^{98}Rb β^-n decay (114 ms) 1986Wa17,1980Sc13,1974Ro15

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

Parent: ^{98}Rb: E=0.0; J^π=(0,1); $T_{1/2}$=114 ms *5*; Q(β^-n)=6500 *50*; %β^-n decay=13.8 *6*
^{98}Rb-From 2003Si07 except for Q(β^-n) which is from 2003Au03.

^{97}Sr Levels

E(level)†	J^π‡
0.0	$1/2^+$
167.2	$3/2^+$
308.2	$7/2^+$

† From 1980Sc13.
‡ From Adopted Levels.

$\gamma(^{97}Sr)$

Iγ normalization: from Iγ(of 144γ in ^{98}Sr per 100 decay of ^{98}Rb)=34 *3* (1987Ma58) and %β^-n(^{98}Rb)=13.8 *6* (1993Ru01). The source of ^{98}Rb contains 114-ms and 96-ms isomers, but it is assumed here (on the basis of $T_{1/2}$ of 167γ in ^{97}Sr) that β^-n decay is mainly from the 114-ms isomer. %β^-n measurements: 13.6 *5* (1986Wa17), 13.0 *10* (quoted by 1993Ru01 from 1987PfZX), 16.7 *17* (1981En05), 18.4 *29* (1979Ri09), 13.3 *21* (1974Ro15).
Measured %β^-n, $T_{1/2}$. Others: 1993Ru01, 1987PfZX, 1983Re10, 1981Re05, 1981En05, 1979Ri09, 1979Pe01, 1979Pe17, 1976Ru01, 1971Tr02.
The source contains 96-ms isomer also but it is assumed here (on the basis of $T_{1/2}$ of 167γ in ^{97}Sr) that β^-n decay is mainly from the 114-ms isomer.
Neutron spectrum: 1989GoZY, 1981Re12.
Additional information 1.

E_γ†	I_γ†#	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	α@	Comments
141.0	3	308.2	$7/2^+$	167.2	$3/2^+$	E2	0.288	α(K)=0.247 *4*; α(L)=0.0347 *5*; α(M)=0.00584 *9*; α(N+..)=0.000722 *11* α(N)=0.000690 *10*; α(O)=3.28×10^{-5} *5*
167.2	10	167.2	$3/2^+$	0.0	$1/2^+$	M1	0.0404	α(K)=0.0356 *5*; α(L)=0.00401 *6*; α(M)=0.000675 *10*; α(N+..)=8.99×10^{-5} *13* α(N)=8.45×10^{-5} *12*; α(O)=5.42×10^{-6} *8*

† From 1980Sc13. Iγ is relative to 100 for 144.6γ (in ^{98}Sr) from ^{98}Rb β^- decay.
‡ From ^{97}Sr Adopted Levels, Gammas.
# For absolute intensity per 100 decays, multiply by 0.35 *3*.
@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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Decay Scheme

Intensities: Relative I_γ