

^{77}Ge IT decay (53.7 s) [1970Me20](#),[1970Im01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	30-Sep-2020

Parent: ^{77}Ge : E=159.7 l; $J^\pi=1/2^-$; $T_{1/2}=53.7$ s 6; %IT decay=19 2

 ^{77}Ge Levels

E(level)	J^π^\dagger	$T_{1/2}^\dagger$
0.0	$7/2^+$	11.211 h 3
159.7 l	$1/2^-$	53.7 s 6

† From the Adopted Levels.

 $\gamma(^{77}\text{Ge})$

I γ normalization: I(γ +ce)(215 γ)/I(γ +ce)(159 γ)=1.13 3 ([1969Im02](#)) and I(γ +ce)(215 γ)/I β =0.268 27 ([1970Im01](#)).

E_γ	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α^\ddagger	Comments
159.7 l	48 l	159.7	$1/2^-$	0.0	$7/2^+$	(E3)	0.836	$\alpha(\text{K})=0.709$ 11; $\alpha(\text{L})=0.1100$ 16; $\alpha(\text{M})=0.01629$ 24; $\alpha(\text{N})=0.000755$ 11 E_γ : from 1970Me20 . I_γ : from 1969Im02 . Mult.: $\alpha(\text{K})_{\text{exp}}=1.2$ 6 (1962We08), $\alpha(\text{K})=0.71$ for E3, 0.93 for M3. E3 assignment is consistent with J^π values of g.s. and 160 level.

† For absolute intensity per 100 decays, multiply by 0.215 23.

‡ 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: $I_{(\gamma+ce)}$ per 100 parent decays
%IT=19.2

