

$^{95}\text{Rb } \beta^- \text{ decay }$     **1992KrZZ,1983Kr11**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111, 2555 (2010)	30-Jun-2009

Parent:  $^{95}\text{Rb}$ : E=0.0;  $J^\pi=5/2^-$ ;  $T_{1/2}=377.7$  ms 8;  $Q(\beta^-)=9284$  21; % $\beta^-$  decay=100.0

[1982Pa24](#) measured  $\beta\gamma$ -coincidences; scin, Ge(Li).

[1992KrZZ](#),[1983Kr11](#) measured  $\gamma$ 's,  $\gamma(t)$ , and  $\gamma\gamma$ -coin (Ge(Li)), ce's (Si(Li)),  $\gamma$ ce-coin (Ge(Li),Si(Li)), and  $\beta$ ce-coin (scin,Si(Li)) using ISOL-system OSTIS at Grenoble. See also  $^{95}\text{Rb } \beta^-$ n decay.

The decay scheme is from [1992KrZZ](#) and [1983Kr11](#), except as noted. Coincidences shown on the drawing are from [1982Pa24](#).

Others: [1992PrZY](#), [1982DaZY](#), [1980De02](#), [1975Gu03](#), and [1975Ba36](#).

$\alpha$ : [Additional information 1](#).

 $^{95}\text{Sr Levels}$ 

E(level)	$J^\pi \dagger$	$T_{1/2} \ddagger$	Comments
0.0	$1/2^+$		
352.01 6	$(3/2)^+$	23.90 s 14	
556.06 8	$(7/2)^+$	21.9 ns 5	$T_{1/2} \leq 20.9$ ns 5; upper limit from $\beta$ -352 $\gamma(t)$ .
680.70 6	$3/2^+, 5/2^+$		
1003.70 10	$1/2^+, 3/2, 5/2$		
1012.25 8	$1/2^+, 3/2^+, 5/2^+$		
1121.01 10	$3/2^+$ to $7/2^+$		
1238.91 14	$(9/2^+)$		
1247.24 25	$1/2, 3/2, 5/2$		
1259.65 8	$1/2^+, 3/2, 5/2$		
1439.29 10	$1/2^+, 3/2, 5/2$		
1743.52 11			
1750.86 14	$1/2^+$ to $7/2$		
1843.72 11			
1860.45 16			
1864.17 16	$1/2^+$ to $7/2$		
1948.5 3			
1974.94 18	$1/2^+$ to $7/2$		
2013.33 21	$1/2^+, 3/2, 5/2$		
2076.5 3			
2098.91 16	$1/2^+, 3/2, 5/2$		
2236.0 3			
2246.89 18	$1/2^+, 3/2, 5/2$		
2264.61 19			
2368.2? 4			
2394.38 19			
2430.06 19			
2827.91 23			
2967.7 3	$3/2, 5/2, 7/2$		
2974.38 18	$3/2, 5/2, 7/2$		
3206.52 18	$3/2, 5/2, 7/2$		
3366.63 13	$3/2^-, 5/2^-, 7/2^-$		
3449.52 16	$3/2^-, 5/2^-, 7/2^-$		
3463.66 17	$3/2, 5/2$		
3479.09 12	$3/2^-, 5/2^-, 7/2^-$		
3532.40 20	$3/2$ to $7/2$		
3584.17 13	$3/2^-, 5/2^-, 7/2^-$		
3587.6 3	$3/2, 5/2$		
3591.34 19	$3/2$ to $7/2$		
3597.86 20	$3/2^-, 5/2^-, 7/2^-$		
3605.67 23	$3/2^-, 5/2^-$		
3612.33 14	$3/2^-, 5/2^-, 7/2^-$		

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**$^{95}\text{Rb } \beta^-$  decay    1992KrZZ,1983Kr11 (continued)** **$^{95}\text{Sr}$  Levels (continued)**

E(level)	$J\pi^\dagger$	E(level)	$J\pi^\dagger$	E(level)	$J\pi^\dagger$
3624.7 4	3/2,5/2,7/2	3986.3 4	3/2,5/2,7/2	4312.4 4	3/2,5/2,7/2
3635.62 13	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	4163.6 5	1/2 <sup>+</sup> ,3/2,5/2	$\approx 4.37 \times 10^3$	3/2 <sup>-</sup>
3708.64 24	3/2,5/2	4230.5 3	3/2,5/2	4570.7 7	1/2 <sup>+</sup> to 7/2
3712.1 4	3/2,5/2,7/2	4247.9 4	3/2,5/2,7/2	4661.3? 8	
3801.79 20	3/2 to 7/2	4278.5 6	1/2 <sup>+</sup> to 7/2		
3940.3 4	1/2 <sup>+</sup> ,3/2,5/2	4292.4 7	1/2 <sup>+</sup> ,3/2,5/2		

<sup>†</sup> From the Adopted Levels. See 1983Kr11 for other suggested spins and parities based on  $\beta$ -feedings, multipolarities, and cascading of  $\gamma$ -deexcitations. Although the log  $f\beta$ 's for transitions to states between 3.8 and 4.5 MeV suggest first-forbidden transitions, 1983Kr11 note that allowed is more probable since the strength of the underlying shell-model state has been fragmented over a large number of narrowly spaced negative-parity states.

<sup>‡</sup> From Adopted Levels.

 **$\beta^-$  radiations**

1985IaZZ measured  $\beta$ -,  $\gamma$  's;  $\Delta E/E$  telescope (HPGe,Si).

See 1983Kr11 and 1985IaZZ for the deduced  $\beta$ -strength function.

E(decay)	E(level)	$I\beta^- \dagger \ddagger @$	Log $f\beta^- \dagger$	Comments
(4623 & 21)	4661.3?	0.010 5	7.55 22	av $E\beta=2045$ 11
(4713 21)	4570.7	0.059 20	6.82 15	av $E\beta=2088$ 11
(4914 21)	$\approx 4370$	0.50# 6	$\approx 6.0$	
(4972 21)	4312.4	0.20 4	6.39 9	av $E\beta=2213$ 11
(4992 21)	4292.4	0.064 20	6.90 14	av $E\beta=2222$ 11
(5006 21)	4278.5	0.049 20	7.02 18	av $E\beta=2229$ 11
(5036 21)	4247.9	0.26 5	6.30 9	av $E\beta=2244$ 11
(5054 21)	4230.5	0.19 4	6.45 10	av $E\beta=2252$ 11
(5120 21)	4163.6	0.14 3	6.61 10	av $E\beta=2284$ 11
(5298 21)	3986.3	0.28 5	6.37 8	av $E\beta=2370$ 11
(5344 21)	3940.3	0.20 5	6.53 11	av $E\beta=2392$ 11
(5482 21)	3801.79	0.95 12	5.91 6	av $E\beta=2459$ 11
(5572 21)	3712.1	0.34 6	6.39 8	av $E\beta=2502$ 11
(5575 21)	3708.64	0.67 9	6.09 6	av $E\beta=2504$ 11
(5648 21)	3635.62	5.0 5	5.24 5	av $E\beta=2539$ 11
(5659 21)	3624.7	0.44 8	6.30 8	av $E\beta=2544$ 11
(5672 21)	3612.33	3.7 4	5.38 5	av $E\beta=2550$ 11
(5678 21)	3605.67	3.1 4	5.46 6	av $E\beta=2553$ 11
(5686 21)	3597.86	2.2 3	5.61 6	av $E\beta=2557$ 11
(5693 21)	3591.34	1.54 17	5.77 5	av $E\beta=2560$ 11
(5696 21)	3587.6	1.32 14	5.84 5	av $E\beta=2562$ 11
(5700 21)	3584.17	4.0 4	5.36 5	av $E\beta=2564$ 11
(5752 21)	3532.40	1.13 14	5.93 6	av $E\beta=2589$ 11
(5805 21)	3479.09	9.4 9	5.02 5	av $E\beta=2614$ 11
(5820 21)	3463.66	1.48 16	5.83 5	av $E\beta=2622$ 11
(5834 21)	3449.52	2.7 4	5.58 7	av $E\beta=2629$ 11
(5917 21)	3366.63	7.7 12	5.15 7	av $E\beta=2669$ 11
(6077 21)	3206.52	0.72 9	6.23 6	av $E\beta=2746$ 11
(6310 21)	2974.38	0.92 11	6.20 6	av $E\beta=2858$ 11
(6316 21)	2967.7	1.06 15	6.14 7	av $E\beta=2861$ 11
(6456 21)	2827.91	0.39 7	6.62 8	av $E\beta=2929$ 11

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**$^{95}\text{Rb } \beta^-$  decay    1992KrZZ,1983Kr11 (continued)** **$\beta^-$  radiations (continued)**

E(decay)	E(level)	$I\beta^-$ <sup>†‡@</sup>	Log $ft^\ddagger$	Comments
(6854 21)	2430.06	0.62 12	6.53 9	av $E\beta=3121$ 11
(6890 21)	2394.38	0.57 7	6.58 6	av $E\beta=3138$ 11
(6916& 21)	2368.2?	0.05 3	7.6 3	av $E\beta=3150$ 11
(7019 21)	2264.61	0.41 13	6.76 14	av $E\beta=3200$ 11
(7037 21)	2246.89	0.42 9	6.75 10	av $E\beta=3209$ 11
(7048 21)	2236.0	0.089 21	7.43 11	av $E\beta=3214$ 11
(7185 21)	2098.91	0.75 11	6.54 7	av $E\beta=3280$ 11
(7208 21)	2076.5	0.26 7	7.01 12	av $E\beta=3291$ 11
(7271 21)	2013.33	0.80 10	6.54 6	av $E\beta=3322$ 11
(7309 21)	1974.94	0.62 9	6.66 7	av $E\beta=3340$ 11
(7336 21)	1948.5	0.33 6	6.94 8	av $E\beta=3353$ 11
(7420 21)	1864.17	1.02 24	6.47 11	av $E\beta=3393$ 11
(7440 21)	1843.72	0.60 22	6.71 16	av $E\beta=3403$ 11
(7533 21)	1750.86	0.58 13	6.75 10	av $E\beta=3448$ 11
(7845& 21)	1439.29	0.6 5	6.8 4	av $E\beta=3598$ 11
(8024 21)	1259.65	2.3 12	6.28 23	av $E\beta=3685$ 11
(8163 21)	1121.01	2.5 6	6.27 11	av $E\beta=3752$ 11
(8272 21)	1012.25	1.8 5	6.44 12	av $E\beta=3804$ 11
(8280 21)	1003.70	0.74 24	6.83 14	av $E\beta=3808$ 11
8600 60	680.70	5.9 16	6.01 12	av $E\beta=3964$ 11
(8728 21)	556.06	6.0 12	6.03 9	av $E\beta=4024$ 11
(8932& 21)	352.01	$\leq 0.2$	$\geq 7.6$	av $E\beta=4122$ 11
(9284& 21)	0.0	$\leq 0.1$	$\geq 10.2^{1u}$	av $E\beta=4291$ 11

<sup>†</sup> Calculated by the evaluator from intensity balancing at state, except as noted.

<sup>‡</sup>  $I\beta$  and log  $ft$  values derived by the evaluator differ somewhat from those suggested by 1983Kr11; primarily due to the adoption of % $I\gamma(352\gamma)=49$  3 instead of 57% 4. Since there are 56 unplaced  $\gamma$ 's therefore the log  $ft$  values are highly tentative.

# From neutron feeding to  $^{94}\text{Sr}$  g.s.

@ Absolute intensity per 100 decays.

& Existence of this branch is questionable.

$\gamma(^{95}\text{Sr})$ I $\gamma$  normalization: From %I $\gamma$ (352 $\gamma$ )=49 3 and I $\gamma$ (352 $\gamma$ )=100.

Other: 1979Bo26.

E $\gamma$ <sup>†</sup>	I $\gamma$ <sup>†#</sup>	E $_i$ (level)	J $^\pi_i$	E $_f$	J $^\pi_f$	Mult. <sup>‡</sup>	$\alpha$	Comments
124.6 & 2	0.49 10	680.70	3/2 $^+$ ,5/2 $^+$	556.06	(7/2) $^+$	[E2]	0.454	$\alpha(\text{K})=0.387\ 6$ ; $\alpha(\text{L})=0.0567\ 9$ ; $\alpha(\text{M})=0.00955\ 15$ ; $\alpha(\text{N})=0.001119\ 18$ ; $\alpha(\text{O})=5.06\times 10^{-5}\ 8$ $\alpha(\text{N+..})=0.001170\ 18$ Mult.: [E2] from $\alpha(\text{K})$ exp. $\alpha(\text{K})_{\text{exp}}=6.7\times 10^{-2}\ 4$
204.0 1	30.8 15	556.06	(7/2) $^+$	352.01	(3/2) $^+$	E2	0.0752	$\alpha(\text{K})=0.0653\ 10$ ; $\alpha(\text{L})=0.00831\ 12$ ; $\alpha(\text{M})=0.001396\ 20$ ; $\alpha(\text{N})=0.0001682\ 24$ $\alpha(\text{O})=8.98\times 10^{-6}\ 13$ ; $\alpha(\text{N+..})=0.000177\ 3$ Mult.: E2 from $\alpha(\text{K})$ exp.
256.0 2	0.20 4	1259.65	1/2 $^+$ ,3/2,5/2	1003.70	1/2 $^+$ ,3/2,5/2	[M1,E2]	0.023 10	$\alpha(\text{K})=0.021\ 9$ ; $\alpha(\text{L})=0.0024\ 12$ ; $\alpha(\text{M})=0.00041\ 19$ ; $\alpha(\text{N})=5.0\times 10^{-5}\ 23$ ; $\alpha(\text{O})=2.9\times 10^{-6}\ 12$ $\alpha(\text{N+..})=5.3\times 10^{-5}\ 24$ Mult.: E2 from $\alpha(\text{K})$ exp.
328.7 1	19.0 12	680.70	3/2 $^+$ ,5/2 $^+$	352.01	(3/2) $^+$	M1	0.00718 10	$\alpha(\text{K})_{\text{exp}}=5.4\times 10^{-3}\ 10$ $\alpha(\text{K})=0.00634\ 9$ ; $\alpha(\text{L})=0.000701\ 10$ ; $\alpha(\text{M})=0.0001178\ 17$ ; $\alpha(\text{N})=1.479\times 10^{-5}\ 21$ $\alpha(\text{O})=9.60\times 10^{-7}\ 14$ ; $\alpha(\text{N+..})=1.575\times 10^{-5}$ Mult.: M1 from $\alpha(\text{K})$ exp.
331.6 2	3.2 4	1012.25	1/2 $^+$ ,3/2 $^+$ ,5/2 $^+$	680.70	3/2 $^+$ ,5/2 $^+$	[M1,E2]	0.010 4	$\alpha(\text{K})=0.009\ 3$ ; $\alpha(\text{L})=0.0011\ 4$ ; $\alpha(\text{M})=0.00018\ 7$ ; $\alpha(\text{N})=2.2\times 10^{-5}\ 8$ ; $\alpha(\text{O})=1.3\times 10^{-6}\ 4$ $\alpha(\text{N+..})=2.3\times 10^{-5}\ 8$
352.0 1	100	352.01	(3/2) $^+$	0.0	1/2 $^+$	M1	0.00607 9	$\alpha(\text{K})_{\text{exp}}=5.0\times 10^{-3}\ 5$ $\alpha(\text{K})=0.00537\ 8$ ; $\alpha(\text{L})=0.000591\ 9$ ; $\alpha(\text{M})=9.95\times 10^{-5}\ 14$ ; $\alpha(\text{N})=1.249\times 10^{-5}\ 18$ ; $\alpha(\text{O})=8.12\times 10^{-7}\ 12$ $\alpha(\text{N+..})=1.330\times 10^{-5}\ 19$ Mult.: M1 from $\alpha(\text{K})$ exp. %I $\gamma$ : Affiliation method; Ge(Li). Others: 47.5% 21 (revised by evaluator from 57% 4 (1983Kr11. %I $\gamma$ ( <sup>95</sup> Y 954 $\gamma$ )=19 2; % $\beta^-$ n( <sup>95</sup> Rb)=8.6 5) using current values) and 46% (1989WaZV. Ge(Li); assuming independent fission yields of 1988Wa12).
427.2 2	0.50 8	1439.29	1/2 $^+$ ,3/2,5/2	1012.25	1/2 $^+$ ,3/2 $^+$ ,5/2 $^+$			
435.5 2	0.80 12	1439.29	1/2 $^+$ ,3/2,5/2	1003.70	1/2 $^+$ ,3/2,5/2			
440.3 3	2.4 5	1121.01	3/2 $^+$ to 7/2 $^+$	680.70	3/2 $^+$ ,5/2 $^+$			
535.7 2	0.28 6	1974.94	1/2 $^+$ to 7/2	1439.29	1/2 $^+$ ,3/2,5/2			
565.0 2	3.7 4	1121.01	3/2 $^+$ to 7/2 $^+$	556.06	(7/2) $^+$			
578.9 1	5.5 5	1259.65	1/2 $^+$ ,3/2,5/2	680.70	3/2 $^+$ ,5/2 $^+$			

$\gamma^{(95)\text{Sr}}$  (continued)

$E_\gamma^{\dagger}$	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$	Comments
583.8 3	0.06 3	1843.72		1259.65	$1/2^+, 3/2, 5/2$			
604.7 2	1.00 12	1843.72		1238.91	$(9/2^+)$			
622.3 2	0.20 4	1743.52		1121.01	$3/2^+$ to $7/2^+$			
630.3 3	0.14 3	1750.86	$1/2^+$ to $7/2$	1121.01	$3/2^+$ to $7/2^+$			
<sup>x</sup> 638.2 3	0.08 2							
651.6 2	1.10 13	1003.70	$1/2^+, 3/2, 5/2$	352.01	$(3/2)^+$			
660.2 1	8.4 6	1012.25	$1/2^+, 3/2^+, 5/2^+$	352.01	$(3/2)^+$	M1,E2	0.00152 14	$\alpha(K)\exp=1.1\times 10^{-3}$ 3 $\alpha(K)=0.00134$ 12; $\alpha(L)=0.000148$ 15; $\alpha(M)=2.48\times 10^{-5}$ 25; $\alpha(N)=3.1\times 10^{-6}$ 3; $\alpha(O)=1.99\times 10^{-7}$ 15 $\alpha(N..)=3.3\times 10^{-6}$ 3
680.7 1	30.3 20	680.70	$3/2^+, 5/2^+$	0.0	$1/2^+$	M1,E2	0.00141 12	$\alpha(K)\exp=1.1\times 10^{-3}$ 2 $\alpha(K)=0.00124$ 10; $\alpha(L)=0.000137$ 13; $\alpha(M)=2.30\times 10^{-5}$ 21; $\alpha(N)=2.87\times 10^{-6}$ 25 $\alpha(O)=1.85\times 10^{-7}$ 13; $\alpha(N..)=3.1\times 10^{-6}$ 3
682.8 4	3.2 6	1238.91	$(9/2^+)$	556.06	$(7/2)^+$			
<sup>x</sup> 692.6 3	0.18 4							
<sup>x</sup> 697.5 3	0.19 4							
703.5 2	0.80 15	1259.65	$1/2^+, 3/2, 5/2$	556.06	$(7/2)^+$			
<sup>x</sup> 709.7 3	0.13 3							
<sup>x</sup> 714.9 3	0.09 3							
722.6 2	0.70 15	1843.72		1121.01	$3/2^+$ to $7/2^+$			
731.3 3	0.23 5	1743.52		1012.25	$1/2^+, 3/2^+, 5/2^+$			
739.4 3	0.30 8	1860.45		1121.01	$3/2^+$ to $7/2^+$			
747.0 3	0.07 3	1750.86	$1/2^+$ to $7/2$	1003.70	$1/2^+, 3/2, 5/2$			
758.9 3	0.12 4	1439.29	$1/2^+, 3/2, 5/2$	680.70	$3/2^+, 5/2^+$			
769.0 2	9.0 7	1121.01	$3/2^+$ to $7/2^+$	352.01	$(3/2)^+$			
<sup>x</sup> 791.3 3	0.08 3							
<sup>x</sup> 796.9 3	0.18 4							
831.3 3	1.9 3	1843.72		1012.25	$1/2^+, 3/2^+, 5/2^+$			
839.2 3	0.26 12	2098.91	$1/2^+, 3/2, 5/2$	1259.65	$1/2^+, 3/2, 5/2$			
<sup>x</sup> 873.7 3	0.08 3							
886.7 3	0.34 8	1238.91	$(9/2^+)$	352.01	$(3/2)^+$			
907.6 2	2.7 4	1259.65	$1/2^+, 3/2, 5/2$	352.01	$(3/2)^+$			
<sup>x</sup> 930.6 3	0.05 3							
955.5 4	0.03 8	2076.5		1121.01	$3/2^+$ to $7/2^+$			
976.3 3	0.18 4	2236.0		1259.65	$1/2^+, 3/2, 5/2$			
<sup>x</sup> 995.3 3	0.21 4							
1003.7 2	4.0 4	1003.70	$1/2^+, 3/2, 5/2$	0.0	$1/2^+$			
1012.2 3	0.30 6	1012.25	$1/2^+, 3/2^+, 5/2^+$	0.0	$1/2^+$			
<sup>x</sup> 1020.0 3	0.22 4							
<sup>x</sup> 1033.6 3	0.23 4							
<sup>x</sup> 1042.7 4	0.05 3							
1048.6 3	0.09 3	3479.09	$3/2^-, 5/2^-, 7/2^-$	2430.06				

<sup>95</sup>Rb  $\beta^-$  decay    1992KrZZ,1983Kr11 (continued) $\gamma(^{95}\text{Sr})$  (continued)

$E_\gamma^\dagger$	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
<sup>x</sup> 1056.9 3	0.08 3			680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1062.8 2	1.5 3	1743.52		680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1069.9 3	0.87 12	1750.86	1/2 <sup>+</sup> to 7/2	1743.52	
1084.4 3	0.50 10	2827.91		352.01	(3/2) <sup>+</sup>
1087.3 3	0.50 10	1439.29	1/2 <sup>+</sup> ,3/2,5/2		
<sup>x</sup> 1095.3 3	0.15 4				
1110.5 3	0.26 6	2974.38	3/2,5/2,7/2	1864.17	1/2 <sup>+</sup> to 7/2
1120.0 3	0.39 8	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	2246.89	1/2 <sup>+</sup> ,3/2,5/2
<sup>x</sup> 1130.2 3	0.15 4				
<sup>x</sup> 1142.2 3	0.28 7				
1163.0 3	0.52 10	1843.72		680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1179.8 3	1.20 20	1860.45		680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1187.2 3	0.35 7	1743.52		556.06	(7/2) <sup>+</sup>
1195.0 3	0.32 7	1750.86	1/2 <sup>+</sup> to 7/2	556.06	(7/2) <sup>+</sup>
1247.2 @ 4	1.27 @ 20	1247.24	1/2,3/2,5/2	0.0	1/2 <sup>+</sup>
1247.2 @& 4	0.11 @ 6	2368.2?		1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
1259.7 2	6.9 6	1259.65	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
<sup>x</sup> 1264.1 3	0.22 5				
1267.8 3	0.67 10	1948.5		680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1273.5 3	0.16 4	2394.38		1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
<sup>x</sup> 1288.4 3	0.18 4				
<sup>x</sup> 1302.8 4	0.15 5				
1304.6 4	0.30 8	1860.45		556.06	(7/2) <sup>+</sup>
1308.0 3	0.70 20	1864.17	1/2 <sup>+</sup> to 7/2	556.06	(7/2) <sup>+</sup>
1308.8 3	0.70 20	2430.06		1121.01	3/2 <sup>+</sup> to 7/2 <sup>+</sup>
1319.7 3	0.51 10	3584.17	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	2264.61	
<sup>x</sup> 1342.4 4	0.11 3				
<sup>x</sup> 1353.5 4	0.50 20				
<sup>x</sup> 1363.0 4	0.25 6				
1370.8 3	0.30 6	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	2264.61	
1381.8 3	0.28 6	2394.38		1012.25	1/2 <sup>+</sup> ,3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1395.7 4	0.50 10	2076.5		680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1398.6 4	0.80 15	1750.86	1/2 <sup>+</sup> to 7/2	352.01	(3/2) <sup>+</sup>
1418.6 3	0.58 10	2098.91	1/2 <sup>+</sup> ,3/2,5/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1439.2 2	7.4 6	1439.29	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
<sup>x</sup> 1474.7 3	0.76 10				
<sup>x</sup> 1481.5 4	0.12 3				
1512.1 3	2.5 4	1864.17	1/2 <sup>+</sup> to 7/2	352.01	(3/2) <sup>+</sup>
1522.7 3	0.80 10	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1843.72	
1528.5 3	1.95 25	2967.7	3/2,5/2,7/2	1439.29	1/2 <sup>+</sup> ,3/2,5/2
<sup>x</sup> 1553.4 3	0.53 8				
<sup>x</sup> 1584.7 3	0.30 6				
<sup>x</sup> 1609.3 3	0.28 6				

**<sup>95</sup>Rb β<sup>-</sup> decay    1992KrZZ,1983Kr11 (continued)**
 $\gamma(^{95}\text{Sr})$  (continued)

E <sub>γ</sub> <sup>†</sup>	I <sub>γ</sub> <sup>†#</sup>	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>
1622.8 3	0.99 15	1974.94	1/2 <sup>+</sup> to 7/2	352.01	(3/2) <sup>+</sup>
1623.0 4	0.11 4	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1743.52	
1635.0 3	0.13 4	3479.09	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1843.72	
x1654.0 3	0.20 5				
1661.5 3	0.92 12	2013.33	1/2 <sup>+</sup> ,3/2,5/2	352.01	(3/2) <sup>+</sup>
x1678.0 5	0.15 5				
x1681.0 5	0.15 5				
1708.5 3	1.65 23	2264.61		556.06	(7/2) <sup>+</sup>
1714.5 4	0.12 4	2974.38	3/2,5/2,7/2	1259.65	1/2 <sup>+</sup> ,3/2,5/2
1719.6 3	0.75 10	3584.17	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1864.17	1/2 <sup>+</sup> to 7/2
1723.5 3	1.02 15	3584.17	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1860.45	
1735.6 3	0.30 10	3479.09	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1743.52	
1740.5 3	0.20 6	3584.17	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1843.72	
1746.7 3	0.34 10	2098.91	1/2 <sup>+</sup> ,3/2,5/2	352.01	(3/2) <sup>+</sup>
1748.0 4	0.12 6	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1864.17	1/2 <sup>+</sup> to 7/2
1752.6 4	0.42 10	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1860.45	
1768.3 3	0.90 12	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1843.72	
1775.0 4	1.06 15	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1860.45	
1791.7 3	0.94 12	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1843.72	
x1813.5 3	0.39 6				
x1819.0 3	0.19 4				
1833.4 3	1.03 12	3584.17	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1750.86	1/2 <sup>+</sup> to 7/2
1838.5 3	0.72 10	2394.38		556.06	(7/2) <sup>+</sup>
1854.2 3	0.28 8	3597.86	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1743.52	
1868.4 3	0.55 13	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1743.52	
x1870.0 4	0.28 8				
1873.8 3	0.64 10	2430.06		556.06	(7/2) <sup>+</sup>
1891.8 3	0.34 6	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1743.52	
1895.0 3	0.59 10	2246.89	1/2 <sup>+</sup> ,3/2,5/2	352.01	(3/2) <sup>+</sup>
1927.3 3	5.0 7	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1439.29	1/2 <sup>+</sup> ,3/2,5/2
1962.0 3	1.20 15	2974.38	3/2,5/2,7/2	1012.25	1/2 <sup>+</sup> ,3/2 <sup>+</sup> ,5/2 <sup>+</sup>
1963.8 4	0.20 5	2967.7	3/2,5/2,7/2	1003.70	1/2 <sup>+</sup> ,3/2,5/2
x1970.0 3	0.17 4				
2013.1 3	0.71 10	2013.33	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
2098.7 3	0.34 6	2098.91	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
2106.7 3	1.5 20	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1259.65	1/2 <sup>+</sup> ,3/2,5/2
2152.0 3	0.52 10	3591.34	3/2 to 7/2	1439.29	1/2 <sup>+</sup> ,3/2,5/2
2203.0 3	0.26 5	3206.52	3/2,5/2,7/2	1003.70	1/2 <sup>+</sup> ,3/2,5/2
2219.4 3	3.6 4	3479.09	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1259.65	1/2 <sup>+</sup> ,3/2,5/2
2240.1 3	0.30 6	3479.09	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	1238.91	(9/2 <sup>+</sup> )
2247.0 3	0.65 10	2246.89	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
2271.8 3	0.30 6	2827.91		556.06	(7/2) <sup>+</sup>
2293.6 3	0.30 6	3532.40	3/2 to 7/2	1238.91	(9/2 <sup>+</sup> )

<sup>95</sup>Rb  $\beta^-$  decay    1992KrZZ,1983Kr11 (continued)

$\gamma(^{95}\text{Sr})$  (continued)

$E_\gamma^{\dagger}$	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
2324.6 3	2.3 3	3584.17	$3/2^-, 5/2^-, 7/2^-$	1259.65	$1/2^+, 3/2, 5/2$
x2331.0 3	0.60 10				
2338.6 4	0.94 15	3597.86	$3/2^-, 5/2^-, 7/2^-$	1259.65	$1/2^+, 3/2, 5/2$
2340.0 5	0.40 8	3587.6	$3/2, 5/2$	1247.24	$1/2, 3/2, 5/2$
2342.6 4	0.32 6	3463.66	$3/2, 5/2$	1121.01	$3/2^+$ to $7/2^+$
x2344.6 4	0.45 8				
2358.0 @ 3	4.3 @ 5	3479.09	$3/2^-, 5/2^-, 7/2^-$	1121.01	$3/2^+$ to $7/2^+$
2358.0 @ 5	0.71 @ 20	3605.67	$3/2^-, 5/2^-$	1247.24	$1/2, 3/2, 5/2$
2373.3 4	2.6 5	3612.33	$3/2^-, 5/2^-, 7/2^-$	1238.91	( $9/2^+$ )
2376.0 4	1.9 4	3635.62	$3/2^-, 5/2^-, 7/2^-$	1259.65	$1/2^+, 3/2, 5/2$
x2397.5 3	0.44 8				
x2405.7 3	0.31 6				
2418.2 3	0.30 6	2974.38	$3/2, 5/2, 7/2$	556.06	( $7/2)^+$
2437.3 3	0.53 8	3449.52	$3/2^-, 5/2^-, 7/2^-$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2451.2 3	0.70 15	3463.66	$3/2, 5/2$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2460.0 4	0.40 10	3463.66	$3/2, 5/2$	1003.70	$1/2^+, 3/2, 5/2$
2461.8 4	0.50 10	3708.64	$3/2, 5/2$	1247.24	$1/2, 3/2, 5/2$
2463.3 4	1.27 25	3584.17	$3/2^-, 5/2^-, 7/2^-$	1121.01	$3/2^+$ to $7/2^+$
2466.8 3	1.58 20	3479.09	$3/2^-, 5/2^-, 7/2^-$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2492.0 5	0.20 5	3612.33	$3/2^-, 5/2^-, 7/2^-$	1121.01	$3/2^+$ to $7/2^+$
2514.7 3	1.33 18	3635.62	$3/2^-, 5/2^-, 7/2^-$	1121.01	$3/2^+$ to $7/2^+$
2525.7 3	0.32 6	3206.52	$3/2, 5/2, 7/2$	680.70	$3/2^+, 5/2^+$
2542.0 3	0.40 10	3801.79	$3/2$ to $7/2$	1259.65	$1/2^+, 3/2, 5/2$
x2564.9 4	0.45 10				
2571.8 3	0.29 6	3584.17	$3/2^-, 5/2^-, 7/2^-$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2584.5 5	0.31 6	3587.6	$3/2, 5/2$	1003.70	$1/2^+, 3/2, 5/2$
2593.8 4	0.56 8	3597.86	$3/2^-, 5/2^-, 7/2^-$	1003.70	$1/2^+, 3/2, 5/2$
2600.1 3	0.45 8	3612.33	$3/2^-, 5/2^-, 7/2^-$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2623.5 3	0.70 10	3635.62	$3/2^-, 5/2^-, 7/2^-$	1012.25	$1/2^+, 3/2^+, 5/2^+$
2632.3 5	0.09 4	3635.62	$3/2^-, 5/2^-, 7/2^-$	1003.70	$1/2^+, 3/2, 5/2$
2650.3 3	0.88 12	3206.52	$3/2, 5/2, 7/2$	556.06	( $7/2)^+$
2681.0 4	0.23 6	3801.79	$3/2$ to $7/2$	1121.01	$3/2^+$ to $7/2^+$
2685.9 3	2.2 4	3366.63	$3/2^-, 5/2^-, 7/2^-$	680.70	$3/2^+, 5/2^+$
2704.5 4	0.22 6	3708.64	$3/2, 5/2$	1003.70	$1/2^+, 3/2, 5/2$
2768.8 3	0.69 10	3449.52	$3/2^-, 5/2^-, 7/2^-$	680.70	$3/2^+, 5/2^+$
2782.7 4	0.32 8	3463.66	$3/2, 5/2$	680.70	$3/2^+, 5/2^+$
2798.6 3	8.5 10	3479.09	$3/2^-, 5/2^-, 7/2^-$	680.70	$3/2^+, 5/2^+$
2810.6 3	3.1 5	3366.63	$3/2^-, 5/2^-, 7/2^-$	556.06	( $7/2)^+$
2851.6 3	1.00 16	3532.40	$3/2$ to $7/2$	680.70	$3/2^+, 5/2^+$
x2863.7 4	0.20 5				
2873.2 4	0.29 6	4312.4	$3/2, 5/2, 7/2$	1439.29	$1/2^+, 3/2, 5/2$
2893.3 3	1.07 18	3449.52	$3/2^-, 5/2^-, 7/2^-$	556.06	( $7/2)^+$
2903.6 4	0.66 10	3584.17	$3/2^-, 5/2^-, 7/2^-$	680.70	$3/2^+, 5/2^+$

$\gamma(^{95}\text{Sr})$  (continued)

$E_\gamma^\dagger$	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	$E_\gamma^\dagger$	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
2910.5 3	1.12 18	3591.34	3/2 to 7/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3449.8 5	0.37 7	3801.79	3/2 to 7/2	352.01	(3/2) <sup>+</sup>
2925.1 4	0.42 8	3605.67	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	680.70	3/2 <sup>-</sup> ,5/2 <sup>+</sup>	3464.0 5	0.75 10	3463.66	3/2,5/2	0.0	1/2 <sup>+</sup>
2931.6 4	1.5 2	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	<sup>x</sup> 3523.4 6	0.19 5				
2955.1 3	2.4 4	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3567.0 5	0.44 8	4247.9	3/2,5/2,7/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
2970.5 4	0.07 3	4230.5	3/2,5/2	1259.65	1/2 <sup>+</sup> ,3/2,5/2	3587.8 5	0.80 12	3587.6	3/2,5/2	0.0	1/2 <sup>+</sup>
2982.6 4	0.49 8	3986.3	3/2,5/2,7/2	1003.70	1/2 <sup>+</sup> ,3/2,5/2	3588.2 6	0.25 8	3940.3	1/2 <sup>+</sup> ,3/2,5/2	352.01	(3/2) <sup>+</sup>
3014.7 3	2.5 4	3366.63	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	3605.7 5	0.30 6	3605.67	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	0.0	1/2 <sup>+</sup>
3028.0 5	0.20 5	3708.64	3/2,5/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3631.0 8	0.12 4	4312.4	3/2,5/2,7/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
3031.2 5	0.15 5	3712.1	3/2,5/2,7/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3634.0 8	0.08 4	3986.3	3/2,5/2,7/2	352.01	(3/2) <sup>+</sup>
3035.5 4	0.21 5	3591.34	3/2 to 7/2	556.06	(7/2) <sup>+</sup>	3692.0 8	0.08 4	4247.9	3/2,5/2,7/2	556.06	(7/2) <sup>+</sup>
3056.0 4	0.63 10	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	556.06	(7/2) <sup>+</sup>	<sup>x</sup> 3695.7 8	0.08 4				
3079.6 4	1.20 15	3635.62	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	556.06	(7/2) <sup>+</sup>	3708.4 5	0.45 8	3708.64	3/2,5/2	0.0	1/2 <sup>+</sup>
3097.5 3	3.2 5	3449.52	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 3774.6 6	0.17 4				
3111.8 4	0.51 8	3463.66	3/2,5/2	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 3791.2 6	0.09 4				
3120.9 4	0.93 15	3801.79	3/2 to 7/2	680.70	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3811.2 6	0.21 5	4163.6	1/2 <sup>+</sup> ,3/2,5/2	352.01	(3/2) <sup>+</sup>
3128.1 4	0.40 8	3479.09	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 3818.0 6	0.17 4				
<sup>x</sup> 3148.2 4	0.40 8					<sup>x</sup> 3851.9 6	0.09 4				
3180.2 4	1.00 15	3532.40	3/2 to 7/2	352.01	(3/2) <sup>+</sup>	3878.6 6	0.20 5	4230.5	3/2,5/2	352.01	(3/2) <sup>+</sup>
3235.0 5	1.17 16	3587.6	3/2,5/2	352.01	(3/2) <sup>+</sup>	3926.4 6	0.10 4	4278.5	1/2 <sup>+</sup> to 7/2	352.01	(3/2) <sup>+</sup>
3239.2 5	1.27 18	3591.34	3/2 to 7/2	352.01	(3/2) <sup>+</sup>	3940.2 6	0.15 4	3940.3	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
3245.9 4	2.6 4	3597.86	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 4032.0 7	0.06 3				
3253.6 4	4.8 6	3605.67	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 4058.5 6	0.10 4				
3261.0 6	0.14 4	3612.33	3/2 <sup>-</sup> ,5/2 <sup>-</sup> ,7/2 <sup>-</sup>	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 4127.6 7	0.05 2				
3272.6 4	0.90 15	3624.7	3/2,5/2,7/2	352.01	(3/2) <sup>+</sup>	<sup>x</sup> 4141.7 8	0.04 2				
<sup>x</sup> 3316.9 6	0.07 3					4164.0 7	0.08 3	4163.6	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
<sup>x</sup> 3345.4 6	0.02 1					4218.6 7	0.12 4	4570.7	1/2 <sup>+</sup> to 7/2	352.01	(3/2) <sup>+</sup>
3360.2 5	0.54 8	3712.1	3/2,5/2,7/2	352.01	(3/2) <sup>+</sup>	4231.0 7	0.12 4	4230.5	3/2,5/2	0.0	1/2 <sup>+</sup>
<sup>x</sup> 3398.8 6	0.12 4					4292.3 7	0.13 4	4292.4	1/2 <sup>+</sup> ,3/2,5/2	0.0	1/2 <sup>+</sup>
<sup>x</sup> 3440.7 6	0.10 4					4309.2 & 8	0.02 1	4661.3?		352.01	(3/2) <sup>+</sup>

<sup>†</sup> From 1992KrZZ.

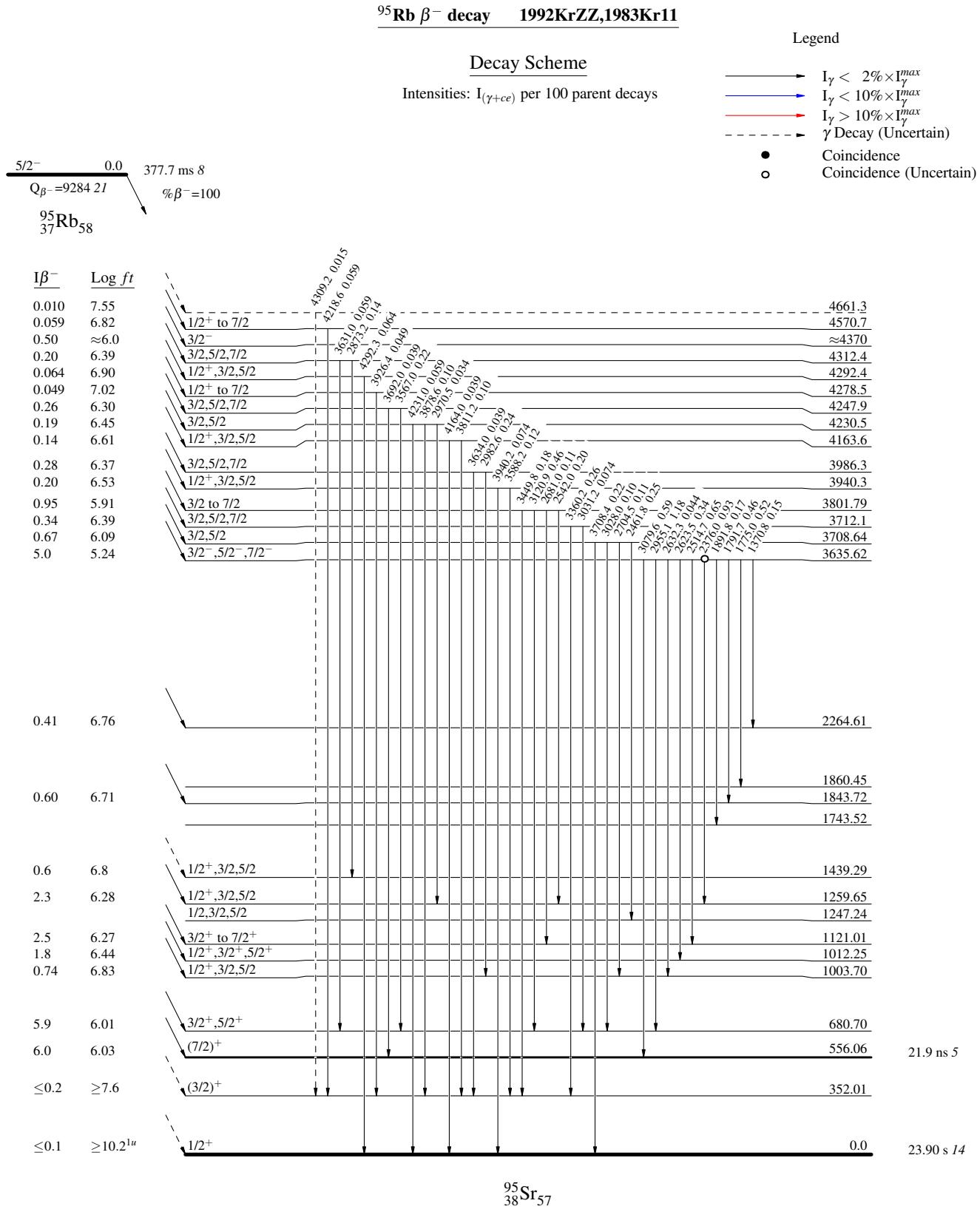
<sup>‡</sup> From  $\alpha(K)\exp$ , except as noted.

<sup>#</sup> For absolute intensity per 100 decays, multiply by 0.49 3.

<sup>@</sup> Multiply placed with intensity suitably divided.

<sup>&</sup> Placement of transition in the level scheme is uncertain.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.



$^{95}\text{Rb} \beta^-$  decay    1992KrZZ, 1983Kr11

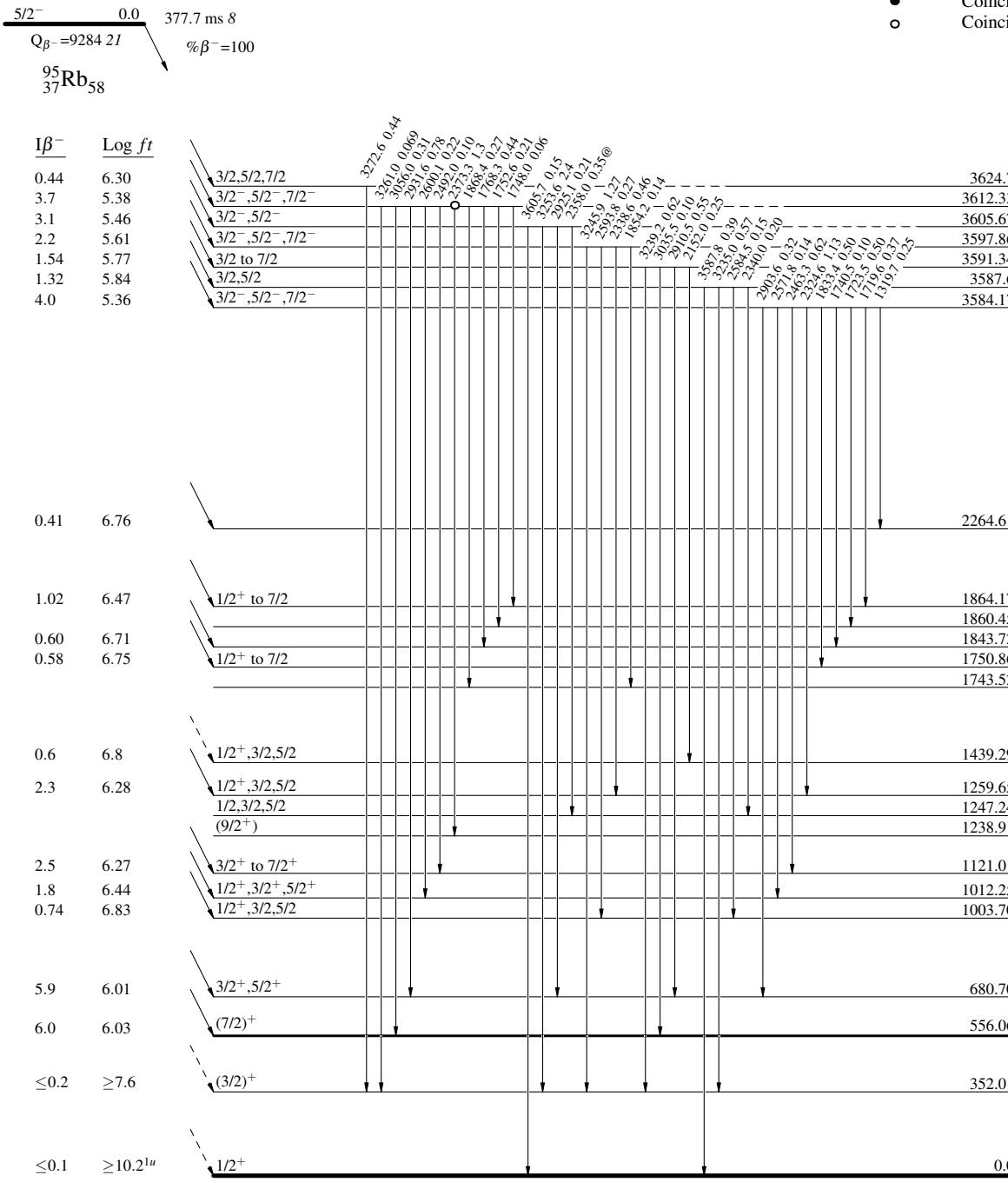
## Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays

@ Multiply placed: intensity suitably divided

## Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- Coincidence
- Coincidence (Uncertain)



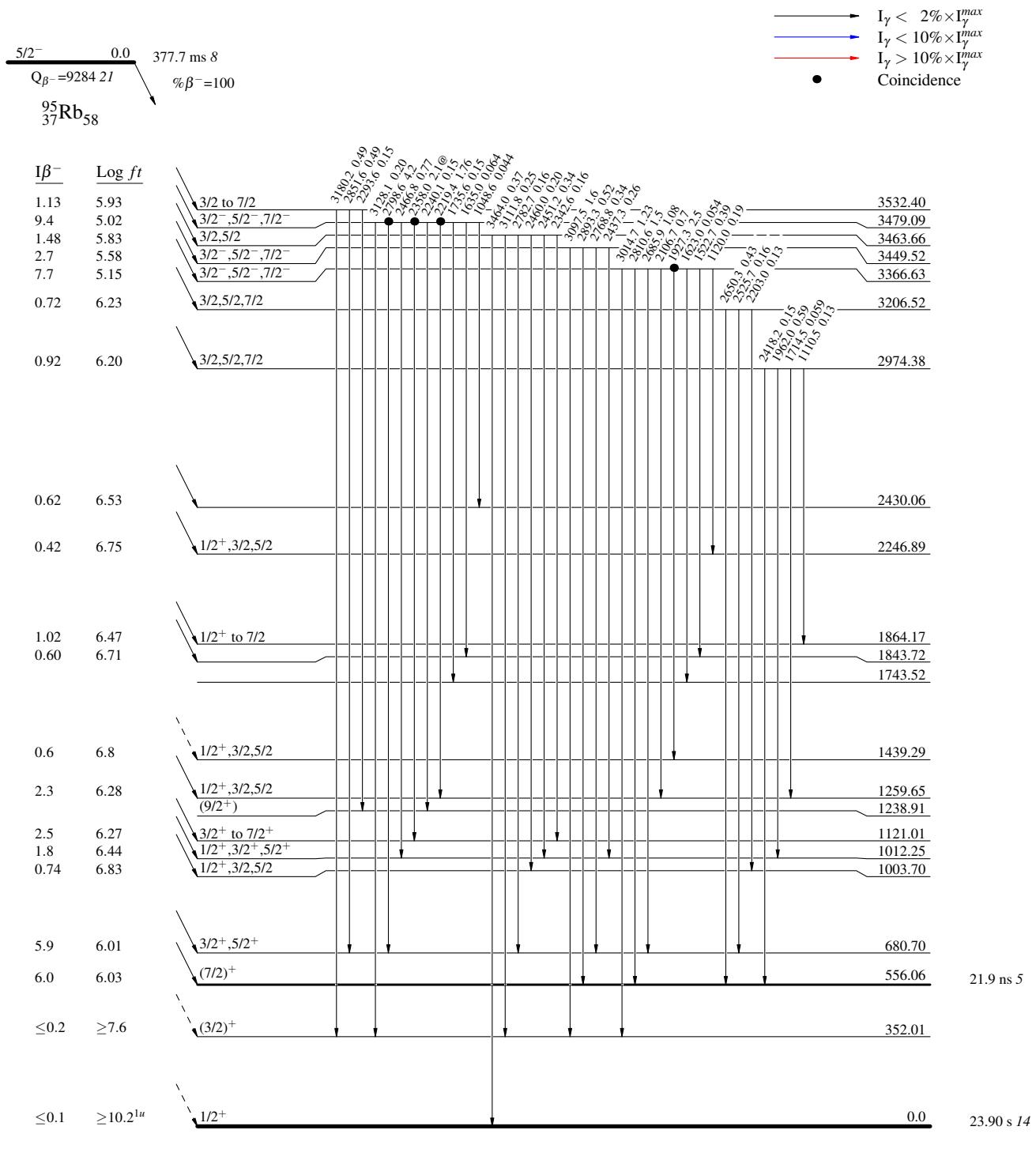
## **$^{95}\text{Rb}$ $\beta^-$ decay      1992KrZZ,1983Kr11**

### Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays

@ Multiply placed: intensity suitably divided

## Legend



$^{95}\text{Rb } \beta^-$  decay    1992KrZZ,1983Kr11

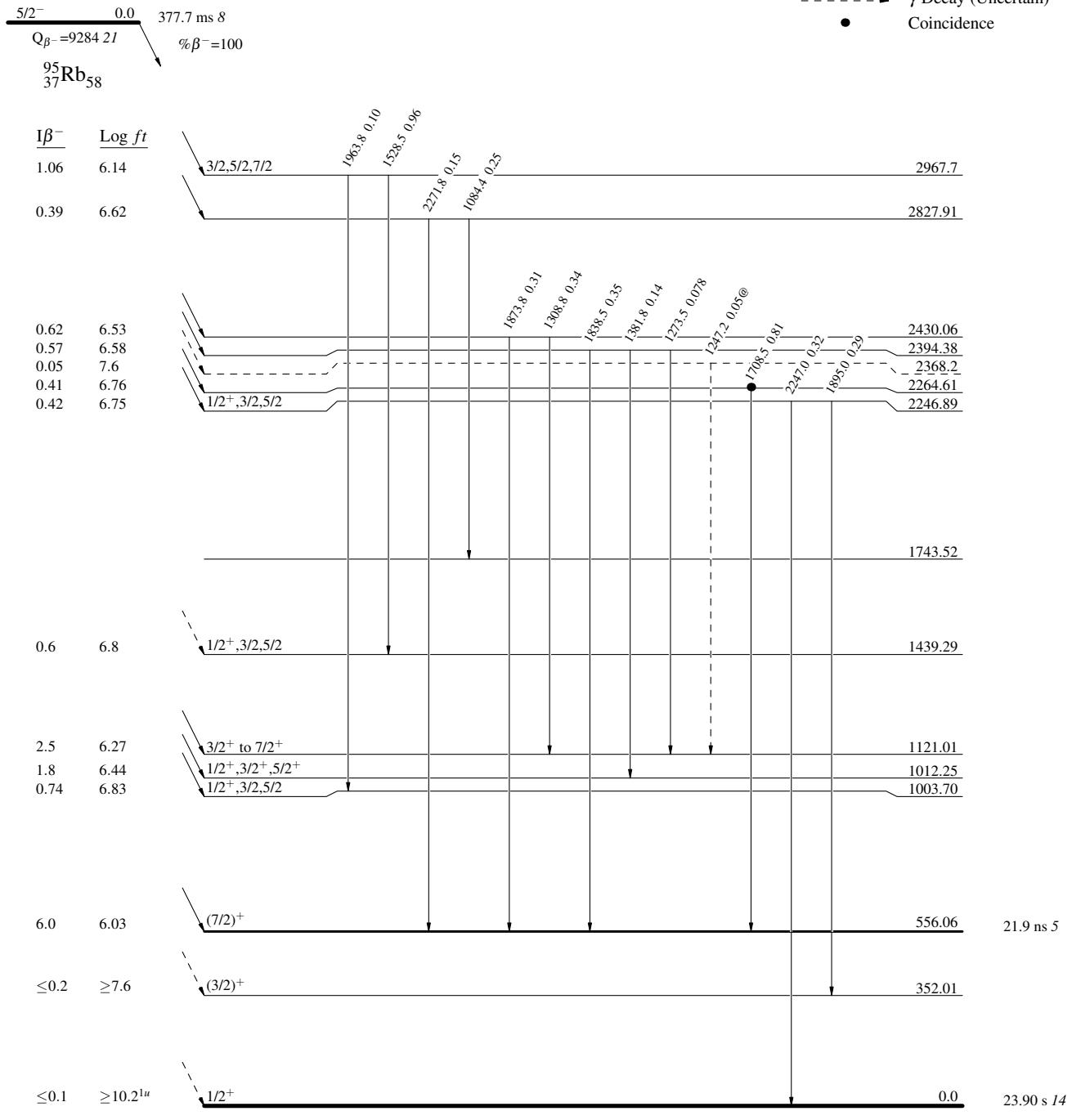
## Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays

@ Multiply placed: intensity suitably divided

## Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - -  $\gamma$  Decay (Uncertain)
- Coincidence



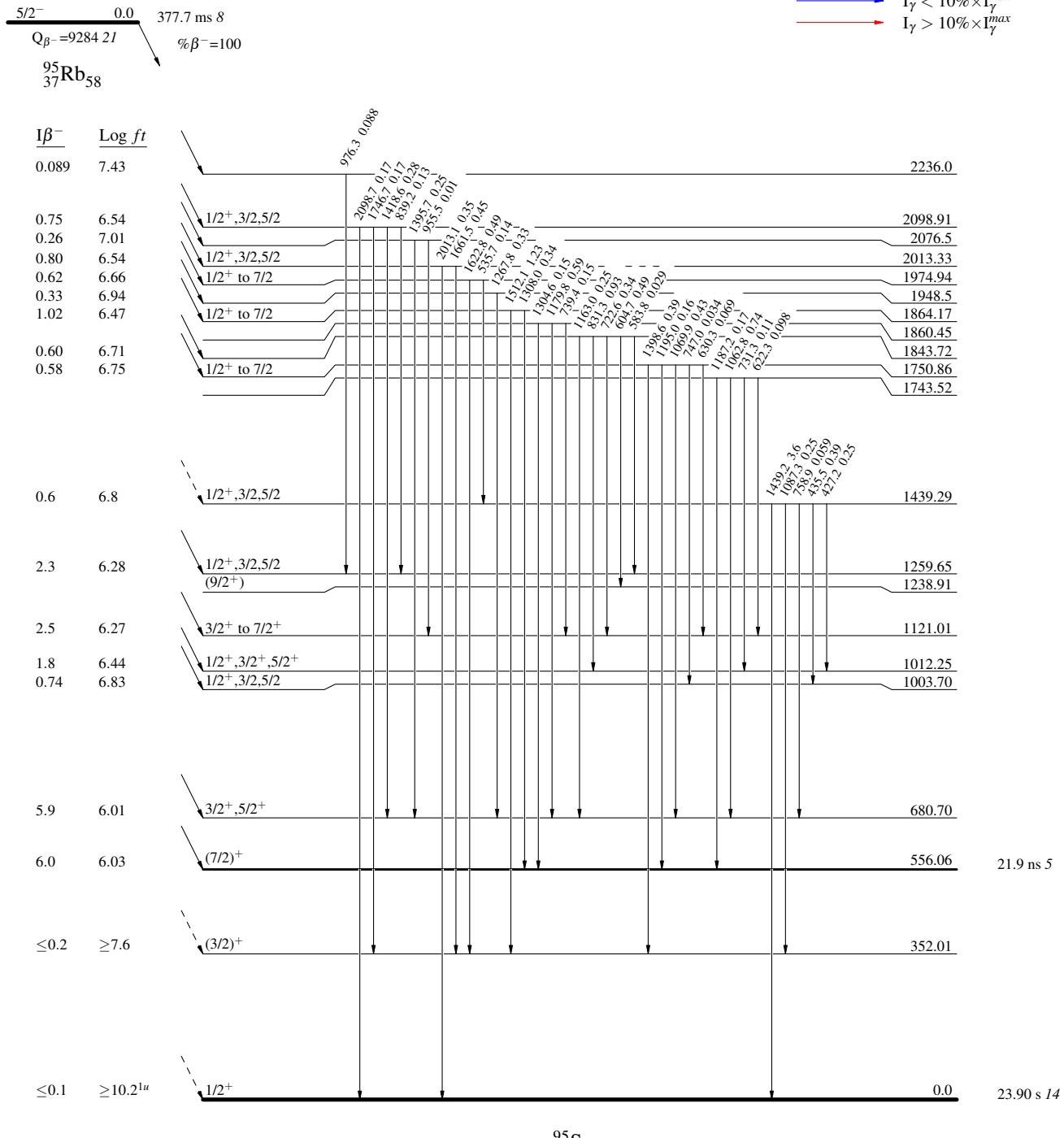
$^{95}\text{Rb } \beta^- \text{ decay }$     1992KrZZ,1983Kr11

## Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays  
 @ Multiply placed: intensity suitably divided

## Legend

- $I_\gamma < 2\% \times I_{\gamma}^{\max}$
- $I_\gamma < 10\% \times I_{\gamma}^{\max}$
- $I_\gamma > 10\% \times I_{\gamma}^{\max}$



**$^{95}\text{Rb} \beta^-$  decay    1992KrZZ,1983Kr11****Decay Scheme (continued)**

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Legend

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