

^{118}In IT decay (8.5 s) [1969Ha08](#),[1970Ha08](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	K. Kitao	NDS 75,99 (1995)	1-Feb-1993

Parent: ^{118}In : $E \approx 200$; $J^\pi = 8^-$; $T_{1/2} = 8.5 \text{ s } 3$; %IT decay=98.6

Source by $^{118}\text{Sn}(n,p)$ on enriched isotope, Ge(Li), $\gamma\gamma$ coin.

Other: [1970Ha08](#).

 ^{118}In Levels

E(level)	J^π	$T_{1/2}$
≈ 60	5^+	4.45 min 5
≈ 200	8^-	8.5 s 3

 $\gamma(^{118}\text{In})$

I_γ normalization: From comparison of the total intensity of 138.2 IT decay (assumed to be E3) and the 254 transition (assumed as E2) in ^{118}Sn ($I_\gamma(138)/I_\gamma(254) = 100/6.3 \text{ } 15$) ([1970Ha08](#)).

E_γ	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α^\ddagger	Comments
138.2 5	100	≈ 200	8^-	≈ 60	5^+	(E3)	3.56	$\alpha(K) = 2.075$; $\alpha(L) = 1.195$; $\alpha(M) = 0.2459$; $\alpha(N+..) = 0.0491$ $B(E3)(\text{W.u.}) = 0.0388 \text{ } 20$ Mult.: $\alpha(K)_{\text{exp}} = 1.5 \text{ } 8$ allows mult=M2,E3; but W.u. does not support M2.

† For absolute intensity per 100 decays, multiply by 0.216 I .

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

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Decay Scheme

Intensities: I_γ per 100 parent decays
%IT=98.6

