^{115}Rh β^- decay 2010Ku19,1988Ay01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

Parent: ^{115}Rh: E=0.0; J^π=(7/2$^+$); $T_{1/2}$=0.99 s *5*; Q(β^-)=6197 *15*; %β^- decay=100.0

1988Ay01: Activity: ^{238}U(p,F) E(p)=20 MeV, mass separator IGISOL.

Measured: γ, $\gamma\gamma$, βce, $T_{1/2}$,Ge(Li), Si(Li).

The g.s. β branching was measured to be weak. The J^π of the levels 0 and 89 is (5/2$^+$) and (11/2$^-$) from Adopted Levels.

1988Ay01 suggest (1/2,3/2) for the J of g.s.

The experimental data don't allow to derive valuable β branchings.

^{115}Rh isotope obtained as daughter of ^{115}Ru β^- decay.

Measured Eγ, Iγ, $\gamma\gamma$ at the Penning trap station at the IGISOL facility in Jyvaskyla.

Eγ=48.8 (1972ChYZ) via ^{252}Cf(SF) (fragment)(fragment) (K x ray)γ-coin, not seen in ^{115}Rh β^- decay.

The level is as given by 2010Ku19.

^{115}Pd Levels

E(level)[†]	J^π[#]	$T_{1/2}$[‡#]	Comments
0	(1/2$^+$)	25 s *2*	
89.1 *2*	(7/2$^-$)	50 s *3*	%IT=8.0 *20*; %β^-=92.0 *20*
127.8 *2*	(3/2$^+$)		
127.9 *4*	(9/2$^-$)		
253.6 *2*	(5/2$^+$)		
295.5 *3*			
354.6 *2*	(7/2$^+$)		
433.2 *2*			
575.6 *6*	(9/2$^+$)		

[†] From least-squares fit to γ energies.
[‡] From Adopted Levels.
[#] From Adopted Levels.

γ(^{115}Pd)

E$_\gamma$	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.	Comments
38.8 *2*	127.9	(9/2$^-$)	89.1	(7/2$^-$)		
89.1 *2*	89.1	(7/2$^-$)	0	(1/2$^+$)	[E3]	α(K)=11.03 *18*; α(L)=10.18 *20*; α(M)=2.05 *4*; α(N+..)=0.309 *6* α(N)=0.309 *6*
101.0 *3*	354.6	(7/2$^+$)	253.6	(5/2$^+$)		
125.8	253.6	(5/2$^+$)	127.8	(3/2$^+$)		
127.8 *3*	127.8	(3/2$^+$)	0	(1/2$^+$)	(M1)	α(K)=0.167 *3*; α(L)=0.0204 *4*; α(M)=0.00384 *6*; α(N+..)=0.000646 *10* α(N)=0.000646 *10*
137.6 *3*	433.2		295.5			
164.5 *3*	253.6	(5/2$^+$)	89.1	(7/2$^-$)	(E1)	α(K)=0.0321 *5*; α(L)=0.00381 *6*; α(M)=0.000711 *11*; α(N+..)=0.0001181 *18* α(N)=0.0001181 *18*
179.6 *3*	433.2		253.6	(5/2$^+$)		
221 *3*	575.6	(9/2$^+$)	354.6	(7/2$^+$)		
226.7 *3*	354.6	(7/2$^+$)	127.8	(3/2$^+$)		
253.6 *3*	253.6	(5/2$^+$)	0	(1/2$^+$)		
265.6 *3*	354.6	(7/2$^+$)	89.1	(7/2$^-$)		
295.5 *3*	295.5		0	(1/2$^+$)		

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^{115}Rh β^- decay 2010Ku19,1988Ay01 (continued)

$\gamma(^{115}Pd)$ (continued)

E_γ	E_i(level)	J_i^π	E_f	J_f^π
305.3 *3*	433.2		127.8	$(3/2^+)$
322 *3*	575.6	$(9/2^+)$	253.6	$(5/2^+)$

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Decay Scheme