^{172}Lu IT decay (3.7 min) 1962Va07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 75,199 (1995)	31-May-1995

Parent: ^{172}Lu: E=41.86 *4*; $J^\pi=1^-$; $T_{1/2}$=3.7 min *5*; %IT decay=100.0
^{172}Lu-%IT decay: $\%\varepsilon+\%\beta^+<0.18$ from $\%\beta^+<0.015$ (1967Dz10) and $\varepsilon/\beta^+=11.2$ (1971Go40).
1962Va07: measured $T_{1/2}$, G.
Other: 1967Dz10 ($\%\beta^+$ limit measured).

^{172}Lu Levels

E(level)	J^π †	$T_{1/2}$	Comments
0.0	4^-		
41.86 *4*	1^-	3.7 min *5*	$T_{1/2}$: L x ray(t) (1962Va07).

† From Adopted Levels.

$\gamma(^{172}Lu)$

E_γ	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α ‡	$I_{(\gamma+ce)}$ †	Comments
41.86 *4*	0.0039 *2*	41.86	1^-	0.0	4^-	M3	2.58×10^4	100	α(L)=1.85×10^4; α(M)=5.43×10^3 E_γ: from ce data (1962Va07). I_γ: I(γ+ce)/(1+α). Mult.: from L-subshell ratios in ^{172}Hf ε decay (1966Ha23,1962Va07).

† Absolute intensity per 100 decays.
‡ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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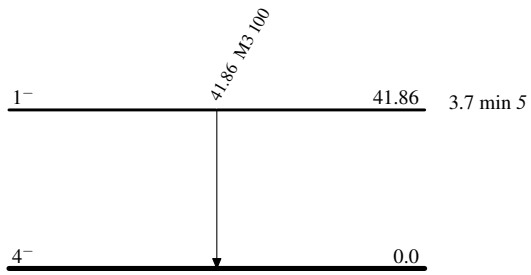
Decay Scheme

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



$^{172}_{71}Lu_{101}$