## <sup>95</sup>Pd β<sup>+</sup>p decay (13.3 s) 1982No06,1982Ku15

History

Type Author Citation Literature Cutoff Date

Full Evaluation D. Abriola(a), A. A. Sonzogni NDS 107, 2423 (2006)

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Parent:  $^{95}$ Pd: E $\approx$ 2000;  $J^{\pi}$ =(21/2<sup>+</sup>);  $T_{1/2}$ =13.3 s 3;  $Q(\beta^{+}p)$ =5.13×10<sup>3</sup> SY;  $\%\beta^{+}p$  decay=0.90 16

All information is from 1982No06, except as noted. See  $^{58}$ Ni( $^{40}$ Ca,n2p) in (HI,xn $\gamma$ ) for experimental details.

The singles proton spectrum and delayed py-coincidence spectrum are the same within statistics indicating that the contamination of the proton spectrum by other  $\beta$ -delayed proton emitters is small and the final state in  $^{94}$ Ru populated after proton emission is the 2645. Feeding of other states in  $^{94}$ Ru was not observed by 1982No06.

From the prompt py-coincidence spectrum, feeding of higher excited states is <20% for each of them compared to the feeding of the  $(8^+)$  state.

#### <sup>94</sup>Ru Levels

E(level)	$J^{\pi \dagger}$	$T_{1/2}^{\dagger}$		
0	0+	51.8 min 6		
1430.7	2+			
2187	4+			
2498	6+	65 ns 2		
2645	8+	71 $\mu$ s 4		

<sup>†</sup> From Adopted Levels.

 $\gamma(^{94}Ru)$ 

$\mathrm{E}_{\gamma}^{\dagger}$	$I_{\gamma}$ $^{\ddagger}$ $^{\textcircled{@}}$	$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$\mathbf{E}_f$	$\mathbf{J}_f^{\pi}$	Mult.#	α <mark>&amp;</mark>	Comments
146.3	74.91	2645	8+	2498	6+	E2	0.335	$\alpha$ =0.335; $\alpha$ (K)=0.277; $\alpha$ (L)=0.0471; $\alpha$ (M)=0.00873; $\alpha$ (N+)=0.00155
311.6 756	97.68 100	2498 2187	6 <sup>+</sup> 4 <sup>+</sup>	2187 1430.7	4 <sup>+</sup>	E2 (E2)	0.0237	$\alpha$ =0.0237; $\alpha$ (K)=0.02039; $\alpha$ (L)=0.00270; $\alpha$ (M)=0.00050
1430.7	100	1430.7	2+	0	0+	(E2)		

<sup>&</sup>lt;sup>†</sup> From py-coincidence spectrum. No other  $\gamma$ 's were observed by 1982No06.

### Delayed Protons (94Ru)

$$\frac{E(p)}{4.5 \times 10^3} \quad \frac{E(^{94}Ru)}{2645} \quad \frac{I(p)}{100}$$

 $<sup>^{\</sup>ddagger}$  From the adopted branching ratios and I(p)=100 to (8<sup>+</sup>) state.

<sup>#</sup> From adopted gammas.

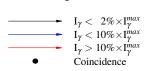
<sup>&</sup>lt;sup>®</sup> For absolute intensity per 100 decays, multiply by 0.0090 16.

<sup>&</sup>amp; Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

<sup>&</sup>lt;sup>†</sup> For absolute intensity per 100 decays, multiply by 0.0090 16.

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## Legend



## Decay Scheme

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

