

## 1 Half-life, Q-value and Decay mode

$T_{1/2}$	:	24100	(11)	y
$Q_\alpha$	:	5244.51	(21)	keV
$\alpha$	:	100		%

## 2 $\alpha$ Emissions

	Energy keV	Probability $\times 100$
$\alpha_{0,53}$	4059.1 (3)	0.00000021 (5)
$\alpha_{0,52}$	4116.78 (25)	0.00000093 (9)
$\alpha_{0,51}$	4180.6 (3)	0.0000020 (3)
$\alpha_{0,50}$	4186.53 (27)	0.00000077 (7)
$\alpha_{0,49}$	4202.4 (3)	0.00000041 (4)
$\alpha_{0,48}$	4204.42 (21)	0.00000061 (15)
$\alpha_{0,47}$	4279.70 (26)	0.00000199 (12)
$\alpha_{0,46}$	4305.79 (28)	0.00000098 (13)
$\alpha_{0,45}$	4325.5 (10)	$\sim 0.00000042$
$\alpha_{0,44}$	4326.92 (21)	0.00000228 (12)
$\alpha_{0,43}$	4349.15 (21)	0.0000030 (3)
$\alpha_{0,42}$	4364.42 (22)	0.00000084 (14)
$\alpha_{0,41}$	4390.20 (21)	0.00000101 (11)
$\alpha_{0,40}$	4392.08 (28)	0.00000247 (19)
$\alpha_{0,39}$	4400.0 (4)	0.0000103 (12)
$\alpha_{0,38}$	4400.26 (21)	0.000027 (3)
$\alpha_{0,37}$	4408.36 (22)	0.00000103 (17)
$\alpha_{0,36}$	4419.14 (26)	0.0000034 (4)
$\alpha_{0,35}$	4448.46 (21)	0.00000213 (9)
$\alpha_{0,34}$	4464.68 (21)	0.0000114 (3)
$\alpha_{0,33}$	4467.37 (21)	0.00000707 (13)
$\alpha_{0,32}$	4496.90 (21)	$< 0.00000034$
$\alpha_{0,31}$	4503.24 (21)	0.00000631 (11)
$\alpha_{0,30}$	4508.72 (21)	0.0000264 (6)
$\alpha_{0,29}$	4529.52 (22)	0.00000322 (21)
$\alpha_{0,28}$	4534.08 (22)	0.00000284 (7)
$\alpha_{0,27}$	4558.75 (22)	0.000012 (4)
$\alpha_{0,26}$	4632.35 (21)	0.00086 (3)
$\alpha_{0,25}$	4655.27 (27)	0.0000033 (7)
$\alpha_{0,24}$	4690.29 (21)	0.00056 (5)
$\alpha_{0,23}$	4718.39 (21)	0.0000400 (11)
$\alpha_{0,22}$	4737.05 (21)	0.00570 (5)
$\alpha_{0,21}$	4748.81 (21)	0.00075 (11)
$\alpha_{0,20}$	4770.01 (21)	0.00125 (3)
$\alpha_{0,19}$	4795.73 (21)	0.000944 (17)
$\alpha_{0,18}$	4805.33 (22)	0.000017 (4)
$\alpha_{0,17}$	4823.80 (22)	$\approx 0.000022$
$\alpha_{0,16}$	4829.38 (21)	0.00354 (7)
$\alpha_{0,15}$	4866.91 (21)	0.0018 (5)
$\alpha_{0,14}$	4870.38 (21)	0.0007 (3)
$\alpha_{0,13}$	4911.69 (21)	0.0030 (16)

	Energy keV	Probability × 100
$\alpha_{0,12}$	4935.00 (21)	0.0050 (7)
$\alpha_{0,11}$	4962.83 (21)	0.007 (1)
$\alpha_{0,10}$	4988.13 (21)	0.0034 (10)
$\alpha_{0,8}$	5008.70 (21)	0.0182 (27)
$\alpha_{0,7}$	5029.51 (21)	0.013 (4)
$\alpha_{0,6}$	5055.34 (21)	0.0375 (12)
$\alpha_{0,5}$	5076.28 (21)	0.052 (8)
$\alpha_{0,4}$	5105.81 (21)	11.87 (3)
$\alpha_{0,3}$	5111.21 (21)	<0.02
$\alpha_{0,2}$	5143.82 (21)	17.14 (4)
$\alpha_{0,1}$	5156.59 (14)	70.79 (10)
$\alpha_{0,0}$	5156.65 (21)	~0.03

### 3 Electron Emissions

		Energy keV	Electrons per 100 disint.
eAL	(U)	5.9 - 21.6	4.66 (19)
eAK	(U)		0.00045 (6)
	KLL	71.78 - 80.95	}
	KLX	88.15 - 98.34	}
	KXY	104.42 - 115.40	}
ec <sub>2,1</sub> M	(U)	7.427 - 9.425	15.4 (6)
ec <sub>5,4</sub> L	(U)	8.28 - 12.87	0.0259 (11)
ec <sub>4,2</sub> L	(U)	16.903 - 21.493	2.61 (16)
ec <sub>3,0</sub> L	(U)	24.45 - 29.04	0.0286 (16)
ec <sub>4,1</sub> L	(U)	29.866 - 34.456	6.09 (15)
ec <sub>4,2</sub> M	(U)	33.113 - 35.111	0.70 (4)
ec <sub>6,3</sub> L	(U)	35.07 - 39.66	0.0276 (13)
ec <sub>4,1</sub> M	(U)	46.076 - 48.074	1.68 (4)
ec <sub>5,2</sub> L	(U)	46.938 - 51.528	0.021 (6)
ec <sub>8,4</sub> L	(U)	77.02 - 81.61	0.0139 (12)

### 4 Photon Emissions

#### 4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(U)	11.619 — 20.714	4.66 (5)	
XK $\alpha_2$	(U)	94.666	0.00418 (4)	} K $\alpha$
XK $\alpha_1$	(U)	98.44	0.00661 (9)	}

		Energy keV	Photons per 100 disint.	
XK $\beta_3$	(U)	110.421	}	
XK $\beta_1$	(U)	111.298	}	0.00239 (3)    K $\beta'_1$
XK $\beta'_5$	(U)	111.964	}	
XK $\beta_2$	(U)	114.407	}	
XK $\beta_4$	(U)	115.012	}	0.00131 (6)    K $\beta'_2$
XKO $_{2,3}$	(U)	115.377	}	

## 4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	$\alpha_T$	$P_\gamma$ $\times 100$
$\gamma_{1,0}(U)$	0.0765 (4)	100	E3	$1 \times 10^{10}$	$\sim 0.00000001$
$\gamma_{2,1}(U)$	12.975 (10)	20.7 (8)	M1+0.19(2)%E2	607 (17)	0.0341 (9)
$\gamma_{-1,1}(U)$	14.22 (3)	>0.006			>0.0055 (4)
$\gamma_{5,4}(U)$	30.04 (2)	0.0346 (14)	(M1)	157 (3)	0.000219 (8)
$\gamma_{4,2}(U)$	38.661 (2)	3.56 (21)	M1+22.2(16)%E2	339 (19)	0.01047 (21)
$\gamma_{-1,2}(U)$	40.41 (5)	>0.0002			>0.000163 (16)
$\gamma_{10,7}(U)$	41.93 (5)	0.0097 (5)	(M1)	58.6 (12)	0.000163 (8)
$\gamma_{3,0}(U)$	46.21 (5)	0.0389 (21)	M1+1.8(5)%E2	52.6 (27)	0.000726 (13)
$\gamma_{11,8}(U)$	46.68 (3)	0.0044 (13)	M1+9(5)%E2	86 (24)	0.000050 (6)
$\gamma_{7,5}(U)$	47.60 (3)	0.00259 (11)	(M1)	40.4 (8)	0.0000625 (25)
$\gamma_{4,1}(U)$	51.624 (1)	8.38 (18)	E2	310 (6)	0.02694 (26)
$\gamma_{12,10}(U)$	54.039 (8)	0.00560 (14)	M1	27.8 (6)	0.0001943 (28)
$\gamma_{6,3}(U)$	56.828 (3)	0.0382 (18)	M1+5.0(8)%E2	32.6 (15)	0.001136 (15)
$\gamma_{14,12}(U)$	65.708 (30)	0.00095 (29)	M1+4(6)%E2	19 (6)	0.0000473 (25)
$\gamma_{9,6}(U)$	67.674 (12)	0.00283 (12)	M1+3.6(11)%E2	16.9 (5)	0.000158 (5)
$\gamma_{5,2}(U)$	68.696 (6)	0.029 (8)	E2	78.6 (16)	0.00036 (10)
$\gamma_{8,5}(U)$	68.73 (2)	0.0036 (17)	(M1+20%E2)	27	0.00013 (6)
$\gamma_{-1,3}(U)$	74.96 (10)	>0.00004			>0.000038 (6)
$\gamma_{7,4}(U)$	77.592 (14)	0.0068 (38)	M1(+20(32)%E2)	17 (10)	0.000380 (6)
$\gamma_{13,9}(U)$	78.43 (2)	0.0026 (15)	M1(+20(32)%E2)	16 (10)	0.0001533 (28)
$\gamma_{17,13}(U)$	89.39 (6)	$\sim 0.000015$	[M1]	6.40 (13)	$\sim 0.000002$
$\gamma_{10,5}(U)$	89.64 (3)	0.00040 (22)	(M1+E2)	14 (8)	0.000027 (2)
$\gamma_{12,7}(U)$	96.14 (3)	0.00064 (3)	[E2]	16.0 (3)	0.0000379 (19)
$\gamma_{15,11}(U)$	97.6 (3)	0.0007 (5)	M1+20(19)%E2	7.0 (19)	0.00009 (6)
$\gamma_{8,4}(U)$	98.78 (2)	0.0204 (17)	E2	14.1 (3)	0.00135 (11)
$\gamma_{6,0}(U)$	103.06 (3)	0.00273 (9)	E2	11.58 (23)	0.000217 (6)
$\gamma_{11,5}(U)$	115.38 (5)	0.00362 (40)	E2	6.87 (14)	0.00046 (5)
$\gamma_{7,2}(U)$	116.26 (2)	0.0077 (15)	M1+24(36)%E2	12.2 (26)	0.000581 (19)
$\gamma_{10,4}(U)$	119.70 (3)	0.00021 (9)	(M1+E2)	9 (4)	0.000021 (3)
$\gamma_{14,10}(U)$	119.76 (2)	0.000063 (14)	[E2]	5.99 (12)	0.000009 (2)
$\gamma_{12,6}(U)$	122.35 (12)	0.00000125 (17)	(E1)	0.312 (6)	0.00000095 (13)
$\gamma_{37,29}(U)$	123.228 (5)	0.000000021 (5)	(M1)	12.19 (24)	0.0000000016 (4)
$\gamma_{21,14}(U)$	123.62 (5)	0.000310 (13)	[M1]	12.08 (24)	0.0000237 (9)
$\gamma_{9,3}(U)$	124.51 (3)	0.000413 (13)	E2	5.06 (10)	0.0000681 (19)
$\gamma_{10,3}(U)$	125.21 (10)	0.0000730 (21)	[E1]	0.296 (6)	0.0000563 (16)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	$\alpha_T$	$P_\gamma$ $\times 100$
$\gamma_{7,0}(U)$	129.296 (1)	0.00805 (6)	E1	0.275 (6)	0.00631 (4)
$\gamma_{19,12}(U)$	141.657 (20)	0.000296 (11)	[M1]	8.22 (16)	0.0000321 (10)
$\gamma_{12,5}(U)$	143.35 (20)	0.000110 (46)	[M1+E2]	5.3 (26)	0.0000174 (8)
$\gamma_{15,8}(U)$	144.201 (3)	0.00106 (3)	E2	2.72 (5)	0.000285 (7)
$\gamma_{13,6}(U)$	146.094 (6)	0.000432 (12)	E2	2.57 (5)	0.000121 (3)
$\gamma_{10,2}(U)$	158.1 (3)	0.0000029 (3)	[E2]	1.86 (4)	0.00000101 (10)
$\gamma_{18,11}(U)$	160.19 (5)	0.0000172 (36)	[E2]	1.77 (4)	0.0000062 (13)
$\gamma_{16,10}(U)$	161.450 (15)	0.000814 (42)	(M1)	5.67 (11)	0.000122 (6)
$\gamma_{17,9}(U)$	167.81 (5)	0.0000074 (20)	[E2]	1.47 (3)	0.0000030 (8)
$\gamma_{10,0}(U)$	171.393 (6)	0.0001255 (34)	[E1]	0.141 (3)	0.000110 (3)
$\gamma_{42,28}(U)$	172.560 (8)	$\sim 0.000000017$	M1	4.70 (9)	$\sim 0.000000003$
$\gamma_{12,4}(U)$	173.70 (5)	0.0000071 (18)	[E2]	1.28 (3)	0.0000031 (8)
$\gamma_{12,3}(U)$	179.220 (12)	0.0000739 (22)	[E1]	0.127 (3)	0.0000656 (19)
$\gamma_{-1,4}(U)$	184.55 (5)	0.000010 (3)	[M1]	3.87 (8)	0.0000021 (6)
$\gamma_{14,6}(U)$	188.23 (10)	0.0000123 (12)	[E1]	0.1140 (23)	0.0000110 (11)
$\gamma_{21,12}(U)$	189.36 (1)	0.00027 (11)	[M1+E2]	2.3 (14)	0.0000820 (14)
$\gamma_{-1,5}(U)$	193.13 (12)	$> 0.000009$			$> 0.0000090$ (9)
$\gamma_{19,10}(U)$	195.679 (8)	0.000456 (11)	M1	3.30 (7)	0.000106 (2)
$\gamma_{-1,6}(U)$	196.87 (5)	$> 0.000004$			$> 0.0000037$ (4)
$\gamma_{16,7}(U)$	203.550 (5)	0.002224 (49)	M1	2.95 (6)	0.000563 (9)
$\gamma_{21,11}(U)$	218.0 (5)	$> 0.000002$			$> 0.0000012$ (10)
$\gamma_{12,0}(U)$	225.42 (4)	0.0000161 (4)	[E1]	0.0747 (15)	0.0000150 (4)
$\gamma_{19,7}(U)$	237.77 (10)	0.0000422 (18)	[M1]	1.91 (4)	0.0000145 (6)
$\gamma_{26,14}(U)$	242.08 (3)	0.0000209 (14)	[M1]	1.82 (4)	0.0000074 (5)
$\gamma_{21,10}(U)$	243.38 (3)	0.000053 (18)	[M1+E2]	1.1 (7)	0.0000254 (7)
$\gamma_{14,3}(U)$	244.92 (5)	0.0000054 (5)		0.0618 (12)	0.0000051 (5)
$\gamma_{24,12}(U)$	248.95 (5)	0.0000188 (16)	[M1]	1.68 (3)	0.0000070 (6)
$\gamma_{22,10}(U)$	255.384 (15)	0.000204 (6)	[M1]	1.57 (3)	0.0000795 (20)
$\gamma_{20,7}(U)$	263.95 (3)	0.0000629 (26)	M1	1.43 (3)	0.0000259 (10)
$\gamma_{30,20}(U)$	265.7 (3)	0.0000017 (4)	[E1]	0.0514 (10)	0.0000016 (4)
$\gamma_{16,4}(U)$	281.2 (2)	0.0000036 (12)	[M1+E2]	0.7 (5)	0.0000021 (3)
$\gamma_{19,5}(U)$	285.3 (2)	0.0000032 (12)	[M1+E2]	0.7 (5)	0.0000019 (4)
$\gamma_{22,7}(U)$	297.46 (3)	0.000100 (3)	[M1]	1.025 (21)	0.0000492 (13)
$\gamma_{24,10}(U)$	302.87 (5)	0.0000097 (8)	[M1]	0.976 (20)	0.0000049 (4)
$\gamma_{26,12}(U)$	307.85 (5)	0.0000101 (8)	[M1]	0.933 (19)	0.0000052 (4)
$\gamma_{21,6}(U)$	311.78 (4)	0.0000266 (8)	[E1]	0.0361 (7)	0.0000257 (8)
$\gamma_{23,7}(U)$	316.41 (3)	0.0000248 (10)	M1	0.865 (17)	0.0000133 (5)
$\gamma_{16,2}(U)$	319.68 (10)	0.0000073 (19)	[M1+E2]	0.50 (35)	0.0000049 (5)
$\gamma_{19,3}(U)$	320.862 (20)	0.0000558 (12)	[E1]	0.0337 (7)	0.0000540 (12)
$\gamma_{24,8}(U)$	323.84 (3)	0.0000960 (25)	M1	0.811 (16)	0.0000530 (13)
$\gamma_{16,0}(U)$	332.845 (5)	0.000503 (8)	E1	0.0313 (6)	0.000488 (8)
$\gamma_{26,11}(U)$	336.113 (12)	0.000192 (5)	M1	0.733 (15)	0.0001111 (26)
$\gamma_{20,4}(U)$	341.506 (10)	0.0001106 (24)	M1	0.701 (14)	0.0000650 (13)
$\gamma_{24,7}(U)$	345.00 (2)	$< 0.000084$	(M1)	0.682 (14)	$< 0.00005$
$\gamma_{22,5}(U)$	345.013 (4)	0.000922 (15)	M1	0.682 (14)	0.000548 (8)
$\gamma_{-1,7}(U)$	350.8 (3)	$> 0.000002$			$> 0.0000018$ (4)
$\gamma_{19,2}(U)$	354.0 (5)	0.00000085 (33)	[E2]	0.1150 (23)	0.00000076 (30)
$\gamma_{26,10}(U)$	361.89 (5)	0.0000187 (11)	[M1]	0.598 (12)	0.0000117 (7)



	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	$\alpha_T$	$P_\gamma$ $\times 100$
$\gamma_{19,0}(U)$	367.073 (25)	0.0000893 (21)	[E1]	0.0254 (5)	0.0000871 (20)
$\gamma_{21,3}(U)$	368.554 (20)	0.0000899 (14)	[E1]	0.0252 (5)	0.0000877 (14)
$\gamma_{22,4}(U)$	375.054 (3)	0.002376 (37)	M1	0.543 (11)	0.001540 (21)
$\gamma_{20,2}(U)$	380.191 (6)	0.000460 (7)	M1	0.523 (10)	0.000302 (4)
$\gamma_{26,8}(U)$	382.75 (5)	0.000387 (7)	M1	0.513 (10)	0.000256 (4)
$\gamma_{24,5}(U)$	392.53 (3)	0.000179 (24)	M1	0.479 (10)	0.000121 (16)
$\gamma_{20,1}(U)$	393.14 (3)	0.000619 (25)	M1	0.477 (10)	0.000419 (17)
$\gamma_{23,3}(U)$	399.53 (6)	0.00000625 (27)	[E1]	0.0213 (4)	0.00000612 (26)
$\gamma_{25,6}(U)$	406.8 (2)	0.0000030 (7)	[E1]	0.0204 (4)	0.0000029 (7)
$\gamma_{27,11}(U)$	411.2 (3)	0.000010 (4)	[M1]	0.422 (8)	0.0000069 (30)
$\gamma_{42,20}(U)$	412.49 (6)	$\sim 0.00000018$	[E1]	0.0199 (4)	$\sim 0.00000018$
$\gamma_{22,2}(U)$	413.713 (5)	0.00207 (3)	M1	0.415 (8)	0.001464 (21)
$\gamma_{24,4}(U)$	422.598 (19)	0.0001669 (30)	M1	0.392 (8)	0.0001199 (20)
$\gamma_{22,1}(U)$	426.68 (3)	0.0000256 (6)	[E2]	0.0699 (14)	0.0000239 (6)
$\gamma_{24,3}(U)$	428.4 (3)	0.00000103 (10)	[E1]	0.0184 (4)	0.00000101 (10)
$\gamma_{26,6}(U)$	430.08 (10)	0.00000437 (19)	[E1]	0.0183 (4)	0.00000429 (19)
$\gamma_{23,0}(U)$	445.72 (3)	0.00000892 (26)	E1	0.0170 (3)	0.00000877 (26)
$\gamma_{-1,8}(U)$	446.82 (20)	0.0000009 (1)			0.00000085 (13)
$\gamma_{26,5}(U)$	451.481 (10)	0.000223 (25)	M1(+50%E2)	0.19 (13)	0.000187 (3)
$\gamma_{27,8}(U)$	457.61 (5)	0.00000199 (4)	[M1]	0.316 (6)	0.00000151 (3)
$\gamma_{24,2}(U)$	461.25 (5)	0.00000242 (5)	[E2]	0.0575 (12)	0.00000229 (5)
$\gamma_{25,3}(U)$	463.9 (3)	0.000000284 (30)	[E1]	0.0157 (3)	0.00000028 (3)
$\gamma_{24,0}(U)$	473.9 (5)	0.000000061 (30)	[E1]	0.0150 (3)	0.00000006 (3)
$\gamma_{26,4}(U)$	481.66 (12)	0.00000485 (11)	[E2]	0.0517 (10)	0.00000461 (10)
$\gamma_{26,3}(U)$	487.06 (10)	0.000000269 (19)	[E1]	0.0142 (3)	0.000000265 (19)
$\gamma_{31,10}(U)$	493.08 (5)	0.00000089 (3)	[E1]	0.0139 (3)	0.00000088 (3)
$\gamma_{-1,9}(U)$	497.0 (5)	0.000000044 (25)			0.000000044 (25)
$\gamma_{27,5}(U)$	526.4 (4)	0.000000059 (19)	[E2]	0.0419 (8)	0.000000057 (19)
$\gamma_{-1,10}(U)$	538.8 (2)	0.00000031 (2)			0.000000309 (19)
$\gamma_{33,8}(U)$	550.5 (2)	0.000000440 (25)	(E1)	0.01120 (22)	0.000000435 (25)
$\gamma_{-1,11}(U)$	557.3 (5)	0.00000004 (2)			0.000000038 (19)
$\gamma_{36,10}(U)$	579.4 (3)	0.000000091 (20)	[E2]	0.0337 (7)	0.000000088 (19)
$\gamma_{31,5}(U)$	582.89 (10)	0.000000624 (26)	[E1]	0.0100 (2)	0.000000618 (26)
$\gamma_{29,4}(U)$	586.3 (3)	0.000000155 (16)	[E1]	0.0099 (2)	0.000000153 (16)
$\gamma_{43,12}(U)$	596.0 (5)	0.000000040 (12)	[E2]	0.0317 (6)	0.000000039 (12)
$\gamma_{33,6}(U)$	597.99 (5)	0.00000179 (6)	[E2]	0.0314 (6)	0.00000174 (6)
$\gamma_{36,8}(U)$	599.6 (2)	0.000000204 (25)	[E1]	0.00948 (19)	0.000000202 (25)
$\gamma_{40,10}(U)$	606.9 (2)	0.000000136 (15)	M1(+E2)	0.12 (3)	0.000000121 (13)
$\gamma_{-1,12}(U)$	608.9 (2)	0.00000012 (2)			0.000000117 (12)
$\gamma_{31,4}(U)$	612.83 (3)	0.00000096 (5)	E1	0.00910 (18)	0.00000095 (5)
$\gamma_{35,6}(U)$	617.1 (1)	0.00000154 (9)	[M1]	0.142 (3)	0.00000135 (8)
$\gamma_{31,3}(U)$	618.28 (6)	0.00000212 (8)	(E2)	0.0292 (6)	0.00000206 (8)
$\gamma_{33,5}(U)$	619.21 (6)	0.00000122 (8)	[E1]	0.00892 (18)	0.00000121 (8)
$\gamma_{32,3}(U)$	624.78 (3)	$< 0.000000025$	(M1)	0.137 (3)	$< 0.000000022$
$\gamma_{29,2}(U)$	624.78 (5)	0.000000464 (19)	[E1]	0.00877 (18)	0.000000460 (19)
$\gamma_{28,0}(U)$	633.15 (6)	0.00000286 (7)	M1(+E2)	0.122 (11)	0.00000255 (6)
$\gamma_{29,1}(U)$	637.73 (5)	0.00000065 (6)	[E1]	0.00844 (17)	0.00000064 (6)
$\gamma_{29,0}(U)$	637.80 (5)	0.00000197 (20)	E2	0.0273 (5)	0.00000192 (19)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	$\alpha_T$	$P_\gamma$ $\times 100$
$\gamma_{38,7}(U)$	639.99 (10)	0.00000869 (21)	[E2]	0.0271 (5)	0.00000846 (20)
$\gamma_{30,2}(U)$	645.94 (4)	0.00001502 (30)	E1	0.00824 (16)	0.0000149 (3)
$\gamma_{33,4}(U)$	649.32 (6)	0.00000073 (5)	[E1]	0.00816 (16)	0.00000072 (5)
$\gamma_{-1,13}(U)$	650.53 (6)	0.00000027 (4)			0.00000027 (4)
$\gamma_{34,4}(U)$	652.05 (2)	0.00000668 (20)	E1	0.00809 (16)	0.00000663 (20)
$\gamma_{33,3}(U)$	654.88 (8)	0.00000233 (5)	(E2)	0.0258 (5)	0.00000227 (5)
$\gamma_{30,1}(U)$	658.86 (6)	0.00000967 (26)	E1	0.00794 (16)	0.00000959 (26)
$\gamma_{31,0}(U)$	664.58 (5)	0.000001712 (41)	E2	0.0251 (5)	0.00000167 (4)
$\gamma_{36,5}(U)$	668.2 (5)	0.00000040 (12)	[E1]	0.00773 (15)	0.00000040 (12)
$\gamma_{43,8}(U)$	670.8 (5)	$\leq 0.000000009$ (3)			$\leq 0.000000009$ (3)
$\gamma_{32,0}(U)$	670.99 (4)	$\leq 0.000000009$ (3)	[M1+E2]	0.06 (4)	$\leq 0.000000009$ (3)
$\gamma_{35,3}(U)$	674.05 (3)	0.000000556 (22)		0.1120 (22)	0.00000050 (2)
$\gamma_{40,5}(U)$	674.4 (5)	0.000000111 (11)	(M1)	0.1120 (22)	0.00000010 (1)
$\gamma_{-1,14}(U)$	685.97 (11)	0.00000127 (6)	E1	0.00736 (15)	0.00000126 (6)
$\gamma_{-1,15}(U)$	688.1 (3)	0.000000114 (11)			0.000000112 (11)
$\gamma_{34,2}(U)$	690.81 (8)	0.00000059 (5)	E1	0.00727 (15)	0.00000059 (5)
$\gamma_{-1,16}(U)$	693.2 (5)	0.000000033 (13)			0.000000032 (13)
$\gamma_{46,10}(U)$	693.81 (1)	0.000000019 (7)	(E2)	0.0229 (5)	0.000000019 (7)
$\gamma_{41,5}(U)$	697.8 (5)	0.000000076 (15)			0.000000074 (15)
$\gamma_{-1,17}(U)$	699.6 (5)	0.00000008 (2)			0.000000080 (16)
$\gamma_{33,0}(U)$	701.1 (2)	0.000000555 (29)	[M1+E2]	0.06 (4)	0.000000524 (19)
$\gamma_{34,1}(U)$	703.68 (5)	0.00000413 (13)	E1	0.00702 (14)	0.00000410 (13)
$\gamma_{-1,18}(U)$	712.96 (5)	0.000000052 (6)			0.000000052 (6)
$\gamma_{44,7}(U)$	714.71 (14)	0.000000081 (8)	E2	0.0215 (4)	0.000000079 (8)
$\gamma_{39,4}(U)$	718.0 (5)	0.00000278 (6)	E1	0.00677 (14)	0.00000276 (6)
$\gamma_{35,0}(U)$	720.3 (5)	0.000000029 (5)			0.000000029 (5)
$\gamma_{47,10}(U)$	720.55 (3)	0.000000020 (2)			0.000000020 (2)
$\gamma_{41,4}(U)$	727.9 (2)	0.000000136 (8)	M1	0.0911 (18)	0.000000125 (7)
$\gamma_{46,7}(U)$	736.5 (5)	0.000000031 (9)	M1+59(8)%E2	0.0481 (10)	0.000000030 (9)
$\gamma_{-1,19}(U)$	742.7 (5)	0.000000038 (11)			0.000000038 (11)
$\gamma_{37,2}(U)$	747.4 (5)	0.000000082 (16)	E1	0.00629 (13)	0.000000081 (16)
$\gamma_{38,2}(U)$	756.23 (6)	0.0000029 (5)	[M1+E2]	0.05 (3)	0.0000028 (5)
$\gamma_{39,2}(U)$	756.4 (4)	0.00000069 (19)	[E1]	0.00615 (12)	0.00000069 (19)
$\gamma_{47,7}(U)$	762.6 (2)	$\sim 0.00000001$			$\sim 0.00000001$
$\gamma_{45,5}(U)$	763.60 (15)	$> 0.000000042$	E0(+M1)	0.9	$> 0.000000022$
$\gamma_{41,2}(U)$	766.47 (3)	0.00000065 (11)	E0+M1	4.0 (4)	0.00000013 (2)
$\gamma_{51,12}(U)$	767.29 (4)	0.00000014 (3)			0.00000014 (3)
$\gamma_{38,1}(U)$	769.15 (8)	0.0000153 (32)	M1+E0	2.0 (2)	0.0000051 (10)
$\gamma_{39,1}(U)$	769.4 (5)	0.0000068 (12)	E1	0.00596 (12)	0.0000068 (12)
$\gamma_{-1,20}(U)$	777.1 (3)	0.000000028 (7)			0.000000028 (7)
$\gamma_{41,1}(U)$	779.43 (3)	0.000000147 (10)	M1	0.0759 (15)	0.000000137 (9)
$\gamma_{-1,21}(U)$	786.9 (2)	0.000000089 (9)	E2	0.0177 (4)	0.000000087 (9)
$\gamma_{-1,22}(U)$	788.5 (3)	0.000000035 (7)			0.000000035 (7)
$\gamma_{42,2}(U)$	792.68 (6)	0.000000020 (4)	(E1)	0.00565 (11)	0.000000020 (4)
$\gamma_{-1,23}(U)$	796.9 (3)	0.000000015 (3)			0.000000015 (3)
$\gamma_{-1,24}(U)$	803.2 (2)	0.000000064 (5)			0.000000064 (5)
$\gamma_{42,1}(U)$	805.65 (6)	0.000000029 (4)	E2	0.0169 (3)	0.000000028 (4)
$\gamma_{43,2}(U)$	808.21 (4)	0.000000130 (6)	M1	0.0690 (14)	0.000000122 (6)

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	$\alpha_T$	$P_\gamma$ $\times 100$
$\gamma_{46,4}(U)$	813.7 (2)	0.000000048 (5)	M1	0.0677 (14)	0.000000045 (5)
$\gamma_{50,9}(U)$	816.0 (2)	0.000000026 (4)	[M1+E2]	0.042 (25)	0.000000025 (4)
$\gamma_{43,0}(U)$	821.25 (4)	0.000000050 (11)	E1+M2		0.000000050 (11)
$\gamma_{51,10}(U)$	821.3 (2)	$\sim 0.000000006$			$\sim 0.000000006$
$\gamma_{-1,25}(U)$	826.8 (3)	0.000000018 (6)			0.000000018 (6)
$\gamma_{-1,26}(U)$	828.9 (2)	0.000000014 (1)			0.000000134 (8)
$\gamma_{52,12}(U)$	832.2 (2)	0.000000030 (4)			0.000000030 (4)
$\gamma_{-1,27}(U)$	837.3 (2)	0.000000020 (4)			0.000000020 (4)
$\gamma_{47,4}(U)$	840.4 (2)	0.000000056 (6)	M1(+E0)	0.14 (2)	0.000000049 (5)
$\gamma_{44,1}(U)$	843.78 (1)	0.000000147 (9)	M1(+E0)	0.09 (1)	0.000000135 (8)
$\gamma_{47,2}(U)$	879.2 (3)	0.000000037 (4)	[M1+E2]	0.035 (20)	0.000000036 (4)
$\gamma_{47,1}(U)$	891.0 (3)	0.000000076 (8)	[E2]	0.0139 (3)	0.000000075 (8)
$\gamma_{-1,28}(U)$	895.4 (3)	0.000000008 (3)			0.000000076 (25)
$\gamma_{-1,29}(U)$	898.1 (3)	0.000000018 (4)			0.000000018 (4)
$\gamma_{-1,30}(U)$	905.5 (3)	0.000000008 (3)			0.000000076 (25)
$\gamma_{-1,31}(U)$	911.7 (3)	0.000000014 (3)			0.000000014 (3)
$\gamma_{49,4}(U)$	918.7 (3)	0.000000009 (3)			0.000000088 (30)
$\gamma_{-1,32}(U)$	931.9 (3)	0.000000013 (4)			0.000000013 (4)
$\gamma_{50,3}(U)$	940.3 (3)	0.000000051 (5)	[E2]	0.01250 (25)	0.000000050 (5)
$\gamma_{48,2}(U)$	955.41 (2)	0.0000000321 (31)	M1+27(13)%E2	0.036 (4)	0.000000031 (3)
$\gamma_{49,2}(U)$	957.6 (3)	0.000000032 (3)			0.000000032 (3)
$\gamma_{48,1}(U)$	968.37 (2)	0.000000029 (5)	M1+27(20)%E2	0.035 (19)	0.000000028
$\gamma_{51,2}(U)$	979.7 (3)	0.000000029 (5)	[M1+E2]	0.026 (15)	0.000000028 (5)
$\gamma_{-1,33}(U)$	982.7 (3)	0.000000011 (3)			0.0000000107 (25)
$\gamma_{53,7}(U)$	986.90 (4)	0.000000021 (5)	E1	0.00383 (8)	0.000000021 (5)
$\gamma_{51,1}(U)$	992.64 (3)	0.000000027 (4)			0.000000027 (4)
$\gamma_{52,4}(U)$	1005.7 (3)	0.000000018 (3)			0.0000000177 (25)
$\gamma_{-1,34}(U)$	1009.4 (3)	0.000000014 (3)			0.0000000139 (25)
$\gamma_{52,0}(U)$	1057.3 (2)	0.000000045 (7)			0.000000045 (7)

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