

1 Half-life, Q-value and Decay mode

$T_{1/2}$:	8250	(70)	y
Q_α	:	5622.3	(5)	keV
α	:	100		%

2 α Emissions

	Energy keV	Probability $\times 100$
$\alpha_{0,8}$	5152 (3)	≤ 0.005
$\alpha_{0,7}$	5234.4 (12)	0.32
$\alpha_{0,6}$	5303.6 (12)	5.0 (1)
$\alpha_{0,5}$	5361.8 (12)	93.2 (5)
$\alpha_{0,4}$	5371.4 (5)	0.0210 (9)
$\alpha_{0,3}$	5371.7 (5)	0.39 (22)
$\alpha_{0,2}$	5436.1 (5)	0.04
$\alpha_{0,1}$	5488.5 (5)	0.83
$\alpha_{0,0}$	5530.4 (4)	0.58

3 Electron Emissions

		Energy keV		Electrons per 100 disint.
eAL	(Pu)	6.19 - 22.99		50.1 (13)
eAK	(Pu)			1.91 (27)
	KLL	75.263 - 85.357	}	
	KLX	92.607 - 103.729	}	
	KXY	109.93 - 121.78	}	
ec _{5,1} K	(Pu)	11.290	(2)	24.7 (7)
ec _{6,2} K	(Pu)	14.365	(9)	0.70 (14)
ec _{7,3} K	(Pu)	18.067	(16)	0.032 (32)
ec _{1,0} L	(Pu)	18.868 - 23.915		28.1 (16)
ec _{2,1} L	(Pu)	30.703 - 35.750		2.43 (15)
ec _{6,5} L	(Pu)	33.79 - 38.83		2.30 (22)
ec _{1,0} M	(Pu)	36.039 - 38.197		7.16 (42)
ec _{4,0} K	(Pu)	39.894	(1)	0.0135 (6)
ec _{1,0} N	(Pu)	40.413 - 41.548		1.96 (11)
ec _{3,2} L	(Pu)	42.431 - 47.478		0.32 (17)
ec _{7,6} L	(Pu)	46.133 - 51.180		0.15 (9)
ec _{2,1} M	(Pu)	47.874 - 50.032		0.615 (37)
ec _{6,5} M	(Pu)	50.96 - 53.12		0.62 (6)
ec _{2,1} N	(Pu)	52.248 - 53.383		0.168 (10)
ec _{5,0} K	(Pu)	53.2613	(14)	40.0 (11)
ec _{6,5} N	(Pu)	55.33 - 56.47		0.169 (17)
ec _{5,2} L	(Pu)	56.169 - 61.216		1.9 (6)
ec _{3,2} M	(Pu)	59.602 - 61.760		0.081 (44)

		Energy keV	Electrons per 100 disint.
ec _{7,6} M	(Pu)	63.304 - 65.462	0.035 (26)
ec _{3,2} N	(Pu)	63.976 - 65.111	0.022 (13)
ec _{7,6} N	(Pu)	67.678 - 68.813	0.010 (7)
ec _{6,1} K	(Pu)	68.17 (1)	0.502 (34)
ec _{2,0} L	(Pu)	72.676 - 77.722	0.153 (32)
ec _{5,2} M	(Pu)	73.340 - 75.498	0.52 (15)
ec _{5,2} N	(Pu)	77.714 - 78.849	0.144 (49)
ec _{7,2} K	(Pu)	83.602 (16)	0.013 (12)
ec _{2,0} M	(Pu)	89.846 - 92.004	0.043 (9)
ec _{2,0} N	(Pu)	94.220 - 95.355	0.0118 (25)
ec _{7,5} L	(Pu)	102.99 - 108.03	0.028 (8)
ec _{5,1} L	(Pu)	109.977 - 115.024	5.40 (16)
ec _{6,2} L	(Pu)	113.052 - 118.099	0.231 (19)
ec _{7,3} L	(Pu)	116.754 - 121.801	0.0160 (45)
ec _{5,1} M	(Pu)	127.148 - 129.306	1.329 (39)
ec _{6,2} M	(Pu)	130.223 - 132.381	0.059 (6)
ec _{5,1} N	(Pu)	131.522 - 132.657	0.362 (10)
ec _{6,2} N	(Pu)	134.597 - 135.732	0.0162 (17)
ec _{4,0} L	(Pu)	138.581 - 143.628	0.0915 (41)
ec _{5,0} L	(Pu)	151.948 - 156.995	8.40 (22)
ec _{4,0} M	(Pu)	155.752 - 157.910	0.0256 (11)
ec _{6,1} L	(Pu)	166.861 - 171.908	0.1357 (45)
ec _{5,0} M	(Pu)	169.119 - 171.277	2.05 (5)
ec _{5,0} N	(Pu)	173.493 - 174.628	0.560 (15)
ec _{6,1} M	(Pu)	184.032 - 186.190	0.0343 (11)

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(Pu)	12.1246 — 21.9844	51.7 (10)	
XK α_2	(Pu)	99.525	19.0 (5)	} K α
XK α_1	(Pu)	103.734	30.1 (7)	}
XK β_3	(Pu)	116.244	}	
XK β_1	(Pu)	117.228	}	
XK β'_5	(Pu)	117.918	}	K β'_1
XK β_2	(Pu)	120.54	}	
XK β_4	(Pu)	120.969	}	
XKO _{2,3}	(Pu)	121.543	}	K β'_2

4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{1,0}(\text{Pu})$	41.972 (1)	38.2 (22)	M1+E2	102.4 (20)	0.369 (20)
$\gamma_{2,1}(\text{Pu})$	53.807 (1)	3.34 (20)	M1+E2	44.7 (11)	0.073 (4)
$\gamma_{6,5}(\text{Pu})$	56.89 (3)	3.16 (17)	M1+E2	87 (7)	0.0359 (21)
$\gamma_{3,2}(\text{Pu})$	65.535 (3)	0.45 (22)	M1+E2	24 (12)	0.018 (2)
$\gamma_{7,6}(\text{Pu})$	69.237 (18)	0.20 (4)	M1(+E2)	28 (14)	0.007 (3)
$\gamma_{5,2}(\text{Pu})$	79.2728 (18)	2.8 (7)	M1+E2	22 (6)	0.120 (7)
$\gamma_{2,0}(\text{Pu})$	95.7795 (12)	0.221 (47)	E2	19.3 (3)	0.0109 (23)
$\gamma_{7,5}(\text{Pu})$	126.09 (4)	0.046 (13)	[E2]	5.59 (8)	0.007 (2)
$\gamma_{5,1}(\text{Pu})$	133.081 (2)	34.7 (10)	M1+E2	11.36 (17)	2.81 (7)
$\gamma_{6,2}(\text{Pu})$	136.156 (9)	1.13 (12)	M1+E2	9 (1)	0.113 (4)
$\gamma_{7,3}(\text{Pu})$	139.858 (16)	0.064 (33)	[M1,E2]	7 (4)	0.008 (1)
$\gamma_{4,0}(\text{Pu})$	161.685 (1)	0.210 (9)	E2	1.96 (3)	0.071 (3)
$\gamma_{5,0}(\text{Pu})$	175.0523 (14)	61.0 (16)	M1+E2	5.21 (8)	9.83 (22)
$\gamma_{6,1}(\text{Pu})$	189.965 (10)	0.889 (42)	M1+E2	3.36 (16)	0.204 (6)
$\gamma_{7,2}(\text{Pu})$	205.393 (16)	0.028 (13)	[M1,E2]	2.1 (14)	0.009 (1)
$\gamma_{6,0}(\text{Pu})$	231.935 (9)	0.0175 (27)	[E2]	0.498 (7)	0.0117 (18)
$\gamma_{-1,1}(\text{Pu})$	388.16 (5)	0.019 (1)			0.019 (1)

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