		т		A .1	History	
		Тур	e	Author	Citation	Literature Cuton Date
		Full Eval	uation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022
$Q(\beta^{-}) = -3842$	18; S(n)=7091	17; S(p)=5	5513 <i>15</i> ;	Q(α)=2844 14	2021Wa16	
					²⁰¹ Pb Levels	
				Cross R	eference (XREF) Flags	
				A 201 Bi ε de B 205 Po α d C 200 Hg(α , 3	ecay D $^{192}Os(^{14}C,$ ecay E $^{197}Au(^{207}F,$ eny)	5nγ) Pb,Xγ)
E(level) [†]	J^{π}	T _{1/2}	XREF			Comments
0‡	5/2-	9.33 h 5	ABCD	$\% \varepsilon + \% \beta^+ = 10$ $\mu = +0.67316$ Q = -0.014(1)	0 (2019StZV) 986An06,2021StZZ)	205
				J ^{π} : Atomic be g.s. (J ^{π} =5/ T _{1/2} : Weighte (945.4 γ (t)) h 2 (1955B μ ,Q: From 19 technique. 2019StZV.	eam magnetic resonance 2^- ; μ . ed average of 9.300 75 (in 1981An11. Others: 8 e12) and 10.0 h 8 (1960 186An06, using the atom μ =+0.6753 5 in 1986An	(1977Gu18); Favored α decay from ²⁰⁵ Po 330.7 γ (t)), 9.40 <i>15</i> (691.9 γ (t)) and 9.350 <i>78</i> b <i>2</i> (1950Ne77), 8.4 b <i>10</i> (1954Wa12), 9.4 ULi08). ic beam with laser fluorescence spectroscopy 06, but diamagnetic correction applied in
00 5 # 5	2 /2-			$\delta < r^2 > = -0.40$	193 fm ² 34 (1986An06).	Other: -0.4225 5 fm ² (1982Th05).
88.5" 5	3/2-		AC	$J^{\pi}: 88.6\gamma MI$	+E2 to $5/2^-$; systematic	s in neighboring nuclei.
169.9 ° 5 538 7 7	(1/2) $(3/2^{-})$		A C	J^{π} : 81.4 γ to 2 I^{π} : 368 8 γ to	$\frac{3}{2}$; systematics in neig (1/2 ⁻) 538 7x to $\frac{5}{2}$.	hboring nuclei.
629.1 ^{&} 3	(3/2+)	60.8 s <i>18</i>	A CDE	%IT=100 J ^π : 629.1γ M T _{1/2} : Weighte s (1952Ho4	4 to $5/2^-$. ed average of 60.1 s 44 ((1955Fi30) and 61 s 2 (1956St05). Other: 50
879.6 10	$(5/2)^{-}$		AC	J ^π : 791.0γ M	1 to $3/2^-$, 2170 γ from 7	/2+.
910.5? 12	5/2-		A	J ^π : 822.6γ M	$1(+E2)$ to $3/2^{-}$, 740.7γ	$\frac{1}{2}$
$936.1^{\circ} 3$	7/2 7/2-		A C	J [*] : 847.7 γ E ₂ I ^{π} : 902 0 γ E ²	2 to $3/2$; direct population 2 to $3/2^-$; direct population	on in ²⁰¹ Bi ε decay $(J^{\pi}=9/2)$.
$1014.2^{b}.4$	9/2-		AC	J^{π} : 1014 1 γ F	52 to $5/2^{-1}$ direct populat	tion in ²⁰¹ Bi ε decay $(J^{\pi}=9/2^{-})$
1185.8 4	$(7/2)^{-}$		A C	J^{π} : 171.7 γ M	$1(+E2)$ to $9/2^-$, 1186.5 γ	$v \text{ to } 5/2^-$.
1325.4 ^{<i>a</i>} 5	7/2-		Α	J ^π : 1325.2γ N	$M1+E2$ to $5/2^-$; direct po	opulation in ²⁰¹ Bi ε decay ($J^{\pi}=9/2^{-}$).
1415.4 ^{<i>d</i>} 4	9/2+		A	J^{π} : 786.4 γ E2 $(J^{\pi}=9/2^{-}).$	2 to $13/2^+$, 424.5γ (E1) t	to 7/2 ⁻ ; direct population in ²⁰¹ Bi ε decay
1447.9 5	$(11/2)^+$		A C	$J^{\pi}: 818.9\gamma E2$	$2+M1$ to $13/2^+$; direct po	ppulation in ²⁰¹ Bi ε decay ($J^{\pi}=9/2^{-}$).
1490.3 6 1541 8 ^e 1	17/2 ⁻ ,9/2 ⁻		A CDF	J [*] : 499.9 γ M	$1(+E2)$ to $7/2^-$; direct p 2 to $13/2^+$	opulation in ²⁰¹ Bi ε decay ($J^{n}=9/2^{-}$).
1545.8 4	$15/2^+$		CDE	$J^{\pi}: 916.7\gamma$ M	$1+E2$ to $13/2^+$.	
1651.0 4	7/2+		A	J^{π} : 1650.9 γ E	E1 to $5/2^-$; direct popula	tion in ²⁰¹ Bi ε decay ($J^{\pi}=9/2^{-}$).
1737.3 4	9/2+		Α	J ^π : 746.8γ E1	l to $7/2^{-}$, 1108.1 γ E2 to	13/2+.
1843.8 <i>5</i> 1875.6 <i>5</i>	11/2 ⁺ 9/2 ⁺		A A	J ^π : 1214.5γ M J ^π : 224.5γ M	$M1(+E2)$ to $13/2^+$; direct 1(+E2) to $7/2^+$, 428.0γ	t population in ²⁰¹ Bi ε decay ($J^{\pi}=9/2^{-}$). M1(+E2) to 11/2 ⁺ .
1896.1 ^J 4	$19/2^{+}$	3.3 ns 3	CDE	J^{π} : 350.3 γ E2	2 to $15/2^+$, 354.3γ M1 to	o 17/2 ⁺ .

²⁰¹Pb Levels (continued)

E(level) [†]	\mathbf{J}^{π}	T _{1/2}	XREF	Comments
				$T_{1/2}$: Weighted average of 3.2 ns 6 using $(350\gamma, 354\gamma, 913\gamma, 917\gamma)(t)$ in 1981He07 (²⁰⁰ Hg($\alpha, 3n\gamma$)) and 3.3 ns 3 from $\gamma\gamma(\Delta t)$ and contraid shift analysis in 2020We24 (¹⁹⁷ Au(²⁰⁷ Pb X ₂))
1902.2 ⁸ 5 1977.6 5 2068.5 5 2119.5 5 2151.9 6	21/2 ⁺ 7/2 ⁺ ,9/2 ⁺ 21/2 9/2 ⁺ 7/2 ⁺		CD A CD A A	J^{π} : 360.4 γ E2 to 17/2 ⁺ . J^{π} : 986.5 γ E1 to 7/2 ⁻ , 529.8 γ to 11/2 ⁺ . J^{π} : 166.2 γ D,E2 Δ J=0 to 21/2 ⁺ . J^{π} : 275.5 γ M1(+E2) to 11/2 ⁺ , 1183.7 γ to 7/2 ⁻ . J^{π} : 414.6 γ M1(+E2) to 9/2 ⁺ , 1241.4 γ (E1) to 5/2 ⁻ .
2208.9 6 2279.8 8 2439.4 7 2459.9 6 2474.6 5	$(9/2^+) (9/2)^+ 7/2^+,9/2^+ 7/2^+,9/2^+ (7/2^+,9/2^+)$		A A A A A	J ^{<i>τ</i>} : 557.7γ to 7/2 ^{<i>τ</i>} , 1579.8γ to 13/2 ^{<i>τ</i>} , 1298.4γ to 5/2 ^{<i>τ</i>} . J ^{<i>π</i>} : 832.0γ M1(+E2) to 11/2 ^{<i>τ</i>} , 1265.7γ to 9/2 ^{<i>τ</i>} , 1400.3γ to (5/2) ^{<i>τ</i>} . J ^{<i>π</i>} : 1024.4γ M1(+E2) to 9/2 ^{<i>τ</i>} , 1503.0γ to 7/2 ^{<i>τ</i>} . J ^{<i>π</i>} : 250.9γ M1+E2 to (9/2 ^{<i>τ</i>}), 1469.5γ to 7/2 ^{<i>τ</i>} . J ^{<i>π</i>} : 1288.9γ (E1) to (7/2) ^{<i>τ</i>} ; direct population in ²⁰¹ Bi ε decay
2496.3 ^h 4 2506.8 4 2548.9 6 2604.0 7	21/2 ⁻ 9/2 ⁺ (11/2 ⁻) (21/2)		CDE A A C	$(J^{*}=9/2^{-})$. J^{π} : 594.5 γ (E1) to 21/2 ⁺ , 600.5 γ (E1) to 19/2 ⁺ , 222.4 γ E2 from 25/2 ⁻ . J^{π} : 1570.8 γ E1 to 7/2 ⁻ , 1877.4 γ to 13/2 ⁺ . J^{π} : 1558.6 γ (E2) to 7/2 ⁻ , 1919.4 γ to 13/2 ⁺ . J^{π} : 707.9 γ D to 19/2 ⁺ .
2718.5 ^{<i>i</i>} 4	25/2-	63 ns <i>3</i>	CDE	μ=-0.79 4 (1988Ro08,2020StZV); Q=0.46 2 (1979MaYQ,2021StZZ) XREF: D(2719.6)E(2719.1). J ^π : μ; π from 222.2γ E2 to negative parity state; systematics of similar isomers in neighboring Pb nuclei; proposed configuration. T _{1/2} : From (222.3γ,350.3γ,354.3γ,600.3γ,913.2γ,917.1γ)(t) in 1988Ro08 (²⁰⁰ Hg(α,3nγ)). Other: ≈55 ns in 1981He07. μ,Q: Using the time dependent perturbed angular distribution technique.
2718.5+x ^j 4	(29/2 ⁻)	508 ns 5	CDE	$\mu = -1.011 \ 6 \ (1988Ro08,2020StZV)$ Additional information 1. E(level): X<70 keV in 1981He07. J ^π : From systematics. Consistent with the proposed configuration and μ . T _{1/2} : From (222.3 γ ,350.3 γ ,354.3 γ ,600.3 γ ,913.2 γ ,917.1 γ)(t) in 1988Ro08 (²⁰⁰ Hg(α ,3n γ)). Other: 540 ns 40 γ (t) in 1981He07 (²⁰⁰ Hg(α ,3n γ)). w: Using the time dependent perturbed angular distribution technique
2732.8 6 2736.2 6	11/2-		D D	μ . Osing the time dependent perturbed angular distribution technique.
2788.8 6 2794.2 5 2961.8 6	$(19/2,21/2,23/2)^{-}$ $(7/2,9/2^{-})$		A C A	$J^{*}: 239.7\gamma$ M1+E2 to 11/2, 1051.6 γ E1 to 9/2 ⁺ , 2159.7 to 13/2 ⁺ . $J^{\pi}: 297.9\gamma$ M1+E2 to 21/2 ⁻ . $J^{\pi}: 1971.0\gamma$ to 7/2 ⁻ , 2082.0 γ to (5/2) ⁻ ; direct population in ²⁰¹ Bi ε decay $(I^{\pi} - 9/2^{-})$
3050.7 <i>5</i> 3509.5+x <i>4</i> 3545.0+x <i>4</i> 3638.0+x <i>4</i> 3832.3+x <i>6</i>	$(7/2)^+$ (31/2 ⁻) (33/2 ⁻) (31/2) (35/2 ⁻)		A CD CDE CD CDE	J^{π} : 931.6 γ M1(+E2) to 9/2 ⁺ , 2170.4 γ to (5/2) ⁻ . J^{π} : 791.0 γ M1+E2 to (29/2 ⁻). J^{π} : 826.6 γ E2 to (29/2 ⁻). J^{π} : 919.4 γ (D) to (29/2 ⁻). J^{π} : 287.2 γ M1+E2 to (33/2 ⁻).
3932.0+x ^k 4 4059 5 7	(33/2+)		CD D	J^{π} : 293.9 γ D to (31/2),387.0 γ (D) to (33/2 ⁻), 422.5 γ (D) to (31/2 ⁻); proposed configuration.
$\begin{array}{c} 4059.5 + y^{n} \ 7 \\ 4168.7 + y^{n} \ 5 \\ 4350.3 + y^{n} \ 7 \end{array}$			D D D	Additional information 2.
4505.1+x 6 4560.2+x 6 4614.1+y ⁿ 9	(35/2) (37/2 ⁺)		CD CDE D	J^{π} : 573.2 γ D to (33/2 ⁺). J^{π} : 628.4 γ E2 to (33/2 ⁺), 728.0 D to (35/2 ⁻).
$4640.0 + x^{l} 6$	$(41/2^+)$	46 ns <i>3</i>	CDE	$\mu = -3.7 \ 8 \ (1988 \text{Ro08}, 2020 \text{StZV})$

Continued on next page (footnotes at end of table)

²⁰¹Pb Levels (continued)

E(level) [†]	J^{π}	XREF	Comments
			XREF: C(4638.0+X).
			J^{π} : 80 γ E2 to (37/2 ⁺).
			T _{1/2} : Unweighted average of 52 ns 2 from $\gamma\gamma(\Delta t)$ in 2019Ro12, using 902 γ -(728 γ ,827 γ)
			and 447γ -(728 γ ,827 γ) in ¹⁹⁷ Au(²⁰⁷ Pb,X γ), 43 ns 3 from 80.1 γ (t) in 1989Su12
			$(^{192}\text{Os}(^{14}\text{C},5n\gamma))$, and 43 ns 3 from $(727.7\gamma,287.0\gamma,825.6\gamma)(t)$ in 1988Ro08
			$(^{200}\text{Hg}(\alpha,3n\gamma)).$
1(100, 0, 0, 7)		P	μ : Using time dependent perturbed angular distribution technique.
$4640.0+u^{P}$ /		D	Additional information 3.
$4640.0 + \sqrt{7}$		ע	Additional information 5
4640.0+2 / $4640.1+x.5$	(35/2)	C C	I^{π} : 708 lot to (33/2 ⁺)
4647 6+x 6	(35/2)	D	I^{π} : 142 5 γ (D) to (35/2 ⁺). 715 7 γ D to (33/2 ⁺)
$4780.5 + z^{0}.5$	(33/2)	D	v : 1 = 2.57 (D) to (55/2), (15.77 D to (55/2)).
4793.8+v ^q 5		D	
4817.4+u ^p 5		D	
4830.2+x 6	(39/2)	D	J^{π} : 190.4 γ D to (41/2 ⁺), 269.9 γ D to (37/2 ⁺).
4954.9+y ⁿ 10		D	
4956.3+z ^o 7		D	
4992.4+v ^q 7		D	
5000.1+x 7		C	
5043.1+u ^p 7	(10 0)	D	I^{T}_{-} 447.2 D ((41/2 ⁺)
508/.1+x 0	(43/2)	CDE	J [*] : 447.3 γ D to (41/2 ⁺).
51/2.4+X/ $5178.6+z^{0}$ 0			
$5742 4 \pm \sqrt{9} 9$		ע ת	
$53213+u^{p}9$		D D	
$5358.7 + v^{n} 10$		D	
5389.1+x 7	(45/2)	D	J^{π} : 302.0 γ D to (43/2).
5425.5+x 7		С	
5455.0+z ^o 10		D	
5554.4+v ^q 10		D	
5581.9+x 7	$(39/2^{-})$	D	J^{π} : 1749.5 γ E2 to (35/2 ⁻).
5648.0+u ^p 10		D	
5787.3+z ^o 12		D	
5817.7+y ⁿ 10	$(A \in (0^+))$	D	I^{π}_{-} 1100 1 FO ((41/2 ⁺))
5830.0+X /	$(45/2^{+})$	D	J [*] : 1190.1 γ E2 to (41/2 ⁺).
$5855.7 \pm x 0$ 5801 3 $\pm x 7$	(41/2) (43/2)	ע	J^{*} : 255.77 (D) to (59/2), 1005.57 D to (59/2). I^{π} : 1251.39 D to (Λ 1/2 ⁺)
$5071.3 \pm x^{-7}$ 5928 8 $\pm y^{-7}$ 12	(+3/2)	ם ח	J : 1251.57 D to (41/2).
5989.4+x 6	(45/2)	DE	J^{π} : 98.2 γ D to (43/2), 153.7 γ E2 to (41/2), 159.4 γ (D) to (45/2 ⁺).
$6028.4 + u^p$ 12	(,=)	D	
6145.1+x ^m 7	(35/2)	D	J^{π} : 1640.0 $\gamma \Delta J=0$, (D) to (35/2).
6175.4+z ^o 12		D	
6246.8+x ^m 8	(37/2)	D	J^{π} : 101.7 γ (M1) to (35/2); band structure.
6323.4+y ⁿ 11		D	
6323.9+x 7	$(45/2^+)$	D	J^{π} : 1683.8 γ E2 to (41/2 ⁺).
6336.1+y <i>11</i>		D	
6364.8+v ^q 13		D	
$63/6.4 + x^m 9$	(39/2)	D	J ^{<i>n</i>} : 129.7 γ (M1) to (37/2); band structure.
6458.1+u ^P 13	(17/2)	D	$I\pi$, 126 2. D to $(45/2^{+})$ 470 7. D to $(45/2)$
$0400.1 + X / 6548.0 + x^{m}.0$	(41/2)	ע	J ^{**} : 150.27 D to $(45/2^{+})$, $4/0.77$ D to $(45/2)$. I^{π} : 171.64 (M1) to $(30/2)$; band structure
$66167 \pm 7^{0}12$	(+1/2)	ע	$J = 1/1.0 \gamma$ (1911) to ($37/2$), band structure.
0010./TZ 12		D	

²⁰¹Pb Levels (continued)

E(level) [†]	J^{π}	XREF	Comments						
6706.7+x 7	(49/2)	D	J^{π} : 717.3 γ E2 to (45/2).						
6768.5+x ^m 8	(43/2)	D	J^{π} : 220.5 γ (M1) to (41/2); band structure.						
6858.2+v ^q 14		D							
6881.9+y ⁿ 12		D							
6910.1+x 8	(47/2)	D	J^{π} : 586.1 γ D to (45/2 ⁺).						
6941.2+u ^p 14		D							
7008.4+x 8	(49/2)	D	J^{π} : 548.3 γ D to (47/2).						
7044.3+x ^m 7	(45/2)	D	J^{n} : 2/5.9 γ (M1) to (43/2); band structure.						
7108.4+z° 13	$(40/2^{+})$	D	II_{-} 222 2 D to $(47/2)$ (22 2 D to $(47/2)$ 1212 2 E2 to $(45/2^{+})$						
/142.3+X / 7220.5+x 8	$(49/2^{+})$ (51/2)	ע	J [*] : 252.27 D to $(4//2)$, 082.57 D to $(4//2)$, 1512.57 E2 to $(45/2^{\circ})$.						
$7339.3 \pm x 0$ 7377 5 \pm x 7	(31/2) (47/2)	ע ח	J . 197.27 D to $(49/2)$, 551.17 D to $(49/2)$. I^{π} : 333 1 γ (M1) to $(45/2)$ 1388 1 γ D to $(45/2)$						
$7378.9 + x^{m} 7$	(47/2)	ם	$J = 332.6\gamma$ (M1) to $(45/2, 47/2)$, 1380.17 D to $(45/2)$.						
$7471.4 \pm n^{P}$ 15	(17/2)	D	$3 \cdot 35 \cdot 37 \cdot 37 \cdot 37 \cdot 37 \cdot 37 \cdot 37 \cdot 3$						
$7648.2 + z^{0}$ 13		D							
7759.5+x 7	(49/2)	D	J^{π} : 380.6 γ D to (47/2), 382.0 γ D to (47/2).						
7772.2+x ^m 8	(49/2)	D	J^{π} : 393.3 γ (M1) to (47/2), 394.8 γ (M1) to (47/2).						
8003.4+x 10	(53/2)	D	J^{π} : 663.9 γ D to (51/2).						
8018.7+x 8	(51/2)	D	J^{π} : 259.2 γ D to (49/2), 1312.0 γ D to (49/2).						
8198.0+x 9	(53/2)	D	J^{π} : 179.3 γ D to (51/2).						
8214.7+x 9	(51/2)	D	J^{π} : 442.5 γ (M1) to (49/2).						
8226.1+x ^m 9	(51/2)	D	J^{π} : 453.9 γ (M1) to (49/2).						
[†] From a least [‡] Configuratio	t squares f $n = \nu f_{5/2}^{-1}$.	ît to Eγ.							
[#] Configuratio	$n = v p_{2}^{-1}$.								
[@] Configuratio	$n = \nu p_{1/2}^{-1}$.	The assign	nment is tentative.						
& Configuratio	$n = v i_{13/2}^{-1}$								
^a Configuratio	$n = \nu f_{7/2}^{-1}$.	The assign	iment is tentative.						
^b Configuratio	$n = \nu (f_{5/2}^{-1})$	$\otimes 2^+$.							
^c Configuratio	$n = \nu (p_{3/2}^{-1})$)⊗2⁺.							
^d Configuratio	$n = \nu (i_{13/2}^{-1})$)⊗2+.							
^e Probably an	admixture	e of config	$r_{j}(r_{13/2}) \otimes r_{1/2}(r_{13/2}) \otimes r_{1/2}$ and configuration= ν $(r_{13/2}) \otimes r_{1/2}(r_{13/2}) \otimes r$						
^f Probably an	admixture	e of config $\cdot -1$	$(t_{5/2}^{-1}, p_{1/2}^{-1}, t_{13/2}^{-1}) \otimes 4^+$ and configuration= $\nu (t_{13/2}^{-1}) \otimes 4^+$.						
⁸ Configuratio	$n = \nu (f_{5/2}),$	$\binom{1}{13/2}$.							
ⁱ Probably an	$p_{3/2}$	$(1_{13/2})_{12+1}$	$\mu_{ration=\nu}$ [f ⁻¹ (i ⁻²), a 1 configuration= ν [n ⁻¹ (i ⁻²), a 1 and configuration= ν						
$[n^{-1}(i^{-2})]$		e or comig	$\mu_{13/2}^{(13/2)}$ and $\nu_{13/2}^{(13/2)}$ $\mu_{13/2}^{(13/2)}$ $\mu_{13/2}^{(13/2)}$ $\mu_{13/2}^{(13/2)}$						
j Configuratio	$n = \gamma [f^{-1}]$	$(i^{-2})_{12}$							
^k Configuration= $v \begin{pmatrix} i-5/2 \\ i-2 \\ i-2 \\ i-2 \end{pmatrix}$.									
^l Configuratio	$n = v (p_{2}^{-1})^{-1}$	$f_{z_{z_{z_{z_{z_{z_{z_{z_{z_{z_{z_{z_{z_$							
^m Band(A): co	nfiguratio	$n = v [p_{2}^{-1}]$	$(i_{13/2})^{-2})_{12+} \gg \pi (h_{0/2}^{+1}, i_{12/2}^{+1})_{11-}$. Band 2 in 1995Ba70.						
^{n} Band(B): co	nfiguratio	$n = \nu (i_{12/2}^{-1})$	$\psi \otimes \pi (h_{0,0}^{+1})_{13/2}^{+1})_{11-}$. Band 1 in 1995Ba70.						
^o Band(C): Ba	and 3 in 1	995Ba70.	7/2 $1/3/2$						

^{*p*} Band(D): Band 4 in 1995Ba70. ^{*q*} Band(E): Band 5 in 1005Ba70.

						Adop	ted Levels,	Gammas (con	tinued)
							$\frac{\gamma}{\gamma}$	(²⁰¹ Pb)	
E_i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_f	${ m J}_f^\pi$	Mult.&	δ ^a	α b	Comments
88.5	3/2-	88.6 10	100	0	5/2-	M1+E2		9.1 21	α(L)=4.8 29; α(M)=1.2 8 α(N)=0.31 20; α(O)=0.056 34; α(P)=0.0029 5 Mult.: From α(exp) in ²⁰¹ Bi ε decay. α: From intensity balance in ²⁰¹ Bi ε decay.
169.9 538.7	$(1/2^{-})$ $(3/2^{-})$	(81.4 7) 368.8 10 450.3 10 538.7 10	100 100 <i>19</i> 70 <i>14</i> 50 <i>11</i>	88.5 169.9 88.5 0	3/2 ⁻ (1/2 ⁻) 3/2 ⁻ 5/2 ⁻				E_{γ} : Not observed experimentally; E_{γ} from E(level) difference.
629.1	13/2+	629.1 5	100	0	5/2-	M4		0.813 12	B(M4)(W.u.)=3.08 +11-10 α (K)=0.552 8; α (L)=0.1949 28; α (M)=0.0504 7 α (N)=0.01299 19; α (O)=0.00252 4; α (P)=0.0002177 31 Mult.: From α (K)exp=0.6 2, K/L=2.3 3 and L12/L3=4 1 (1956St05) and α (L)exp=0.21 1 (1978Ri04) in ²⁰¹ Bi ε decay.
879.6	(5/2)-	710.0 ^c 10 791.0 ^c 10	7.4 <i>14</i> 27 6	169.9 88.5	(1/2 ⁻) 3/2 ⁻	M1(+E2)	<1.1	0.027 6	$\alpha(K)=0.022 5; \alpha(L)=0.0037 7; \alpha(M)=0.00087 16$ $\alpha(N)=0.00022 4; \alpha(O)=4.4\times10^{-5} 9; \alpha(P)=4.6\times10^{-6} 10$ Mult 5: From $\alpha(K)$ or $p=0.028 11$ in 2^{01} Bi 6 decay
		879.6 10	100 20	0	5/2-	E2+M1	7.3 16	0.00888 22	
910.5?	5/2-	372.3 ^c 10	5.4 11	538.7	(3/2-)				
		822.6° 10	43 9	88.5	3/2-	M1(+E2)	<1.7	0.022 7	$\alpha(K)=0.018\ 6;\ \alpha(L)=0.0031\ 9;\ \alpha(M)=7.3\times10^{-4}\ 20$ $\alpha(N)=1.9\times10^{-4}\ 5;\ \alpha(O)=3.7\times10^{-5}\ 10;\ \alpha(P)=3.9\times10^{-6}\ 12$ Mult δ : From $\alpha(K)=0.019\ 8$ in 201 Bi c decay
		911.0 ^c 10	100 20	0	5/2-	M1(+E2)	<0.5	0.0211 15	$\alpha(K)=0.0174 \ 13; \ \alpha(L)=0.00289 \ 18; \ \alpha(M)=0.00068 \ 4$ $\alpha(N)=0.000172 \ 11; \ \alpha(O)=3.42\times10^{-5} \ 22; \ \alpha(P)=3.66\times10^{-6} \ 25$
936.1	7/2-	847.7 10	16 <i>3</i>	88.5	3/2-	E2		0.00924 13	Mult., δ : From α (K)exp=0.028 7 in ²⁰¹ B1 ε decay. α (K)=0.00724 <i>10</i> ; α (L)=0.001524 22; α (M)=0.000366 5 α (N)=9.27×10 ⁻⁵ <i>13</i> ; α (O)=1.801×10 ⁻⁵ 26; α (P)=1.675×10 ⁻⁶ 24
		936.2 5	100 5	0	5/2-	M1,E2		0.014 7	Mult.: From α (K)exp=0.009 5 in ²⁰¹ Bi ε decay. α (K)=0.012 6; α (L)=0.0020 8; α (M)=4.8×10 ⁻⁴ 19 α (N)=1.2×10 ⁻⁴ 5: α (O)=2.4×10 ⁻⁵ 10: α (P)=2.5×10 ⁻⁶ 11
990.5	7/2-	902.0 5	100 5	88.5	3/2-	E2		0.00816 11	Mult.: From α (K)exp=0.004 3 in ²⁰¹ Bi ε decay. α (K)=0.00644 9; α (L)=0.001313 18; α (M)=0.000314 4 α (N)=7.96×10 ⁻⁵ 11; α (O)=1.550×10 ⁻⁵ 22; α (P)=1.463×10 ⁻⁶ 21
		990.6 5	38.8 20	0	5/2-	E2+M1	2.2 6	0.0087 13	Mult.: From α (K)exp=0.006 2 in ²⁰¹ Bi ε decay. α (K)=0.0070 <i>11</i> ; α (L)=0.00130 <i>16</i> ; α (M)=0.00031 <i>4</i>

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From ENSDF

 $^{201}_{82} Pb_{119}$ -5

						Adopted Lo	evels, Gam	mas (continue	d)
						<u>γ(</u>	²⁰¹ Pb) (con	tinued)	
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	\mathbf{E}_{f}	\mathbf{J}_f^{π}	Mult. ^{&}	δ ^a	$\alpha^{\boldsymbol{b}}$	Comments
1014.2	9/2-	1014.1 5	100	0	5/2-	E2		0.00648 9	$\begin{aligned} &\alpha(\text{N})=7.8\times10^{-5} \ 9; \ \alpha(\text{O})=1.53\times10^{-5} \ 19; \ \alpha(\text{P})=1.53\times10^{-6} \ 21 \\ &\text{Mult.,}\delta: \ \text{From } \alpha(\text{K})\text{exp}=0.007 \ 2 \ \text{in } ^{201}\text{Bi } \varepsilon \ \text{decay.} \\ &\alpha(\text{K})=0.00517 \ 7; \ \alpha(\text{L})=0.001000 \ 14; \ \alpha(\text{M})=0.0002379 \ 33 \\ &\alpha(\text{N})=6.03\times10^{-5} \ 8; \ \alpha(\text{O})=1.179\times10^{-5} \ 17; \ \alpha(\text{P})=1.140\times10^{-6} \\ &16 \end{aligned}$
1185.8	(7/2)-	171.7 5	100 5	1014.2	9/2-	M1(+E2)	<0.5	1.88 <i>13</i>	Mult.: From $\alpha(K)\exp=0.005\ 2$ in ²⁰¹ Bi ε decay. $\alpha(K)=1.50\ 14$; $\alpha(L)=0.292\ 10$; $\alpha(M)=0.0694\ 34$ $\alpha(N)=0.0176\ 8$; $\alpha(O)=0.00347\ 12$; $\alpha(P)=0.000344\ 16$ Mult. δ : From $\alpha(L)\exp=0.27\ 3\ L\ 12U\ 3>66\ in\ ^{201}Bi\ s\ decay$
		305.7 [°] 10	4.1 9 8 4 <i>16</i>	879.6 0	$(5/2)^{-}$ $5/2^{-}$				$Mut.,0.$ From $a(L)exp=0.27.5, E12/E5>00 m B1 \epsilon decay.$
1325.4	7/2-	1325.2 5	100	0	5/2-	M1+E2	0.6 4	0.0074 11	$\begin{aligned} &\alpha(\text{K}) = 0.0061 \ 9; \ \alpha(\text{L}) = 0.00101 \ 14; \ \alpha(\text{M}) = 0.000235 \ 33 \\ &\alpha(\text{N}) = 6.0 \times 10^{-5} \ 8; \ \alpha(\text{O}) = 1.19 \times 10^{-5} \ 17; \ \alpha(\text{P}) = 1.27 \times 10^{-6} \ 19; \\ &\alpha(\text{IPF}) = 3.08 \times 10^{-5} \ 35 \end{aligned}$
1415.4	9/2+	424.5 10	9.3 18	990.5	7/2-	(E1)		0.01354 20	Mult., δ : From α (K)exp=0.006 <i>1</i> in ²⁰¹ Bi ε decay. α (K)=0.01117 <i>17</i> ; α (L)=0.001823 <i>27</i> ; α (M)=0.000424 <i>6</i> α (N)=0.0001070 <i>16</i> ; α (O)=2.095×10 ⁻⁵ <i>31</i> ; α (P)=2.021×10 ⁻⁶ <i>30</i>
		786.4 5	100 5	629.1	13/2+	E2		0.01077 15	Mult.: From $\alpha(K)\exp=0.050\ 20\ in\ ^{201}Bi\ \varepsilon\ decay.$ $\alpha(K)=0.00836\ 12;\ \alpha(L)=0.001835\ 26;\ \alpha(M)=0.000443\ 6$ $\alpha(N)=0.0001121\ 16;\ \alpha(O)=2.170\times10^{-5}\ 31;\ \alpha(P)=1.981\times10^{-6}$
1447.9	$(11/2)^+$	818.9 5	100	629.1	13/2+	E2+M1	7.8 10	0.01023 17	Mult.: From α (K)exp=0.0095 8 in ²⁰¹ Bi ε decay. α (K)=0.00800 14; α (L)=0.001698 27; α (M)=0.000408 6 α (N)=0.0001034 16; α (O)=2.007×10 ⁻⁵ 32; α (P)=1.863×10 ⁻⁶ 31
									Mult., δ : From α (K)exp=0.0080 20 in ²⁰¹ Bi ε decay; A ₂ =-0.21 5, A ₄ =0.01 7 using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ) are consistent with Mult=D.
1490.3	7/2 ⁻ ,9/2 ⁻	499.9 <i>10</i>	100 20	990.5	7/2-	M1(+E2)	<1.2	0.085 23	$\alpha(K)=0.069\ 20;\ \alpha(L)=0.0124\ 25;\ \alpha(M)=0.0029\ 6$ $\alpha(N)=0.00075\ 14;\ \alpha(O)=0.000147\ 29;\ \alpha(P)=1.5\times10^{-5}\ 4$ Mult : From $\alpha(K)=0.08\ 3$ in 201 Bi ε decay
		610.4 ^c 10 1490.1 10	30 6 39 7	879.6 0	$(5/2)^{-}$ $5/2^{-}$				
1541.8	17/2+	912.7 [#] 2	100 [#]	629.1	13/2+	E2		0.00797 11	α (K)=0.00629 9; α (L)=0.001277 18; α (M)=0.000305 4 α (N)=7.74×10 ⁻⁵ 11; α (O)=1.507×10 ⁻⁵ 21; α (P)=1.426×10 ⁻⁶ 20
									Mult.: From A ₂ =0.32 5, A ₄ =-0.01 6 (1988Ro08) and A ₂ =0.21 3, A ₄ =-0.05 4 (1981He07) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ); R(DCO)=1.08 8 in ¹⁹² Os(¹⁴ C,5n γ).

From ENSDF

						Adopted Le	vels, Gan	nmas (continued	d)
						$\gamma(^2$	⁰¹ Pb) (co	ntinued)	
E _i (level)	\mathbf{J}_i^π	${\rm E_{\gamma}}^{\dagger}$	I_{γ}^{\dagger}	\mathbf{E}_{f}	\mathbf{J}_f^{π}	Mult. ^{&}	δ^{a}	$\alpha^{\boldsymbol{b}}$	Comments
1545.8	15/2+	916.7 [#] 2	100#	629.1	13/2+	M1+E2		0.015 7	$\frac{\alpha(K)=0.012 \ 6; \ \alpha(L)=0.0021 \ 9; \ \alpha(M)=5.0\times10^{-4} \ 20}{\alpha(N)=1.3\times10^{-4} \ 5; \ \alpha(O)=2.5\times10^{-5} \ 10; \ \alpha(P)=2.6\times10^{-6} \ 12}$ Mult.: From A ₂ =-0.51 4, A ₄ =0.15 6 (1988Ro08) and A ₂ =-0.28 3, A ₄ =0.04 4 (1981He07) using $\gamma(\theta)$ in $\frac{200}{10}$ Hg(α ,3n\gamma); R(DCO)=0.81 11 in $\frac{192}{10}$ S(14 C,5n\gamma).
1651.0	7/2+	325.7 ^c 10 740.7 ^c 10	2.9 6 9.1 <i>16</i>	1325.4 910.5?	7/2 ⁻ 5/2 ⁻	E1		0.00436 6	$\alpha(K)=0.00363 5; \alpha(L)=0.000565 8; \alpha(M)=0.0001306 19$ $\alpha(N)=3.30\times10^{-5} 5; \alpha(O)=6.52\times10^{-6} 9; \alpha(P)=6.61\times10^{-7} 9$ Mult : From $\alpha(K)=x=0.0030 20$ in 201 Bi ε decay
		1650.9 <i>5</i>	100 5	0	5/2-	E1		1.33×10 ⁻³ 2	$\alpha(K) = 0.000881 \ 12; \ \alpha(L) = 0.0001310 \ 18; \ \alpha(M) = 3.01 \times 10^{-5} \ 4$ $\alpha(N) = 7.62 \times 10^{-6} \ 11; \ \alpha(O) = 1.517 \times 10^{-6} \ 21; \ \alpha(P) = 1.601 \times 10^{-7} \ 22; \ \alpha(IPF) = 0.000276 \ 4$
1737.3	9/2+	288.6 10	7.4 15	1447.9	(11/2)+	M1(+E2)	<0.24	0.465 12	Mult.: From $\alpha(K)\exp=0.0006\ 4$ in ²⁰¹ Bi ε decay. $\alpha(K)=0.379\ 11;\ \alpha(L)=0.0656\ 13;\ \alpha(M)=0.01539\ 29$ $\alpha(N)=0.00391\ 7;\ \alpha(O)=0.000779\ 15;\ \alpha(P)=8.26\times10^{-5}\ 20$ Mult., δ : From $\alpha(K)\exp=0.45\ 5$ in ²⁰¹ Bi ε decay.
		411.6 10	13.4 24	1325.4	7/2-				
		723.5 10 746.8 10	6.3 <i>13</i> 29 6	1014.2 990.5	9/2 7/2 ⁻	E1		0.00430 6	$\alpha(K)=0.00357 5; \alpha(L)=0.000556 8; \alpha(M)=0.0001285 18$ $\alpha(N)=3.25\times10^{-5} 5; \alpha(O)=6.42\times10^{-6} 9; \alpha(P)=6.51\times10^{-7} 9$ Mult : From $\alpha(K)\exp=0.0050 10$ in 201 Bi ε decay
		1108.1 5	100 5	629.1	13/2+	E2		0.00546 8	$\alpha(K) = 0.00439 \ 6; \ \alpha(L) = 0.000820 \ 12; \ \alpha(M) = 0.0001942 \ 27 \\ \alpha(N) = 4.92 \times 10^{-5} \ 7; \ \alpha(O) = 9.65 \times 10^{-6} \ 14; \ \alpha(P) = 9.48 \times 10^{-7} \\ 13; \ \alpha(IPF) = 2.05 \times 10^{-7} \ 5 \\ \text{Mult: From } \alpha(K) = 0.005 \ L \text{ in } {}^{201}\text{Pi c decay}$
		1737.6 10	3.3 7	0	5/2-				Mult. From $a(\mathbf{K})exp=0.005 T$ in Bi ε decay.
1843.8	11/2+	396.1 <i>10</i> 1214.5 <i>5</i>	11.1 22 100 5	1447.9 629.1	$(11/2)^+$ 13/2 ⁺	M1(+E2)	<2.3	0.0082 26	α (K)=0.0067 22; α (L)=0.00113 33; α (M)=2.6×10 ⁻⁴ 8 α (N)=6.7×10 ⁻⁵ 19; α (O)=1.3×10 ⁻⁵ 4; α (P)=1.4×10 ⁻⁶ 5; α (IPF)=7.5×10 ⁻⁶ 17
1875.6	9/2+	224.5 10	55 10	1651.0	7/2+	M1(+E2)	<0.44	0.90 6	Mult., δ : From α (K)exp=0.006 3 in ²⁰¹ Bi ε decay. α (K)=0.72 5; α (L)=0.1319 27; α (M)=0.0312 6 α (N)=0.00791 15; α (O)=0.001566 32; α (P)=0.000161 8 Mult., δ : From α (K)exp=0.75 8 in ²⁰¹ Bi ε decay.
		384.4 10	18 4	1490.3	7/2-,9/2-				
		428.0 10	100 17	1447.9	$(11/2)^+$	M1(+E2)	<0.9	0.136 27	$\alpha(K)=0.110\ 23;\ \alpha(L)=0.0200\ 27;\ \alpha(M)=0.0047\ 6$ $\alpha(N)=0.00120\ 15;\ \alpha(O)=0.000237\ 32;\ \alpha(P)=2.4\times10^{-5}\ 4$ Mult δ : From $\alpha(K)=0.12\ 3$ in $^{201}\text{Bi}\ \epsilon$ decay
		460.1 10	55 10	1415.4	9/2+	M1(+E2)	< 0.7	0.118 16	$\alpha(K)=0.096 \ 14; \ \alpha(L)=0.0170 \ 17; \ \alpha(M)=0.0040 \ 4$

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From ENSDF

					A	dopted Leve	els, Gamr	nas (continue	ed)
						$\gamma(^{201}$	Pb) (cont	tinued)	
E _i (level)	\mathbf{J}_i^π	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_f	\mathbf{J}_f^{π}	Mult. ^{&}	δ^{a}	$\alpha^{\boldsymbol{b}}$	Comments
1975 6	0/2+	<u> </u>	48 10	000.5	7/2-				α (N)=0.00101 <i>10</i> ; α (O)=0.000201 <i>20</i> ; α (P)=2.10×10 ⁻⁵ 27 Mult., δ : From α (K)exp=0.16 δ in ²⁰¹ Bi ε decay.
1875.0	9/2 19/2 ⁺	350.3 2	48 10 54.4 22	990.3 1545.8	1/2 15/2 ⁺	E2		0.0739 <i>10</i>	B(E2)(W.u.)=0.136 +15-12 α (K)=0.0454 6; α (L)=0.02135 30; α (M)=0.00543 8 α (N)=0.001374 19; α (O)=0.000255 4; α (P)=1.684×10 ⁻⁵ 24 E _{γ} : From ²⁰⁰ Hg(α ,3n γ). L: From ¹⁹² Os(¹⁴ C 5n γ): l_{γ} =68 6 in ²⁰⁰ Hg(α ,3n γ)
									Mult.: From A ₂ =0.25 5, A ₄ =-0.05 6 (1988Ro08) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ). Note, that A ₂ =0.09 2, A ₄ =-0.07 4 in 1981He07 (²⁰⁰ Hg(α ,3n γ)) would imply Mult=M1+E2; R(DCO)=0.95 13 in ¹⁹² Os(¹⁴ C,5n γ).
		354.3 2	100 3	1541.8	17/2+	M1		0.271 4	B(M1)(W.u.)=8.3×10 ⁻⁵ +19-13 α (K)=0.2220 31; α (L)=0.0378 5; α (M)=0.00884 12 α (N)=0.002245 32; α (O)=0.000448 6; α (P)=4.79×10 ⁻⁵ 7 E _{γ} : From ²⁰⁰ Hg(α ,3n γ). I _{γ} : From ¹⁹² Os(¹⁴ C,5n γ). Mult.: From A ₂ =0.70 5, A ₄ =0.04 6 (1988Ro08) and A ₂ =0.19 3, A ₄ =0.01 4 (1981He07) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ).
1902.2	21/2+	360.4 [#] 3	100 [#]	1541.8	17/2+	E2		0.0683 10	$\alpha(K)=0.0426\ 6;\ \alpha(L)=0.01929\ 28;\ \alpha(M)=0.00490\ 7$ $\alpha(N)=0.001239\ 18;\ \alpha(O)=0.0002300\ 33;\ \alpha(P)=1.543\times10^{-5}\ 22$ Mult.: From A ₂ =0.25 3, A ₄ =-0.08 4 (1981He07) using $\gamma(\theta)$ in ²⁰⁰ Hg(α 3nx): R(DCO)=0.96 9 in ¹⁹² Os(¹⁴ C 5nx)
1977.6	7/2+,9/2+	529.8 10 562.5 10 651.8 10	100 <i>20</i> 43 <i>9</i> 20 <i>4</i>	1447.9 1415.4 1325.4	(11/2) ⁺ 9/2 ⁺ 7/2 ⁻				
		986.5 10	100 20	990.5	7/2-	E1		0.00256 4	$\alpha(K)=0.002140 \ 30; \ \alpha(L)=0.000326 \ 5; \ \alpha(M)=7.53\times10^{-5} \ 11 \ \alpha(N)=1.904\times10^{-5} \ 27; \ \alpha(O)=3.77\times10^{-6} \ 5; \ \alpha(P)=3.90\times10^{-7} \ 5 \ Mult.; From \ \alpha(K)exp=0.005 \ 3 \ in \ ^{201}Bi \ \varepsilon \ decay.$
		1042.8 10	27 5	936.1	7/2-				
2068.5	21/2	166.2 [#] 2	100 [#]	1902.2	21/2+	D,E2			α(K)=1.0 8; α(L)=0.37 6; α(M)=0.093 20 α(N)=0.023 5; α(O)=0.0044 7; α(P)=0.00032 8 Mult.: From A2=0.36 5, A4=0.01 5 (1988Ro08) using γ(θ) in 200Hg(α,3nγ); R(DCO)=1.08 9 in 192Os(14C,5nγ); consistent with ΔJ=0 transition.
2119.5	9/2+	142.6 <i>10</i> 243.1 <i>10</i> 275.5 <i>10</i>	5.2 <i>12</i> 10.3 <i>21</i> 67 <i>15</i>	1977.6 1875.6 1843.8	7/2 ⁺ ,9/2 ⁺ 9/2 ⁺ 11/2 ⁺	M1(+E2)	< 0.25	0.527 15	$\alpha(K)=0.430$ 13; $\alpha(L)=0.0746$ 15; $\alpha(M)=0.01751$ 33

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					Ad	opted Levels	, Gammas	(continued)	
						γ (²⁰¹ P	b) (continue	ed)	
E _i (level)	${ m J}^{\pi}_i$	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_f	\mathbf{J}_f^{π}	Mult. ^{&}	δ^{a}	$\alpha^{\boldsymbol{b}}$	Comments
									α (N)=0.00445 8; α (O)=0.000885 17; α (P)=9.38×10 ⁻⁵ 24 Mult δ : From α (K)exp=0.52 9 in ²⁰¹ Bi ε decay
2119.5	9/2+	671.9 <i>10</i> 703.9 <i>10</i>	13 <i>3</i> 100 <i>21</i> 21 6	1447.9 1415.4	$(11/2)^+$ 9/2 ⁺ 7/2 ⁻				
2151.9	7/2+	414.6 10	92 <i>18</i>	1737.3	9/2 ⁺	M1(+E2)	<0.6	0.160 17	$\alpha(K)=0.130 \ 15; \ \alpha(L)=0.0230 \ 17; \ \alpha(M)=0.0054 \ 4$ $\alpha(N)=0.00137 \ 10; \ \alpha(O)=0.000272 \ 20; \ \alpha(P)=2.85\times10^{-5} \ 28$
		661.5 [°] 10	63 <i>13</i>	1490.3	7/29/2-				Mult., δ : From $\alpha(\mathbf{K}) \exp[=0.14 \ \beta$ in ²⁰¹ Bi ε decay.
		736.4 10	88 18	1415.4	9/2+	M1		0.0391 6	$\alpha(K)=0.0322 5; \alpha(L)=0.00535 8; \alpha(M)=0.001250 18$ $\alpha(N)=0.000317 5; \alpha(O)=6.33\times10^{-5} 9;$ $\alpha(P)=6.80\times10^{-6} 10$ Multi Farm (K) are 0.048 10 in ²⁰¹ Di e decen
		1137.7 ^c 10	11.2 22	1014.2	9/2-				Mult.: From $\alpha(\mathbf{K})\exp=0.048$ 10 m $^{\circ}$ BI ε decay.
		1161.2 10	22 4	990.5	7/2-				
		1241.4 ^c 10	100 20	910.5?	5/2-	(E1)		1.74×10 ⁻³ 2	$\alpha(K)=0.001427 \ 20; \ \alpha(L)=0.0002149 \ 30; \alpha(M)=4.95\times10^{-5} \ 7 \alpha(N)=1.252\times10^{-5} \ 18; \ \alpha(O)=2.488\times10^{-6} \ 35; \alpha(P)=2.60\times10^{-7} \ 4; \ \alpha(IPF)=2.94\times10^{-5} \ 6 Mult : From \ \alpha(K)exp=0.004 \ 3 in \ ^{201}Bi \ \epsilon \ decay.$
2208.9	(9/2+)	557.7 10 1298.4 10 1579 8 10	100 22 78 17 19 4	1651.0 910.5? 629.1	7/2 ⁺ 5/2 ⁻ 13/2 ⁺				
2279.8	(9/2)+	832.0 10	82 18	1447.9	$(11/2)^+$	M1(+E2)	<1.3	0.023 6	$ \begin{array}{l} \alpha(\mathrm{K}) = 0.018 \ 5; \ \alpha(\mathrm{L}) = 0.0032 \ 7; \ \alpha(\mathrm{M}) = 0.00074 \ 17 \\ \alpha(\mathrm{N}) = 0.00019 \ 4; \ \alpha(\mathrm{O}) = 3.7 \times 10^{-5} \ 9; \ \alpha(\mathrm{P}) = 3.9 \times 10^{-6} \\ 10 \end{array} $
		1265.6 <i>10</i> 1400.3 ^c <i>10</i>	47 <i>10</i> 100 <i>18</i>	1014.2 879.6	9/2 ⁻ (5/2) ⁻				Mult.: From $\alpha(K)$ exp=0.028 14 in ²⁰¹ Bi ε decay.
2439.4	7/2+,9/2+	1024.0 10	42 9	1415.4	9/2+	M1+E2	2.9 11	0.0075 13	$\alpha(K)=0.0060 \ 11; \ \alpha(L)=0.00112 \ 17; \ \alpha(M)=0.00026 \ 4$ $\alpha(N)=6.7\times10^{-5} \ 10; \ \alpha(O)=1.32\times10^{-5} \ 20; \alpha(P)=1.30\times10^{-6} \ 23$
		1052 0 10	72.14	1105.0	(7/0)-				Mult., δ : From α (K)exp=0.006 3 in ²⁰¹ Bi ε decay.
		1253.8 10 1503.0 10	12 14	1185.8 936.1	(1/2) $7/2^{-}$				
2459.9	7/2+,9/2+	250.9 10	13 3	2208.9	(9/2+)	M1+E2	0.6 4	0.57 12	α (K)=0.44 <i>11</i> ; α (L)=0.092 <i>5</i> ; α (M)=0.0220 <i>8</i> α (N)=0.00559 <i>22</i> ; α (O)=0.00109 <i>6</i> ; α (P)=0.000104

 $^{201}_{82} \mathrm{Pb}_{119}$ -9

					Adoj	pted Levels,	Gamma	s (continued)	
						$\gamma(^{201}\text{Pb})$) (contin	ued)	
E _i (level)	J_i^π	E_{γ}^{\dagger}	I_{γ}^{\dagger}	\mathbf{E}_{f}	\mathbf{J}_f^{π}	Mult. ^{&}	δ^{a}	$\alpha^{\boldsymbol{b}}$	Comments
2459.9 2474.6	7/2 ⁺ ,9/2 ⁺ (7/2 ⁺ ,9/2 ⁺)	584.3 <i>10</i> 969.9 <i>10</i> 1469.5 <i>10</i> 1523.3 <i>10</i> 1547.6 ^c <i>10</i> 322.3 <i>10</i>	10.9 21 19 4 26 6 100 20 22 4 6.8 14	1875.6 1490.3 990.5 936.1 910.5? 2151.9	9/2+ 7/2 ⁻ ,9/2 ⁻ 7/2 ⁻ 5/2 ⁻ 7/2+				17 Mult.: From α (K)exp=0.46 12 in ²⁰¹ Bi ε decay.
		1059.7 <i>10</i> 1288.9 <i>10</i>	18 4 69 <i>14</i>	1415.4 1185.8	9/2+ (7/2) ⁻	(E1)		1.65×10 ⁻³ 2	$\alpha(K)=0.001338 \ I9; \ \alpha(L)=0.0002010 \ 28;$ $\alpha(M)=4.63\times10^{-5} \ 7$ $\alpha(N)=1.171\times10^{-5} \ I6; \ \alpha(O)=2.328\times10^{-6} \ 33;$ $\alpha(P)=2.434\times10^{-7} \ 34; \ \alpha(IPF)=4.78\times10^{-5} \ 8$ Mult.: From $\alpha(K)\exp=0.003 \ I$ in ²⁰¹ Bi ε decay.
2496.3	21/2-	1538.4 <i>5</i> 594.1 <i>3</i>	100 5 4.2 4	936.1 1902.2	7/2 ⁻ 21/2 ⁺	(E1)		0.00672 9	$\alpha(K)=0.00557 \ 8; \ \alpha(L)=0.000882 \ 12; \ \alpha(M)=0.0002045 \ 29 \ \alpha(N)=5.17\times10^{-5} \ 7; \ \alpha(O)=1.017\times10^{-5} \ 14; \ \alpha(P)=1.013\times10^{-6} \ 14 \ E_{\gamma}: \ From \ ^{200}Hg(\alpha,3n\gamma). \ I_{\gamma}: \ From \ ^{192}Os(^{14}C,5n\gamma). \ Mult.: \ From \ A_2=-0.06 \ 5, \ A_4=0.08 \ 6 \ (1988Ro08) \ using \ \gamma(\theta) \ in \ ^{200}Hg(\alpha,3n\gamma); \ R(DCO)=0.73 \ 21 \ in \ ^{192}Os(^{14}C,5n\gamma); \ the \ adopted \ spin \ and \ parity \ changes \ for \ 594. \ 1\gamma.$
		600.2 1	100.0 20	1896.1	19/2+	(E1)		0.00658 9	$\alpha(K)=0.00546 \ 8; \ \alpha(L)=0.000864 \ 12; \ \alpha(M)=0.0002002 \ 28 \ \alpha(N)=5.06\times10^{-5} \ 7; \ \alpha(O)=9.96\times10^{-6} \ 14; \ \alpha(P)=9.93\times10^{-7} \ 14 \ E_{\gamma}: \ From \ ^{200}Hg(\alpha, 3n\gamma). \ I_{\gamma}: \ From \ ^{192}Os(^{14}C, 5n\gamma). \ Mult.: \ From \ A_2=-0.21 \ 4, \ A_4=-0.02 \ 6 \ (1988Ro08) \ and \ A_2=-0.10 \ 3, \ A_4=-0.03 \ 4 \ (1981He07) \ using \ \gamma(\theta) \ in \ ^{200}Hg(\alpha, 3n\gamma); \ R(DCO)=0.80 \ 8 \ in \ ^{192}Os(^{14}C, 5n\gamma); \ the \ adopted \ spin \ and \ parity \ changes \ for \ 600.2\gamma.$
2506.8	9/2+	387.3 <i>10</i> 855.8 <i>10</i>	3.4 7 57 12	2119.5 1651.0	9/2 ⁺ 7/2 ⁺	M1(+E2)	<2.0	0.020 7	$\alpha(K)=0.016 \ 6; \ \alpha(L)=0.0028 \ 9; \ \alpha(M)=6.5\times10^{-4} \ 19 \ \alpha(N)=1.6\times10^{-4} \ 5; \ \alpha(O)=3.3\times10^{-5} \ 10; \ \alpha(P)=3.4\times10^{-6} \ 12 \ Mult.: From \ \alpha(K)exp=0.020 \ 10 \ in \ ^{201}Bi \ \varepsilon \ decay.$

 $^{201}_{82} \mathrm{Pb}_{119}\text{--}10$

$\gamma(^{201}\text{Pb})$ (continued)

E_i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_{f}	\mathbf{J}_{f}^{π}	Mult.&	δ^{a}	$\alpha^{\boldsymbol{b}}$	Comments
2506.8	9/2+	1091.5 <i>10</i> 1320.9 <i>10</i> 1516.4 <i>10</i>	26 6 31 6 38 8	1415.4 1185.8 990.5	9/2 ⁺ (7/2) ⁻ 7/2 ⁻				
		1570.8 5	100 5	936.1	7/2-	E1		1.36×10 ⁻³ 2	$\alpha(K)=0.000957 \ I3; \ \alpha(L)=0.0001426 \ 20; \ \alpha(M)=3.28\times10^{-5} \ 5 \\ \alpha(N)=8.30\times10^{-6} \ I2; \ \alpha(O)=1.652\times10^{-6} \ 23; \\ \alpha(P)=1.740\times10^{-7} \ 24; \ \alpha(IPF)=0.0002190 \ 31 \\ \text{Mult: From } \alpha(K)=p=0.0009 \ 5 \text{ in } {}^{201}\text{Bi c decay}.$
2548.9	$(11/2^{-})$	1877.4 <i>10</i> 339.7 <i>10</i>	6.0 <i>12</i> 10.7 <i>21</i>	629.1 2208.9	$\frac{13}{2^+}$ (9/2 ⁺)				$\mathbf{M}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{u}u$
	()	1558.6 10	100 20	990.5	7/2-	(E2)		0.00296 4	$\alpha(K)=0.002359 \ 33; \ \alpha(L)=0.000400 \ 6; \ \alpha(M)=9.36\times10^{-5} \ 13 \ \alpha(N)=2.372\times10^{-5} \ 33; \ \alpha(O)=4.69\times10^{-6} \ 7; \ \alpha(P)=4.82\times10^{-7} \ 7; \ \alpha(IPF)=8.27\times10^{-5} \ 12 \ M \ b = 0.0020 \ 10^{-5} \ 201 \ D; \ b = 0.0020 \ 10^{-5} \ 1$
		1638.7 ^C 10	13.4 <i>21</i>	910.5?	5/2-				Mult.: From $\alpha(K)$ exp=0.0020 10 in ²⁰¹ Bi ε decay. E _{γ} : Very tentative, since the expected lifetime of the 2548.9-keV level would be very long.
		1919.4 <i>10</i>	12.5 25	629.1	$13/2^{+}$,,,,,,,, .
2604.0	(21/2)	707.9 [#] 5	100 [#]	1896.1	19/2+	D			Mult.: From A ₂ =-0.10 4, A ₄ =-0.02 6 (1988Ro08) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ).
2718.5	25/2-	222.2 [#] 1	100#	2496.3	21/2-	E2		0.299 4	B(E2)(W.u.)=0.181 9 $\alpha(K)$ =0.1318 19; $\alpha(L)$ =0.1247 18; $\alpha(M)$ =0.0325 5 $\alpha(N)$ =0.00820 12; $\alpha(O)$ =0.001488 21; $\alpha(P)$ =7.85×10 ⁻⁵ 11 Mult.: From A ₂ =0.22 5, A ₄ =0.02 6 (1988Ro08) using $\gamma(\theta)$ and $\alpha(exp)$ =0.34 3 (1981He07) in ²⁰⁰ Hg(α ,3n γ); R(DCO)=0.93 10 in ¹⁹² Os(¹⁴ C,5n γ).
2732.8		664.1 [‡] 5	48 [‡] 4	2068.5	21/2	D,E2			Mult.: From R(DCO)=1.08 25 in 192 Os(14 C,5n γ).
		830.7 [‡] 5	100 [‡] 11	1902.2	$21/2^{+}$	D,E2			Mult.: From R(DCO)=1.13 16 in ${}^{192}Os({}^{14}C,5n\gamma)$.
2736.2		667.6 [‡] 5	74 [‡] 5	2068.5	21/2	D,E2			Mult.: From R(DCO)= 1.03 16 in ${}^{192}Os({}^{14}C,5n\gamma)$.
		834.0 [‡] 5	100 [‡] 8	1902.2	$21/2^+$	D.E2			Mult.: From R(DCO)= 0.94 11 in 192 Os(14 C.5n γ).
2788.8	11/2-	239.7 10	14 3	2548.9	(11/2 ⁻)	M1+E2	0.47 7	0.690 28	$\alpha(K)=0.549\ 26;\ \alpha(L)=0.1073\ 22;\ \alpha(M)=0.0255\ 5$ $\alpha(N)=0.00649\ 13;\ \alpha(O)=0.001274\ 26;\ \alpha(P)=0.000126\ 4$
		1051.6 <i>10</i>	47 10	1737.3	9/2+	E1		2.29×10 ⁻³ 3	Mult., δ : From $\alpha(K)\exp=0.55\ 2$ in ²⁰¹ Bi ε decay. $\alpha(K)=0.001909\ 27;\ \alpha(L)=0.000290\ 4;\ \alpha(M)=6.69\times10^{-5}\ 9$ $\alpha(N)=1.692\times10^{-5}\ 24;\ \alpha(O)=3.36\times10^{-6}\ 5;\ \alpha(P)=3.47\times10^{-7}\ 5$ Mult.: From $\alpha(K)\exp=0.0011\ 10$ in ²⁰¹ Bi ε decay.
		1603.8 <i>10</i>	100 18	1185.8	(7/2)-	(E2)		0.00283 4	$\begin{aligned} &\alpha(\text{K}) = 0.002241 \ 31; \ \alpha(\text{L}) = 0.000377 \ 5; \ \alpha(\text{M}) = 8.83 \times 10^{-5} \ 12 \\ &\alpha(\text{N}) = 2.238 \times 10^{-5} \ 31; \ \alpha(\text{O}) = 4.43 \times 10^{-6} \ 6; \ \alpha(\text{P}) = 4.56 \times 10^{-7} \\ &6; \ \alpha(\text{IPF}) = 9.86 \times 10^{-5} \ 14 \\ &\text{Mult.: From } \alpha(\text{K}) \exp = 0.0040 \ 10 \text{ in } {}^{201}\text{Bi } \varepsilon \text{ decay.} \end{aligned}$

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 $^{201}_{82} \mathrm{Pb}_{119} \mathrm{-} 11$

				A	dopted Lev	els, Gammas	(contin	ued)	
					γ ⁽²⁰	¹ Pb) (continu	ed)		
E _i (level)	J_i^π	E_{γ}^{\dagger}	I_{γ}^{\dagger}	\mathbf{E}_{f}	\mathbf{J}_{f}^{π}	Mult. ^{&}	δ ^a	$\alpha^{\boldsymbol{b}}$	Comments
2788.8	11/2-	1851.9 <i>10</i> 2159.7 <i>10</i>	5.3 <i>10</i> 67 <i>14</i>	936.1 629.1	7/2 ⁻ 13/2 ⁺				
2794.2	(19/2,21/2,23/2) ⁻	297.9 [#] 3	100 [#]	2496.3	21/2-	M1+E2		0.28 16	α (K)=0.21 <i>14</i> ; α (L)=0.050 <i>11</i> ; α (M)=0.0121 <i>21</i> α (N)=0.0031 <i>5</i> ; α (O)=0.00059 <i>13</i> ; α (P)=5.3×10 ⁻⁵ <i>24</i>
									Mult.: From A ₂ =-0.99 13, A ₄ =0.13 5 (1981He07) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ).
2961.8	(7/2,9/2 ⁻)	1472.1 <i>10</i> 1775.7 <i>10</i> 1971.0 <i>10</i> 2025.6 <i>10</i>	71 <i>14</i> 100 <i>19</i> 31 6 50 <i>10</i>	1490.3 1185.8 990.5 936.1	7/2 ⁻ ,9/2 ⁻ (7/2) ⁻ 7/2 ⁻ 7/2 ⁻				
3050.7	$(7/2)^+$	2082.0 ^c 10 931.6 10	14 <i>3</i> 44 9	879.6 2119.5	(5/2) ⁻ 9/2 ⁺	M1(+E2)	<0.6	0.0195 18	$\alpha(K)=0.0160\ 15;\ \alpha(L)=0.00268\ 23;\ \alpha(M)=0.00063$
									α (N)=0.000159 <i>13</i> ; α (O)=3.17×10 ⁻⁵ 27; α (P)=3.38×10 ⁻⁶ 31
		1313 2 10	28.5	1737 3	9/2+				Mult., δ : From α (K)exp=0.020 5 in ²⁰¹ Bi ε decay.
		1634.9 <i>10</i>	100 20	1415.4	9/2 ⁺	M1(+E2)	<1.2	0.0045 7	$\alpha(K)=0.0036\ 6;\ \alpha(L)=0.00059\ 9;\ \alpha(M)=0.000137$
									$\alpha(N)=3.5\times10^{-5} 6; \alpha(O)=6.9\times10^{-6} 11;$ $\alpha(P)=7.4\times10^{-7} 13; \alpha(IPF)=0.000164 23$ Mult., δ : From $\alpha(K)\exp=0.0040 \ 10$ in 201 Bi ε
		2035.8 <i>10</i> 2060.9 <i>10</i> 2114.7 <i>10</i> 2170.4 ^c <i>10</i>	4.3 9 9.4 19 5.6 11 8.9 18	1014.2 990.5 936.1 879.6	9/2 ⁻ 7/2 ⁻ 7/2 ⁻ (5/2) ⁻				decay.
3509.5+x	(31/2 ⁻)	791.0 [‡] 5	100 [‡]	2718.5+x	(29/2 ⁻)	M1+E2		0.022 11	α (K)=0.017 9; α (L)=0.0031 13; α (M)=7.4×10 ⁻⁴ 30 α (N)=1.9×10 ⁻⁴ 8; α (O)=3.7×10 ⁻⁵ 16; α (P)=3.8×10 ⁻⁶ 18
									Mult.: From A ₂ =-1.06 3, A ₄ =-0.01 5 (1988Ro08) using $\gamma(\theta)$ in ²⁰⁰ Hg(α ,3n γ) and R(DCO)=0.61 4 in ¹⁹² Os(¹⁴ C,5n γ).
3545.0+x	(33/2 ⁻)	826.6 [‡] 5	100‡	2718.5+x	(29/2 ⁻)	E2		0.00973 14	$\begin{aligned} &\alpha(\mathbf{K}) = 0.00759 \ 11; \ \alpha(\mathbf{L}) = 0.001621 \ 23; \\ &\alpha(\mathbf{M}) = 0.000390 \ 5 \\ &\alpha(\mathbf{N}) = 9.88 \times 10^{-5} \ 14; \ \alpha(\mathbf{O}) = 1.916 \times 10^{-5} \ 27; \\ &\alpha(\mathbf{P}) = 1.771 \times 10^{-6} \ 25 \end{aligned}$

	Adopted Levels, Gammas (continued)										
	γ ⁽²⁰¹ Pb) (continued)										
E _i (level)	\mathbf{J}_i^π	${\rm E}_{\gamma}^{\dagger}$	I_{γ}^{\dagger}	E_f	\mathbf{J}_f^π	Mult. ^{&}	$\alpha^{\boldsymbol{b}}$	Comments			
					ř			$\begin{aligned} &\alpha(\text{K}) = 0.00759 \ 11; \ \alpha(\text{L}) = 0.001621 \ 23; \ \alpha(\text{M}) = 0.000390 \ 5 \\ &\alpha(\text{N}) = 9.88 \times 10^{-5} \ 14; \ \alpha(\text{O}) = 1.916 \times 10^{-5} \ 27; \ \alpha(\text{P}) = 1.771 \times 10^{-6} \ 25 \\ &\text{Mult.: From } \text{A}_2 = 0.28 \ 5, \ \text{A}_4 = -0.03 \ 6 \ (1988 \text{Ro08}) \ \text{using } \gamma(\theta) \ \text{in} \\ &\frac{200}{10} \text{Hg}(\alpha, 3n\gamma) \ \text{and } \text{R}(\text{DCO}) = 1.00 \ 14 \ \text{in} \ ^{192} \text{Os}(^{14}\text{C}, 5n\gamma). \end{aligned}$			
3638.0+x	(31/2)	919.4 [‡] 5	100 [‡]	2718.5+x	(29/2 ⁻)	(D)		$\begin{aligned} &\alpha(\text{K}) = 0.012 \ 6; \ \alpha(\text{L}) = 0.0021 \ 9; \ \alpha(\text{M}) = 5.0 \times 10^{-4} \ 20 \\ &\alpha(\text{N}) = 1.3 \times 10^{-4} \ 5; \ \alpha(\text{O}) = 2.5 \times 10^{-5} \ 10; \ \alpha(\text{P}) = 2.6 \times 10^{-6} \ 12 \\ &\text{Mult.: From } \text{A}_2 = -0.48 \ 4, \ \text{A}_4 = 0.31 \ 7 \ (1988\text{Ro08}) \ \text{using } \gamma(\theta) \ \text{in} \\ &\frac{200}{10}\text{Hg}(\alpha, 3n\gamma) \ \text{and } \text{R}(\text{DCO}) = 0.87 \ 12 \ \text{in} \ {}^{192}\text{Os}({}^{14}\text{C}, 5n\gamma). \end{aligned}$			
3832.3+x	(35/2 ⁻)	287.2 [‡] 5	100 [‡]	3545.0+x	(33/2 ⁻)	M1+E2	0.31 17	$\alpha(K)=0.23\ 16;\ \alpha(L)=0.056\ 11;\ \alpha(M)=0.0136\ 21$ $\alpha(N)=0.0035\ 5;\ \alpha(O)=0.00067\ 13;\ \alpha(P)=5.9\times10^{-5}\ 27$ Mult.: From A ₂ =-0.51 5, A ₄ =0.02 8 (1988Ro08) using $\gamma(\theta)$ in 200 Hg(α ,3n γ); R(DCO)=0.76 5 and K/L (1989Su12) in 192 Os(14 C,5n γ).			
3932.0+x	(33/2+)	293.9 [‡] 5	39.4 [‡] 25	3638.0+x	(31/2)	D		$\alpha(K)=0.0255 \ 8; \ \alpha(L)=0.00432 \ 13; \ \alpha(M)=0.00101 \ 3; \ \alpha(N+)=0.00032 \ I$ $I_{\gamma}: \text{ Note, that } I_{\gamma}=76 \ 8 \text{ in } {}^{200}\text{Hg}(\alpha,3n\gamma).$ Mult.: From A ₂ =-0.28 4, A ₄ =0.07 6 (1988Ro08) using $\gamma(\theta)$ in ${}^{200}\text{Hg}(\alpha,3n\gamma)$ and R(DCO)=0.78 7 in ${}^{192}\text{Os}({}^{14}\text{C},5n\gamma).$			
		387.0 [‡] 5	10.2 [‡] 3	3545.0+x	(33/2 ⁻)	(D)		α (K)=0.0137 5; α (L)=0.00226 7; α (M)=0.00053 2; α (N+)=0.00017 1 Mult.: From R(DCO)=0.90 15 in ¹⁹² Os(¹⁴ C,5n γ).			
		422.5 [‡] 5	100 [‡] 5	3509.5+x	(31/2 ⁻)	(D)		α (K)=0.0113 4; α (L)=0.00185 6; α (M)=0.00043 1; α (N+)=0.00014 1 Mult.: From R(DCO)=0.83 14 in ¹⁹² Os(¹⁴ C,5n γ).			
4059.5		1341.0 [‡] 5	100‡	2718.5	25/2-			Mult.: R(DCO)=0.89 16.			
4168.7+y		109.2 [‡] 5	100 [‡]	4059.5+y		(M1)	7.27 14	α (K)=5.93 <i>11</i> ; α (L)=1.031 <i>20</i> ; α (M)=0.242 <i>5</i> α (N)=0.0615 <i>12</i> ; α (O)=0.01225 <i>24</i> ; α (P)=0.001308 <i>25</i> Mult.: From R(DCO)=0.71 <i>15</i> in ¹⁹² Os(¹⁴ C,5n γ).			
4350.3+y		181.6 [‡] 5	100 [‡]	4168.7+y		(M1)	1.716 27	α (K)=1.401 22; α (L)=0.241 4; α (M)=0.0566 9 α (N)=0.01438 23; α (O)=0.00287 5; α (P)=0.000306 5 Mult.: From R(DCO)=0.66 6 in ¹⁹² Os(¹⁴ C,5n γ).			
4505.1+x	(35/2)	573.2 [‡] 5	100 [‡]	3932.0+x	(33/2 ⁺)	D		Mult.: From A ₂ =-0.87 5, A ₄ =0.14 8 (1988Ro08) using $\gamma(\theta)$ in 200 Hg(α ,3n γ) and R(DCO)=0.63 11 in 192 Os(14 C,5n γ).			
4560.2+x	(37/2+)	628.4 [‡] 5	43.9 [‡] 23	3932.0+x	(33/2+)	E2	0.01736 24	$\alpha(K)=0.01298\ 18;\ \alpha(L)=0.00332\ 5;\ \alpha(M)=0.000812\ 12$ $\alpha(N)=0.0002057\ 29;\ \alpha(O)=3.94\times10^{-5}\ 6;\ \alpha(P)=3.36\times10^{-6}\ 5$ $I_{\gamma}:$ Note, that $I_{\gamma}\approx10$ in $^{200}Hg(\alpha,3n\gamma)$. Mult.: From R(DCO)=1.00 9 in $^{192}Os(^{14}C,5n\gamma)$.			
		728.0 [‡] 5	100 [‡] 3	3832.3+x	(35/2-)	D		Mult.: From A ₂ =-0.13 5, A ₄ =-0.02 7 (1988Ro08) using $\gamma(\theta)$ in 200 Hg(α ,3n γ) and R(DCO)=0.89 4 in 192 Os(14 C,5n γ).			

	Adopted Levels, Gammas (continued)									
γ ⁽²⁰¹ Pb) (continued)										
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$	Mult.&	$\alpha^{\boldsymbol{b}}$	Comments			
4614.1+y		263.8 [‡] 5	100 [‡]	4350.3+y	(M1)	0.607 9	α (K)=0.496 7; α (L)=0.0849 13; α (M)=0.01988 30 α (N)=0.00505 8; α (O)=0.001007 15; α (P)=0.0001077 16 Mult.: From R(DCO)=0.71 6 in ¹⁹² Os(¹⁴ C.5n γ).			
4640.0+x	(41/2+)	80 [@] 1	100 [@]	4560.2+x (37/2+	E2	16.5 6	B(E2)(W.u.)=3.1 3 α (L)=12.3 4; α (M)=3.25 11 α (N)=0.819 27; α (O)=0.146 5; α (P)=0.00543 17 Mult.: From R(DCO)=1.1 4 and K/L in ¹⁹² Os(¹⁴ C,5n\gamma).			
4640.0+u		u		4640.0+x (41/2 ⁺)					
4640.0+v		V		$4640.0+x (41/2^{+})$)					
4640.0+z	(25/2)	Z	100#	4640.0+x (41/2))					
4640.1+x	(35/2)	/08.1" 2	100"	3932.0+x (33/2*)					
4647.6+x	(35/2)	142.5* 5	20.0+ 18	4505.1+x (35/2)	(D)		Mult.: From R(DCO)=1.00 35 in ¹⁹² Os(¹⁴ C,Sn γ), consistent with $\Delta J=0$ transition.			
		715.7 [‡] 5	100 [‡] 15	3932.0+x (33/2+) D		Mult.: From R(DCO)=0.66 12 in ${}^{192}Os({}^{14}C,5n\gamma)$.			
4780.5+z		139.6 [‡] 5	100 [‡]	4640.0+z	(M1)	3.61 6	$\alpha(K)=2.95 5; \alpha(L)=0.510 9; \alpha(M)=0.1195 21 \alpha(N)=0.0304 5; \alpha(O)=0.00605 11; \alpha(P)=0.000647 11 Mult.: From R(DCO)=0.69 17 in 192Os(14C,5n\gamma).$			
4793.8+v		152.9 [‡] 5	100 [‡]	4640.0+v	(M1)	2.79 5	α (K)=2.28 4; α (L)=0.393 7; α (M)=0.0921 16 α (N)=0.0234 4; α (O)=0.00467 8; α (P)=0.000499 8 Mult.: From R(DCO)=0.55 23 in ¹⁹² Os(¹⁴ C,5n γ).			
4817.4+u		176.5 [‡] 5	100 [‡]	4640.0+u	(M1)	1.860 <i>30</i>	α (K)=1.518 24; α (L)=0.262 4; α (M)=0.0613 10 α (N)=0.01558 25; α (O)=0.00311 5; α (P)=0.000332 5 Mult.: From R(DCO)=0.83 19 in ¹⁹² Os(¹⁴ C,5n γ).			
4830.2+x	(39/2)	190.4 [‡] 5	<25 [‡]	4640.0+x (41/2+) D		Mult.: From R(DCO)=0.81 18 in ${}^{192}Os({}^{14}C,5n\gamma)$.			
		269.9 [‡] 5	100 [‡] 18	4560.2+x (37/2+) D		Mult.: From R(DCO)= $0.64 \ 12 \text{ in } {}^{192}\text{Os}({}^{14}\text{C},5n\gamma)$.			
4954.9+y		340.8 [‡] 5	100 [‡]	4614.1+y	(M1)	0.301 4	α (K)=0.247 4; α (L)=0.0420 6; α (M)=0.00982 14 α (N)=0.00250 4; α (O)=0.000498 7; α (P)=5.33×10 ⁻⁵ 8 Mult.: From R(DCO)=0.69 5 in ¹⁹² Os(¹⁴ C,5n γ).			
4956.3+z		175.8 [‡] 5	100 [‡]	4780.5+z	(M1)	1.881 <i>30</i>	α (K)=1.535 25; α (L)=0.265 4; α (M)=0.0620 10 α (N)=0.01576 25; α (O)=0.00314 5; α (P)=0.000336 5 Mult.: From R(DCO)=0.68 19 in ¹⁹² Os(¹⁴ C,5n γ).			
4992.4+v		198.6 [‡] 5	100 [‡]	4793.8+v	(M1)	1.335 <i>21</i>	α (K)=1.090 <i>17</i> ; α (L)=0.1875 <i>29</i> ; α (M)=0.0439 <i>7</i> α (N)=0.01117 <i>18</i> ; α (O)=0.002227 <i>35</i> ; α (P)=0.000238 <i>4</i> Mult.: From R(DCO)=0.63 <i>11</i> in ¹⁹² Os(¹⁴ C,5n γ).			
5000.1+x		360.0 [#] 5	100 [#]	4640.1+x (35/2)						
5043.1+u		225.7 [‡] 5	100 [‡]	4817.4+u	(M1)	0.935 14	α (K)=0.763 <i>12</i> ; α (L)=0.1310 <i>20</i> ; α (M)=0.0307 <i>5</i> α (N)=0.00780 <i>12</i> ; α (O)=0.001555 <i>24</i> ; α (P)=0.0001663 <i>25</i> Mult.: From R(DCO)=0.88 <i>17</i> in ¹⁹² Os(¹⁴ C,5n γ).			

 $^{201}_{82} \mathrm{Pb}_{119}$ -14

From ENSDF

 $^{201}_{82} \mathrm{Pb}_{119}\text{-}14$

$\gamma(^{201}\text{Pb})$ (continued)

E _i (level)	\mathbf{J}_i^{π}	${\rm E_{\gamma}}^{\dagger}$	I_{γ}^{\dagger}	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$	Mult. ^{&}	$\alpha^{\boldsymbol{b}}$	Comments
5087.1+x	(43/2)	446.9 [#] 5	100#	$4640.0+x (41/2^+)$	D		Mult.: From R(DCO)= $0.76 \ 5 \ \text{in}^{192} \text{Os}(^{14}\text{C}, 5n\gamma)$.
5172.4+x		667.3 [#] 3	100 [#]	4505.1+x (35/2)	D		Mult.: From A ₂ =-0.38 6, A ₄ =-0.16 9 (1981He07) using $\gamma(\theta)$ in 200 Hg(α ,3n γ).
5178.6+z		222.3 [‡] 5	100 [‡]	4956.3+z	(M1)	0.975 15	α (K)=0.796 <i>12</i> ; α (L)=0.1367 <i>21</i> ; α (M)=0.0320 <i>5</i> α (N)=0.00814 <i>13</i> ; α (O)=0.001623 <i>25</i> ; α (P)=0.0001735 <i>27</i> Mult.: From DCO in ¹⁹² Os(¹⁴ C,5nγ).
5242.4+v		250.0 [‡] 5	100 [‡]	4992.4+v	(M1)	0.704 11	α (K)=0.575 9; α (L)=0.0985 15; α (M)=0.02308 35 α (N)=0.00587 9; α (O)=0.001170 18; α (P)=0.0001250 19 Mult.: From DCO in ¹⁹² Os(¹⁴ C,5n γ).
5321.3+u		278.2 [‡] 5	100 [‡]	5043.1+u	(M1)	0.524 8	α (K)=0.429 6; α (L)=0.0733 11; α (M)=0.01716 26 α (N)=0.00436 6; α (O)=0.000870 13; α (P)=9.30×10 ⁻⁵ 14 Mult.: From DCO in ¹⁹² Os(¹⁴ C,5n γ).
5358.7+y		404.0 [‡] 5	100 [‡] <i>10</i>	4954.9+y	(M1)	0.1905 27	α (K)=0.1560 22; α (L)=0.0264 4; α (M)=0.00618 9 α (N)=0.001572 23; α (O)=0.000313 5; α (P)=3.35×10 ⁻⁵ 5 Mult.: From DCO in ¹⁹² Os(¹⁴ C,5n γ).
		744.6 [‡] 5	18 [‡] 6	4614.1+y	E2	0.01206 17	α (K)=0.00929 <i>13</i> ; α (L)=0.002109 <i>30</i> ; α (M)=0.000510 <i>7</i> α (N)=0.0001293 <i>18</i> ; α (O)=2.496×10 ⁻⁵ <i>35</i> ; α (P)=2.244×10 ⁻⁶ <i>32</i> Mult.: From DCO in ¹⁹² Os(¹⁴ C,5nγ).
5389.1+x	(45/2)	$302.0^{\ddagger} 5$	100 [‡] 100 [#]	5087.1 + x (43/2)	D		Mult.: From DCO in 192 Os(14 C,5n γ).
5455.0+z		276.4 [‡] 5	100 [‡]	5178.6+z	(M1)	0.534 8	α (K)=0.436 6; α (L)=0.0746 11; α (M)=0.01747 26 α (N)=0.00444 7; α (O)=0.000885 13; α (P)=9.47×10 ⁻⁵ 14 Mult.: From R(DCO)=0.66 9 in ¹⁹² Os(¹⁴ C,5n γ).
5554.4+v		312.0 [‡] 5	100 [‡]	5242.4+v	(M1)	0.383 6	α (K)=0.313 5; α (L)=0.0534 8; α (M)=0.01251 18 α (N)=0.00318 5; α (O)=0.000634 9; α (P)=6.78×10 ⁻⁵ 10 Mult.: From R(DCO)=0.58 11 in ¹⁹² Os(¹⁴ C,5n γ).
5581.9+x	(39/2 ⁻)	1749.5 [‡] 5	100 [‡]	3832.3+x (35/2 ⁻)	E2	2.48×10 ⁻³ 4	$\alpha(K)=0.001916\ 27;\ \alpha(L)=0.000317\ 4;\ \alpha(M)=7.40\times10^{-5}\ 10$ $\alpha(N)=1.877\times10^{-5}\ 26;\ \alpha(O)=3.72\times10^{-6}\ 5;\ \alpha(P)=3.86\times10^{-7}\ 5;$ $\alpha(IPF)=0.0001548\ 22$
5648.0+u		326.7 [‡] 5	100 [‡]	5321.3+u	(M1)	0.338.5	Mult.: From R(DCO)=0.93 <i>19</i> in ¹⁹² Os(¹⁴ C,5n γ). α (K)=0.276 <i>4</i> : α (L)=0.0471 <i>7</i> : α (M)=0.01103 <i>16</i>
			~ ~		()		α (N)=0.00280 4; α (O)=0.000559 8; α (P)=5.98×10 ⁻⁵ 9 Mult.: From R(DCO)=0.79 16 in ¹⁹² Os(¹⁴ C,5n γ).
5787.3+z		332.3 [‡] 5	100 [‡]	5455.0+z	(M1)	0.323 5	α (K)=0.264 4; α (L)=0.0450 7; α (M)=0.01053 15 α (N)=0.00267 4; α (O)=0.000533 8; α (P)=5.71×10 ⁻⁵ 8 Mult.: From R(DCO)=0.69 13 in ¹⁹² Os(¹⁴ C,5n γ).

Adopted Levels, Gammas (continued) $\gamma(^{201}\text{Pb})$ (continued)									
5817.7+y		459.0 [‡] 5	100 [‡] 11	5358.7+y		(M1)	0.1355 19	α (K)=0.1110 <i>16</i> ; α (L)=0.01875 <i>27</i> ; α (M)=0.00438 <i>6</i> α (N)=0.001114 <i>16</i> ; α (O)=0.0002221 <i>32</i> ; α (P)=2.379×10 ⁻⁵ <i>34</i> Mult.: From R(DCO)=0.70 <i>6</i> in ¹⁹² Os(¹⁴ C,5n γ).	
		862.8 [‡] 5	22 [‡] 9	4954.9+y		E2	0.00892 13	α (K)=0.00700 <i>10</i> ; α (L)=0.001460 <i>21</i> ; α (M)=0.000350 <i>5</i> α (N)=8.88×10 ⁻⁵ <i>12</i> ; α (O)=1.725×10 ⁻⁵ <i>24</i> ; α (P)=1.611×10 ⁻⁶ <i>23</i> Mult.: From R(DCO)=0.92 <i>34</i> in ¹⁹² Os(¹⁴ C,5n γ).	
5830.0+x	(45/2+)	1190.1 [‡] 5	100 [‡]	4640.0+x	(41/2 ⁺)	E2	0.00477 7	$ \begin{aligned} &\alpha(\mathrm{K}) = 0.00385 \ 5; \ \alpha(\mathrm{L}) = 0.000701 \ 10; \ \alpha(\mathrm{M}) = 0.0001657 \ 23 \\ &\alpha(\mathrm{N}) = 4.20 \times 10^{-5} \ 6; \ \alpha(\mathrm{O}) = 8.25 \times 10^{-6} \ 12; \ \alpha(\mathrm{P}) = 8.20 \times 10^{-7} \ 11; \\ &\alpha(\mathrm{IPF}) = 3.08 \times 10^{-6} \ 6 \end{aligned} $	
		4						Mult.: From R(DCO)=1.07 13 in 192 Os(14 C,5n γ).	
5835.7+x	(41/2)	253.7 + 5	47 + 5	5581.9+x	$(39/2^{-})$	(D)		Mult.: From R(DCO)=0.78 28 in 192 Os(14 C,5n γ).	
		1005.5+ 5	100+ 5	4830.2+x	(39/2)	(D)		Mult.: From R(DCO)=0.76 20 in 192 Os(14 C,5n γ).	
5891.3+x	(43/2)	1251.3+ 5	100+	4640.0+x	$(41/2^+)$	D		Mult.: From R(DCO)= $0.74 \ 17 \ \text{in}^{192} \text{Os}(^{14}\text{C}, 5n\gamma)$.	
5928.8+v		374.4+ 5	100+	5554.4+v		(M1)	0.2338 34	α (K)=0.1913 28; α (L)=0.0325 5; α (M)=0.00760 11 α (N)=0.001932 28; α (O)=0.000385 6; α (P)=4.12×10 ⁻⁵ 6 Mult.: From R(DCO)=0.68 14 in ¹⁹² Os(¹⁴ C,5n γ).	
5989.4+x	(45/2)	98.2 [‡] 5	3.4 [‡] 4	5891.3+x	(43/2)	D		Mult.: From R(DCO)=0.74 21 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
		153.7 [‡] 5	8.4 [‡] 4	5835.7+x	(41/2)	E2	1.114 21	α (K)=0.300 5; α (L)=0.607 12; α (M)=0.1597 32 α (N)=0.0403 8; α (O)=0.00723 15; α (P)=0.000325 6 Mult.: From R(DCO)=1.02 15 in ¹⁹² Os(¹⁴ C,5n γ).	
		159.4 [‡] 5	9.6 [‡] 4	5830.0+x	$(45/2^+)$	(D)		Mult.: From R(DCO)=1.06 13 in 192 Os(14 C,5n γ).	
		600.2 [‡] 5	12.1 [‡] 17	5389.1+x	(45/2)	(D)		Mult.: From R(DCO)=0.98 16 in 192 Os(14 C,5n γ).	
		902.2 [‡] 5	100.0 [‡] 8	5087.1+x	(43/2)	D		Mult.: From R(DCO)=0.55 5 in 192 Os(14 C,5n γ).	
6028.4+u		380.4 [‡] 5	100 [‡]	5648.0+u		(M1)	0.2240 32	α (K)=0.1833 26; α (L)=0.0311 4; α (M)=0.00728 11 α (N)=0.001850 27; α (O)=0.000369 5; α (P)=3.95×10 ⁻⁵ 6 Mult.: From R(DCO)=0.89 11 in ¹⁹² Os(¹⁴ C,5n γ).	
6145.1+x	(35/2)	1640.0 [‡] 5	100 [‡]	4505.1+x	(35/2)	(D)		Mult.: From R(DCO)=1.13 26 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
6175.4+z		388.1 [‡] 5	100 [‡]	5787.3+z		(M1)	0.2122 <i>31</i>	α (K)=0.1737 25; α (L)=0.0295 4; α (M)=0.00690 10 α (N)=0.001752 25; α (O)=0.000349 5; α (P)=3.74×10 ⁻⁵ 5 Mult.: From R(DCO)=0.59 14 in ¹⁹² Os(¹⁴ C,5n γ).	
6246.8+x	(37/2)	101.7 [‡] 5	100 [‡]	6145.1+x	(35/2)	(M1)	8.91 18	α (K)=7.26 <i>14</i> ; α (L)=1.266 <i>25</i> ; α (M)=0.297 <i>6</i> α (N)=0.0755 <i>15</i> ; α (O)=0.01505 <i>30</i> ; α (P)=0.001607 <i>32</i> Mult.: From R(DCO)=0.55 <i>14</i> in ¹⁹² Os(¹⁴ C,5n γ).	
6323.4+y		505.7 [‡] 5	100 [‡] <i>33</i>	5817.7+y		(M1)	0.1048 15	α (K)=0.0859 <i>12</i> ; α (L)=0.01446 <i>21</i> ; α (M)=0.00338 <i>5</i> α (N)=0.000859 <i>12</i> ; α (O)=0.0001713 <i>24</i> ; α (P)=1.836×10 ⁻⁵ <i>26</i> Mult.: From R(DCO)=0.67 <i>11</i> in ¹⁹² Os(¹⁴ C,5n γ).	

From ENSDF

Adopted Levels, Gammas (continued)										
γ ⁽²⁰¹ Pb) (continued)										
E _i (level)	\mathbf{J}_i^π	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_f	\mathbf{J}_f^{π}	Mult.&	α b	Comments		
6323.4+y		964.7 [‡] 5	67 [‡] 20	5358.7+y		(E2)	0.00714 10	$\alpha(K)=0.00567 \ 8; \ \alpha(L)=0.001121 \ 16; \ \alpha(M)=0.000267 \ 4$ $\alpha(N)=6.78\times10^{-5} \ 10; \ \alpha(O)=1.323\times10^{-5} \ 19; \ \alpha(P)=1.266\times10^{-6} \ 18$ Mult.: From R(DCO)=0.77 \ 18 in $^{192}Os(^{14}C, 5n\gamma)$.		
6323.9+x	(45/2+)	1683.8 [‡] 5	100 [‡]	4640.0+x	(41/2+)	E2	0.00263 4	$\alpha(K)=0.002053 \ 29; \ \alpha(L)=0.000342 \ 5; \ \alpha(M)=8.00\times10^{-5} \ 11 \\ \alpha(N)=2.027\times10^{-5} \ 28; \ \alpha(O)=4.01\times10^{-6} \ 6; \ \alpha(P)=4.15\times10^{-7} \ 6; \\ \alpha(PF)=0.0001288 \ 18 \\ \text{Mult: From } P(DCO)=1.01 \ 17 \ \text{in} \ {}^{192}\text{Osc}({}^{14}\text{C} \ 5\text{nst})$		
6336 1±v		518 1 5	100	5817 7±v		D		Mult.: $P(DCO) = 0.69 \ I0 \ in \ \frac{192}{100} Os(-2.5m)$		
6264 8 L		126 0 5	100	5020 0 L			0 1554 22	$\alpha(K) = 0.1272 I_{2} \alpha(L) = 0.02152 I_{1} \alpha(M) = 0.00502 7$		
0304.8+V		430.01 5	100 *	3928.8+V		(1011)	0.1334 22	$\alpha(\mathbf{K})=0.1273 \ 18; \ \alpha(\mathbf{L})=0.02132 \ 31; \ \alpha(\mathbf{M})=0.00303 \ 7$ $\alpha(\mathbf{N})=0.001279 \ 18; \ \alpha(\mathbf{O})=0.000255 \ 4; \ \alpha(\mathbf{P})=2.73\times10^{-5} \ 4$ Mult.: From R(DCO)=0.77 21 in 192 Os(14 C,5ny).		
6376.4+x	(39/2)	129.7 [‡] 5	100 [‡]	6246.8+x	(37/2)	(M1)	4.45 8	α (K)=3.63 6; α (L)=0.629 11; α (M)=0.1475 26 α (N)=0.0375 7; α (O)=0.00747 13; α (P)=0.000798 14 Mult.: From R(DCO)=0.57 8 in ¹⁹² Os(¹⁴ C,5ny).		
6458.1+u		429.7 [‡] 5	100 [‡]	6028.4+u		(M1)	0.1615 23	α (K)=0.1323 <i>19</i> ; α (L)=0.02238 <i>32</i> ; α (M)=0.00523 <i>8</i> α (N)=0.001330 <i>19</i> ; α (O)=0.000265 <i>4</i> ; α (P)=2.84×10 ⁻⁵ <i>4</i> Mult.: From R(DCO)=0.79 <i>30</i> in ¹⁹² Os(¹⁴ C,5n γ).		
6460.1+x	(47/2)	136.2 [‡] 5	8.5 [‡] 14	6323.9+x	$(45/2^+)$	D		Mult.: From R(DCO)=0.89 28 in 192 Os(14 C,5n γ).		
		470.7 [‡] 5	100 [‡] 6	5989.4+x	(45/2)	(D)		Mult.: From R(DCO)= 0.94 12 in $^{192}Os(^{14}C.5n\gamma)$.		
6548.0+x	(41/2)	171.6 [‡] 5	100 [‡]	6376.4+x	(39/2)	(M1)	2.013 33	$\alpha(\text{K})$ =1.643 27; $\alpha(\text{L})$ =0.283 5; $\alpha(\text{M})$ =0.0664 11 $\alpha(\text{N})$ =0.01688 27; $\alpha(\text{O})$ =0.00336 5; $\alpha(\text{P})$ =0.000359 6 Mult.: From R(DCO)=0.58 6 in ¹⁹² Os(¹⁴ C,5n\gamma).		
6616.7+z		441.3 [‡] 5	100 [‡] 27	6175.4+z		(M1)	0.1505 22	$\alpha(K)=0.1232 \ 18; \ \alpha(L)=0.02084 \ 30; \ \alpha(M)=0.00487 \ 7 \ \alpha(N)=0.001238 \ 18; \ \alpha(O)=0.0002469 \ 35; \ \alpha(P)=2.64\times10^{-5} \ 4 \ Mult.; From R(DCO)=0.64 \ 16 \ in \ ^{192}Os(^{14}C.5n\gamma).$		
		829.4 [‡] 5	35 [‡] 15	5787.3+z		E2	0.00966 14	$\alpha(K)=0.00755 \ 11; \ \alpha(L)=0.001608 \ 23; \ \alpha(M)=0.000387 \ 5 \ \alpha(N)=9.80\times10^{-5} \ 14; \ \alpha(O)=1.900\times10^{-5} \ 27; \ \alpha(P)=1.758\times10^{-6} \ 25 \ Mult.; From R(DCO)=1.2 \ 7 \ in \ ^{192}Os(^{14}C.5n\gamma).$		
6706.7+x	(49/2)	717.3 [‡] 5	100 [‡]	5989.4+x	(45/2)	E2	0.01305 18	$\alpha(K)=0.00999\ 14;\ \alpha(L)=0.002324\ 33;\ \alpha(M)=0.000564\ 8$ $\alpha(N)=0.0001428\ 20;\ \alpha(O)=2.75\times10^{-5}\ 4;\ \alpha(P)=2.446\times10^{-6}\ 34$ Mult.: From R(DCO)=1.05 6 in ¹⁹² Os(¹⁴ C.5ny).		
6768.5+x	(43/2)	220.5 [‡] 5	100 [‡]	6548.0+x	(41/2)	(M1)	0.997 15	$\alpha(K)=0.814 \ 13; \ \alpha(L)=0.1399 \ 22; \ \alpha(M)=0.0328 \ 5 \ \alpha(N)=0.00833 \ 13; \ \alpha(O)=0.001660 \ 26; \ \alpha(P)=0.0001775 \ 27 \ Mult.: From R(DCO)=0.58 \ 5 \ in \ ^{192}Os(^{14}C,5n\gamma).$		
6858.2+v		493.4 [‡] 5	100 [‡]	6364.8+v		(M1)	0.1118 <i>16</i>	$\alpha(K)=0.0917 \ 13; \ \alpha(L)=0.01545 \ 22; \ \alpha(M)=0.00361 \ 5$ $\alpha(N)=0.000917 \ 13; \ \alpha(O)=0.0001830 \ 26; \ \alpha(P)=1.960\times10^{-5} \ 28$ Mult.: From R(DCO)=0.76 20 in $^{192}Os(^{14}C, 5n\gamma)$.		

 $^{201}_{82} \mathrm{Pb}_{119}\text{-}17$

From ENSDF

 $^{201}_{82} \mathrm{Pb}_{119}\text{--}17$

Adopted Levels, Gammas (continued)									
γ (²⁰¹ Pb) (continued)									
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	\mathbf{E}_{f} .	J_f^{π} M	lult.&	α b	Comments	
6881.9+y		558.5 [‡] 5	100‡	6323.4+y	(M	M1)	0.0806 11	α (K)=0.0661 9; α (L)=0.01110 16; α (M)=0.00259 4 α (N)=0.000659 9; α (O)=0.0001315 19; α (P)=1.409×10 ⁻⁵ 20 Mult.: From R(DCO)=0.65 18 in ¹⁹² Os(¹⁴ C,5n γ).	
6910.1+x	(47/2)	586.1 [‡] 5	100 [‡]	6323.9+x (45	5/2 ⁺) D			Mult.: From R(DCO)=0.76 13 in 192 Os(14 C,5n γ).	
6941.2+u		483.1 [‡] 5	100 [‡]	6458.1+u	(N	M1)	0.1183 <i>17</i>	α (K)=0.0969 <i>14</i> ; α (L)=0.01634 <i>23</i> ; α (M)=0.00382 <i>5</i> α (N)=0.000971 <i>14</i> ; α (O)=0.0001936 <i>28</i> ; α (P)=2.074×10 ⁻⁵ <i>30</i> Mult.: From R(DCO)=0.73 <i>26</i> in ¹⁹² Os(¹⁴ C,5n γ).	
7008.4+x	(49/2)	548.3 [‡] 5	100 [‡]	6460.1+x (47	7/2) D			Mult.: From R(DCO)=0.67 9 in 192 Os(14 C,5n γ).	
7044.3+x	(45/2)	275.9 [‡] 5	100 [‡]	6768.5+x (43	3/2) (N	M1)	0.536 8	α (K)=0.438 7; α (L)=0.0750 11; α (M)=0.01756 26 α (N)=0.00446 7; α (O)=0.000890 13; α (P)=9.51×10 ⁻⁵ 14 Mult.: From R(DCO)=0.56 3 in ¹⁹² Os(¹⁴ C,5n γ).	
7108.4+z		491.7 [‡] 5	100 [‡] 22	6616.7+z	(N	M1)	0.1129 <i>16</i>	α (K)=0.0925 <i>13</i> ; α (L)=0.01559 <i>22</i> ; α (M)=0.00364 <i>5</i> α (N)=0.000926 <i>13</i> ; α (O)=0.0001847 <i>26</i> ; α (P)=1.979×10 ⁻⁵ <i>28</i> Mult.: From R(DCO)=0.64 <i>17</i> in ¹⁹² Os(¹⁴ C,5n γ).	
		933.1 [‡] 5	44 [‡] 17	6175.4+z	E2	2	0.00763 11	α (K)=0.00604 8; α (L)=0.001212 17; α (M)=0.000289 4 α (N)=7.34×10 ⁻⁵ 10; α (O)=1.430×10 ⁻⁵ 20; α (P)=1.360×10 ⁻⁶ 19 Mult.: From R(DCO)=0.8 3 in ¹⁹² Os(¹⁴ C,5n γ).	
7142.3+x	$(49/2^+)$	232.2 [‡] 5	10 [‡] 5	6910.1+x (47	7/2) D			Mult.: From R(DCO)=0.81 25 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
		682.3 [‡] 5	17.2 [‡] 17	6460.1+x (47	7/2) D			Mult.: From R(DCO)=0.73 18 in $^{192}Os(^{14}C, 5n\gamma)$.	
		1312.3 [‡] 5	100 [‡] 7	5830.0+x (45	5/2 ⁺) E2	2	0.00398 6	α (K)=0.00322 5; α (L)=0.000569 8; α (M)=0.0001340 19 α (N)=3.40×10 ⁻⁵ 5; α (O)=6.69×10 ⁻⁶ 9; α (P)=6.74×10 ⁻⁷ 9; α (IPF)=1.758×10 ⁻⁵ 26 Mult.: From R(DCO)=0.97 11 in ¹⁹² Os(¹⁴ C,5n γ).	
7339.5+x	(51/2)	197.2 [‡] 5	100.0 [‡] 24	7142.3+x (49	$D/2^+)$ D	1		Mult.: From R(DCO)=0.70 11 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
		331.1 [‡] 5	42 [‡] 5	7008.4+x (49	D/2) D			Mult.: From R(DCO)=0.77 18 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
7377.5+x	(47/2)	333.1 [‡] 5	100 [‡] 20	7044.3+x (45	5/2) (N	M1)	0.321 5	α (K)=0.262 4; α (L)=0.0447 7; α (M)=0.01046 15 α (N)=0.00266 4; α (O)=0.000530 8; α (P)=5.67×10 ⁻⁵ 8 Mult.: From R(DCO)=0.57 5 in ¹⁹² Os(¹⁴ C,5n γ).	
		1388.1 [‡] 5	5.6 [‡] 3	5989.4+x (45	5/2) D			Mult.: From R(DCO)=0.72 29 in ${}^{192}Os({}^{14}C,5n\gamma)$.	
7378.9+x	(47/2)	334.6 [‡] 5	100 [‡] 24	7044.3+x (45	5/2) (N	M1)	0.317 5	α (K)=0.259 4; α (L)=0.0441 6; α (M)=0.01033 15 α (N)=0.00262 4; α (O)=0.000523 8; α (P)=5.60×10 ⁻⁵ 8 Mult.: From R(DCO)=0.60 5 in ¹⁹² Os(¹⁴ C,5n γ).	
		1389.4 [‡] 5	4.4 [‡] 3	5989.4+x (45	5/2) D			Mult.: From R(DCO)=0.64 37 in 192 Os(14 C,5n γ).	
7471.4+u		530.2 [‡] 5	100 [‡]	6941.2+u	(N	M1)	0.0925 13	α (K)=0.0758 <i>11</i> ; α (L)=0.01275 <i>18</i> ; α (M)=0.00298 <i>4</i> α (N)=0.000757 <i>11</i> ; α (O)=0.0001510 <i>21</i> ; α (P)=1.618×10 ⁻⁵ <i>23</i> Mult.: From R(DCO)=0.85 <i>20</i> in ¹⁹² Os(¹⁴ C,5n γ).	

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	Adopted Levels, Gammas (continued)										
γ ⁽²⁰¹ Pb) (continued)											
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E _f	\mathbf{J}_{f}^{π}	Mult. ^{&}	α b	Comments			
7648.2+z		539.8 [‡] 5	92 [‡] 25	7108.4+z		(M1)	0.0882 13	α (K)=0.0723 <i>10</i> ; α (L)=0.01215 <i>17</i> ; α (M)=0.00284 <i>4</i> α (N)=0.000722 <i>10</i> ; α (O)=0.0001439 <i>20</i> ; α (P)=1.543×10 ⁻⁵ <i>22</i> Mult.: From R(DCO)=0.66 <i>26</i> in ¹⁹² Os(¹⁴ C,5n γ).			
		1031.4 [‡] 5	100 [‡] 33	6616.7+z		E2	0.00627 9	α (K)=0.00501 7; α (L)=0.000962 14; α (M)=0.0002287 32 α (N)=5.80×10 ⁻⁵ 8; α (O)=1.134×10 ⁻⁵ 16; α (P)=1.100×10 ⁻⁶ 15 Mult.: From R(DCO)=1.2 5 in ¹⁹² Os(¹⁴ C,5n γ).			
7759.5+x	(49/2)	380.6 [‡] 5	84 [‡] 8	7378.9+x (4	47/2)	D		Mult.: From R(DCO)= $0.84\ 29\ \text{in}\ {}^{192}\text{Os}({}^{14}\text{C},5n\gamma).$			
		382.0 [‡] 5	100 [‡] 3	7377.5+x (4	47/2)	D		Mult.: From R(DCO)=0.66 15 in ${}^{192}Os({}^{14}C,5n\gamma)$.			
7772.2+x	(49/2)	393.3 [‡] 5	89 [‡] 12	7378.9+x (4	47/2)	(M1)	0.2048 <i>30</i>	α (K)=0.1676 24; α (L)=0.0284 4; α (M)=0.00665 10 α (N)=0.001690 24; α (O)=0.000337 5; α (P)=3.61×10 ⁻⁵ 5 Mult.: From R(DCO)=0.64 10 in ¹⁹² Os(¹⁴ C.5n γ).			
		394.8 [‡] 5	100 [‡] 23	7377.5+x (4	47/2)	(M1)	0.2027 29	α (K)=0.1659 24; α (L)=0.0281 4; α (M)=0.00658 9 α (N)=0.001673 24; α (O)=0.000334 5; α (P)=3.57×10 ⁻⁵ 5 Mult.: From R(DCO)=0.60 13 in ¹⁹² Os(¹⁴ C,5n γ).			
8003.4+x	(53/2)	663.9 [‡] 5	100 [‡]	7339.5+x (51/2)	D		Mult.: From R(DCO)=0.80 12 in ${}^{192}Os({}^{14}C,5n\gamma)$. Note, that the authors give R(DCO)=0.8 12, which is probably a typo.			
8018.7+x	(51/2)	259.2 [‡] 5	9.2 [‡] 5	7759.5+x (4	49/2)	D		Mult.: From R(DCO)= $0.63 \ 13 \text{ in } {}^{192}\text{Os}({}^{14}\text{C},5n\gamma).$			
		1312.0 [‡] 5	100 [‡] 6	6706.7+x (4	49/2)	D		Mult.: From R(DCO)= $0.73 \ 13 \text{ in } {}^{192}\text{Os}({}^{14}\text{C},5n\gamma)$.			
8198.0+x	(53/2)	179.3 [‡] 5	100 [‡]	8018.7+x (51/2)	D		Mult.: From R(DCO)= $0.70 \ 6$ in 192 Os(14 C, $5n\gamma$).			
8214.7+x	(51/2)	442.5 [‡] 5	100 [‡]	7772.2+x (4	49/2)	(M1)	0.1494 21	α (K)=0.1224 <i>18</i> ; α (L)=0.02068 <i>30</i> ; α (M)=0.00484 <i>7</i> α (N)=0.001229 <i>18</i> ; α (O)=0.0002451 <i>35</i> ; α (P)=2.62×10 ⁻⁵ <i>4</i> Mult.: From R(DCO)=0.68 <i>16</i> in ¹⁹² Os(¹⁴ C,5n γ).			
8226.1+x	(51/2)	453.9 [‡] 5	100 [‡]	7772.2+x (4	49/2)	(M1)	0.1396 20	α (K)=0.1143 <i>16</i> ; α (L)=0.01932 <i>28</i> ; α (M)=0.00452 <i>6</i> α (N)=0.001148 <i>16</i> ; α (O)=0.0002289 <i>33</i> ; α (P)=2.452×10 ⁻⁵ <i>35</i> Mult.: From R(DCO)=0.62 <i>14</i> in ¹⁹² Os(¹⁴ C,5n γ).			
8653.8+x	(55/2)	455.8 [‡] 5	100 [‡]	8198.0+x (:	53/2)	(M1)	0.1380 20	α (K)=0.1131 <i>16</i> ; α (L)=0.01910 <i>27</i> ; α (M)=0.00447 <i>6</i> α (N)=0.001135 <i>16</i> ; α (O)=0.0002263 <i>32</i> ; α (P)=2.424×10 ⁻⁵ <i>35</i> Mult.: From R(DCO)=0.71 7 in ¹⁹² Os(¹⁴ C,5ny).			

[†] From 1978Ri04 in ²⁰¹Bi ε decay, unless otherwise specified.

[‡] From ¹⁹²Os(¹⁴C,5n γ). [#] From ²⁰⁰Hg(α ,3n γ). [@] From ¹⁹⁷Au(²⁰⁷Pb,X γ).

^k From $\alpha(K)$ exp, $\alpha(L)$ exp and subshell ratios in ²⁰¹Bi ε decay (1978Ri04), $\gamma(\theta)$ in ²⁰⁰Hg($\alpha,3n\gamma$) and DCO in ¹⁹²Os(¹⁴C,5n γ), coupled together with the observed multiple decay branches and band structures. For rotational band transitions whose multipolarity is determined from $\gamma(\theta)$ or DCO, Mult.=(M1), instead of D, is

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From ENSDF

γ (²⁰¹Pb) (continued)

- assigned in this evaluation. ^{*a*} From $\alpha(K)exp$, $\alpha(L)exp$ and subshell ratios in ²⁰¹Bi ε decay (1978Ri04) and the briccmixing program, unless otherwise stated. ^{*b*} Additional information 6. ^{*c*} Placement of transition in the level scheme is uncertain.

Level Scheme

Intensities: Relative photon branching from each level



Level Scheme (continued)

Intensities: Relative photon branching from each level



Level Scheme (continued)

Intensities: Relative photon branching from each level



 $^{201}_{82}{\rm Pb}_{119}$



 $^{201}_{\ 82} \mathrm{Pb}_{119}$



 $^{201}_{82}\text{Pb}_{119}$

 $^{201}_{82} \mathrm{Pb}_{119}\text{--}26$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



 $^{201}_{82} \mathrm{Pb}_{119}$

 $^{201}_{82}{\rm Pb}_{119}$