

^{141}Nd IT decay (62.0 s) 1988Ch39

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

Parent: ^{141}Nd : E=756.51 5; $J^\pi=11/2^-$; $T_{1/2}=62.0$ s 8; %IT decay=99.975 25

^{141}Nd -%IT decay: according to 1988Ch39 the sum of the three estimated branches from the ^{141}Nd ε decay (62.0 s) is less than 0.05% (see β^+, ε Data table in ^{141}Nd ε decay (62.0 s) dataset) leaving the difference to 100% to the ^{141}Nd IT decay (62.0 s) here adopted.

Measured: γ , $\gamma(t)$, K x ray (1968Be28,1967Ge09,1969Ja02,1972De23).

 ^{141}Nd Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$3/2^+$	2.49 h 3	
756.51 5	$11/2^-$	62.0 s 8	%IT=99.975 25

 $\gamma(^{141}\text{Nd})$

E_γ	$I_\gamma^\ddagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	$\alpha^\dagger$	$I_{(\gamma+ce)}^\ddagger$	Comments
756.51 5	91.59 11	756.51	$11/2^-$	0.0	$3/2^+$	M4	0.0916 13	99.975 25	ce(K)/($\gamma+ce$)=0.0679 9; ce(L)/($\gamma+ce$)=0.01257 17; ce(M)/($\gamma+ce$)=0.00277 4 ce(N)/($\gamma+ce$)=0.000620 9; ce(O)/($\gamma+ce$)= 9.20×10^{-5} 13; ce(P)/($\gamma+ce$)= 5.28×10^{-6} 7 $\alpha(K)=0.0741$ 10; $\alpha(L)=0.01373$ 19; $\alpha(M)=0.00302$ 4 $\alpha(N)=0.000676$ 9; $\alpha(O)=0.0001004$ 14; $\alpha(P)=5.76 \times 10^{-6}$ 8 E_γ : from 1988Ch39. Mult.: $\alpha(K)_{\text{exp}}=0.084$ 12 from K x ray/ I_γ (1970Gr23).

† Additional information 1.

‡ Absolute intensity per 100 decays.

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
%IT=99.975 25

