

$^{166}\text{Lu}$  IT decay (1.41 min) 1974De09

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 109, 1103 (2008)	1-Mar-2008

Parent:  $^{166}\text{Lu}$ : E=34.37 22;  $J^\pi=3^{(-)}$ ;  $T_{1/2}=1.41$  min 10; %IT decay=42 5

$^{166}\text{Lu}$ -%IT decay: The 34.37-keV level decays 42% 5 by IT decay and 58% 5 by ( $\varepsilon+\beta^+$ ).

 $^{166}\text{Lu}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	$T_{1/2}$	Comments
0.0	6 <sup>-</sup>	2.65 min 10	
34.37 22	3 <sup>(-)</sup>	1.41 min 10	%IT=42 5; % $\varepsilon$ =58 5 (1974De09)

<sup>†</sup> From  $E_\gamma$ .

<sup>‡</sup> From Adopted Levels.

 $\gamma(^{166}\text{Lu})$ 

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\alpha$ <sup>‡</sup>	$I_{(\gamma+ce)}$ <sup>†</sup>	Comments
34.37 22	34.37	3 <sup>(-)</sup>	0.0	6 <sup>-</sup>	(M3)	$8.6 \times 10^4$ 4	100	ce(L)/( $\gamma+ce$ )=0.725 24; ce(M)/( $\gamma+ce$ )=0.217 12; ce(N+)/( $\gamma+ce$ )=0.058 4 ce(N)/( $\gamma+ce$ )=0.052 4; ce(O)/( $\gamma+ce$ )=0.0064 4; ce(P)/( $\gamma+ce$ )=0.000118 7 $E_\gamma$ , Mult.: from Adopted Gammas.

<sup>†</sup> For absolute intensity per 100 decays, multiply by 0.42 5.

<sup>‡</sup> 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.

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 $^{166}\text{Lu}$  IT decay (1.41 min) 1974De09Decay Scheme

%IT=42.5

