^{95}Rb β^-n decay 1987GaZF

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	A. Negret, A. A. Sonzogni	ENSDF	31-Mar-2011

Parent: ^{95}Rb: E=0.0; $J^\pi=5/2^-$; $T_{1/2}$=377.5 ms *8*; Q(β^-n)=4934 *22*; %β^-n decay=8.73 *20*

1987GaZF: measured nγ-coincidences; moderated ^{3}He, Ge(HP). Supersedes earlier works by the same group, 1982Kr11 and 1983Kr11.

1981Ho07: measured γ's (Ge(Li)) and neutrons (shielded ^{3}He).

1982Kr11 and 1982Kr07: measured γ's and $\gamma\gamma$-coin and $\beta\gamma$-coin (Ge(Li)) and nγ-coin (^{3}He,Ge(Li)).

1983Kr11 measured n's and γn-coin from E(n)=10 keV to 3 MeV (^{3}He,Ge(Li)), FWHM=12 keV for thermal n's and 20 keV for E(n)=1 MeV and n's from E(n)=180 keV to 3 MeV (tof,scin,Ge(Li)), FWHM=3 keV for E(n)=200 keV and 35 keV for E(n)=1 MeV and n's from E(n)=5 to 150 keV (Li-glass).

1985Gr15: measured neutrons; gas-filled proportional counters.

1991LeZT: measured neutrons; ^{6}Li-glass, tof (E(n)<100 keV) and scin, tof (100 keV<E(n)<325 keV).

All data are from 1987GaZF.

^{94}Sr Levels

E(level)	J^π†	$T_{1/2}$†	E(level)	J^π†	E(level)	J^π†
0.0	0^+	75.3 s *2*	2604.0	(4^-)	2739.9	(4^-)
836.9	2^+		2613.9	(2,3,4)	2930.1	(2,3,4)
1926.9	$3^{(-)}$		2649.8	$4^{(+)}$	3438.9	(2,3,4)
2146.1	4^+		2703.4	(2,3,4)		
2415.0	(3^-)		2710.9	(2,3,4)		

† From Adopted Levels.

$\gamma(^{94}Sr)$

Iγ normalization: From Σ Iγ(g.s.)= 8.73 % 20.

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π
457.9	6.7 *10*	2604.0	(4^-)	2146.1	4^+	1578.1	6.9 *10*	2415.0	(3^-)	836.9	2^+
813.0	3.1 *5*	2739.9	(4^-)	1926.9	$3^{(-)}$	1777.0	4.5 *5*	2613.9	(2,3,4)	836.9	2^+
836.9	100	836.9	2^+	0.0	0^+	1812.9	3.6 *5*	2649.8	$4^{(+)}$	836.9	2^+
1090.0	3.6 *6*	1926.9	$3^{(-)}$	836.9	2^+	1866.5	4.5 *5*	2703.4	(2,3,4)	836.9	2^+
1292.8	3.5 *5*	3438.9	(2,3,4)	2146.1	4^+	1874.0	2.8 *5*	2710.9	(2,3,4)	836.9	2^+
1309.2	9.8 *10*	2146.1	4^+	836.9	2^+	2093.2	3.3 *5*	2930.1	(2,3,4)	836.9	2^+

† For absolute intensity per 100 decays, multiply by 0.0873 *20*.

Delayed Neutrons (^{94}Sr)

For neutron spectra see 1982Kr11, 1985Gr15, 1991LeZT.

E(^{94}Sr)	I(n)†	E(^{94}Sr)	I(n)†	E(^{94}Sr)	I(n)†
				0.0	67.6 *20*
				836.9	20.9 *10*
				1926.9	≤0.5
				2146.1	≤0.5
				2415.0	2.0 *5*
				2604.0	1.9 *5*

	2613.9	1.3 *5*
	2649.8	1.0 *5*
	2703.4	1.3 *5*
	2710.9	0.8 *5*
	2739.9	0.9 *5*
	2930.1	0.9 *5*
	3438.9	1.0 *5*

† For absolute intensity per 100 decays, multiply by 0.0873 *20*.

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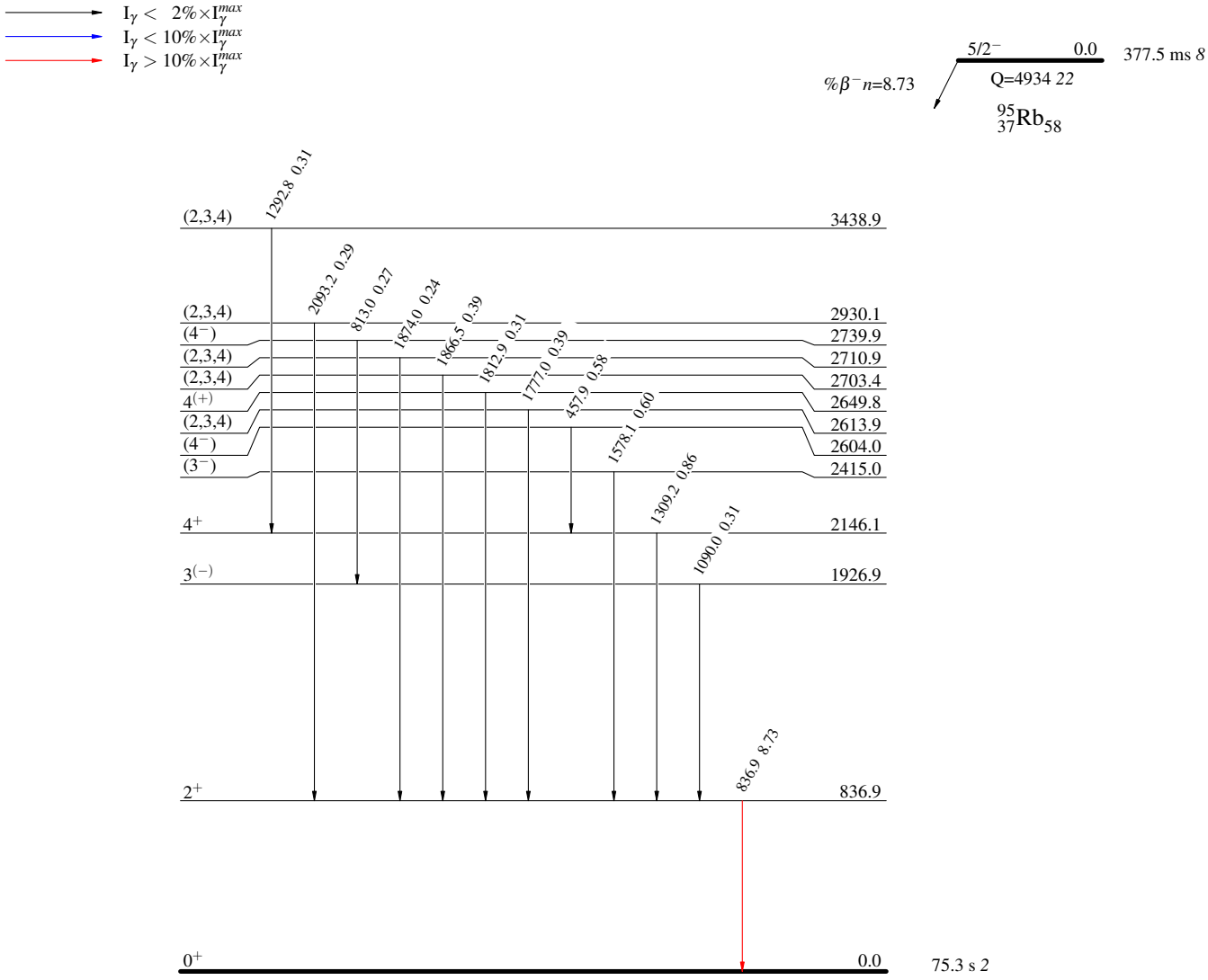
Decay Scheme

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

Legend

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



$^{94}_{38}Sr_{56}$