^{107}Ag IT decay (44.3 s)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 109, 1383 (2008)	1-Mar-2008

Parent: ^{107}Ag: E=93.125 *19*; $J^\pi=7/2^+$; $T_{1/2}$=44.3 s *2*; %IT decay=100.0
Others: 1939Va02, 1941He01.

^{107}Ag Levels

E(level)	J^π†	$T_{1/2}$	Comments
0.0	$1/2^-$	stable	
93.124	$7/2^+$	44.3 s *2*	$T_{1/2}$: 44.3 s *2* (1947Br05). Others: 40 s *2* (1940Al01), 44 s *1* (1951Wo15), 43.8 s *6* (1963Ve13), 44.2 s *3* (1967Ab07), 40 s *6* (1973Co10). E(level): $7/2^+$ isomerism systematics: 65.7-min ^{103}Ag g.s., 7.2-min ^{105}Ag at 25 keV, 40-s ^{109}Ag at 88 keV, 65-s ^{111}Ag at 60 keV. For model interpretations of anomalously low-lying $7/2^+$ states in odd-A silver isotopes, see 1972Pa17, 1974Ku09. %IT=100.

† From Adopted Levels.

$\gamma(^{107}Ag)$

Iγ normalization: from Ti(93γ)=100 per 100 isomer decays.

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α‡	Comments
93.124 *20*	100	93.124	$7/2^+$	0.0	$1/2^-$	E3	20.4	α(K)= 9.39; α(L)= 8.86; α(M)= 1.797; α(N+..)= 0.322 E_γ: 93.124 *20* (1974HeYW). Others: 93.06 *4* (1953Jo20,1972Br02), 93.10 *5* (1962La10), 93.13 *3* (1974Pa15), 93.16 *2* (1978Sh08). Mult.: L1:L2:L3=18.0 *11*:90.0 *35*:100 (1958Sc40), 17.7 *11*:86.6 *27*:100 (1972Br02), 17.1 *14*:84.0 *15*:100 (1978Sh08). K/L=1.09 *4* (1958Sc40), 1.08 *3* (1962La10), 0.95 *4* (1978Sh08). α(K)exp=9.5 *10* (1953Br73) ce(K)/Iγ, 9.1 *5* (1962La10) K x ray/Iγ, 9.3 *4* (1974Pa15) K x ray/Iγ. K/L2=2.30 *15*, L1/L2=0.20 *1*, L2/L3=0.90 *2* (1981Tr07). 1981Tr07 extract a value for the penetration factor, λ=−0.7 *5*.

† For absolute intensity per 100 decays, multiply by 0.0467 *20*.
‡ 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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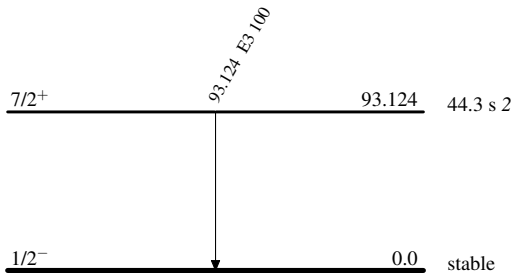
Decay Scheme

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



$^{107}_{47}Ag_{60}$