972Ha71).

$^{205}_{82}Pb_{123}$-9

Adopted Levels, Gammas (continued)

$\gamma(^{205}Pb)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
761.43	5/2$^-$	759.10 *10*	100 *5*	2.329	1/2$^-$	E2		0.01159	α(K)=0.00895 *13*; α(L)=0.00201 *3*; α(M)=0.000485 *7* α(N)=0.0001229 *18*; α(O)=2.37×10^{-5} *4*; α(P)=2.15×10^{-6} *3* Mult.: α(K)exp=0.0106 *22* (1972Ha71) and 0.0088 *25* (1956Sc18).
		761.35 *10*	66 *3*	0.0	5/2$^-$	M1+E2	4.2 *18*	0.0128 *23*	α(K)=0.0100 *20*; α(L)=0.0021 *3*; α(M)=0.00052 *7* α(N)=0.000131 *16*; α(O)=2.5×10^{-5} *4*; α(P)=2.4×10^{-6} *4* Mult.,δ: α(K)exp=0.0100 *22* (1972Ha71) and 0.010 *4* (1956Sc18).
803.35	(1/2,3/2)$^-$	226.9[‡] *2*	31[‡] *8*	576.20	3/2$^-$				
		540.6[‡] *1*	100[‡] *15*	262.81	3/2$^-$				
		803.34[‡] *8*	24[‡] *4*	0.0	5/2$^-$				
987.63	9/2$^-$	284.15 *10*	10.49 *14*	703.443	7/2$^-$	M1+E2	0.33 *22*	0.46 *5*	α(K)=0.37 *5*; α(L)=0.067 *4*; α(M)=0.0158 *6* α(N)=0.00401 *16*; α(O)=0.00079 *4*; α(P)=8.2×10^{-5} *8* Mult.: From $\gamma\gamma(\theta)$ in 1973Ah01; α(K)exp=0.37 *5* (1972Ha71) and 0.38 *9*, average of values given in 1956Sc18 and 1959St42. δ: From α(K)exp. Other: 0.06 *6* from $\gamma\gamma(\theta)$ in 1973Ah01.
		987.66 *5*	100.0 *10*	0.0	5/2$^-$	E2		0.00682	α(K)=0.00543 *8*; α(L)=0.001062 *15*; α(M)=0.000253 *4* α(N)=6.41×10^{-5} *9*; α(O)=1.252×10^{-5} *18*; α(P)=1.205×10^{-6} *17* Mult.: $\gamma\gamma(\theta)$ in 1973Ah01; α(K)exp=0.0055 *7* and K/L=5.6 *8* (1972Ha71); α(K)exp=0.0054 *5*, average of values given in 1956Sc18 and 1959St42.
997.6	(1/2,3/2)$^-$	996.4[‡] *5*	100[‡]	2.329	1/2$^-$				
1013.85	13/2$^+$	26.220 *11*	1.16 *12*	987.63	9/2$^-$	M2		1.144×10^4	α(L)=8.39×10^3 *12*; α(M)=2.32×10^3 *4* α(N)=605 *9*; α(O)=116.2 *17*; α(P)=8.80 *13* B(M2)(W.u.)=0.001115 *17* Mult.: From α(exp) using the γ-ray intensity balance in ^{204}Hg(^{9}Be,xnγ).
		310.35 *5*	100 *3*	703.443	7/2$^-$	E3		0.548	α(K)=0.1609 *23*; α(L)=0.287 *4*; α(M)=0.0771 *11* α(N)=0.0196 *3*; α(O)=0.00357 *5*; α(P)=0.000205 *3* B(E3)(W.u.)=0.0023 *3* Mult.: α(K)exp=0.14 *3* (1972Ha71) and 0.17 *7* (1960St24); α(exp) using γ-ray intensity balance in ^{204}Hg(^{9}Be,xnγ).
		1013.8 *1*	55 *12*	0.0	5/2$^-$	[M4]		0.1475	α(K)=0.1098 *16*; α(L)=0.0284 *4*; α(M)=0.00705 *10* α(N)=0.00181 *3*; α(O)=0.000355 *5*; α(P)=3.41×10^{-5}

$^{205}_{82}Pb_{123}$-10

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
									5 B(M4)(W.u.)=3.3 *8*
1043.716	7/2⁻	282.38 *7*	5.67 *8*	761.43	5/2⁻	M1(+E2)	≤0.44	0.47 *3*	α(K)=0.38 *3*; α(L)=0.0685 *21*; α(M)=0.0161 *4* α(N)=0.00410 *11*; α(O)=0.000813 *25*; α(P)=8.5×10^{-5} *5* Mult.,δ: α(K)exp=0.39 *6* (1972Ha71) and 0.42 *7*, average of values given in 1956Sc18 and 1959St42.
		780.92 *5*	7.62 *13*	262.81	3/2⁻	E2		0.01093	α(K)=0.00847 *12*; α(L)=0.00187 *3*; α(M)=0.000451 *7* α(N)=0.0001142 *16*; α(O)=2.21×10^{-5} *3*; α(P)=2.01×10^{-6} *3* Mult.: From γγ(θ) in 1973Ah01.
		1043.75 *5*	100.0 *13*	0.0	5/2⁻	M1+E2	0.031 *20*	0.01593	α(K)=0.01311 *19*; α(L)=0.00216 *3*; α(M)=0.000503 *7* α(N)=0.0001278 *18*; α(O)=2.55×10^{-5} *4*; α(P)=2.75×10^{-6} *4* Mult.: A_2=0.27 *2*, A_4=0.001 *1* (1990Si13); α(K)exp=0.0130 *14* and K/L=6.8 *10* (1972Ha71); γγ(θ) in 1973Ah01; α(K)exp=0.013 *2*, average of values given in 1956Sc18 and 1959St42. δ: From α(K)exp and K/L, and δ=0.03 *1* (1990Si13) and −0.15 *15* (1973Ah01).
1264.73	5/2⁻	221.07 *7*	11.4 *7*	1043.716	7/2⁻	M1+E2	0.5 *4*	0.85 *17*	α(K)=0.67 *17*; α(L)=0.137 *4*; α(M)=0.0327 *5* α(N)=0.00829 *12*; α(O)=0.00162 *4*; α(P)=0.000157 *24* Mult.,δ: α(K)exp=0.88 *24* (1972Ha71) and 0.56 *19* (1956Sc18).
		277.2 *5*	5.7 *11*	987.63	9/2⁻				
		503.4 *5*	2.8 *17*	761.43	5/2⁻				
		561.27 *5*	19.3 *17*	703.443	7/2⁻				
		688.50 *5*	83 *3*	576.20	3/2⁻	M1+E2	1.5 *+7−4*	0.024 *5*	α(K)=0.019 *4*; α(L)=0.0038 *6*; α(M)=0.00089 *13* α(N)=0.00023 *4*; α(O)=4.4×10^{-5} *7*; α(P)=4.4×10^{-6} *8* Mult.,δ: α(K)exp=0.021 *5* (1972Ha71) and 0.017 *6* (1956Sc18).
		1001.95 *20*	100 *16*	262.81	3/2⁻	M1+E2	0.8 *4*	0.013 *3*	α(K)=0.0109 *24*; α(L)=0.0019 *4*; α(M)=0.00044 *8* α(N)=0.000111 *21*; α(O)=2.2×10^{-5} *5*; α(P)=2.3×10^{-6} *5* Mult.,δ: α(K)exp=0.0108 *22* (1972Ha71).
		1261.65 *20*	22.5 *23*	2.329	1/2⁻				
		1264.8 *2*	46 *8*	0.0	5/2⁻				
1374.17	(1/2,3/2)⁻	1371.87[‡] *8*	100[‡]	2.329	1/2⁻				
1499.14	9/2⁻	511.50 *5*	100.0 *18*	987.63	9/2⁻	M1+E2	0.22 *12*	0.098 *5*	α(K)=0.080 *4*; α(L)=0.0137 *5*; α(M)=0.00320 *12* α(N)=0.00081 *3*; α(O)=0.000162 *6*; α(P)=1.72×10^{-5} *8* Mult.: A_2=−0.39 *6*, A_4=−0.003 *+3−9* (1990Si13); α(K)exp=0.082 *11* (1972Ha71) and 0.07 *2* (1956Sc18). δ: From α(K)exp and δ=−0.089 (1990Si13) and −0.4 *1* (1973Ah01).
		795.67 *5*	16.4 *7*	703.443	7/2⁻				
		1499.00 *15*	20.0 *16*	0.0	5/2⁻	(E2)		0.00316	α(K)=0.00253 *4*; α(L)=0.000433 *6*; α(M)=0.0001014 *15*

$^{205}_{82}Pb_{123}$-11

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	α[a]	Comments
									α(N)=2.57×10^{-5} *4*; α(O)=5.08×10^{-6} *8*; α(P)=5.19×10^{-7} *8*; α(IPF)=6.33×10^{-5} *9* Mult.: α(K)exp=0.0034 *8* (1972Ha71).
1575.35	9/2$^-$	813.75 *10*	100 *3*	761.43	5/2$^-$	E2		0.01004	α(K)=0.00783 *11*; α(L)=0.001685 *24*; α(M)=0.000406 *6* α(N)=0.0001028 *15*; α(O)=1.99×10^{-5} *3*; α(P)=1.83×10^{-6} *3* Mult.: α(K)exp=0.008 *3* (1972Ha71).
		871.95 *5*	88.7 *20*	703.443	7/2$^-$				
1593.55	9/2$^+$	549.84 *4*	54.2 *6*	1043.716	7/2$^-$	E1(+M2)	0.087 *+20−26*	0.0096 *9*	α(K)=0.0079 *7*; α(L)=0.00132 *15*; α(M)=0.00031 *4* α(N)=7.8×10^{-5} *9*; α(O)=1.54×10^{-5} *18*; α(P)=1.54×10^{-6} *19* Mult.: A$_2$=0.3 *1*, A$_4$=0.000 *2* (1990Si13); α(K)exp=0.0080 *14* (1972Ha71) and 0.0074 *21*, average of values given in 1956Sc18 and 1959St42. δ: From α(K)exp and δ in 1990Si13.
		579.80 *10*	100.0 *12*	1013.85	13/2$^+$	E2		0.0208	α(K)=0.01527 *22*; α(L)=0.00417 *6*; α(M)=0.001026 *15* α(N)=0.000260 *4*; α(O)=4.95×10^{-5} *7*; α(P)=4.10×10^{-6} *6* Mult.: A$_2$=−0.22 *5* (1990Si13); α(K)exp=0.0151 *18* and K/L=3.5 *8* (1972Ha71); α(K)exp=0.015 *2*, average of values given in 1956Sc18 and 1959St42.
		605.25 *15*	0.46 *7*	987.63	9/2$^-$				
		890.15 *5*	12.46 *17*	703.443	7/2$^-$	(E1)		0.00309	α(K)=0.00258 *4*; α(L)=0.000396 *6*; α(M)=9.14×10^{-5} *13* α(N)=2.31×10^{-5} *4*; α(O)=4.58×10^{-6} *7*; α(P)=4.69×10^{-7} *7* Mult.: α(K)exp≤0.0037 (1972Ha71).
1614.32	7/2$^-$	115.10 *10*	1.72 *7*	1499.14	9/2$^-$	M1+E2	0.69 *25*	5.4 *5*	α(K)=3.6 *8*; α(L)=1.33 *22*; α(M)=0.33 *7* α(N)=0.084 *16*; α(O)=0.016 *3*; α(P)=0.001113 *17* Mult.,δ: α(K)exp=3.6 *7* (1960St24).
		349.55 *5*	12.98 *22*	1264.73	5/2$^-$	M1+E2	0.52 *25*	0.24 *4*	α(K)=0.19 *3*; α(L)=0.035 *3*; α(M)=0.0084 *6* α(N)=0.00213 *16*; α(O)=0.00042 *4*; α(P)=4.3×10^{-5} *6* Mult.,δ: α(K)exp=0.182 *25* and K/L=4.9 *13* (1972Ha71) and α(K)exp=0.21 *3*, average of values given in 1956Sc18 and 1959St42.
		570.60 *5*	100.0 *14*	1043.716	7/2$^-$	M1+E2	0.37 *13*	0.070 *5*	α(K)=0.057 *4*; α(L)=0.0098 *5*; α(M)=0.00228 *12* α(N)=0.00058 *3*; α(O)=0.000115 *6*; α(P)=1.22×10^{-5} *8* Mult.: A$_2$=−0.43 *+3−7* A$_4$=0.0 (1990Si13); α(K)exp=0.064 *7* and K/L=5.8 *12* (1972Ha71); α(K)exp=0.065 *10*, average of values given in 1956Sc18 and 1959St42. δ: From α(K)exp and δ=−0.01 *+10−3* (1990Si13) and 0.8 *1* from (1973Ah01).
		626.71 *10*	13.49 *14*	987.63	9/2$^-$	M1+E2	0.50 *22*	0.051 *6*	α(K)=0.042 *6*; α(L)=0.0072 *7*; α(M)=0.00169 *16* α(N)=0.00043 *4*; α(O)=8.5×10^{-5} *9*; α(P)=9.0×10^{-6} *10* Mult.,δ: α(K)exp=0.043 *6* (1972Ha71) and 0.040 *7* (1956Sc18).
		852.90 *5*	1.66 *11*	761.43	5/2$^-$				
		910.90 *5*	37.9 *7*	703.443	7/2$^-$	M1(+E2)	−0.05 *5*	0.0226	α(K)=0.0186 *3*; α(L)=0.00307 *5*; α(M)=0.000716 *11*

$^{205}_{82}Pb_{123}$-12

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
									α(N)=0.000182 *3*; α(O)=3.63×10^{-5} *6*; α(P)=3.90×10^{-6} *6* Mult.: γγ(θ) in 1973Ah01; α(K)exp=0.019 *3* (1972Ha71) and 0.018 *3*, average of values given in 1956Sc18 and 1959St42. δ: From 1973Ah01.
1614.32	7/2$^-$	1038.86 *24*	2.62 *22*	576.20	3/2$^-$				
		1351.52 *5*	24.4 *7*	262.81	3/2$^-$	E2		0.00378	α(K)=0.00305 *5*; α(L)=0.000535 *8*; α(M)=0.0001259 *18* α(N)=3.19×10^{-5} *5*; α(O)=6.29×10^{-6} *9*; α(P)=6.36×10^{-7} *9*; α(IPF)=2.49×10^{-5} *4* Mult.: A$_2$=−0.63 *14* (1990Si13); α(K)exp=0.0031 *9* (1972Ha71) and 0.0033 *13* (1956Sc18).
		1614.30 *15*	52.5 *9*	0.0	5/2$^-$	M1+E2	0.7 *3*	0.0046 *5*	α(K)=0.0036 *4*; α(L)=0.00060 *7*; α(M)=0.000139 *15* α(N)=3.5×10^{-5} *4*; α(O)=7.0×10^{-6} *8*; α(P)=7.5×10^{-7} *9*; α(IPF)=0.000150 *14* Mult.: A$_2$=1.09 *+1−4*, A$_4$=0.26 *+8−7* (1990Si13); α(K)exp=0.0047 *11* (1972Ha71) and 0.0053 *13* (1956Sc18). δ: From α(K)exp and δ=−0.84 *+17−23* (1990Si13).
1618.0	(1/2$^-$,3/2$^-$)	1041.8[‡] *4*	100[‡]	576.20	3/2$^-$				
1697.45	17/2$^+$	683.6[@] *2*	100[@]	1013.85	13/2$^+$	E2		0.01445	α(K)=0.01098 *16*; α(L)=0.00264 *4*; α(M)=0.000642 *9* α(N)=0.0001626 *23*; α(O)=3.13×10^{-5} *5*; α(P)=2.74×10^{-6} *4* Mult.: A$_2$=+0.29 *4*; A$_2$=+0.27 *1* and A$_4$=−0.09 *1*; α(K)exp=0.011 *2*; K/L=4.4 *4* (1976Li09); A$_2$=0.29 *4* and A$_4$=0.003 *4* (1973Be32); A$_2$=0.25 *8*; pol=0.04 *13* (1994Po20).
1704.98	(7/2,9/2)$^-$	129.62 *10*	2.0 *2*	1575.35	9/2$^-$				
		205.74 *7*	8.1 *10*	1499.14	9/2$^-$	M1(+E2)	≤0.7	1.07 *14*	α(K)=0.85 *14*; α(L)=0.1701 *25*; α(M)=0.0406 *10* α(N)=0.01031 *25*; α(O)=0.00202 *3*; α(P)=0.000197 *19* Mult.,δ: α(K)exp=0.90 *20* (1972Ha71).
		661.40 *15*	9.0 *15*	1043.716	7/2$^-$				
		717.37 *5*	100 *2*	987.63	9/2$^-$	M1+E2	0.67 *13*	0.0330 *25*	α(K)=0.0268 *21*; α(L)=0.0047 *3*; α(M)=0.00110 *7* α(N)=0.000279 *17*; α(O)=5.5×10^{-5} *4*; α(P)=5.8×10^{-6} *5* Mult.,δ: α(K)exp=0.026 *7* (1972Ha71) and 0.027 *2* (1956Sc18).
		1001.59 *20*	82 *14*	703.443	7/2$^-$	M1+E2	0.8 *4*	0.013 *3*	α(K)=0.0110 *24*; α(L)=0.0019 *4*; α(M)=0.00044 *8* α(N)=0.000111 *21*; α(O)=2.2×10^{-5} *5*; α(P)=2.3×10^{-6} *5* Mult.,δ: α(K)exp=0.0108 *22* (1972Ha71) and 0.013 *5* (1956Sc18).
		1704.7		0.0	5/2$^-$				E$_\gamma$: From ^{206}Pb(n,2nγ).
1756.4	(7/2,9/2$^-$)	1756.4 *3*	100	0.0	5/2$^-$				
1758.62	9/2$^+$	164.95 *10*	2.23 *14*	1593.55	9/2$^+$				
		259.46 *20*	7.1 *36*	1499.14	9/2$^-$				

$^{205}_{82}Pb_{123}$-13

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
1758.62	9/2$^+$	744.70 *10*	100.0 *22*	1013.85	13/2$^+$	E2		0.01206	α(K)=0.00928 *13*; α(L)=0.00211 *3*; α(M)=0.000510 *8* α(N)=0.0001292 *18*; α(O)=2.49×10^{-5} *4*; α(P)=2.24×10^{-6} *4* Mult.: α(K)exp=0.010 *3* (1972Ha71) and 0.009 *3* (1956Sc18).
		771.40[b] *15*	6.7 *5*	987.63	9/2$^-$				
1764.36	7/2$^-$	170.8 *2*	0.013 *3*	1593.55	9/2$^+$				
		499.54 *20*	0.19 *5*	1264.73	5/2$^-$	(M1)		0.1082	α(K)=0.0887 *13*; α(L)=0.01494 *21*; α(M)=0.00349 *5* α(N)=0.000888 *13*; α(O)=0.0001770 *25*; α(P)=1.90×10^{-5} *3* Mult.: From α(K)exp=0.09 *3* (1972Ha71).
		720.65 *10*	0.44 *3*	1043.716	7/2$^-$	M1(+E2)	≤0.12	0.0412 *7*	α(K)=0.0338 *5*; α(L)=0.00564 *9*; α(M)=0.001317 *20* α(N)=0.000335 *5*; α(O)=6.68×10^{-5} *10*; α(P)=7.16×10^{-6} *11* Mult.,δ: α(K)exp=0.0359 *+11−8* (1972Ha71).
		1003.0 *3*	0.22 *10*	761.43	5/2$^-$	M1+E2	0.8 *5*	0.013 *4*	α(K)=0.011 *3*; α(L)=0.0019 *5*; α(M)=0.00044 *10* α(N)=0.000111 *25*; α(O)=2.2×10^{-5} *5*; α(P)=2.3×10^{-6} *6* Mult.,δ: α(K)exp=0.0108 *22* (1972Ha71).
		1060.75 *15*	0.136 *14*	703.443	7/2$^-$				
		1501.40 *10*	0.70 *4*	262.81	3/2$^-$	(E2)		0.00315	α(K)=0.00252 *4*; α(L)=0.000431 *6*; α(M)=0.0001010 *15* α(N)=2.56×10^{-5} *4*; α(O)=5.06×10^{-6} *7*; α(P)=5.18×10^{-7} *8*; α(IPF)=6.41×10^{-5} *9* Mult.: α(K)exp=0.0034 *8* (1972Ha71) and 0.0044 *25* (1956Sc18).
		1764.30 *10*	100.0 *19*	0.0	5/2$^-$	M1+E2	0.055 *17*	0.00445	α(K)=0.00345 *5*; α(L)=0.000560 *8*; α(M)=0.0001303 *19* α(N)=3.31×10^{-5} *5*; α(O)=6.61×10^{-6} *10*; α(P)=7.13×10^{-7} *10*; α(IPF)=0.000269 *4* Mult.: K/L=6.0 *3* (1956Sc18); internal pair coef=3.4×10^{-4} *6* (1971Al03); A_2=0.22 *2*, A_4=0.002 *1* (1990Si13); α(K)exp=0.0042 *5* and K/L=6.6 *8* (1972Ha71); α(K)exp=0.0045 *9*, average of values given in 1956Sc18 and 1959St42. δ: From α(K)exp and K/L, and δ=+0.055 *+10−8* (1990Si13).
1775.80	7/2$^-$	788.13 *15*	2.5 *4*	987.63	9/2$^-$				
		1014.30 *5*	22.9 *5*	761.43	5/2$^-$	M1+E2	0.5 *4*	0.015 *3*	α(K)=0.0123 *23*; α(L)=0.0021 *4*; α(M)=0.00048 *8* α(N)=0.000122 *20*; α(O)=2.4×10^{-5} *4*; α(P)=2.6×10^{-6} *5* Mult.,δ: α(K)exp=0.0124 *20* (1972Ha71).
		1072.40 *10*	7.58 *16*	703.443	7/2$^-$	M1(+E2)	≤0.7	0.0134 *15*	α(K)=0.0110 *13*; α(L)=0.00183 *19*; α(M)=0.00043 *5* α(N)=0.000108 *11*; α(O)=2.16×10^{-5} *23*; α(P)=2.3×10^{-6} *3* Mult.,δ: α(K)exp=0.013 *3* (1972Ha71).
		1199.62 *10*	4.8 *3*	576.20	3/2$^-$				
		1513.40 *20*	1.8 *3*	262.81	3/2$^-$				

$^{205}_{82}Pb_{123}$-14

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
1775.80	7/2⁻	1775.80 *10*	100.0 *20*	0.0	5/2⁻	M1(+E2)	+0.03 *+4−3*	0.00439	α(K)=0.00340 *5*; α(L)=0.000551 *8*; α(M)=0.0001283 *19* α(N)=3.26×10^{-5} *5*; α(O)=6.51×10^{-6} *10*; α(P)=7.02×10^{-7} *10*; α(IPF)=0.000277 *4* Mult.: A_2=0.26 *+6−7*, A_4=0.001 *+2−1* (1990Si13); α(K)exp=0.0039 *10* (1972Ha71) and 0.0043 *12*, average of values given in 1956Sc18 and 1959St42. δ: From 1990Si13.
1812.05	(1/2⁻,3/2⁻)	1050.9[‡] *4*	21[‡] *8*	761.43	5/2⁻				
		1812.03[‡] *8*	100[‡] *15*	0.0	5/2⁻				
1817.99	(3/2⁻,5/2⁻)	1815.6 *4*	29 *10*	2.329	1/2⁻				
		1818.0 *2*	100 *8*	0.0	5/2⁻				
1842.06	(13/2)⁺	248.4 *2*	0.7 *4*	1593.55	9/2⁺				
		828.22 *5*	100 *4*	1013.85	13/2⁺				
1920.1	(1/2⁻,3/2⁻)	546.4[‡] *3*	31[‡] *13*	1374.17	(1/2,3/2)⁻				
		1655.8[‡] *5*	100[‡] *25*	262.81	3/2⁻				
1965.99	(7/2,9/2⁻)	701.16 *20*	100 *40*	1264.73	5/2⁻				
		922.15 *10*	34 *2*	1043.716	7/2⁻				
		978.50 *10*	26 *4*	987.63	9/2⁻				
		1965.8 *5*	5.2 *10*	0.0	5/2⁻				
2020.7	19/2⁺	323.2[@] *2*	100[@]	1697.45	17/2⁺	M1		0.348	α(K)=0.285 *4*; α(L)=0.0485 *7*; α(M)=0.01136 *16* α(N)=0.00289 *4*; α(O)=0.000575 *9*; α(P)=6.16×10^{-5} *9* Mult.: A_2=−0.22 *5*; A_2=−0.24 *1* and A_4≤0.001; α(K)exp=0.28 *5*; K/L=5.3 *8* (1976Li09); A_2=−0.22 *5* and A_4=−0.07 *7* (1973Be32).
2087.2	(1/2⁻,3/2⁻)	1511.0[‡] *4*	100[‡]	576.20	3/2⁻				
2117.5	(1/2⁻,3/2⁻)	1120.3[‡] *3*	22[‡] *4*	997.6	(1/2,3/2)⁻				
		1543.9[‡] *15*	100[‡] *12*	576.20	3/2⁻				
		2117.0[‡] *3*	19[‡] *4*	0.0	5/2⁻				
2203.88	11/2⁺	361.85 *20*	1.4 *4*	1842.06	(13/2)⁺				
		444.8 *7*	0.6 *3*	1758.62	9/2⁺				
		498.87 *20*	1.8 *11*	1704.98	(7/2,9/2)⁻				
		704.86 *20*	17 *4*	1499.14	9/2⁻				
		1190.03 *5*	100 *3*	1013.85	13/2⁺	M1+E2	0.08 *4*	0.01136 *17*	α(K)=0.00935 *14*; α(L)=0.001535 *23*; α(M)=0.000358 *6* α(N)=9.08×10^{-5} *14*; α(O)=1.81×10^{-5} *3*; α(P)=1.95×10^{-6} *3*; α(IPF)=5.55×10^{-6} *8* Mult.: A_2=0.04 *5*, A_4=0.002 *+2−1* (1990Si13); α(K)exp=0.0094 *18* (1972Ha71) and 0.011 *2*

$^{205}_{82}Pb_{123}$-15

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α[a]	Comments
									(1956Sc18). δ: From α(K)exp and δ=−0.08 *3* (1990Si13).
2203.88	11/2$^+$	1216.25 *10*	4.46 *21*	987.63	9/2$^-$				
2252.28	(7/2)$^+$	476.30 *15*	4.6 *6*	1775.80	7/2$^-$				
		488.05 *15*	7.6 *9*	1764.36	7/2$^-$				
		493.65 *5*	73.0 *15*	1758.62	9/2$^+$	M1(+E2)	−0.1 *+19−2*	0.11 *7*	α(K)=0.09 *6*; α(L)=0.015 *7*; α(M)=0.0036 *15* α(N)=0.0009 *4*; α(O)=0.00018 *8*; α(P)=1.9×10^{-5} *10* Mult.: A_2=−0.3 *+1−2*, A_4=−0.01 *+1−4* (1990Si13); α(K)exp=0.092 *13* (1972Ha71) and 0.12 *2* (1956Sc18). δ: From 1990Si13.
		987.49 *20*	18 *6*	1264.73	5/2$^-$				
		1208.70 *5*	100.0 *18*	1043.716	7/2$^-$	E1+M2	−0.08 *+6−5*	0.0020 *3*	α(K)=0.00162 *21*; α(L)=0.00025 *4*; α(M)=5.7×10^{-5} *9* α(N)=1.45×10^{-5} *23*; α(O)=2.9×10^{-6} *5*; α(P)=3.0×10^{-7} *5*; α(IPF)=1.80×10^{-5} *3* Mult.: A_2=+0.44 *9*, A_4=+0.003 *+6−3* (1990Si13). δ: From 1990Si13.
		1264.60 *20*	10 *4*	987.63	9/2$^-$				
		1548.65 *15*	55 *3*	703.443	7/2$^-$				
2352.8	(1/2,3/2)$^-$	734.80[‡] *20*	100[‡]	1618.0	(1/2$^-$,3/2$^-$)				
2485.5	(1/2$^-$,3/2$^-$)	564.4[‡b] *3*	31[‡] *13*	1920.1	(1/2$^-$,3/2$^-$)				
		1909.3[‡] *5*	100[‡] *20*	576.20	3/2$^-$				
2488.07	(9/2)$^+$	235.97 *6*	9.1 *5*	2252.28	(7/2)$^+$	M1(+E2)	≤0.7	0.73 *10*	α(K)=0.58 *10*; α(L)=0.113 *4*; α(M)=0.0268 *5* α(N)=0.00681 *13*; α(O)=0.00134 *4*; α(P)=0.000133 *14* Mult.,δ: α(K)exp=0.73 *15* (1972Ha71) and 0.50 *19* (1956Sc18).
		284.26 *10*	5.0 *15*	2203.88	11/2$^+$			0.515	α(K)=0.421; α(L)=0.0721; α(M)=0.0169; α(N+..)=0.00547
		646.00 *10*	10.5 *5*	1842.06	(13/2)$^+$				
		723.57 *5*	24.5 *20*	1764.36	7/2$^-$	(E1)		0.00456	α(K)=0.00379 *6*; α(L)=0.000591 *9*; α(M)=0.0001368 *20* α(N)=3.46×10^{-5} *5*; α(O)=6.83×10^{-6} *10*; α(P)=6.91×10^{-7} *10* Mult.: α(K)exp<0.038 (1972Ha71).
		729.40 *5*	10.5 *6*	1758.62	9/2$^+$	(M1+E2)		0.0401	α(K)=0.0330 *5*; α(L)=0.00549 *8*; α(M)=0.001281 *18* α(N)=0.000326 *5*; α(O)=6.50×10^{-5} *9*; α(P)=6.97×10^{-6} *10* Mult.: α(K)exp<0.078 (1972Ha71).

$^{205}_{82}Pb_{123}$-16

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	α[a]	Comments
2488.07	$(9/2)^+$	894.56 *5*	100.0 *15*	1593.55	$9/2^+$	M1(+E2)	≤0.6	0.0216 *21*	α(K)=0.0178 *18*; α(L)=0.0030 *3*; α(M)=0.00069 *6* α(N)=0.000176 *15*; α(O)=3.5×10^{-5} *3*; α(P)=3.8×10^{-6} *4* Mult.,δ: α(K)exp=0.019 *3* (1972Ha71).
		989.12 *20*	<5	1499.14	$9/2^-$				
2521.46	$(7/2)^-$	703.4[b]		1817.99	$(3/2^-,5/2^-)$				
		757.09 *20*	100 *38*	1764.36	$7/2^-$				
		1256.9 *5*	18 *9*	1264.73	$5/2^-$				
		1760.0 *4*	100 *25*	761.43	$5/2^-$				
		1818.0 *2*	38 *3*	703.443	$7/2^-$				
2555.7	$(21/2^+)$	534.9[&] *5*	39[&] *7*	2020.7	$19/2^+$	(M1)		0.0903	α(K)=0.0741 *11*; α(L)=0.01245 *18*; α(M)=0.00291 *5* α(N)=0.000739 *11*; α(O)=0.0001475 *21*; α(P)=1.581×10^{-5} *23* B(M1)(W.u.)>5.6×10^{-5} Mult.: A_2=0.27 *45* from γ(θ) in ^{204}Hg(^{9}Be,xnγ).
		858.3[&] *5*	100[&] *14*	1697.45	$17/2^+$	[E2]		0.00901	α(K)=0.00707 *10*; α(L)=0.001479 *21*; α(M)=0.000355 *5* α(N)=8.99×10^{-5} *13*; α(O)=1.747×10^{-5} *25*; α(P)=1.630×10^{-6} *23* B(E2)(W.u.)>0.017
2556.0	$(1/2^-,3/2^-)$	743.9[‡] *3*	100[‡]	1812.05	$(1/2^-,3/2^-)$				
2565.12	$9/2^+$	312.84 *20*	0.40 *15*	2252.28	$(7/2)^+$	M1(+E2)	≤0.7	0.33 *5*	α(K)=0.27 *5*; α(L)=0.050 *4*; α(M)=0.0117 *7* α(N)=0.00298 *18*; α(O)=0.00059 *4*; α(P)=6.0×10^{-5} *8* Mult.,δ: α(K)exp=0.28 *7* (1972Ha71) and 0.29 *9* (1960St24).
		361.20 *20*	0.50 *15*	2203.88	$11/2^+$				
		723.09 *20*	0.45 *20*	1842.06	$(13/2)^+$				
		789.3 *2*	0.30 *15*	1775.80	$7/2^-$				
		800.80 *5*	3.07 *10*	1764.36	$7/2^-$				
		806.55 *10*	2.57 *20*	1758.62	$9/2^+$				
		860.13 *5*	7.06 *13*	1704.98	$(7/2,9/2)^-$				
		950.84 *5*	6.30 *15*	1614.32	$7/2^-$				
		971.56 *5*	4.54 *10*	1593.55	$9/2^+$				
		989.84 *20*	1.2 *4*	1575.35	$9/2^-$				
		1066.03 *15*	1.77 *8*	1499.14	$9/2^-$				
		1521.20 *10*	3.23 *20*	1043.716	$7/2^-$				
		1551.00 *10*	15.7 *4*	1013.85	$13/2^+$	E2		0.00299	α(K)=0.00238 *4*; α(L)=0.000404 *6*; α(M)=9.45×10^{-5} *14* α(N)=2.40×10^{-5} *4*; α(O)=4.74×10^{-6} *7*; α(P)=4.86×10^{-7} *7*; α(IPF)=8.01×10^{-5} *12* Mult.: α(K)exp=0.0028 *8* (1972Ha71) and 0.0033 *17* (1956Sc18).
		1577.50 *15*	2.70 *15*	987.63	$9/2^-$				

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	α[a]	Comments
2565.12	9/2+	1861.70 *10*	100.0 *15*	703.443	7/2−	E1(+M2)	+0.002 *+19−6*	1.29×10^{-3} *2*	α(K)=0.000722 *11*; α(L)=0.0001069 *16*; α(M)=2.46×10^{-5} *4* α(N)=6.22×10^{-6} *10*; α(O)=1.239×10^{-6} *19*; α(P)=1.311×10^{-7} *20*; α(IPF)=0.000430 *6* Mult.: A_2=0.30 *+1−4*, A_4=0.0 (1990Si13); α(K)exp=0.00089 *3* (1972Ha71) and 0.0010 *3*, average of values given in 1956Sc18 and 1959St42. δ: From 1990Si13.
		2565.10 *15*	0.69 *4*	0.0	5/2−	M2		0.00438	α(K)=0.00323 *5*; α(L)=0.000536 *8*; α(M)=0.0001252 *18* α(N)=3.18×10^{-5} *5*; α(O)=6.36×10^{-6} *9*; α(P)=6.84×10^{-7} *10*; α(IPF)=0.000454 *7* Mult.: α(K)exp=0.0023 *6* (1972Ha71) and 0.0018 *9* (1959St42).
2606.88	9/2+	354.45 *10*	0.69 *8*	2252.28	(7/2)+				
		764.99 *20*	0.38 *15*	1842.06	(13/2)+				
		831.0 *3*	1.6 *4*	1775.80	7/2−				
		842.8 *3*	0.88 *25*	1764.36	7/2−				
		848.2 *3*	1.07 *15*	1758.62	9/2+				
		901.90 *5*	5.23 *19*	1704.98	(7/2,9/2)−				
		992.65 *20*	3.5 *13*	1614.32	7/2−				
		1013.40 *15*	3.3 *8*	1593.55	9/2+	M1+E2	−0.4 *1*	0.0157 *7*	α(K)=0.0129 *6*; α(L)=0.00215 *9*; α(M)=0.000501 *21* α(N)=0.000127 *6*; α(O)=2.54×10^{-5} *11*; α(P)=2.71×10^{-6} *12* Mult.: A_2=−0.13 *9*, A_4=−0.07 *+3−4* (1990Si13); ce in 1965Be08. δ: From 1990Si13.
		1031.5 *3*	1.4 *4*	1575.35	9/2−				
		1107.72 *10*	4.0 *4*	1499.14	9/2−				
		1563.15 *10*	6.7 *4*	1043.716	7/2−				
		1593.00 *15*	4.7 *3*	1013.85	13/2+				
		1619.10 *15*	14.9 *6*	987.63	9/2−				
		1903.45 *10*	100.0 *15*	703.443	7/2−	E1(+M2)	+0.01 *+2−1*	1.29×10^{-3} *2*	α(K)=0.000697 *11*; α(L)=0.0001031 *17*; α(M)=2.37×10^{-5} *4* α(N)=6.00×10^{-6} *10*; α(O)=1.195×10^{-6} *20*; α(P)=1.266×10^{-7} *21*; α(IPF)=0.000460 *7* Mult.: A_2=0.32 *+2−3* (1990Si13); α(K)exp=0.0007 *2* (1972Ha71) and 0.00078 *18*, average of values given in 1956Sc18 and 1959St42. δ: From 1990Si13.

$^{205}_{82}Pb_{123}$-18

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[a]	Comments
2606.88	9/2$^+$	2607.1 *2*	0.76 *8*	0.0	5/2$^-$	M2	0.00425	α(K)=0.00310 *5*; α(L)=0.000515 *8*; α(M)=0.0001202 *17* α(N)=3.06×10^{-5} *5*; α(O)=6.10×10^{-6} *9*; α(P)=6.57×10^{-7} *10*; α(IPF)=0.000473 *7* Mult.: α(K)exp=0.0029 *8* (1972Ha71) and 0.0025 *13* (1959St42).
2707.72	9/2$^+$	1661[#]	29[#] *12*	1043.716	7/2$^-$			
		2004.3[#] *1*	100[#] *21*	703.443	7/2$^-$			
3168.0	21/2$^-$	612.2[&] *5*	4.8[&] *5*	2555.7	(21/2$^+$)	[E1]	0.00633	α(K)=0.00525 *8*; α(L)=0.000829 *12*; α(M)=0.000192 *3* α(N)=4.85×10^{-5} *7*; α(O)=9.56×10^{-6} *14*; α(P)=9.55×10^{-7} *14* B(E1)(W.u.)>5.5×10^{-8}
		1147.4[&] *5*	100[&] *7*	2020.7	19/2$^+$	E1	0.00196	α(K)=0.001637 *23*; α(L)=0.000247 *4*; α(M)=5.70×10^{-5} *8* α(N)=1.443×10^{-5} *21*; α(O)=2.86×10^{-6} *4*; α(P)=2.98×10^{-7} *5*; α(IPF)=4.18×10^{-6} *9* B(E1)(W.u.)>1.7×10^{-7} Mult.: A_2=−0.17 *5* and α(K)exp=0.0015 *3* (1976Li09); A_2=−0.17 *5* and A_4=0.10 *5* (1973Be32) in ^{204}Hg(α,3nγ); A_2=−0.11 *5*; pol=+0.06 *19* in ^{204}Hg(^{9}Be,xnγ) (1994Po20).
3195.8	25/2$^-$	27.8[&] *12*	0.24[&] *8*	3168.0	21/2$^-$	[E2]	2.9×10^3 *7*	α(L)=2.1×10^3 *6*; α(M)=5.6×10^2 *14* α(N)=1.4×10^2 *4*; α(O)=25 *6*; α(P)=0.80 *20* B(E2)(W.u.)=0.66 *21*
		1175.1[&] *5*	100[&] *6*	2020.7	19/2$^+$	E3	0.01077 *16*	α(K)=0.00821 *12*; α(L)=0.00194 *3*; α(M)=0.000473 *7* α(N)=0.0001201 *17*; α(O)=2.33×10^{-5} *4*; α(P)=2.19×10^{-6} *3*; α(IPF)=6.21×10^{-7} *13* B(E3)(W.u.)=0.09 *4* Mult.: A_2=+0.33 *4*, α(K)exp=0.0067 *14* (1976Li09); A_2=0.33 *4* and A_4=0.08 *6* (1973Be32); A_2=0.08 *3* (1994Po20).
3481.24		3218.4[#] *2*	100[#]	262.81	3/2$^-$			
3521.2	(23/2$^-$)	325.4[@] *5*	100[@]	3195.8	25/2$^-$	[M1]	0.342	α(K)=0.279 *4*; α(L)=0.0476 *7*; α(M)=0.01115 *17* α(N)=0.00283 *5*; α(O)=0.000565 *9*; α(P)=6.04×10^{-5} *9*
3626.1	29/2$^-$	430.3[@] *2*	100[@]	3195.8	25/2$^-$	E2	0.0426	α(K)=0.0287 *4*; α(L)=0.01050 *15*; α(M)=0.00264 *4* α(N)=0.000667 *10*; α(O)=0.0001250 *18*; α(P)=9.13×10^{-6} *13* Mult.: A_2=+0.30 *8*; A_2=+0.27 *2* and A_4=−0.10 *3*; α(K)exp=0.032 *4*; K/L=2.7 *3* (1976Li09); A_2=0.30 *8* and A_4=−0.2 *1* (1973Be32); A_2=0.43 *7*; pol=+0.53 *17* (1994Po20).
3651.5	(25/2$^-$)	455.7[@] *5*	100[@]	3195.8	25/2$^-$			
3910.4	(27/2$^-$)	284.3[@] *5*	100[@]	3626.1	29/2$^-$			
		714.9[@] *5*	86[@]	3195.8	25/2$^-$			
4115.95		3853.1[#] *1*	100[#]	262.81	3/2$^-$			
4320.15		4057.3[#] *3*	47[#] *16*	262.81	3/2$^-$			
		4320.1[#] *3*	100[#] *45*	0.0	5/2$^-$			

$^{205}_{82}Pb_{123}$-19

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[a]	Comments
4337.26		3760.2[#] *3*	15.0[#] *17*	576.20	3/2⁻			
		4074.5[#] *1*	100[#] *11*	262.81	3/2⁻			
4447.0		3403.3[#] *3*	100[#]	1043.716	7/2⁻			
4490.19		3684[#]	32[#] *3*	803.35	(1/2,3/2)⁻			
		3914.5[#] *3*	5.0[#] *10*	576.20	3/2⁻			
		4227.4[#] *2*	72.0[#] *23*	262.81	3/2⁻			
		4487.6[#] *2*	100[#] *11*	2.329	1/2⁻			
4532.07		3730[#]	58[#] *12*	803.35	(1/2,3/2)⁻			
		4269.2[#] *1*	27[#] *5*	262.81	3/2⁻			
		4531.7[#] *20*	100[#] *21*	0.0	5/2⁻			
4551.76		3975.8[#] *3*	29[#] *6*	576.20	3/2⁻			
		4287.7[#] *10*	33[#] *7*	262.81	3/2⁻			
		4549.3[#] *2*	100[#] *21*	2.329	1/2⁻			
4583.25		4320.1[#] *3*	47[#] *17*	262.81	3/2⁻			
		4581.0[#] *2*	100[#] *11*	2.329	1/2⁻			
4995.5		4192.1[#] *3*	100[#]	803.35	(1/2,3/2)⁻			
5064.7	(29/2⁺)	1154.4[&] *5*	73[&] *13*	3910.4	(27/2⁻)	[E1]	0.00194	α(K)=0.001620 *23*; α(L)=0.000245 *4*; α(M)=5.64×10⁻⁵ *8* α(N)=1.427×10⁻⁵ *20*; α(O)=2.83×10⁻⁶ *4*; α(P)=2.95×10⁻⁷ *5*; α(IPF)=5.15×10⁻⁶ *11* B(E1)(W.u.)>1.5×10⁻⁸
		1438.4[&] *5*	100[&] *13*	3626.1	29/2⁻	[E1]	1.45×10⁻³	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)=0.0001300 *19* B(E1)(W.u.)>1.1×10⁻⁸
5075.87		4498[#] *3*	96[#] *30*	576.20	3/2⁻			
		4813.0[#] *2*	100[#] *31*	262.81	3/2⁻			
5161.9	(33/2⁺)	97.1[&] *5*	1.2[&] *3*	5064.7	(29/2⁺)	E2	7.18 *19*	α(K)=0.514 *8*; α(L)=4.96 *14*; α(M)=1.31 *4* α(N)=0.330 *10*; α(O)=0.0588 *17*; α(P)=0.00229 *7* B(E2)(W.u.)=0.13 *4* Mult.: From ce in ^{204}Hg(α,3nγ).
		1251.7[&] *5*	22[&] *3*	3910.4	(27/2⁻)	[E3]	0.00939	α(K)=0.00722 *11*; α(L)=0.001641 *23*; α(M)=0.000398 *6* α(N)=0.0001010 *15*; α(O)=1.97×10⁻⁵ *3*; α(P)=1.87×10⁻⁶ *3*; α(IPF)=3.11×10⁻⁶ *5* B(E3)(W.u.)=0.26 *4*
		1535.6[&] *5*	100[&] *9*	3626.1	29/2⁻	[M2]	0.01409	α(K)=0.01144 *16*; α(L)=0.00200 *3*; α(M)=0.000469 *7* α(N)=0.0001194 *17*; α(O)=2.38×10⁻⁵ *4*; α(P)=2.54×10⁻⁶ *4*; α(IPF)=4.56×10⁻⁵ *7* B(M2)(W.u.)=0.00124 *8*

$^{205}_{82}Pb_{123}$-20

Adopted Levels, Gammas (continued)

γ(^{205}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[a]	Comments
5173.0		4369.6[#] *20*	100[#]	803.35	$(1/2,3/2)^-$			
5203.87		4627.70[#] *10*	100[#] *31*	576.20	$3/2^-$			
		4940.90[#] *10*	97[#] *30*	262.81	$3/2^-$			
5255.9		4993.0[#] *5*	100[#]	262.81	$3/2^-$			
5284.6	$(27/2^-)$	1658.5[@] *2*	100[@]	3626.1	$29/2^-$	(M1)	0.00510	α(K)=0.00404 *6*; α(L)=0.000657 *10*; α(M)=0.0001529 *22* α(N)=3.88×10^{-5} *6*; α(O)=7.76×10^{-6} *11*; α(P)=8.37×10^{-7} *12*; α(IPF)=0.000201 *3* Mult.: A_2=−0.21 *8*; pol=+0.18 *79* in ^{204}Hg(^{9}Be,xnγ) (1994Po20).
5389.8	$(29/2^-)$	(105[@] *5*)	100[@]	5284.6	$(27/2^-)$			
5735.1	$(29/2^-)$	450.5[@] *2*	100[@]	5284.6	$(27/2^-)$	M1	0.1424	B(M1)(W.u.)=0.0002995 *13* α(K)=0.1167 *17*; α(L)=0.0197 *3*; α(M)=0.00461 *7* α(N)=0.001171 *17*; α(O)=0.000234 *4*; α(P)=2.50×10^{-5} *4* Mult.: A_2=−0.45 *30*; pol=−0.51 *152* in ^{204}Hg(^{9}Be,xnγ) (1994Po20).
5902.9	$(31/2^-)$	167.7[@] *5*	60[@]	5735.1	$(29/2^-)$	M1	2.15 *4*	α(K)=1.75 *3*; α(L)=0.302 *5*; α(M)=0.0709 *12* α(N)=0.0180 *3*; α(O)=0.00359 *6*; α(P)=0.000384 *7* B(M1)(W.u.)>5.5×10^{-5} Mult.: From α(exp)=3.4 *15* from intensity balance in ^{204}Hg(^{9}Be,xnγ) (1994Po20).
		513.1[@] *5*	68[@]	5389.8	$(29/2^-)$			
		618.3[@] *5*	100[@]	5284.6	$(27/2^-)$	(E2)	0.0180	α(K)=0.01341 *19*; α(L)=0.00347 *5*; α(M)=0.000851 *12* α(N)=0.000215 *3*; α(O)=4.12×10^{-5} *6*; α(P)=3.49×10^{-6} *5* B(E2)(W.u.)>0.0017 Mult.: A_2=0.58 *30* in ^{204}Hg(^{9}Be,xnγ) (1994Po20).
6139.5	$(33/2^+)$	236.6[@] *5*	100[@]	5902.9	$(31/2^-)$			
6318.7	$(33/2^-)$	415.9[@] *5*	100[@]	5902.9	$(31/2^-)$			
		928.9[@] *5*	32[@]	5389.8	$(29/2^-)$			
6533.5	$(35/2^+)$	214.8[@] *5*	100[@]	6318.7	$(33/2^-)$			
6865.8	$(37/2^+)$	332.3[@] *5*	100[@]	6533.5	$(35/2^+)$			

[†] From ^{205}Bi ε decay, unless otherwise stated. The δ values were determined using the briccmixing program.
[‡] From ^{204}Pb(n,γ) E=thermal.
[#] From ^{204}Pb(d,pγ).
[@] From ^{204}Hg(^{9}Be,xnγ).
[&] From ^{204}Hg(α,3nγ). Iγ is from Iγ(delayed).
[a] Additional information 1.
[b] Placement of transition in the level scheme is uncertain.

$^{205}_{82}Pb_{123}$-21

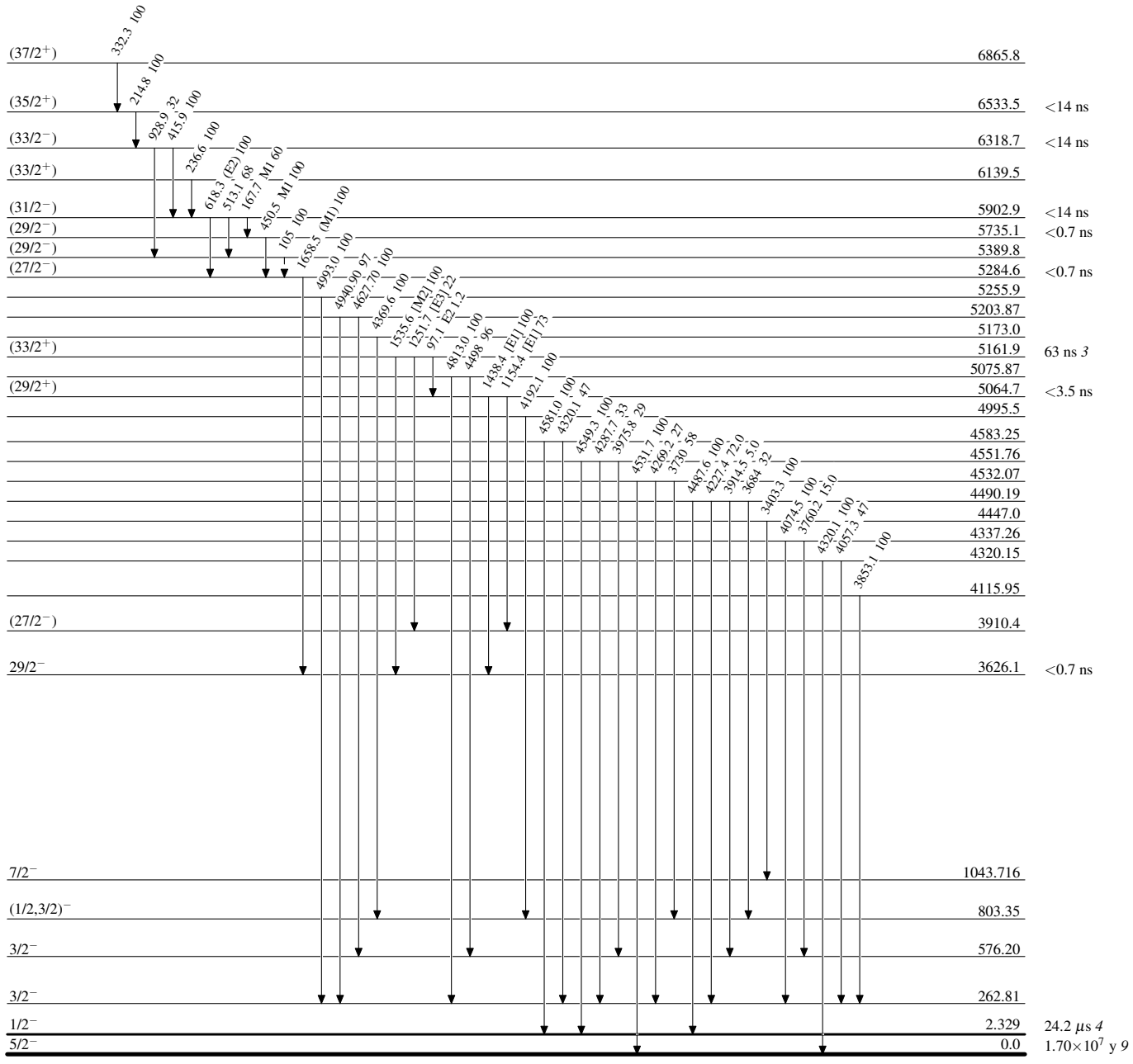
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)

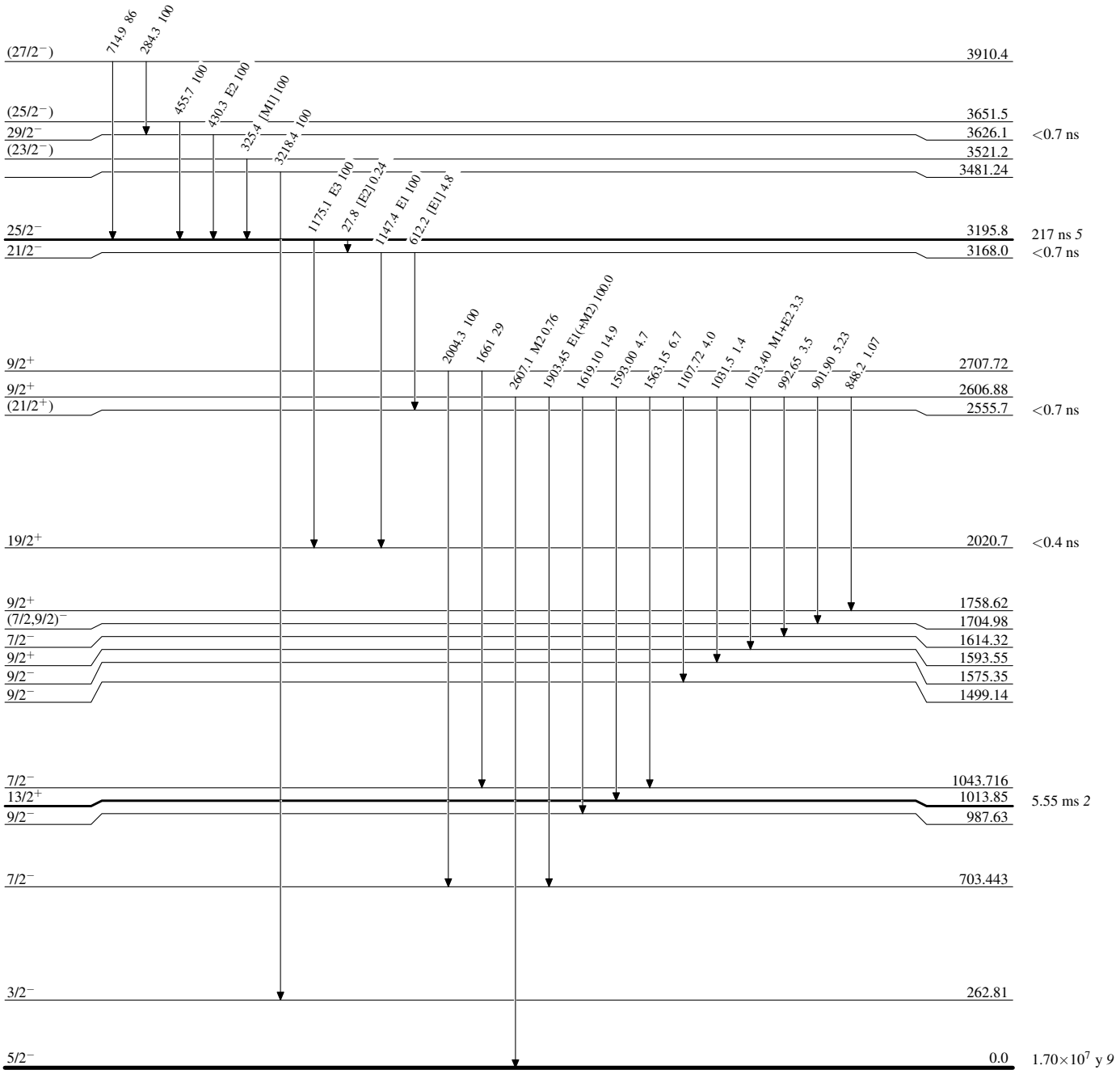


$^{205}_{82}Pb_{123}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{205}_{82}Pb_{123}$

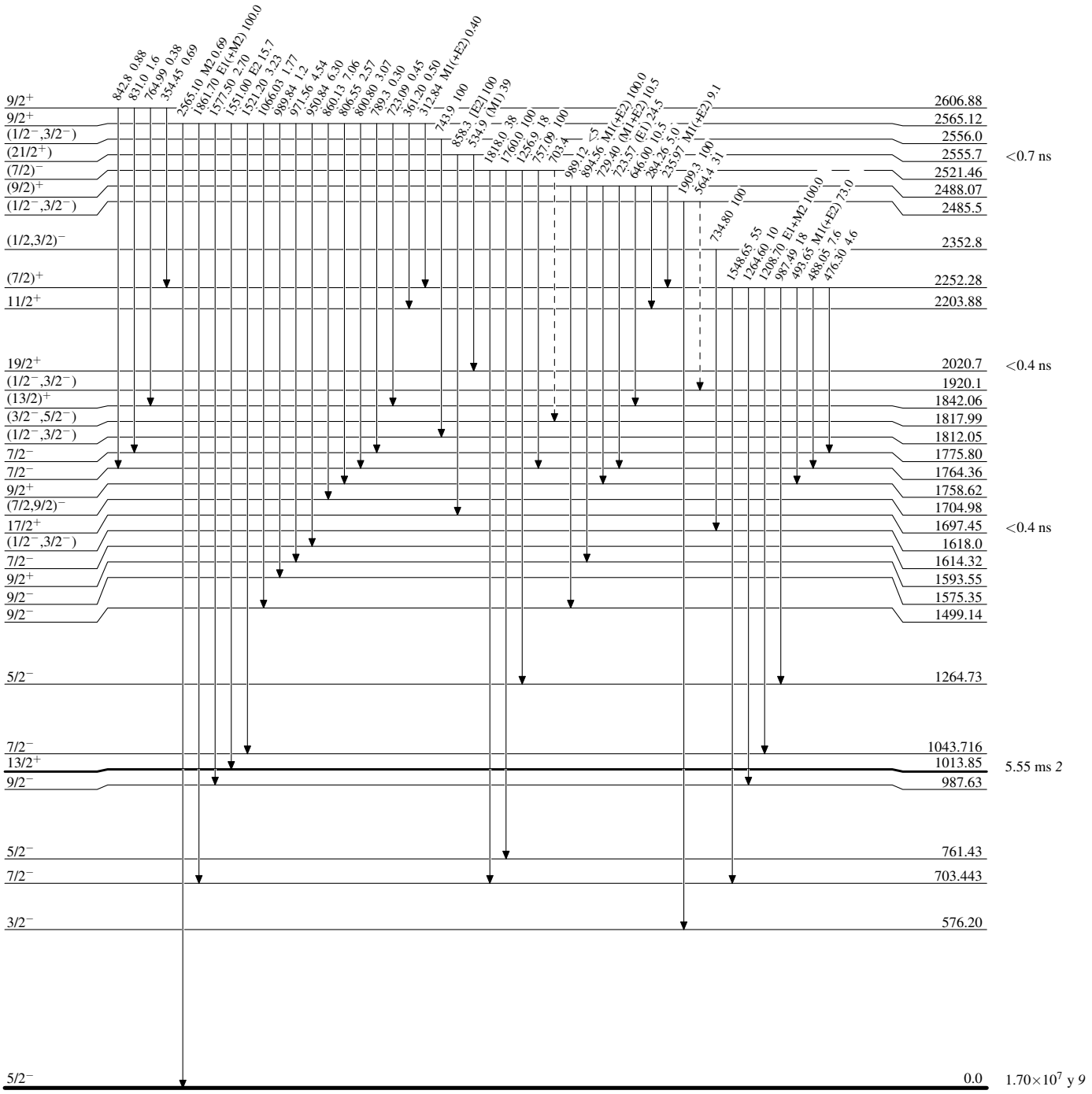
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

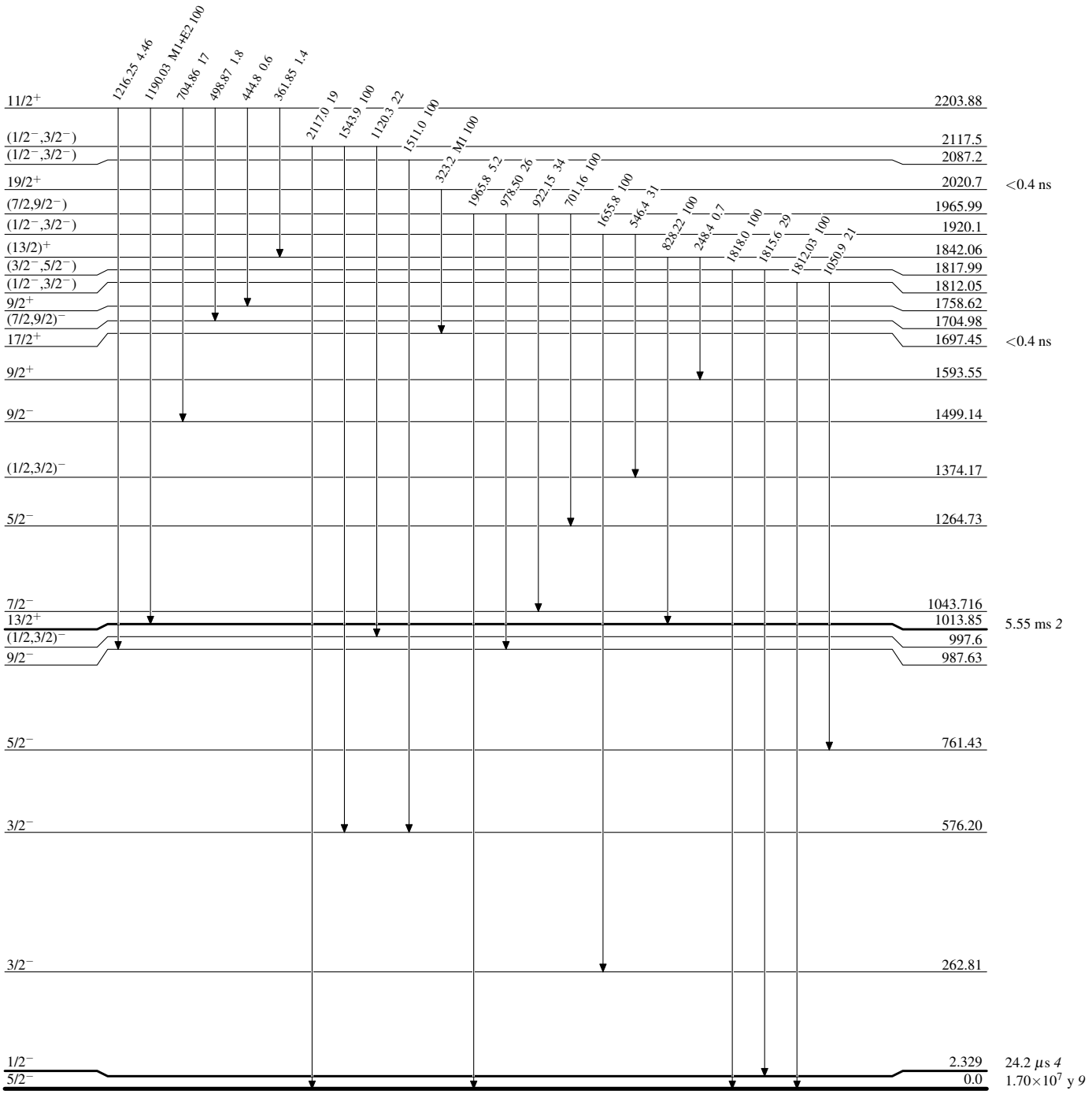


$^{205}_{82}Pb_{123}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



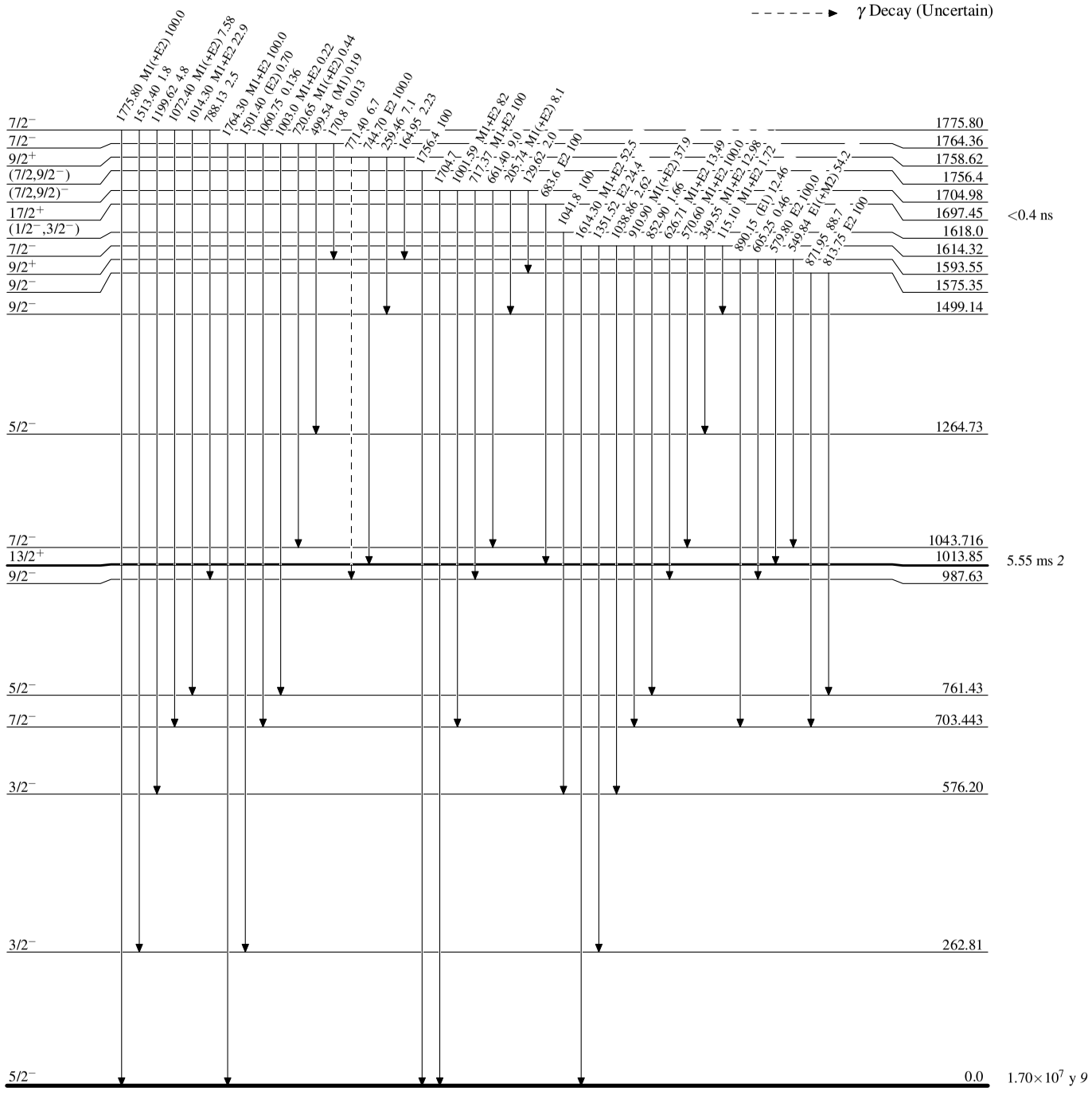
$^{205}_{82}Pb_{123}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

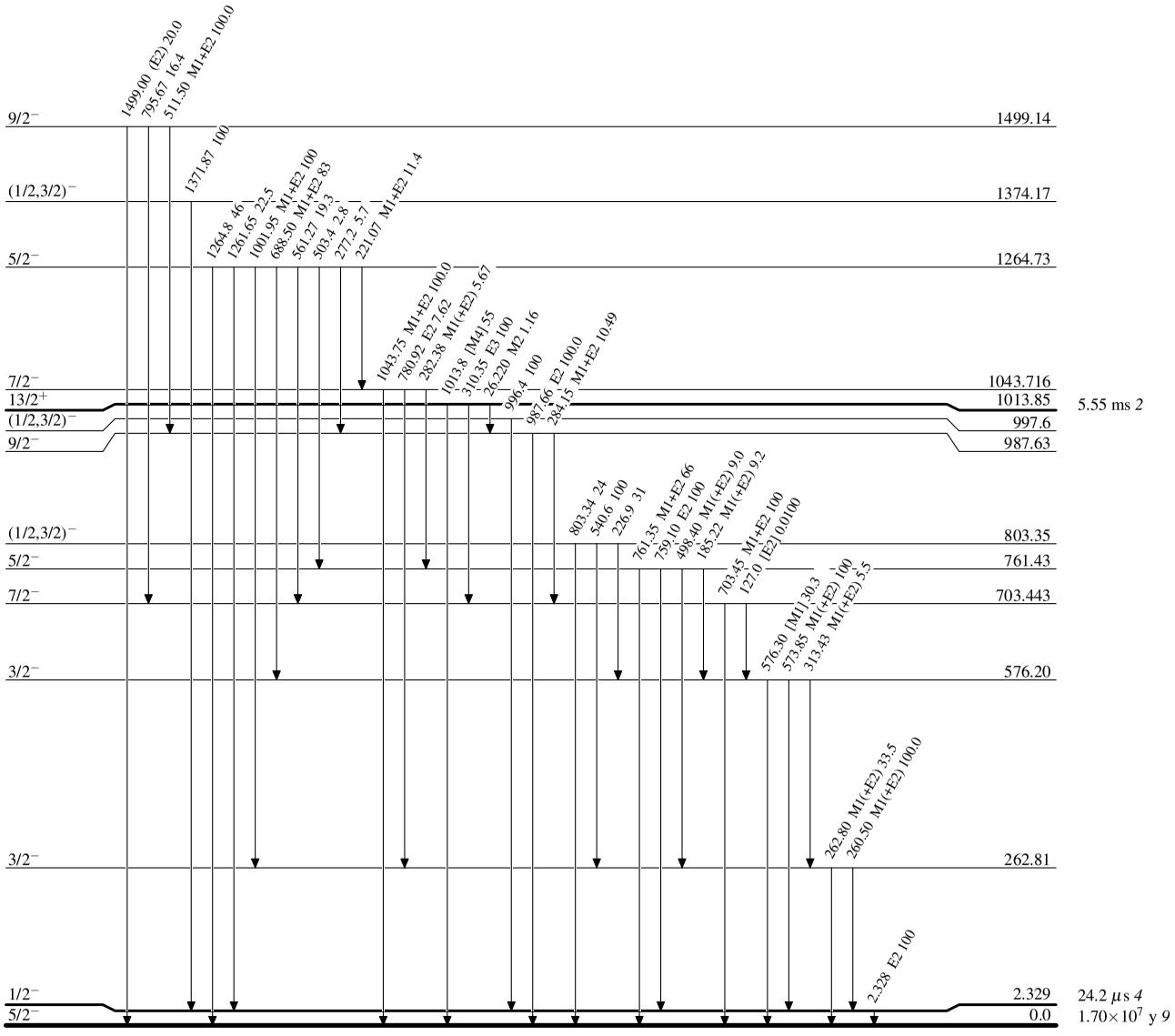


$^{205}_{82}Pb_{123}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{205}_{82}Pb_{123}$