

1 Half-life, Q-value and Decay mode

$T_{1/2}$: 2.356 (3) d
 Q_{β^-} : 722.5 (10) keV
 β^- : 100 %

2 β^- Transitions

	Energy keV	Probability $\times 100$	Nature	log <i>ft</i>
$\beta_{0,13}^-$	166.3 (5)	0.0026	1st forbidden	9.7
$\beta_{0,12}^-$	210.7 (5)	1.56 (16)	Allowed	7.3
$\beta_{0,11}^-$	217.3 (5)	0.0074	1st forbidden	9.7
$\beta_{0,10}^-$	230.3 (5)	0.02	1st forbidden	9.3
$\beta_{0,9}^-$	252.7 (5)	0.0027	1st forbidden unique	9.9
$\beta_{0,8}^-$	330.9 (5)	38.8 (9)	1st forbidden	6.3
$\beta_{0,7}^-$	335.1 (5)		2nd forbidden	
$\beta_{0,6}^-$	392.4 (5)	9.4 (14)	Allowed	7.4
$\beta_{0,5}^-$	437.0 (5)	43.0 (22)	Allowed	6.9
$\beta_{0,4}^-$	558.7 (5)		2nd forbidden	
$\beta_{0,3}^-$	646.8 (5)		Allowed	
$\beta_{0,2}^-$	665.2 (5)	0.4 (72)	Allowed	
$\beta_{0,1}^-$	714.6 (5)	6.5 (10)	Allowed	8.4
$\beta_{0,0}^-$	722.5 (5)		2nd forbidden unique	

3 Electron Emissions

		Energy keV	Electrons per 100 disint.	Energy keV
e _{AL}	(Pu)	6.19 - 22.99	47.9 (26)	
e _{AK}	(Pu)		1.36 (19)	
	KLL	75.26 - 85.36	}	
	KLX	92.61 - 103.73	}	
	KXY	109.93 - 121.78	}	
ec _{1,0} M	(Pu)	1.928 - 4.086	51 (6)	
ec _{12,7} K	(Pu)	2.6	0.1	
ec _{6,5} L	(Pu)	21.559 - 26.606	8.3 (10)	
ec _{2,1} I.	(Pu)	26.311 - 31.358	13.3 (3)	
ec _{2,0} L	(Pu)	34.169 - 39.216	20.8 (32)	
ec _{8,6} L	(Pu)	38.36 - 43.40	0.457 (11)	
ec _{6,5} M	(Pu)	38.730 - 40.888	2.12 (26)	
ec _{2,1} M	(Pu)	43.482 - 45.640	3.6 (9)	
ec _{6,4} K	(Pu)	44.60 (6)	0.08 (3)	
ec _{3,1} L	(Pu)	44.74 - 49.78	7.1 (21)	
ec _{2,0} M	(Pu)	51.340 - 53.498	5.8 (9)	
ec _{8,6} M	(Pu)	55.53 - 57.68	0.114 (3)	
ec _{12,6} K	(Pu)	59.91 (3)	0.323 (10)	

		Energy keV	Electrons per 100 disint.	Energy keV
ec3,1 M	(Pu)	61.91 - 64.07	2.0 (6)	
ec4,3 L	(Pu)	64.96 - 70.00	0.054 (30)	
ec7,5 L	(Pu)	78.86 - 83.90	0.084 (21)	
ec4,3 M	(Pu)	82.13 - 84.28	0.014 (9)	
ec8,5 L	(Pu)	83.02 - 88.07	4.9 (8)	
ec4,2 L	(Pu)	83.37 - 88.41	0.42 (7)	
ec5,3 K	(Pu)	87.962 (2)	7.76 (18)	
ec7,5 M	(Pu)	96.03 - 98.18	0.023 (6)	
ec8,5 M	(Pu)	100.19 - 102.35	1.30 (21)	
ec4,2 M	(Pu)	100.54 - 102.69	0.117 (19)	
ec12,7 L	(Pu)	101.3 - 106.3	0.024	
ec12,5 K	(Pu)	104.59 (2)	0.52 (3)	
ec8,4 K	(Pu)	106	0.030 (6)	
ec5,2 K	(Pu)	106.392 (1)	21.4 (8)	
ec6,3 K	(Pu)	132.61 (3)	0.161 (6)	
ec6,4 L	(Pu)	143.29 - 148.33	0.016 (7)	
ec6,2 K	(Pu)	151.05 (3)	0.092 (4)	
ec5,1 K	(Pu)	155.808 (1)	16.1 (7)	
ec12,6 L	(Pu)	158.59 - 163.63	0.066 (2)	
ec5,0 K	(Pu)	163.669 (2)	0.066 (2)	
ec12,6 M	(Pu)	175.76 - 177.92	0.0161 (5)	
ec5,3 L	(Pu)	186.65 - 191.70	1.71 (4)	
ec8,3 K	(Pu)	194.089 (3)	0.0469 (10)	
ec12,5 L	(Pu)	203.28 - 208.32	0.105 (7)	
ec5,3 M	(Pu)	203.82 - 205.98	0.42 (9)	
ec5,2 L	(Pu)	205.08 - 210.13	4.48 (16)	
ec8,2 K	(Pu)	212.519 (3)	0.0532 (11)	
ec12,5 M	(Pu)	220.45 - 222.60	0.0255 (18)	
ec5,2 M	(Pu)	222.25 - 224.41	1.10 (4)	
ec6,3 L	(Pu)	231.3 - 236.3	0.0324 (11)	
ec6,2 L	(Pu)	249.74 - 254.78	0.0186 (8)	
ec5,1 L	(Pu)	254.50 - 259.54	3.28 (9)	
ec5,0 L	(Pu)	262.36 - 267.40	0.093 (3)	
ec5,1 M	(Pu)	271.67 - 273.82	0.801 (18)	
ec5,0 M	(Pu)	279.53 - 281.68	0.0256 (6)	
$\beta_{0,13}^-$	max:	166.3 (5)	0.0026	avg: 44.2 (2)
$\beta_{0,12}^-$	max:	210.7 (5)	1.56 (16)	avg: 56.8 (2)
$\beta_{0,11}^-$	max:	217.3 (5)	0.0074	avg: 58.7 (2)
$\beta_{0,10}^-$	max:	230.3 (5)	0.02	avg: 62.5 (2)
$\beta_{0,9}^-$	max:	252.7 (5)	0.0027	avg: 74.7 (2)
$\beta_{0,8}^-$	max:	330.9 (5)	38.8 (9)	avg: 98.3 (2)
$\beta_{0,7}^-$	max:	335.1 (5)		avg:
$\beta_{0,6}^-$	max:	392.4 (5)	9.4 (14)	avg: 111.5 (2)
$\beta_{0,5}^-$	max:	437.0 (5)	43.0 (22)	avg: 125.6 (2)
$\beta_{0,4}^-$	max:	558.7 (5)		avg:
$\beta_{0,3}^-$	max:	646.8 (5)		avg:
$\beta_{0,2}^-$	max:	665.2 (5)	0.4 (72)	avg:

		Energy keV		Electrons per 100 disint.	Energy keV
$\beta_{0,1}^-$	max:	714.6	(5)	6.5 (10)	avg: 218.3 (2)
$\beta_{0,0}^-$	max:	722.5	(5)		avg:

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV		Photons per 100 disint.	
XL	(Pu)	12.125 — 21.984		51.3 (24)	
XK α_2	(Pu)	99.525		13.5 (4)	} K α
XK α_1	(Pu)	103.734		21.4 (6)	
XK β_3	(Pu)	116.244	}	7.84 (25)	K β'_1
XK β_1	(Pu)	117.228	}		
XK β'_5	(Pu)	117.918	}		
XK β_2	(Pu)	120.54	}	2.72 (10)	K β'_2
XK β_4	(Pu)	120.969	}		
XK $O_{2,3}$	(Pu)	121.543	}		

4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{1,0}$ (Pu)	7.861 (2)	70 (8)	M1+0.3%E2	5716 (400)	0.0122 (12)
$\gamma_{3,2}$ (Pu)	18.430 (4)	5.5 (30)	[M1+E2]		0.02
$\gamma_{6,5}$ (Pu)	44.663 (5)	11.3 (14)	M1+4%E2	86 (8)	0.13 (1)
$\gamma_{2,1}$ (Pu)	49.415 (3)	18 (5)	M1+20%E2	126 (8)	0.145 (35)
$\gamma_{2,0}$ (Pu)	57.273 (4)	27 (7)	E2	222 (5)	0.12 (3)
$\gamma_{7,6}$ (Pu)	57.3	≈ 0.012	M1(+E2)		≈ 0.012
$\gamma_{8,6}$ (Pu)	61.460 (2)	1.900 (32)	E1	0.473 (10)	1.29 (2)
$\gamma_{3,1}$ (Pu)	67.841 (7)	9.9 (30)	E2	98.3 (20)	0.10 (3)
$\gamma_{4,3}$ (Pu)	88.06 (3)	0.078 (44)	M1+20%E2	12 (6)	0.006 (2)
$\gamma_{7,5}$ (Pu)	101.96 (2)	0.12 (3)	E2	14.4 (3)	0.008 (2)
$\gamma_{8,5}$ (Pu)	106.125 (2)	32.6 (9)	E1(+M2)	0.26 (3)	25.9 (3)
$\gamma_{4,2}$ (Pu)	106.50 (3)	0.63 (10)	E2	11.8 (3)	0.049 (8)
$\gamma_{12,7}$ (Pu)	124.4	0.15	E2	13.6 (3)	0.01
$\gamma_{6,4}$ (Pu)	166.39 (6)	0.12 (5)	M1(+20%E2)	6.23 (13)	0.016 (7)
$\gamma_{12,6}$ (Pu)	181.70 (3)	0.497 (14)	M1	4.78 (10)	0.086 (2)
$\gamma_{5,3}$ (Pu)	209.753 (2)	13.47 (24)	M1+2%E2	2.94 (6)	3.42 (3)
$\gamma_{12,5}$ (Pu)	226.38 (2)	0.91 (5)	M1+12%E2	2.58 (8)	0.255 (14)
$\gamma_{8,4}$ (Pu)	227.83	0.54 (11)	M1+1.7%E2	0.0762 (15)	0.5 (1)
$\gamma_{5,2}$ (Pu)	228.183 (1)	38.6 (12)	M1+7.3%E2	2.41 (8)	11.32 (22)
$\gamma_{6,3}$ (Pu)	254.40 (3)	0.314 (10)	M1+2.5%E2	1.85 (4)	0.110 (3)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_γ $\times 100$
$\gamma_{6,2}$ (Pu)	272.84 (3)	0.194 (8)	M1+2.6%E2	1.52 (3)	0.077 (3)
$\gamma_{5,1}$ (Pu)	277.599 (1)	34.8 (9)	M1+5%E2	1.42 (6)	14.4 (1)
$\gamma_{5,0}$ (Pu)	285.460 (2)	0.973 (13)	E2	0.248 (5)	0.78 (1)
$\gamma_{7,3}$ (Pu)	311.70 (2)	0.002 (2)	(M1+E2)		0.002 (2)
$\gamma_{8,3}$ (Pu)	315.880 (3)	1.649 (10)	E1(+0.006%M2)	0.0372 (8)	1.59 (1)
$\gamma_{6,1}$ (Pu)	322.3 (2)	0.006	(E2)	0.170 (4)	0.0052
$\gamma_{8,2}$ (Pu)	334.310 (3)	2.107 (21)	E1(+0.004%M2)	0.0329 (7)	2.04 (2)
$\gamma_{13,4}$ (Pu)	392.4 (5)	0.0016	(E1)		0.0016
$\gamma_{11,3}$ (Pu)	429.5 (5)	0.0039			0.0039
$\gamma_{10,2}$ (Pu)	434.7 (5)	0.013	E1(+M2)		0.013
$\gamma_{11,2}$ (Pu)	447.6 (5)	0.00026			0.00026
$\gamma_{12,2}$ (Pu)	454.2 (5)	0.00082	(M1)		0.00082
$\gamma_{9,1}$ (Pu)	461.9 (5)	0.0016	(E1)		0.0016
$\gamma_{9,0}$ (Pu)	469.8 (5)	0.0011	(E1)		0.0011
$\gamma_{10,1}$ (Pu)	484.3 (5)	0.001	(E1)		0.001
$\gamma_{10,0}$ (Pu)	492.3 (5)	0.006	(E1)		0.006
$\gamma_{11,1}$ (Pu)	497.8 (5)	0.0032			0.0032
$\gamma_{13,2}$ (Pu)	498.7	0.001	(E1)		0.001
$\gamma_{12,1}$ (Pu)	504.2 (5)	0.00078	(E2)		0.00078

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