

1 Half-life, Q-value and Decay mode

$T_{1/2}$:	28.9	(4)	y
Q_α	:	6168.8	(10)	keV
Q_{EC}	:	7.5	(17)	keV
α	:	99.71	(3)	%
EC	:	0.29	(3)	%

2 Electron Capture Transitions

	Energy keV	Probability $\times 100$	Nature	$\log ft$	P_K	P_L	P_{M+}
$\epsilon_{0,0}$	7.5 (17)	0.29 (3)	1st forbidden	7.2	0 (0)	0 (0)	1.000 (0)

3 α Emissions

	Energy keV	Probability $\times 100$
$\alpha_{0,27}$	5231 (15)	0.00039
$\alpha_{0,26}$	5268 (3)	0.0015
$\alpha_{0,25}$	5317 (3)	0.001
$\alpha_{0,24}$	5324 (3)	0.003
$\alpha_{0,23}$	5333 (3)	0.003
$\alpha_{0,22}$	5520.1 (11)	0.002
$\alpha_{0,21}$	5533 (3)	0.006
$\alpha_{0,20}$	5538 (3)	0.002
$\alpha_{0,19}$	5569.9 (10)	0.007
$\alpha_{0,18}$	5576 (3)	0.007
$\alpha_{0,17}$	5583.2 (10)	0.009
$\alpha_{0,16}$	5588 (3)	0.02
$\alpha_{0,15}$	5594 (3)	0.01
$\alpha_{0,14}$	5605.1 (11)	≤ 0.01
$\alpha_{0,13}$	5613 (3)	0.03
$\alpha_{0,12}$	5624 (5)	0.06
$\alpha_{0,11}$	5640 (3)	0.14
$\alpha_{0,10}$	5647 (3)	0.03
$\alpha_{0,9}$	5682 (1)	0.2
$\alpha_{0,8}$	5686.1 (10)	1.6 (1)
$\alpha_{0,7}$	5742.5 (10)	11.3 (2)
$\alpha_{0,6}$	5786.4 (10)	73.4 (4)
$\alpha_{0,5}$	5877.6 (14)	0.7
$\alpha_{0,4}$	5906.1 (10)	0.1
$\alpha_{0,3}$	5992.7 (10)	5.7 (2)
$\alpha_{0,2}$	6010.8 (10)	1.05 (12)
$\alpha_{0,1}$	6059.4 (10)	4.4 (2)
$\alpha_{0,0}$	6067.2 (10)	1.3 (2)

4 Electron Emissions

		Energy keV	Electrons per 100 disint.
e _{AL}	(Pu)	6.19 - 22.99	49.3 (15)
e _{AK}	(Pu)		1.34 (19)
	KLL	75.263 - 85.357	}
	KLX	92.607 - 103.729	}
	KXY	109.93 - 121.78	}
ec _{1,0} M	(Pu)	1.93 - 4.09	63.0 (45)
ec _{1,0} N	(Pu)	6.30 - 7.44	17.4 (12)
ec _{3,2} M	(Pu)	12.50 - 14.66	0.6 (6)
ec _{3,2} N	(Pu)	16.87 - 18.01	0.16 (16)
ec _{7,6} L	(Pu)	21.559 - 26.606	9.4 (16)
ec _{2,1} L	(Pu)	26.308 - 31.355	18.4 (12)
ec _{2,0} L	(Pu)	34.169 - 39.216	9.67 (14)
ec _{8,7} L	(Pu)	34.2 - 39.2	1.720 (24)
ec _{7,6} M	(Pu)	38.730 - 40.888	2.36 (49)
ec _{7,6} N	(Pu)	43.104 - 44.239	0.66 (12)
ec _{2,1} M	(Pu)	43.479 - 45.637	4.96 (34)
ec _{7,4} K	(Pu)	44.60 (6)	0.079 (34)
ec _{3,1} L	(Pu)	44.737 - 49.784	14.3 (36)
ec _{2,1} N	(Pu)	47.853 - 48.988	1.36 (10)
ec _{2,0} M	(Pu)	51.340 - 53.498	2.700 (42)
ec _{8,7} M	(Pu)	51.4 - 53.5	0.419 (6)
ec _{8,7} N	(Pu)	55.7 - 56.9	0.1142 (16)
ec _{2,0} N	(Pu)	55.714 - 56.849	0.742 (11)
ec _{3,1} M	(Pu)	61.908 - 64.066	4 (1)
ec _{4,3} L	(Pu)	64.96 - 70.00	0.01633 (23)
ec _{3,1} N	(Pu)	66.282 - 67.417	1.10 (28)
ec _{8,6} L	(Pu)	78.86 - 83.90	0.0837 (12)
ec _{9,6} L	(Pu)	83.021 - 88.068	0.056 (10)
ec _{4,2} L	(Pu)	83.37 - 88.41	0.1284 (18)
ec _{6,3} K	(Pu)	87.962 (2)	8.42 (29)
ec _{5,3} L	(Pu)	94 - 99	0.442 (19)
ec _{8,6} M	(Pu)	96.03 - 98.18	0.02344 (40)
ec _{9,6} M	(Pu)	100.192 - 102.350	0.0148 (27)
ec _{4,2} M	(Pu)	100.54 - 102.70	0.0360 (6)
ec _{6,2} K	(Pu)	106.392 (2)	21.4 (7)
ec _{5,3} M	(Pu)	111.2 - 113.3	0.123 (6)
ec _{5,3} N	(Pu)	115.5 - 116.7	0.0340 (14)
ec _{7,3} K	(Pu)	132.61 (3)	0.160 (15)
ec _{7,4} L	(Pu)	143.29 - 148.33	0.016 (7)
ec _{7,2} K	(Pu)	151.08 (9)	0.096 (12)
ec _{6,1} K	(Pu)	155.808 (2)	16.0 (5)
ec _{6,0} K	(Pu)	163.669 (2)	0.0615 (19)
ec _{6,3} L	(Pu)	186.649 - 191.696	1.68 (6)
ec _{8,3} K	(Pu)	189.9 (2)	0.0143 (18)
ec _{6,3} M	(Pu)	203.820 - 205.978	0.408 (14)

		Energy keV	Electrons per 100 disint.
ec _{6,2} L	(Pu)	205.079 - 210.126	4.27 (14)
ec _{6,3} N	(Pu)	208.194 - 209.329	0.1112 (38)
ec _{6,2} M	(Pu)	222.250 - 224.408	1.038 (33)
ec _{6,2} N	(Pu)	226.624 - 227.759	0.282 (9)
ec _{7,3} L	(Pu)	231.3 - 236.3	0.0323 (30)
ec _{7,2} L	(Pu)	249.77 - 254.81	0.0193 (24)
ec _{6,1} L	(Pu)	254.495 - 259.542	3.22 (11)
ec _{6,0} L	(Pu)	262.36 - 267.40	0.0869 (27)
ec _{6,1} M	(Pu)	271.666 - 273.824	0.784 (25)
ec _{6,1} N	(Pu)	276.040 - 277.175	0.213 (7)
ec _{6,0} M	(Pu)	279.53 - 281.68	0.0238 (7)

5 Photon Emissions

5.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(Pu)	12.1246 — 21.9844	52.1 (16)	
XK α_2	(Pu)	99.525	13.34 (28)	} K α
XK α_1	(Pu)	103.734	21.1 (5)	
XK β_3	(Pu)	116.244	}	K β'_1
XK β_1	(Pu)	117.228	}	
XK β'_5	(Pu)	117.918	}	
XK β_2	(Pu)	120.54	}	K β'_2
XK β_4	(Pu)	120.969	}	
XKO _{2,3}	(Pu)	121.543	}	

5.2 Gamma Transitions and Emissions

	Energy keV	P $_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P $_{\gamma}$ $\times 100$
$\gamma_{1,0}$ (Pu)	7.861 (2)	85.5	M1+E2	5700 (400)	0.015
$\gamma_{3,2}$ (Pu)	18.430 (4)	0.8	(M1+E2)	8000 (6200)	0.0001
$\gamma_{7,6}$ (Pu)	44.663 (5)	12.7 (23)	M1+E2	96 (13)	0.131 (16)
$\gamma_{2,1}$ (Pu)	49.414 (2)	25.4	M1+E2	126 (8)	0.2
$\gamma_{2,0}$ (Pu)	57.273 (4)	13.38	E2	222 (4)	0.06
$\gamma_{8,7}$ (Pu)	57.30 (2)	2.368	[M1]	28.6 (4)	0.08
$\gamma_{9,7}$ (Pu)	61.460 (2)	0.0222 (19)	E1	0.473 (7)	0.0151 (13)
$\gamma_{3,1}$ (Pu)	67.841 (7)	20 (5)	E2	98.5 (14)	0.20 (5)
$\gamma_{4,3}$ (Pu)	88.06 (3)	0.024	M1+E2	12.26 (18)	0.0018
$\gamma_{8,6}$ (Pu)	101.96 (2)	0.123	E2	14.42 (21)	0.008
$\gamma_{9,6}$ (Pu)	106.125 (2)	0.373 (34)	E1(+M2)	0.26 (4)	0.296 (25)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{4,2}$ (Pu)	106.47 (4)	0.192	E2	11.80 (17)	0.015
$\gamma_{5,3}$ (Pu)	117.1 (10)	0.7 (0)	[E2]	7.6 (4)	0.08
$\gamma_{7,4}$ (Pu)	166.39 (6)	0.12 (5)	M1	6.22 (9)	0.016 (7)
$\gamma_{6,3}$ (Pu)	209.753 (2)	13.95 (45)	M1+E2	3.24 (5)	3.29 (10)
$\gamma_{6,2}$ (Pu)	228.183 (2)	37.7 (11)	M1+E2	2.56 (4)	10.6 (3)
$\gamma_{7,3}$ (Pu)	254.40 (3)	0.314 (29)	M1+E2	1.85 (3)	0.11 (1)
$\gamma_{7,2}$ (Pu)	272.87 (9)	0.201 (25)	M1+E2	1.518 (22)	0.08 (1)
$\gamma_{6,1}$ (Pu)	277.599 (2)	34.3 (10)	M1+E2	1.448 (21)	14.0 (4)
$\gamma_{6,0}$ (Pu)	285.460 (2)	0.910 (25)	E2	0.247 (4)	0.73 (2)
$\gamma_{8,3}$ (Pu)	311.7 (2)	0.0350 (42)	M1+E2	1.06 (3)	0.017 (2)
$\gamma_{9,3}$ (Pu)	315.880 (3)	0.0187 (21)	E1(+M2)	0.0372 (9)	0.018 (2)
$\gamma_{7,1}$ (Pu)	322.3 (2)	0.0082 (12)	[E2]	0.1699 (24)	0.007 (1)
$\gamma_{9,2}$ (Pu)	334.310 (3)	0.0248 (21)	E1(+M2)	0.0329 (6)	0.024 (2)
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