

1 Half-life, Q-value and Decay mode

$T_{1/2}$:	4.79	(2)	min
Q_{β^-}	:	314	(6)	keV
Q_{α}	:	6457.8	(14)	keV
α	:	99.9952	(15)	%
β^-	:	0.0048	(15)	%

2 α Emissions

	Energy keV	Probability $\times 100$
$\alpha_{0,14}$	5500 (40)	0.000038 (10)
$\alpha_{0,13}$	5530 (25)	0.00010 (2)
$\alpha_{0,12}$	5689 (3)	0.0025 (5)
$\alpha_{0,11}$	5697 (4)	0.0003
$\alpha_{0,10}$	5776 (3)	0.064 (4)
$\alpha_{0,9}$	5783 (4)	0.0031 (6)
$\alpha_{0,8}$	5813 (3)	0.006 (1)
$\alpha_{0,7}$	5925 (3)	0.0285 (24)
$\alpha_{0,6}$	5938.9 (20)	0.128 (3)
$\alpha_{0,5}$	5965.9 (25)	0.064 (16)
$\alpha_{0,4}$	5979.9 (20)	0.39 (7)
$\alpha_{0,3}$	6075.9 (20)	0.15 (3)
$\alpha_{0,2}$	6126.3 (15)	15.1 (2)
$\alpha_{0,1}$	6243 (2)	1.34 (7)
$\alpha_{0,0}$	6341.0 (13)	82.8 (2)

3 Electron Emissions

	Energy keV	Electrons per 100 disint.
eAL	(At) 5.6 - 17.4	3.05 (10)
eAK	(At)	0.114 (6)
	KLL 60.489 - 67.031	}
	KLX 73.811 - 81.516	}
	KXY 87.10 - 95.72	}
ec _{1,0} K	(At) 4.53 (2)	1.51 (13)
ec _{2,1} K	(At) 22.10 (3)	0.13 (10)
ec _{3,2} L	(At) 36.33 - 39.60	0.156 (27)
ec _{3,2} M	(At) 49.50 - 51.03	0.037 (6)
ec _{4,2} K	(At) 54.49 (3)	0.138 (8)
ec _{3,1} K	(At) 76.11 (3)	0.0156 (21)
ec _{4,3} L	(At) 78.8 - 82.1	0.029 (18)
ec _{1,0} L	(At) 82.77 - 86.04	0.274 (23)
ec _{1,0} M	(At) 95.94 - 97.47	0.065 (5)
ec _{2,1} L	(At) 100.34 - 103.61	0.024 (18)

		Energy keV	Electrons per 100 disint.
ec _{2,0} K	(At)	122.40 (2)	1.570 (31)
ec _{4,2} L	(At)	132.73 - 136.00	0.0247 (14)
ec _{3,1} L	(At)	154.35 - 157.62	0.0325 (43)
ec _{2,0} L	(At)	200.64 - 203.91	1.943 (37)
ec _{2,0} M	(At)	213.81 - 215.34	0.515 (10)
ec _{10,2} K	(At)	264.14 (4)	0.01047 (44)

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(At)	9.8964 — 16.7291	2.18 (7)	
XK α_2	(At)	78.94	0.96 (5)	} K α
XK α_1	(At)	81.51	1.59 (9)	}
XK β_3	(At)	91.73	}	
XK β_1	(At)	92.315	}	K β'_1
XK β'_5	(At)	92.883	}	
XK β_2	(At)	94.846	}	
XK β_4	(At)	95.211	}	K β'_2
XKO _{2,3}	(At)	95.595	}	

4.2 Gamma Transitions and Emissions

	Energy keV	P $_{\gamma+ce}$ × 100	Multipolarity	α_T	P $_{\gamma}$ × 100
$\gamma_{3,2}$ (At)	53.81 (3)	0.220 (38)	M1	14.17 (20)	0.0145 (25)
$\gamma_{4,3}$ (At)	96.3 (3)	0.046 (26)	M1+E2	5.6 (24)	0.007 (3)
$\gamma_{1,0}$ (At)	100.25 (2)	2.02 (17)	M1	11.97 (17)	0.156 (13)
$\gamma_{2,1}$ (At)	117.82 (3)	0.19 (14)	M1	7.58 (11)	0.022 (16)
$\gamma_{4,2}$ (At)	150.21 (3)	0.216 (12)	M1	3.80 (5)	0.0449 (25)
$\gamma_{3,1}$ (At)	171.83 (3)	0.129 (17)	E2	0.863 (12)	0.069 (9)
$\gamma_{10,4}$ (At)	208.3 (6)	0.0073 (14)	[E2]	0.430 (8)	0.0051 (10)
$\gamma_{2,0}$ (At)	218.12 (2)	15.61 (21)	E2	0.367 (5)	11.42 (15)
$\gamma_{5,1}$ (At)	282.12 (9)	0.0097 (20)	[M1,E2]	0.41 (25)	0.0069 (7)
$\gamma_{7,1}$ (At)	324.10 (6)	0.0252 (17)	M1	0.446 (6)	0.0174 (12)
$\gamma_{10,2}$ (At)	359.86 (4)	0.0514 (20)	M1	0.335 (5)	0.0385 (15)
$\gamma_{5,0}$ (At)	382.34 (4)	0.0437 (18)	M1	0.284 (4)	0.0340 (14)
$\gamma_{6,0}$ (At)	410.64 (5)	0.1270 (26)	E2	0.0548 (8)	0.1204 (25)
$\gamma_{8,1}$ (At)	437.00 (5)	0.0010 (1)			0.0010 (1)
$\gamma_{12,2}$ (At)	446.30 (8)	0.0017 (4)	E1+M2		0.0017 (4)
$\gamma_{9,1}$ (At)	468.3 (7)	0.0018 (3)			0.0018 (3)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{8,0}(\text{At})$	537.8 (8)	0.0045 (8)			0.0045 (8)
$\gamma_{12,1}(\text{At})$	562.3 (12)	0.005 (5)			0.005 (5)
$\gamma_{9,0}(\text{At})$	568.5 (3)	0.0012 (4)			0.0012 (4)
$\gamma_{10,0}(\text{At})$	576.9 (4)	0.0033 (7)	[M1]	0.0948 (13)	0.0030 (6)
$\gamma_{11,0}(\text{At})$	652 (2)	0.0004 (4)			0.0004 (4)
$\gamma_{12,0}(\text{At})$	665 (2)	0.0009 (9)			0.0009 (9)
$\gamma_{13,0}(\text{At})$	809.3 (2)	0.00010 (2)			0.00010 (2)
$\gamma_{14,0}(\text{At})$	891.9 (3)	0.000038 (10)			0.000038 (10)

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