

$^{107}\text{Pd}$  IT decay (21.3 s)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 109, 1383 (2008)	1-Mar-2008

Parent:  $^{107}\text{Pd}$ : E=214.6 3;  $J^\pi=11/2^-$ ;  $T_{1/2}=21.3$  s; %IT decay=100.0

Identification: formed by  $^{106}\text{Pd}(\text{th } n, \gamma)$ ,  $^{108}\text{Pd}(n, 2n)$ ; 21-s activity assigned initially to  $^{105}\text{Pd}$  isomer was reassigned to  $^{107}\text{Pd}$  by [1958Sc03](#), [1964We09](#).

 $^{107}\text{Pd}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0	$5/2^+$	$6.5 \times 10^6$ y 3	$T_{1/2}$ : 21.3 s 5 ( <a href="#">1957St87</a> ). Other: 23 s 2 ( <a href="#">1952Fl10</a> ). %IT=100.
214.9 10	$11/2^-$	21.3 s 5	

 $\gamma(^{107}\text{Pd})$ 

I $\gamma$  normalization: from  $T_i(215\gamma)=100$  and  $\alpha=0.455$ .

$E_\gamma$	$I_\gamma^\dagger$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\alpha^\ddagger$	Comments
214.9	100	214.9	$11/2^-$	0.0	$5/2^+$	E3	0.455	$\alpha(\text{K})=0.343$ ; $\alpha(\text{L})=0.0914$ ; $\alpha(\text{M})=0.01777$ ; $\alpha(\text{N}+..)=0.00315$ $E_\gamma$ : from <a href="#">1976Ki01</a> ( $\alpha, n\gamma$ ). Others: 216 5 ( <a href="#">1957St87</a> ), 214 1 ( <a href="#">1969Gr18</a> ). Mult.: $\alpha(\text{K})_{\text{exp}}=0.41$ 2 ( <a href="#">1964We09</a> ), 0.30 5 ( <a href="#">1957St87</a> ); K x ray/I $\gamma$ , scin. $\alpha(\text{exp}) \approx 0.4$ ( <a href="#">1952Fl10</a> ).

$^\dagger$  For absolute intensity per 100 decays, multiply by 0.687 7.

$^\ddagger$  Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

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 **$^{107}\text{Pd IT decay (21.3 s)}$** **Decay Scheme**

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays  
%IT=100.0

