$^{124}_{51}\mathrm{Sb}_{73}$

1 Decay Scheme

L'antimoine 124 se désintègre par émission bêta moins vers des niveaux excités du tellure 124.
Sb-124 disintegrates by beta minus emissions to excited levels in Te-124.

2 Nuclear Data

$T_{1/2}(^{124}\mathrm{Sb}\ )$: 60,208 (11) d
$Q^-(^{124}\mathrm{Sb}\ )$: 2904,3 (15) keV

2.1 β^- Transitions

	Energy keV	Probability × 100	Nature	lg ft
$\beta^-_{0,27}$	17,9 (15)	0,0059 (5)	Allowed	6,9
$\beta^-_{0,26}$	38,6 (15)	0,054 (9)	Allowed	6,9
$\beta^-_{0,25}$	89,7 (15)	0,0207 (12)		8,4
$\beta^-_{0,24}$	96,8 (15)	0,0012 (5)	1st Forbidden	9,8
$\beta^-_{0,23}$	129,2 (15)	0,653 (6)		7,5
$\beta^-_{0,22}$	193,3 (15)	0,106 (6)	1st Forbidden	8,8
$\beta^-_{0,21}$	202,7 (15)	0,571 (25)	Allowed	8
$\beta^-_{0,20}$	210,6 (15)	8,663 (27)	Allowed	7
$\beta^-_{0,19}$	221,8 (15)	0,0242 (22)	1st Forbidden	9,6
$\beta^-_{0,18}$	285,2 (15)	0,0098 (8)		10,4
$\beta^-_{0,17}$	354,6 (15)	0,0364 (22)		10
$\beta^-_{0,16}$	382,8 (15)	0,0529 (5)	1st Forbidden	10
$\beta^-_{0,15}$	392,3 (15)	0,0422 (19)	1st Forbidden	10,2
$\beta^-_{0,14}$	421,0 (15)	0,332 (10)	1st Forbidden	9,4
$\beta^-_{0,13}$	449,3 (15)	0,0050 (26)	1st Forbidden	11,3
$\beta^-_{0,11}$	580,9 (15)	0,0686 (14)	1st Forbidden	10,5
$\beta^-_{0,10}$	610,6 (15)	51,21 (19)	Allowed	7,7
$\beta^-_{0,9}$	679,5 (15)	0,0967 (34)	1st Forbidden	10,6

	Energy keV	Probability × 100	Nature	lg ft
$\beta^-_{0,8}$	721,9 (15)	0,47 (30)	1st Forbidden	10
$\beta^-_{0,7}$	812,6 (15)	0,688 (38)	1st Forbidden	10
$\beta^-_{0,6}$	865,0 (15)	4,143 (18)		9,4
$\beta^-_{0,5}$	946,4 (15)	2,295 (7)	1st Forbidden	9,8
$\beta^-_{0,4}$	1247,7 (15)	0,0053 (10)	3rd Forbidden	12,8
$\beta^-_{0,3}$	1578,8 (15)	4,815 (29)	1st Forbidden	10,3
$\beta^-_{0,2}$	1655,7 (15)	2,472 (33)	1st Forbidden	10,7
$\beta^-_{0,1}$	2301,6 (15)	23,44 (28)	1st Forbidden	10,3

2.2 Gamma Transitions and Internal Conversion Coefficients

	Energy keV	$P_{\gamma+ce}$ × 100	Multipolarity	α_K	α_L	α_M	α_T
$\gamma_{14,12}$(Te)	148,02 (5)	0,0037 (6)	E1+M2				
$\gamma_{(-1,1)}$(Te)	159,867 (35)	0,0049 (6)					
$\gamma_{14,10}$(Te)	189,565 (18)	0,0043 (5)					
$\gamma_{20,14}$(Te)	210,402 (19)	0,0053 (7)					
$\gamma_{10,6}$(Te)	254,424 (6)	0,0144 (9)	(E1)	0,01269 (18)	0,001575 (22)	0,000312 (5)	0,01465 (21)
$\gamma_{23,14}$(Te)	291,793 (25)	0,0069 (7)					
$\gamma_{10,5}$(Te)	335,797 (16)	0,073 (1)	E1	0,00612 (9)	0,000754 (11)	0,0001495 (21)	0,00706 (10)
$\gamma_{20,11}$(Te)	370,269 (30)	0,0286 (11)					
$\gamma_{20,10}$(Te)	399,967 (6)	0,1284 (31)	E2	0,01323 (19)	0,00196 (3)	0,000394 (6)	0,01566 (22)
$\gamma_{14,6}$(Te)	443,989 (18)	0,197 (16)	M1+26%E2	0,01092 (16)	0,001360 (19)	0,000271 (4)	0,01261 (18)
$\gamma_{20,9}$(Te)	468,840 (25)	0,0460 (26)	E1	0,00268 (4)	0,000327 (5)	0,0000648 (9)	0,00309 (5)
$\gamma_{23,10}$(Te)	481,36 (2)	0,0232 (31)					
$\gamma_{14,5}$(Te)	525,362 (24)	0,1462 (35)	M1+50%E2	0,0066 (3)	0,000867 (18)	0,000173 (4)	0,0077 (3)
$\gamma_{26,12}$(Te)	530,46 (7)	0,036 (9)					
$\gamma_{26,10}$(Te)	572,01 (5)	0,0176 (8)					
$\gamma_{1,0}$(Te)	602,7278 (21)	98,254 (21)	E2	0,00420 (6)	0,000566 (8)	0,0001132 (16)	0,00490 (7)
$\gamma_{5,3}$(Te)	632,403 (16)	0,1029 (21)					
$\gamma_{2,1}$(Te)	645,8542 (37)	7,452 (15)	E2+0,004%M3	0,00351 (5)	0,000468 (7)	0,0000935 (14)	0,00409 (6)
$\gamma_{21,6}$(Te)	662,334 (10)	0,024 (11)					
$\gamma_{5,2}$(Te)	709,333 (16)	1,368 (5)	M1+3%E2	0,00349 (5)	0,000429 (7)	0,0000853 (13)	0,00402 (6)
$\gamma_{6,3}$(Te)	713,776 (5)	2,281 (7)	M1+50%E2	0,0031 (4)	0,00039 (4)	0,000078 (7)	0,0036 (4)
$\gamma_{3,1}$(Te)	722,7842 (37)	10,742 (22)	M1+92%E2	0,00271 (4)	0,000352 (5)	0,0000702 (10)	0,00314 (5)
$\gamma_{23,6}$(Te)	735,782 (17)	0,1312 (16)					
$\gamma_{7,3}$(Te)	766,168 (21)	0,0105 (9)	E0,M1	0,019 (6)			0,021 (7)
$\gamma_{25,6}$(Te)	775,27 (7)	0,0098 (4)					
$\gamma_{6,2}$(Te)	790,706 (5)	0,7433 (24)	E2	0,00214 (6)	0,000276 (8)	0,000055 (2)	0,00248 (8)
$\gamma_{23,5}$(Te)	817,155 (23)	0,0744 (12)					
$\gamma_{8,3}$(Te)	856,878 (30)	0,0227 (5)					
$\gamma_{9,3}$(Te)	899,327 (25)	0,0179 (7)					
$\gamma_{10,3}$(Te)	968,200 (5)	1,888 (10)	E1+4%M2	0,000569 (9)	0,0000678 (11)	0,00001343 (22)	0,000653 (11)
$\gamma_{9,2}$(Te)	976,257 (25)	0,0832 (7)					
$\gamma_{(-1,2)}$(Te)	997,80 (3)	0,0033 (23)					
$\gamma_{10,2}$(Te)	1045,130 (5)	1,853 (14)	E1+0,09%M2	0,000494 (9)	0,0000587 (11)	0,00001163 (21)	0,000567 (10)
$\gamma_{4,1}$(Te)	1053,87 (30)	0,0053 (10)	E2	0,001117 (16)	0,0001394 (20)	0,0000277 (4)	0,001290 (18)
$\gamma_{12,2}$(Te)	1086,68 (5)	0,0367 (9)	E1	0,000457 (7)	0,0000543 (8)	0,00001074 (15)	0,000524 (8)
$\gamma_{(-1,3)}$(Te)	1235 (1)	0,0073 (26)					
$\gamma_{15,2}$(Te)	1263,46 (7)	0,0422 (19)					
$\gamma_{17,2}$(Te)	1301,15 (9)	0,0364 (22)					
$\gamma_{3,0}$(Te)	1325,512 (3)	1,588 (7)	E2	0,000693 (10)	0,0000848 (12)	0,00001685 (24)	0,000827 (12)
$\gamma_{5,1}$(Te)	1355,187 (16)	1,0423 (38)	E2+9,3%M3	0,0009 (5)	0,00011 (6)	0,000023 (11)	0,0011 (5)

	Energy keV	$P_{\gamma+ce}$ × 100	Multipolarity	α_K	α_L	α_M	α_T
$\gamma_{20,3}$(Te)	1368,167 (6)	2,621 (8)	E1+0,04%M2	0,000303 (5)	0,0000358 (6)	0,00000709 (10)	0,000478 (7)
$\gamma_{21,3}$(Te)	1376,110 (9)	0,5001 (43)	E1+0,01%M2	0,000300 (5)	0,0000354 (6)	0,00000701 (12)	0,000479 (7)
$\gamma_{22,3}$(Te)	1385,500 (21)	0,062 (6)					
$\gamma_{6,1}$(Te)	1436,5602 (45)	1,235 (8)	M1+69%E2	0,00063 (5)	0,000076 (6)	0,0000151 (11)	0,00078 (5)
$\gamma_{20,2}$(Te)	1445,097 (6)	0,334 (7)	E1+M2	0,00029 (4)	0,000034 (4)	0,0000067 (8)	0,00052 (4)
$\gamma_{7,1}$(Te)	1488,952 (21)	0,6776 (37)	M1+1%E2	0,000659 (14)	0,0000792 (16)	0,0000157 (3)	0,000829 (16)
$\gamma_{23,2}$(Te)	1526,488 (17)	0,414 (5)	E1	0,000252 (4)	0,0000296 (5)	0,00000586 (9)	0,000535 (8)
$\gamma_{25,2}$(Te)	1565,98 (7)	0,0109 (12)					
$\gamma_{8,1}$(Te)	1579,662 (30)	0,412 (5)	M1+E2	0,00054 (5)	0,000065 (6)	0,0000128 (11)	0,00072 (5)
$\gamma_{9,1}$(Te)	1622,111 (25)	0,0416 (19)	E2	0,000467 (7)	0,0000564 (8)	0,00001118 (16)	0,000664 (10)
$\gamma_{4,0}$(Te)	1656,6 (3)		E0				
$\gamma_{10,1}$(Te)	1690,9842 (45)	47,49 (19)	E1+0,01%M2	0,000213 (4)	0,0000250 (4)	0,00000494 (8)	0,000615 (9)
$\gamma_{11,1}$(Te)	1720,682 (30)	0,0947 (6)	M1+E2	0,00045 (4)	0,000054 (4)	0,0000107 (8)	0,00068 (4)
$\gamma_{13,1}$(Te)	1852,23 (7)	0,0030 (9)	M1+E2	0,00039 (3)	0,000047 (4)	0,0000093 (7)	0,00067 (3)
$\gamma_{16,1}$(Te)	1918,75 (6)	0,0529 (5)	M1(+E2)	0,000364 (24)	0,000043 (3)	0,0000086 (6)	0,00067 (3)
$\gamma_{18,1}$(Te)	2016,36 (6)	0,0098 (8)					
$\gamma_{6,0}$(Te)	2039,288 (4)	0,0631 (5)	E2	0,000305 (5)	0,0000364 (5)	0,00000721 (10)	0,000667 (10)
$\gamma_{19,1}$(Te)	2079,77 (13)	0,0224 (22)	M1+E2	0,000311 (18)	0,0000371 (21)	0,0000073 (4)	0,000691 (20)
$\gamma_{20,1}$(Te)	2090,951 (5)	5,498 (24)	E1+0,1%M2	0,0001522 (23)	0,0000178 (3)	0,00000352 (6)	0,000838 (12)
$\gamma_{21,1}$(Te)	2098,894 (9)	0,0471 (33)					
$\gamma_{22,1}$(Te)	2108,284 (21)	0,0444 (23)					
$\gamma_{23,1}$(Te)	2172,342 (17)	0,0029 (16)					
$\gamma_{8,0}$(Te)	2182,39 (3)	0,04147 (31)					
$\gamma_{27,1}$(Te)	2283,64 (6)	0,0059 (5)	E1+M2	0,00033 (21)	0,000040 (25)	0,000008 (5)	0,00091 (5)
$\gamma_{10,0}$(Te)	2293,712 (4)	0,0327 (41)					
$\gamma_{11,0}$(Te)	2323,41 (3)	0,0025 (6)					
$\gamma_{13,0}$(Te)	2454,96 (7)	0,00160 (12)	E2	0,000219 (3)	0,0000259 (4)	0,00000513 (8)	0,000768 (11)
$\gamma_{19,0}$(Te)	2682,50 (15)	0,00176 (6)					
$\gamma_{20,0}$(Te)	2693,679 (10)	0,0032 (14)					
$\gamma_{24,0}$(Te)	2807,55 (24)	0,0012 (5)	E2	0,0001730 (25)	0,0000204 (3)	0,00000404 (6)	0,000878 (13)

3 Atomic Data

3.1 Te

ω_K : 0,875 (4)
$\bar{\omega}_L$: 0,0862 (35)
n_{KL} : 0,917 (4)

3.1.1 X Radiations

		Energy keV		Relative probability
X_K				
	$K\alpha_2$	27,202		53,7
	$K\alpha_1$	27,4726		100
	$K\beta_3$	30,9446	}	
	$K\beta_1$	30,996	}	
	$K\beta_5''$	31,236	}	28,6

		Energy keV		Relative probability
	$K\beta_2$	31,7008	}	
	$K\beta_4$	31,774	}	6,2
	$KO_{2,3}$	31,812	}	
X_L				
	$L\ell$	3,3348		
	$L\alpha$	3,7595 – 3,7697		
	$L\eta$	3,6052		
	$L\beta$	4,0299 – 4,3661		
	$L\gamma$	4,4448 – 4,8228		

3.1.2 Auger Electrons

	Energy keV	Relative probability
Auger K		
KLL	21,804 – 22,989	100
KLX	25,814 – 27,470	45,3
KXY	29,80 – 31,81	5,13
Auger L	2,3 – 4,9	

4 Electron Emissions

		Energy keV		Electrons per 100 disint.
e_{AL}	(Te)	2,3 - 4,9		0,4829 (26)
e_{AK}	(Te)			0,0628 (22)
	KLL	21,804 - 22,989	}	
	KLX	25,814 - 27,470	}	
	KXY	29,80 - 31,81	}	
$ec_{1,0\ K}$	(Te)	570,9140 (21)		0,411 (6)
$ec_{1,0\ L}$	(Te)	597,7886 - 598,3864		0,0553 (8)
$ec_{1,0\ M}$	(Te)	601,7220 - 602,1557		0,01107 (16)
$ec_{2,1\ K}$	(Te)	614,0404 (37)		0,02605 (37)
$ec_{3,1\ K}$	(Te)	690,9704 (37)		0,02902 (43)
$ec_{10,1\ K}$	(Te)	1659,1704 (45)		0,01011 (19)

		Energy keV		Electrons per 100 disint.
$\beta^-_{0,27}$	max:	17,9	(15)	0,0059 (5)
$\beta^-_{0,27}$	avg:	4,5	(4)	
$\beta^-_{0,26}$	max:	38,6	(15)	0,054 (9)
$\beta^-_{0,26}$	avg:	9,8	(4)	
$\beta^-_{0,25}$	max:	89,7	(15)	0,0207 (12)
$\beta^-_{0,25}$	avg:	23,4	(4)	
$\beta^-_{0,24}$	max:	96,8	(15)	0,0012 (5)
$\beta^-_{0,24}$	avg:	25,3	(4)	
$\beta^-_{0,23}$	max:	129,2	(15)	0,653 (6)
$\beta^-_{0,23}$	avg:	34,4	(4)	
$\beta^-_{0,22}$	max:	193,3	(15)	0,106 (6)
$\beta^-_{0,22}$	avg:	52,9	(5)	
$\beta^-_{0,21}$	max:	202,7	(15)	0,571 (25)
$\beta^-_{0,21}$	avg:	55,7	(5)	
$\beta^-_{0,20}$	max:	210,6	(15)	8,663 (27)
$\beta^-_{0,20}$	avg:	58,0	(5)	
$\beta^-_{0,19}$	max:	221,8	(15)	0,0242 (22)
$\beta^-_{0,19}$	avg:	61,5	(5)	
$\beta^-_{0,18}$	max:	285,2	(15)	0,0098 (8)
$\beta^-_{0,18}$	avg:	81,0	(5)	
$\beta^-_{0,17}$	max:	354,6	(15)	0,0364 (22)
$\beta^-_{0,17}$	avg:	103,6	(5)	
$\beta^-_{0,16}$	max:	382,8	(15)	0,0529 (5)
$\beta^-_{0,16}$	avg:	113,0	(5)	
$\beta^-_{0,15}$	max:	392,3	(15)	0,0422 (19)
$\beta^-_{0,15}$	avg:	116,0	(5)	
$\beta^-_{0,14}$	max:	421,0	(15)	0,332 (10)
$\beta^-_{0,14}$	avg:	126,0	(5)	
$\beta^-_{0,13}$	max:	449,3	(15)	0,0050 (26)
$\beta^-_{0,13}$	avg:	135,8	(6)	
$\beta^-_{0,11}$	max:	580,9	(15)	0,0686 (14)
$\beta^-_{0,11}$	avg:	182,8	(6)	
$\beta^-_{0,10}$	max:	610,6	(15)	51,21 (19)
$\beta^-_{0,10}$	avg:	193,8	(6)	
$\beta^-_{0,9}$	max:	679,5	(15)	0,0967 (34)
$\beta^-_{0,9}$	avg:	219,5	(6)	
$\beta^-_{0,8}$	max:	721,9	(15)	0,47 (30)
$\beta^-_{0,8}$	avg:	236,0	(6)	
$\beta^-_{0,7}$	max:	812,6	(15)	0,688 (38)
$\beta^-_{0,7}$	avg:	271,0	(6)	
$\beta^-_{0,6}$	max:	865,0	(15)	4,143 (18)
$\beta^-_{0,6}$	avg:	292	(1)	

		Energy keV		Electrons per 100 disint.
$\beta^-_{0,5}$	max:	946,4	(15)	2,295 (7)
$\beta^-_{0,5}$	avg:	324	(1)	
$\beta^-_{0,4}$	max:	1247,7	(15)	0,0053 (10)
$\beta^-_{0,4}$	avg:	450	(1)	
$\beta^-_{0,3}$	max:	1578,8	(15)	4,815 (29)
$\beta^-_{0,3}$	avg:	593	(1)	
$\beta^-_{0,2}$	max:	1655,7	(15)	2,472 (33)
$\beta^-_{0,2}$	avg:	627	(1)	
$\beta^-_{0,1}$	max:	2301,6	(15)	23,44 (28)
$\beta^-_{0,1}$	avg:	918	(1)	

5 Photon Emissions

5.1 X-Ray Emissions

		Energy keV		Photons per 100 disint.	
XL	(Te)	3,3348 — 4,8228		0,0449 (9)	
XKα_2	(Te)	27,202		0,1252 (18)	} Kα
XKα_1	(Te)	27,4726		0,233 (3)	}
XKβ_3	(Te)	30,9446	}		
XKβ_1	(Te)	30,996	}	0,0667 (12)	K$'\beta_1$
XKβ''_5	(Te)	31,236	}		
XKβ_2	(Te)	31,7008	}		
XKβ_4	(Te)	31,774	}	0,0145 (5)	K$'\beta_2$
XKO$_{2,3}$	(Te)	31,812	}		

5.2 Gamma Emissions

	Energy keV	Photons per 100 disint.
$\gamma_{14,12}$(Te)	148,02 (5)	0,0037 (6)
$\gamma_{(-1,1)}$(Te)	159,867 (35)	0,0049 (6)
$\gamma_{14,10}$(Te)	189,57 (2)	0,0043 (5)
$\gamma_{20,14}$(Te)	210,40 (2)	0,0053 (7)
$\gamma_{10,6}$(Te)	254,42 (1)	0,0142 (9)
$\gamma_{23,14}$(Te)	291,79 (3)	0,0069 (7)

	Energy keV	Photons per 100 disint.
$\gamma_{10,5}$(Te)	335,80 (2)	0,0725 (9)
$\gamma_{20,11}$(Te)	370,27 (3)	0,0286 (11)
$\gamma_{20,10}$(Te)	399,97 (1)	0,1264 (31)
$\gamma_{14,6}$(Te)	444,00 (2)	0,195 (16)
$\gamma_{20,9}$(Te)	468,84 (3)	0,0459 (26)
$\gamma_{23,10}$(Te)	481,36 (2)	0,0232 (31)
$\gamma_{14,5}$(Te)	525,36 (3)	0,1451 (35)
$\gamma_{26,12}$(Te)	530,46 (7)	0,036 (9)
$\gamma_{26,10}$(Te)	572,01 (5)	0,0176 (8)
$\gamma_{1,0}$(Te)	602,7260 (23)	97,775 (20)
$\gamma_{5,3}$(Te)	632,40 (2)	0,1029 (21)
$\gamma_{2,1}$(Te)	645,8520 (19)	7,422 (15)
$\gamma_{21,6}$(Te)	662,33 (1)	0,024 (11)
$\gamma_{5,2}$(Te)	709,33 (2)	1,363 (5)
$\gamma_{6,3}$(Te)	713,776 (4)	2,273 (7)
$\gamma_{3,1}$(Te)	722,782 (3)	10,708 (22)
$\gamma_{23,6}$(Te)	735,78 (2)	0,1312 (16)
$\gamma_{7,3}$(Te)	766,17 (2)	0,0103 (9)
$\gamma_{25,6}$(Te)	775,27 (7)	0,0098 (4)
$\gamma_{6,2}$(Te)	790,706 (7)	0,7415 (24)
$\gamma_{23,5}$(Te)	817,15 (3)	0,0744 (12)
$\gamma_{8,3}$(Te)	856,87 (3)	0,0227 (5)
$\gamma_{9,3}$(Te)	899,32 (3)	0,0179 (7)
$\gamma_{10,3}$(Te)	968,195 (4)	1,887 (10)
$\gamma_{9,2}$(Te)	976,25 (3)	0,0832 (7)
$\gamma_{(-1,2)}$(Te)	997,8 (3)	0,0033 (23)
$\gamma_{10,2}$(Te)	1045,125 (4)	1,852 (14)
$\gamma_{4,1}$(Te)	1053,9 (3)	0,0053 (10)
$\gamma_{12,2}$(Te)	1086,67 (5)	0,0367 (9)
$\gamma_{(-1,3)}$(Te)	1235 (1)	0,0073 (26)
$\gamma_{15,2}$(Te)	1263,45 (7)	0,0422 (19)
$\gamma_{17,2}$(Te)	1301,14 (9)	0,0364 (22)
$\gamma_{3,0}$(Te)	1325,504 (4)	1,587 (7)
$\gamma_{5,1}$(Te)	1355,20 (2)	1,0412 (38)
$\gamma_{20,3}$(Te)	1368,157 (5)	2,620 (8)
$\gamma_{21,3}$(Te)	1376,10 (1)	0,4999 (43)
$\gamma_{22,3}$(Te)	1385,49 (2)	0,062 (6)
$\gamma_{6,1}$(Te)	1436,554 (7)	1,234 (8)
$\gamma_{20,2}$(Te)	1445,09 (1)	0,334 (7)
$\gamma_{7,1}$(Te)	1488,94 (2)	0,6770 (37)
$\gamma_{23,2}$(Te)	1526,48 (2)	0,414 (5)
$\gamma_{25,2}$(Te)	1565,97 (7)	0,0109 (12)
$\gamma_{8,1}$(Te)	1579,65 (3)	0,412 (5)
$\gamma_{9,1}$(Te)	1622,10 (3)	0,0416 (19)
$\gamma_{10,1}$(Te)	1690,971 (4)	47,46 (19)
$\gamma_{11,1}$(Te)	1720,67 (3)	0,0946 (6)
$\gamma_{13,1}$(Te)	1852,22 (7)	0,0030 (9)

	Energy keV	Photons per 100 disint.
$\gamma_{16,1}$(Te)	1918,74 (6)	0,0529 (5)
$\gamma_{18,1}$(Te)	2016,34 (6)	0,0098 (8)
$\gamma_{6,0}$(Te)	2039,27 (1)	0,0631 (5)
$\gamma_{19,1}$(Te)	2079,75 (13)	0,0224 (22)
$\gamma_{20,1}$(Te)	2090,930 (7)	5,493 (24)
$\gamma_{21,1}$(Te)	2098,88 (1)	0,0471 (33)
$\gamma_{22,1}$(Te)	2108,27 (2)	0,0444 (23)
$\gamma_{23,1}$(Te)	2172,32 (2)	0,0029 (16)
$\gamma_{8,0}$(Te)	2182,37 (3)	0,04147 (31)
$\gamma_{27,1}$(Te)	2283,62 (6)	0,0059 (5)
$\gamma_{10,0}$(Te)	2293,69 (1)	0,0327 (41)
$\gamma_{11,0}$(Te)	2323,39 (3)	0,0025 (6)
$\gamma_{13,0}$(Te)	2454,93 (7)	0,00160 (12)
$\gamma_{19,0}$(Te)	2682,47 (13)	0,00176 (6)
$\gamma_{20,0}$(Te)	2693,65 (1)	0,0032 (14)
$\gamma_{24,0}$(Te)	2807,52 (24)	0,0012 (5)

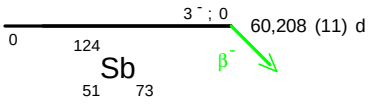
6 Main Production Modes

$\left\{ \begin{array}{l} Sb-123(n,\gamma)Sb-124 \qquad \sigma : 3{,}88\ (12) \text{ barns} \\ \text{Possible impurities : } Sb-122 \end{array} \right.$

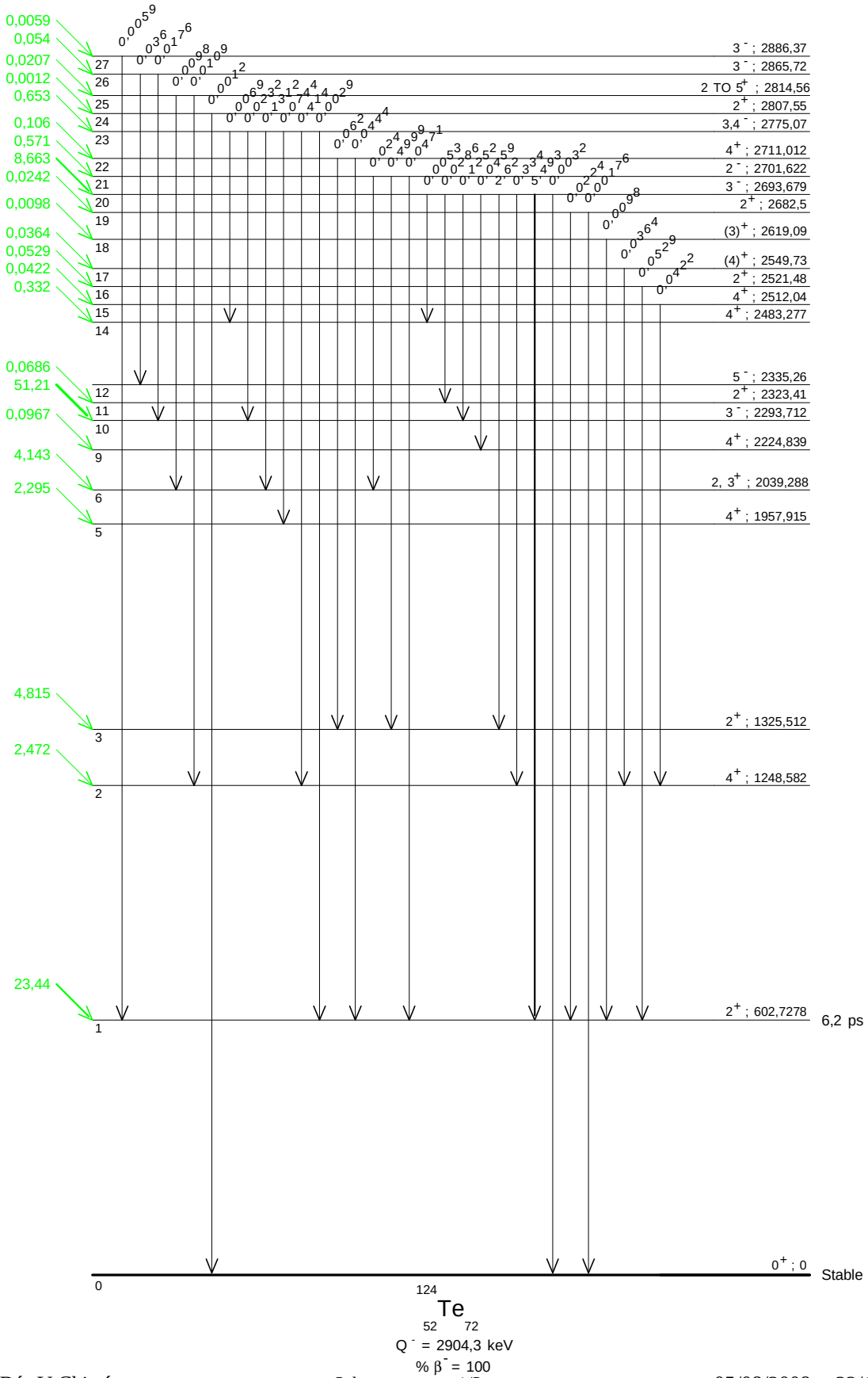
7 References

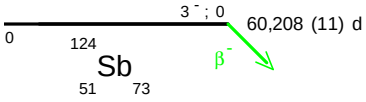
- L.M. LANGER, N.H.Lazar, R.J.D.Moffat. Phys. Rev. 91 (1953) 338
  (Beta emission probabilities)
- J.Moreau. Comp. Rend. Acad. Sci. (Paris) 239 (1954) 800
  (Beta emission probabilities)
- T.Azuma. J. Phys. Soc. Jpn 10 (1955) 167
  (Beta emission probabilities)
- A.V.Zolotavin, E.P.Grigoriev, M.A.Abrovian. Izvest.Akad.Nauk SSSR, Ser.Fiz. 20 (1956) 289
  (Columbia Tech.Transl. 20, 271 (1957))
- R.L.Macklin. Nucl. Instrum. Methods 1 (1957) 335
  (Half-life)
- A.V.Zolotavin, E.P.Grigoriev, M.A.Abrovian. Izvest.Akad.Nauk SSSR, Ser.Fiz. 20, 289 (1956) ; Columbia Tech.Transl. 20 (1957) 271
  (Beta emission probabilities)
- C.H.Johnson, A.Galonsky, J.P.Ulrich. Phys. Rev. 109 (1958) 1243
  (Half-life)
- J.P.Cali, L.F.Lowe. Nucleonics 17, 10 (1959) 86
  (Half-life)
- S.T.HSUE, L.M.Langer, S.M.Tang, D.A.Zollman. Nucl. Phys. 73 (1965) 379
  (Beta emission probabilities)
- D.M.FLEMING, I.T. MYERS. Int. J. Appl. Radiat. Isotop. 17 (1966) 251
  (Half-life)
- P.H. Stelson. Phys. Rev. 157 (1967) 1098
  (ICC)
- E.P.GRIGORIEV, A.V. ZOLOTAVIN, V.O. SERGEEV, M.I. SOVTSOV. Izv. Akad. Nauk SSSR. Ser. Fiz. 32 (1968) 733
  (K-Conv. Elec. emission probabilities)
- S.A.Reynolds, J.F.Emery, E.I.Wyatt. Nucl. Sci. Eng. 32 (1968) 46
  (Half-life)

- E.P.GRIGORIEV, A.V. ZOLOTAVIN, V.O. SERGEEV, M.I. SOVTSOV. Bull. Ac. Sci. USSR. Phys. Ser. 32 (1968) 711
  (K-Conv. Elec. emission probabilities)
- R.C.RAGAINI, W.B. WALTERS, R.A. MEYER. Phys. Rev. 187 (1969) 1721
  (K ICC Mixing Ratio)
- R.A. MEYER, W.B. WALTERS, R.C. RAGAINL. Nucl. Phys. A127 (1969) 595
  (Gamma-ray emission probabilities Spin and Parity Gamma-ray energies)
- J.R.SITES, W.A. STEYERT. Nucl. Phys. A156 (1970) 19
  (Mixing Ratio)
- Z.W.Grabowski, K.S.Krane, R.M.Steffen. Phys. Rev. C3 (1971) 1649
  (Mixing Ratio)
- K.R.Baker, J.H.Hamilton, A.V.Ramayya, G.Highland. Nucl. Phys. A186 (1972) 493
  (Mixing Ratio)
- R.L.HEATH. Report ANCR-1000-2 (1974)
  (Gamma-ray energies Gamma-ray emission probabilities)
- J.R.JOHNSON, K.C. MANN. Can. J. Phys. 52 (1974) 406
  (Gamma-ray emission probabilities K-Conv. Elec. emission probabilities)
- A.K.SHARMA, R.KAUR, H.R. VERNA, K.K. SURI, P.N. TREHAN. J. Phys. Soc. Jap. 46 (1979) 1057
  (Gamma-ray emission probabilities)
- S.J.Robinson, W.D.Hamilton, D.M.Snelling. J. Phys. (London) G9 (1983) 921
  (Mixing ratio)
- Y.IWATA, M.YASUHARA, K.MAEDA, Y.YOSHIZAWA. Nucl. Instrum. Methods 219 (1984) 123
  (Gamma-ray emission probabilities)
- You Jianming, Liu Yunzuo, Hu Dailing. Z. Physik A331 (1988) 391
  (Gamma-ray emission probabilities)
- R.A. Meyer. Fizika (Zagreb) 22 (1990) 153
  (Gamma-ray emission probabilities)
- S.Subrahmanyeswara Rao, K.Bhaskara Rao, V.Seshagiri Rao, H.C.Padhi. Nuovo Cim. 103A (1990) 803
  (ICC)
- J.Goswamy, B.Chand, D.Mehta, N.Singh, P.N.Treha. Appl. Rad. Isotopes 44 (1993) 541
  (Gamma-ray emission probabilities)
- E. Schönfeld, H. Janssen. Nucl. Instrum. Meth. Phys. Res. A369 (1996) 527
  (Atomic data)
- I.A.Kharitonov, T.E.Sazonova, S.V.Sepman, T.I.Shilnikova, A.V.Zanevsky. Appl. Rad. Isotopes 52 (2000) 415
  (Half-life)
- R.G. Helmer, C. van der Leun. Nucl. Instrum. Methods Phys. Res. A450 (2000) 35
  (Gamma energy)
- C.Doll, H.Lehmann, H.G.Borner, T.von Egidy. Nucl. Phys. A672 (2000) 3
  (Nuclear structure)
- I.M.Band, M.B.Trzhaskovskaya. At. Data. Nucl. Data Tables 88,1 (2002)
  (Theoretical ICC)
- G. Audi, A.H.Wapstra, C. Thibault. Nucl. Phys. A729 (2003) 337-676
  (Q value)
- A.Patil, D.Santhosh, K.V.Sai, M.Sainath, K.Venkataramaniah. Appl. Rad. Isotopes 64 (2006) 693
  (Gamma-ray emission probabilities)
- T.Kibédi, T.W.Burrows, M.B.Trzhaskovskaya, P.M.Davidson, C.W.Nestor, Jr.. Nucl. Instrum. Methods Phys. Res. A589 (2008) 202
  (ICC)

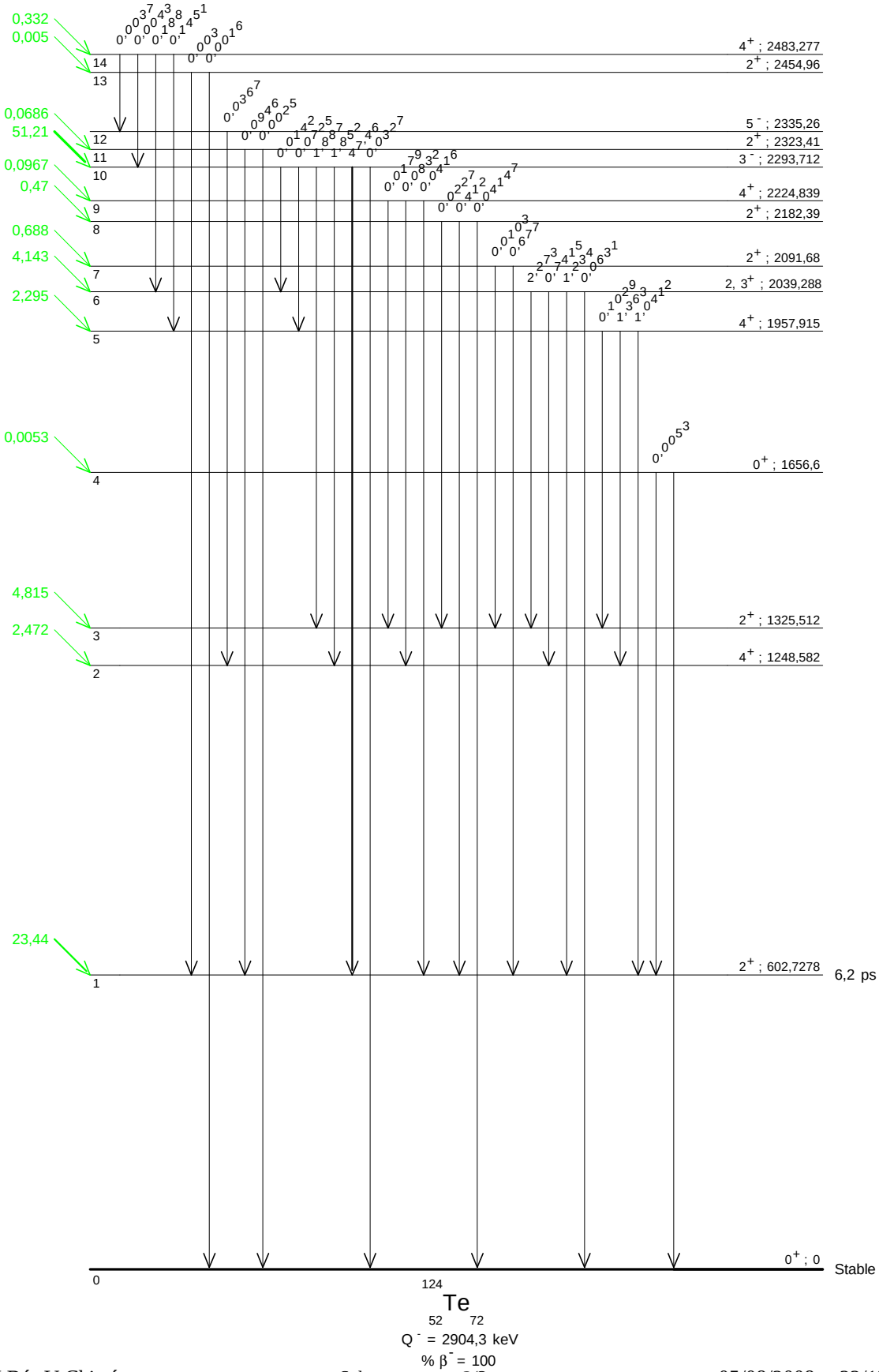


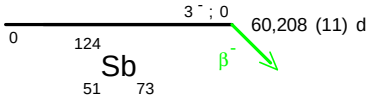
γ Emission intensities per 100 disintegrations



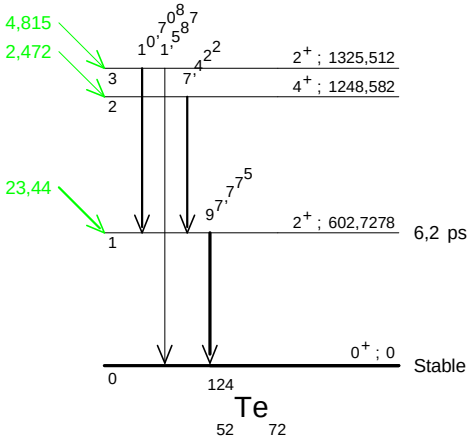


γ Emission intensities per 100 disintegrations





γ Emission intensities
per 100 disintegrations



Q - = 2904,3 keV

% β- = 100