^{122}Sb ε decay 1970LaZT,1975SeZC

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

Parent: ^{122}Sb: E=0.0; $J^\pi=2^-$; $T_{1/2}$=2.7238 d *2*; Q(ε)=1615.8 *28*; %ε+%$β^+$ decay=2.41 *12*
1970LaZT, 1975SeZC, 1967La18: ^{121}Sb(n,γ); semi G.
Others: γ (1965Ar12,1967Ar04), $β^+$ (1958Pe17,1955Gl41).

^{122}Sn Levels

E(level)	J^π
0.0	0^+
1140.68 *4*	2^+

ε,$β^+$ radiations

E(decay)	E(level)	Iβ+ †	Iε†	Log *ft*	I(ε+β+)†	Comments
(475 *3*)	1140.68		0.76 *4*	7.25 *4*	0.76 *4*	εK=0.84863 *9*; εL=0.12014 *7*; εM+=0.03124 *2*
(1616 *3*)	0.0	0.0061 *4*	1.66 *11*	8.99[1u] *4*	1.67 *11*	av Eβ=290.0 *13*; εK=0.8507; εL=0.11568 *3*; εM+=0.029918 *6* E($β^+$)=565 keV *24* (1958Pe17).

† Absolute intensity per 100 decays.

γ(^{122}Sn)

E_γ†	I_γ‡@	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	Comments
1140.67 *4*	1.07 *5*	1140.68	2^+	0.0	0^+	E2	I(1140.0γ)/I(564.1γ in ^{122}Te)=0.0107 *5* (1975SeZC), 0.011 *1* (1965Ar12), 0.011 *2* (1967Ar04), 0.012 (1970LaZT).

† From 1975SeZC.
‡ Relative to Iγ(564g)=100 in ^{122}Sb $β^-$ decay (1975SeZC).
# From adopted gammas.
@ For absolute intensity per 100 decays, multiply by 0.7068 *18*.

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Decay Scheme

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