1 Half-life, Q-value and Decay mode

$T_{1/2}$	:	1.159	(11)	min
$Q_{\beta-}$	:	2269	(4)	keV
Q_{IT}	:	73.92	(2)	keV
β^-	:	99.85	(1)	%
IT	:	0.15	(1)	%

2 β^- Transitions

	Energy keV	Probability × 100	Nature	log ft
$\beta^-_{0,30}$	299 (4)	0.00389 (22)		6.8
$\beta^-_{0,29}$	332 (4)	0.0108 (3)		6.6
$\beta^-_{0,28}$	358 (4)	0.0452 (8)		6
$\beta^-_{0,27}$	394 (4)	0.0258 (3)		6.4
$\beta^-_{0,26}$	406 (4)	0.00311 (19)		7.4
$\beta^-_{0,25}$	460 (4)	0.0146 (7)		6.9
$\beta^-_{0,24}$	473 (4)	0.0021 (3)		7.7
$\beta^-_{0,23}$	488 (4)	0.0357 (18)		6.6
$\beta^-_{0,22}$	575 (4)	0.0024 (3)		8
$\beta^-_{0,21}$	602 (4)	0.0061 (3)		7.6
$\beta^-_{0,20}$	667 (4)	0.00127 (23)		8.5
$\beta^-_{0,19}$	677 (4)	0.0249 (5)		7.2
$\beta^-_{0,18}$	698 (4)	0.00231 (19)		8.4
$\beta^-_{0,17}$	715 (4)	0.0320 (6)		7.2
$\beta^-_{0,16}$	768 (4)	0.0131 (6)		7.7
$\beta^-_{0,14}$	834 (4)	0.0092 (11)		7.9
$\beta^-_{0,13}$	1032 (4)	0.0121 (11)		8.2
$\beta^-_{0,12}$	1095 (4)	0.0046 (3)		8.7
$\beta^-_{0,9}$	1224 (4)	1.006 (13)		6.5
$\beta^-_{0,4}$	1459 (4)	0.945 (12)		6.8
$\beta^-_{0,3}$	1483 (4)	0.049 (3)		8
$\beta^-_{0,0}$	2269 (4)	97.599 (24)	Allowed	5.5

3 Electron Emissions

		Energy keV	Electrons per 100 disint.	Energy keV
e_{AL}	(U)	5.9 - 21.6	0.856 (19)	
e_{AK}	(U)		0.0203 (3)	
	KLL	71.776 - 80.954	}	
	KLX	88.153 - 98.429	}	
	KXY	104.51 - 115.59	}	
e_{AL}	(Pa)	5.9 - 20.9	0.048 (4)	
$ec_{1,0\ L}$	(U)	21.73 - 26.32	1.030 (19)	

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		Energy keV	Electrons per 100 disint.	Energy keV
$ec_{1,0}$ M	(U)	37.94 - 39.94	0.285 (5)	
$ec_{1,0}$ N	(U)	42.05 - 43.11	0.0770 (14)	
$ec_{1,0}$ L	(Pa)	52.82 - 57.19	0.103 (8)	
$ec_{1,0}$ M	(Pa)	68.56 - 70.48	0.025 (2)	
$\beta^-_{0,30}$	max:	299 (4)	0.00389 (22)	avg: 83.0 (13)
$\beta^-_{0,29}$	max:	332 (4)	0.0108 (3)	avg: 93.0 (13)
$\beta^-_{0,28}$	max:	358 (4)	0.0452 (8)	avg: 101.0 (13)
$\beta^-_{0,27}$	max:	394 (4)	0.0258 (3)	avg: 112.3 (13)
$\beta^-_{0,26}$	max:	406 (4)	0.00311 (19)	avg: 116.0 (13)
$\beta^-_{0,25}$	max:	460 (4)	0.0146 (7)	avg: 133.3 (13)
$\beta^-_{0,24}$	max:	473 (4)	0.0021 (3)	avg: 137.4 (14)
$\beta^-_{0,23}$	max:	488 (4)	0.0357 (18)	avg: 142.3 (14)
$\beta^-_{0,22}$	max:	575 (4)	0.0024 (3)	avg: 171.2 (14)
$\beta^-_{0,21}$	max:	602 (4)	0.0061 (3)	avg: 180.1 (14)
$\beta^-_{0,20}$	max:	667 (4)	0.00127 (23)	avg: 202.5 (14)
$\beta^-_{0,19}$	max:	677 (4)	0.0249 (5)	avg: 205.8 (14)
$\beta^-_{0,18}$	max:	698 (4)	0.00231 (19)	avg: 213.3 (14)
$\beta^-_{0,17}$	max:	715 (4)	0.0320 (6)	avg: 219.2 (14)
$\beta^-_{0,16}$	max:	768 (4)	0.0131 (6)	avg: 237.6 (15)
$\beta^-_{0,14}$	max:	834 (4)	0.0092 (11)	avg: 261.1 (15)
$\beta^-_{0,13}$	max:	1032 (4)	0.0121 (11)	avg: 333.1 (15)
$\beta^-_{0,12}$	max:	1095 (4)	0.0046 (3)	avg: 356.7 (15)
$\beta^-_{0,9}$	max:	1224 (4)	1.006 (13)	avg: 405.6 (16)
$\beta^-_{0,4}$	max:	1459 (4)	0.945 (12)	avg: 496.0 (16)
$\beta^-_{0,3}$	max:	1483 (4)	0.049 (3)	avg: 505.3 (16)
$\beta^-_{0,0}$	max:	2269 (4)	97.599 (24)	avg: 820.5 (17)

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(U)	11.6185 — 20.7141	0.856 (19)	
XKα_2	(U)	94.666	0.1973 (25)	} Kα
XKα_1	(U)	98.44	0.316 (4)	}
XKβ_3	(U)	110.421	}	
XKβ_1	(U)	111.298	} 0.115 (2)	Kβ'_1
XKβ''_5	(U)	111.964	}	
XKβ_2	(U)	114.407	}	
XKβ_4	(U)	115.012	} 0.0382 (5)	Kβ'_2
XKO$_{2,3}$	(U)	115.377	}	
XL	(Pa)	11.3676 — 20.1126	0.046 (4)	

4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ × 100	Multipolarity	α_T	P_γ × 100
$\gamma_{1,0}$(U)	43.49 (2)	1.414 (26)	E2	713 (11)	0.00198 (2)
$\gamma_{8,7}$(U)	62.70 (1)	0.0019 (6)	E1	0.426 (6)	0.0013 (4)
$\gamma_{1,0}$(Pa)	73.92 (2)	0.15 (1)	(M1+E2)	10.6 (4)	0.0129 (9)
$\gamma_{2,1}$(U)	99.86 (2)	0.0082 (7)	E2	13.42 (19)	0.00057 (5)
$\gamma_{18,14}$(U)	135.32 (8)	0.0000052 (6)	[E1]	0.247 (4)	0.0000042 (5)
$\gamma_{11,8}$(U)	137.23 (5)	0.000059 (21)	[E1]	0.239 (4)	0.000048 (17)
$\gamma_{8,5}$(U)	140.1 (10)	<0.008	M1+E2	5.3 (18)	<0.00127
$\gamma_{20,14}$(U)	166.5 (1)	0.000000273 (6)	[E1]	0.1514 (22)	0.000000237 (5)
$\gamma_{12,8}$(U)	185.0 (4)	0.00172 (15)			0.00172 (15)
$\gamma_{9,6}$(U)	193.4 (8)	0.00133 (28)	[E2]	0.847 (18)	0.00072 (15)
$\gamma_{14,13}$(U)	197.91 (15)	0.000081 (39)	[M1,E2]	2.0 (12)	0.000027 (7)
$\gamma_{11,7}$(U)	199.9 (10)	0.0017 (8)	(E0+E2+M1)	1.9 (12)	0.00058 (12)
$\gamma_{8,3}$(U)	203.3 (8)	0.0029 (5)	M1+E2	1.4 (4)	0.00119 (9)
$\gamma_{23,18}$(U)	209.9 (4)	0.00132 (15)			0.00132 (15)
$\gamma_{10,5}$(U)	235.9 (3)	0.000096 (43)	[E1]	0.0673 (10)	0.00009 (4)
$\gamma_{-1,1}$(U)	243.5 (8)				0.00050 (9)
$\gamma_{13,8}$(U)	247.7 (8)	0.0019 (8)	[M1,E2]	1.0 (7)	0.00097 (22)
$\gamma_{9,3}$(U)	258.227 (3)	0.0778 (8)	(E1)	0.0548 (8)	0.0738 (8)
$\gamma_{11,6}$(U)	275.5 (8)	0.00056 (22)	[M1,E2]	0.8 (6)	0.00031 (6)
$\gamma_{10,3}$(U)	299 (1)	0.00067 (14)	[E1]	0.0395 (7)	0.00064 (13)
$\gamma_{13,7}$(U)	311 (1)	0.00054 (11)	[E1]	0.0363 (6)	0.00052 (11)
$\gamma_{11,4}$(U)	316.7 (1)	0.00022 (6)	[E2]	0.1597 (23)	0.00019 (5)
$\gamma_{24,15}$(U)	338.1 (8)	0.00113 (23)			0.00113 (23)
$\gamma_{11,3}$(U)	340.2 (1)	0.000074 (22)	[E1]	0.0298 (5)	0.000072 (21)
$\gamma_{28,17}$(U)	357.5 (10)	0.00080 (17)			0.00080 (17)
$\gamma_{24,14}$(U)	362.8 (10)	0.00069 (15)			0.00069 (15)
$\gamma_{13,5}$(U)	387.6 (8)	0.000512 (44)	[E2]	0.0899 (14)	0.00047 (4)
$\gamma_{12,3}$(U)	387.6 (8)	0.00097 (15)			0.00097 (15)
$\gamma_{13,4}$(U)	427.4 (2)	0.000020 (5)	[E1]	0.0185 (3)	0.000020 (5)
$\gamma_{14,8}$(U)	445.91 (10)	0.000037 (9)	[M1,E2]	0.20 (14)	0.000031 (7)
$\gamma_{13,3}$(U)	450.98 (10)	0.00385 (16)	M1+E2	0.241 (4)	0.00310 (13)
$\gamma_{28,15}$(U)	453.58 (10)	0.00282 (16)	[M1]	0.324 (5)	0.00213 (12)
$\gamma_{22,13}$(U)	456.7 (10)	0.00095 (20)	[M1]	0.318 (5)	0.00072 (15)
$\gamma_{17,10}$(U)	468.43 (10)	0.00206 (12)			0.00206 (12)
$\gamma_{28,14}$(U)	475.74 (10)	0.00305 (17)	[M1]	0.285 (4)	0.00237 (13)
$\gamma_{18,10}$(U)	485.44 (7)	0.0000217 (28)	[M1,E2]	0.16 (11)	0.0000187 (17)
$\gamma_{19,10}$(U)	507.5 (10)	0.00158 (15)			0.00158 (15)
$\gamma_{17,9}$(U)	509.2 (8)	0.0022 (3)			0.0022 (3)
$\gamma_{20,10}$(U)	516.60 (6)	0.000015 (2)	(M1)	0.228 (4)	0.0000122 (16)
$\gamma_{18,9}$(U)	526.02 (10)	0.0000110 (12)	[M1]	0.217 (3)	0.000009 (1)
$\gamma_{23,13}$(U)	543.98 (10)	0.00349 (15)			0.00349 (15)
$\gamma_{20,9}$(U)	557.24 (6)	0.0000098 (13)	(M1)	0.186 (3)	0.0000083 (11)
$\gamma_{-1,2}$(U)	557.3 (10)				0.00072 (17)
$\gamma_{25,13}$(U)	572 (1)	0.00102 (20)	[M1]	0.173 (3)	0.00087 (17)
$\gamma_{18,8}$(U)	581.19 (10)	0.000081 (9)	[E1]	0.01006 (14)	0.000080 (9)
$\gamma_{14,4}$(U)	624.6 (10)	0.000117 (12)	[E1]	0.00877 (13)	0.000116 (12)
$\gamma_{-1,3}$(U)	647.7 (8)				0.00158 (15)

	Energy keV	$P_{\gamma+ce}$ × 100	Multipolarity	α_T	P_γ × 100
$\gamma_{14,3}$(U)	649 (1)	0.000064 (9)	[M1,E2]	0.08 (5)	0.000059 (8)
$\gamma_{16,6}$(U)	649 (1)	0.0010 (3)			0.0010 (3)
$\gamma_{23,11}$(U)	655.3 (10)	0.00139 (15)			0.00139 (15)
$\gamma_{15,3}$(U)	670.8 (10)	0.0004 (1)	[M1,E2]	0.07 (5)	0.00037 (9)
$\gamma_{28,13}$(U)	673.9 (10)	0.00071 (14)	[M1]	0.1118 (17)	0.00064 (13)
$\gamma_{25,11}$(U)	683.4 (10)	0.00058 (12)	[E1]	0.00741 (11)	0.00058 (12)
$\gamma_{16,4}$(U)	691.0 (3)	0.00898 (19)			0.00898 (19)
$\gamma_{23,10}$(U)	695.5 (10)	0.00164 (14)			0.00164 (14)
$\gamma_{29,13}$(U)	699.02 (10)	0.0058 (3)			0.0058 (3)
$\gamma_{17,6}$(U)	702.0 (1)	0.00721 (16)			0.00721 (16)
$\gamma_{5,2}$(U)	705.94 (12)	0.0052 (6)	[E1]	0.00698 (10)	0.0052 (6)
$\gamma_{6,2}$(U)	708.2 (10)	<0.00072	[E2]	0.0219 (4)	<0.0007
$\gamma_{18,6}$(U)	719.01 (7)	0.0000271 (24)	[M1+E2]	0.06 (4)	0.0000256 (20)
$\gamma_{30,13}$(U)	732.5 (10)	0.00130 (15)			0.00130 (15)
$\gamma_{19,6}$(U)	740.10 (8)	0.0118 (3)			0.0118 (3)
$\gamma_{3,1}$(U)	742.813 (5)	0.0946 (30)	E1	0.00636 (9)	0.094 (3)
$\gamma_{20,6}$(U)	750.12 (6)	0.0000184 (22)	(M1)	0.0841 (12)	0.000017 (2)
$\gamma_{-1,4}$(U)	760.3 (10)				0.00158 (15)
$\gamma_{18,4}$(U)	760.53 (15)	0.0000046 (10)	[M1]	0.0811 (12)	0.0000043 (9)
$\gamma_{4,1}$(U)	766.361 (20)	0.3290 (41)	(E2)	0.0187 (3)	0.323 (4)
$\gamma_{19,4}$(U)	781.75 (10)	0.00782 (18)			0.00782 (18)
$\gamma_{7,2}$(U)	783.4 (1)	0.000040 (7)	[E2]	0.0179 (3)	0.000039 (7)
$\gamma_{3,0}$(U)	786.272 (22)	0.0539 (7)	E1+M2	0.00573 (8)	0.0536 (7)
$\gamma_{20,4}$(U)	791.94 (5)	0.0000106 (14)	[M1]	0.0728 (11)	0.0000099 (13)
$\gamma_{5,1}$(U)	805.75 (10)	0.0062 (8)	[E1]	0.00549 (8)	0.0062 (8)
$\gamma_{6,1}$(U)	808.2 (1)	0.00281 (17)			0.00281 (17)
$\gamma_{21,5}$(U)	818.2 (5)	0.0010 (3)			0.0010 (3)
$\gamma_{28,10}$(U)	825.5 (2)	0.0014 (4)			0.0014 (4)
$\gamma_{22,5}$(U)	844.1 (8)	0.00109 (23)			0.00109 (23)
$\gamma_{6,0}$(U)	851.6 (1)	0.00707 (15)	[E2]	0.01514 (22)	0.00696 (15)
$\gamma_{28,9}$(U)	866.8 (10)	0.00116 (16)			0.00116 (16)
$\gamma_{21,3}$(U)	880.52 (4)	0.00392 (5)			0.00392 (5)
$\gamma_{7,1}$(U)	883.24 (3)	0.00386 (5)	E2	0.01409 (20)	0.00381 (5)
$\gamma_{-1,5}$(U)	887.29 (100)				0.00708 (14)
$\gamma_{28,8}$(U)	921.72 (10)	0.01275 (20)			0.01275 (20)
$\gamma_{7,0}$(U)	926.61 (10)	0.00127 (13)	(E2)	0.01284 (18)	0.00125 (13)
$\gamma_{26,7}$(U)	936.3 (10)	0.00102 (17)			0.00102 (17)
$\gamma_{10,2}$(U)	941.96 (10)	0.00253 (9)	[E2]	0.01244 (18)	0.00250 (9)
$\gamma_{8,1}$(U)	945.961 (16)	0.01064 (14)	(E1)	0.00412 (6)	0.01060 (14)
$\gamma_{25,5}$(U)	960 (1)	0.0009 (3)			0.0009 (3)
$\gamma_{23,3}$(U)	996.1 (20)	0.0059 (17)			0.0059 (17)
$\gamma_{9,1}$(U)	1001.026 (18)	0.856 (8)	E2	0.01107 (16)	0.847 (8)
$\gamma_{10,1}$(U)	1041.7 (1)	0.00122 (8)	[E2,M1]	0.023 (13)	0.00119 (8)
$\gamma_{28,6}$(U)	1059.4 (8)	0.00111 (22)			0.00111 (22)
$\gamma_{28,5}$(U)	1061.86 (10)	0.00224 (9)			0.00224 (9)
$\gamma_{11,1}$(U)	1081.9 (10)	0.00094 (20)	(M1)	0.0318 (5)	0.00091 (19)
$\gamma_{10,0}$(U)	1084.25 (10)	0.00081 (40)	[E2]	0.00952 (14)	0.0008 (4)
$\gamma_{30,5}$(U)	1120.6 (8)	0.00173 (15)			0.00173 (15)

	Energy keV	$P_{\gamma+ce}$ × 100	Multipolarity	α_T	P_γ × 100
$\gamma_{28,3}$(U)	1124.93 (10)	0.00347 (9)			0.00347 (9)
$\gamma_{11,0}$(U)	1124.93 (10)	0.00039 (9)	[E2]	0.00888 (13)	0.00039 (9)
$\gamma_{12,0}$(U)	1174.2 (10)	0.00192 (19)			0.00192 (19)
$\gamma_{13,1}$(U)	1193.77 (3)	0.01363 (18)	E1	0.00277 (4)	0.01359 (18)
$\gamma_{-1,6}$(U)	1220.37 (10)				0.00091 (9)
$\gamma_{13,0}$(U)	1237.28 (10)	0.00529 (11)	E1	0.00262 (4)	0.00528 (11)
$\gamma_{-1,7}$(U)	1353.0 (15)				0.0015 (5)
$\gamma_{14,1}$(U)	1392.6 (9)	0.0029 (11)	E1	0.00221 (4)	0.0029 (11)
$\gamma_{15,1}$(U)	1413.89 (10)	0.00229 (8)	[E1]	0.00217 (3)	0.00229 (8)
$\gamma_{14,0}$(U)	1434.16 (10)	0.00975 (16)	E1	0.00213 (3)	0.00973 (16)
$\gamma_{16,1}$(U)	1458.5 (15)	0.0019 (5)			0.0019 (5)
$\gamma_{16,0}$(U)	1501 (2)	0.0013			0.0013
$\gamma_{17,1}$(U)	1510.22 (10)	0.01308 (19)			0.01308 (19)
$\gamma_{18,1}$(U)	1527.28 (10)	0.00237 (8)	M1+E2	0.009 (4)	0.00235 (8)
$\gamma_{19,1}$(U)	1550.1 (10)	0.00137 (15)			0.00137 (15)
$\gamma_{17,0}$(U)	1553.77 (10)	0.00826 (14)			0.00826 (14)
$\gamma_{20,1}$(U)	1558.4 (10)	0.00074 (9)	M1	0.01228 (18)	0.00073 (9)
$\gamma_{18,0}$(U)	1570.67 (10)	0.00111 (8)	M1	0.01204 (17)	0.00110 (8)
$\gamma_{19,0}$(U)	1593.5 (6)	0.00235 (12)			0.00235 (12)
$\gamma_{20,0}$(U)	1601.8 (15)	0.00048 (22)	(M1)	0.01146 (17)	0.00047 (22)
$\gamma_{21,0}$(U)	1667.6 (10)	0.00118 (6)			0.00118 (6)
$\gamma_{22,0}$(U)	1694.1 (10)	0.00038 (2)			0.00038 (2)
$\gamma_{-1,8}$(U)	1720.5 (15)				0.00033 (15)
$\gamma_{-1,9}$(U)	1732.2 (15)				0.0019 (3)
$\gamma_{23,1}$(U)	1737.77 (10)	0.0214 (3)			0.0214 (3)
$\gamma_{-1,10}$(U)	1759.81 (10)				0.00146 (5)
$\gamma_{25,1}$(U)	1765.44 (10)	0.0084 (6)			0.0084 (6)
$\gamma_{24,0}$(U)	1796.3 (9)	0.00031 (5)			0.00031 (5)
$\gamma_{25,0}$(U)	1809.05 (10)	0.00376 (7)			0.00376 (7)
$\gamma_{26,1}$(U)	1819.69 (10)	0.00089 (5)			0.00089 (5)
$\gamma_{27,1}$(U)	1831.37 (10)	0.01759 (23)			0.01759 (23)
$\gamma_{26,0}$(U)	1863.09 (10)	0.00120 (5)			0.00120 (5)
$\gamma_{28,1}$(U)	1867.7 (1)	0.00932 (12)			0.00932 (12)
$\gamma_{27,0}$(U)	1874.9 (1)	0.00819 (14)			0.00819 (14)
$\gamma_{29,1}$(U)	1893.51 (11)	0.00218 (6)			0.00218 (6)
$\gamma_{28,0}$(U)	1911.20 (11)	0.00628 (9)			0.00628 (9)
$\gamma_{30,1}$(U)	1926.5 (10)	0.00045 (4)			0.00045 (4)
$\gamma_{29,0}$(U)	1937.01 (13)	0.00285 (5)			0.00285 (5)
$\gamma_{30,0}$(U)	1970.3 (8)	0.00041 (4)			0.00041 (4)
$\gamma_{-1,11}$(U)	2022.24 (12)				0.000186 (3)
$\gamma_{-1,12}$(U)	2041.23 (13)				0.00011 (1)
$\gamma_{-1,13}$(U)	2065.80 (13)				0.00007
$\gamma_{-1,14}$(U)	2093.19 (38)				0.00002
$\gamma_{-1,15}$(U)	2102.14 (15)				0.00006
$\gamma_{-1,16}$(U)	2136.69 (14)				0.00007

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