^{77}Se IT decay (17.36 s) 1972Jo05,1967Yu01

History

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

Parent: ^{77}Se: E=161.9224 *11*; $J^\pi=7/2^+$; $T_{1/2}$=17.36 s *5*; %IT decay=100.0

1972Jo05, 1967Yu01: measured half-life of ^{77}Se isomer decay.
1969Sa05, 1962We08, 1963Ku06: measured ce data for 161.9-keV transition.
2009Mu15: isomer produced in (γ,γ') using ^{60}Co source.
1995Ke16, 1986Ne05, 1980Jo11, 1968Da24, 1968Ar09, 1951Ca23: measured half-life of the isomer in ^{77}Se.

^{77}Se Levels

E(level)	J^π†	$T_{1/2}$	Comments
0.0	$1/2^-$	stable	
161.9224 *11*	$7/2^+$	17.36 s *5*	$T_{1/2}$: from weighted average of 17.31 s *8* (1986Ne05), 17.38 s *8*(1980Jo11), 17.38 s *9* (1967Yu01). Others: 2009Mu15, 1972Jo05, 1968Ma12, 1967Ab08, 1963Al32, 1963Ka34, 1962Ma38, 1952Ru10, 1951Ca23, 1950Fl62, 1947Ar01. See details in the Adopted Levels.

† From the Adopted Levels.

$\gamma(^{77}Se)$

Iγ normalization: From I(γ+ce)(162γ)=100.

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α‡	Comments
161.9224 *11*	100	161.9224	$7/2^+$	0.0	$1/2^-$	E3	0.879	α(K)=0.734 *11*; α(L)=0.1248 *18*; α(M)=0.0194 *3*; α(N)=0.001410 *21* E_γ: from Adopted Gammas. Mult.: from α(K)exp=0.68 *10* (1969Sa05), 0.79 *6* (1962We08), K/L=5.9 (1963Ku06).

† For absolute intensity per 100 decays, multiply by 0.532 *7*.
‡ 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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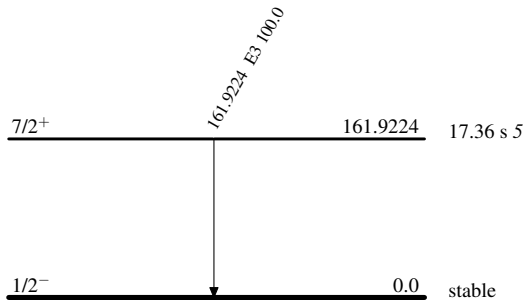
Decay Scheme

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

%IT=100.0



$^{77}_{34}Se_{43}$