^{95}Rh IT decay (1.96 min) 1975We03

History

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

Parent: ^{95}Rh: E=543.3 *3*; $J^{\pi}=(1/2)^{-}$; $T_{1/2}$=1.96 min *4*; %IT decay=88 *5*

^{95}Rh-%IT decay: From comparison of Iγ(543γ) with intensities of γ's following ε decay of 543 state (1975We03). Other: 85% from %Iγ(543γ)=77 (1981Gr20. γ's; Ge(Li)) and α(543γ)=0.100.

Measured γ's, $\beta^{+}{}'$s, $\gamma\gamma$-coin, $\beta\gamma$-coin, γ(t); Ge(Li), scin. Assignment of γ's to ^{95}Rh decay was made based on their half-lives, excitation function and appropriate reduction in their intensities relative to those of other Rh isotopes when a natural Ru target was used.

The strong 543γ was interpreted as an isomeric transition by 1975We03 because it is not in coincidence with any β or γ-ray in the decay of ^{95}Rh to ^{95}Ru.

α: Additional information 1.

^{95}Rh Levels

E(level)	J^{π} †	$T_{1/2}$ †
0.0	$9/2^{+}$	5.02 min *10*
543.3 *3*	$(1/2)^{-}$	1.96 min *4*

† From the Adopted Levels.

γ(^{95}Rh)

Iγ normalization: From ΣI$\gamma(1+\alpha)$ (to g.s.)=100.

E_γ	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.	α	$I_{(\gamma+ce)}$ †	Comments
543.3 *3*	543.3	$(1/2)^{-}$	0.0	$9/2^{+}$	[M4]	0.1001	100	α(K)=0.0842 *12*; α(L)=0.01296 *19*; α(M)=0.00247 *4*; α(N)=0.000404 *6*; α(O)=1.79×10^{-5} *3* α(N+..)=0.000422 *6* Mult.: from the adopted gammas.

† For absolute intensity per 100 decays, multiply by 0.88 *5*.

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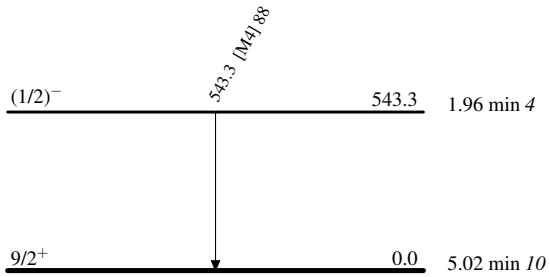
Decay Scheme

%IT=88 *5*



$^{95}_{45}Rh_{50}$