

^{122}Rh IT decay (0.82 μs) [2012Ka36](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	30-Nov-2013

Parent: ^{122}Rh : E=271.0 7; $T_{1/2}=0.82 \mu\text{s} +13-11$; %IT decay=100.0

^{122}Rh -%IT decay: Assumed %IT=100.

[2012Ka36](#): ^{122}Rh produced in $\text{Be}(^{238}\text{U},\text{X})$, beam at E=345 MeV/nucleon provided by the RIBF accelerator complex at RIKEN facility. Fission fragments were separated and analyzed by BigRIPS separator, then transported to focal plane of ZeroDegree spectrometer and finally implanted in an aluminum stopper. Particle identification was achieved by ΔE -tof-B ρ method. Delayed gamma rays from microsecond isomers were detected by three clover-type HPGe detectors. Measured E_γ , I_γ , $\gamma\gamma$ -coin, isomer half-life. Deduced levels.

 ^{122}Rh Levels

E(level)	$T_{1/2}$	Comments
0		
207.1? 5		E(level): reverse ordering of the 63.9-207.1 γ cascade is also possible.
271.0 7	0.82 $\mu\text{s} +13-11$	Number of implanted fragments= 8.6×10^3 . $T_{1/2}$: from $\gamma(t)$ method (2012Ka36).

 $\gamma(^{122}\text{Rh})$

E_γ	I_γ	$E_i(\text{level})$	E_f	Mult.	Comments
63.9 [†] 5	35 9	271.0	207.1?	D,E2	Mult.: from intensity balance argument.
207.1 [†] 5	100 17	207.1?	0		

[†] Reverse ordering of the 63.9-207.1 γ cascade is also possible.

^{122}Rh IT decay (0.82 μs) 2012Ka36

Decay Scheme

Intensities: Relative I_γ
%IT=100.0

Legend

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

