^{122}Sn IT decay 1992Br06

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

Parent: ^{122}Sn: E=2765.6 *11*; $J^{\pi}=(10^+)$; $T_{1/2}$=62 μs *3*; %IT decay=100.0
1992Br06: ^{124}Sn(^{76}Ge,^{76}Ge′) E=325 MeV; measured off-beam γ, γ(t), $\gamma\gamma$.
The decay scheme is that proposed by 1992Br06.

^{122}Sn Levels

E(level)†	J^{π}†	$T_{1/2}$	Comments
0.0	0^+		
1140.5 *1*	2^+		
2245.8 *1*	5^-		
2409.0 *1*	7^-		
2690.0 *1*	(8^+)		
2765.6 *11*	(10^+)	62 μs *3*	%IT=100 $T_{1/2}$: from measurements with pulsed beam (1992Br06).

† From Adopted Levels.

$\gamma(^{122}Sn)$

E_γ†	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.	α#	Comments
75.2‡ *5*	2765.6	(10^+)	2690.0	(8^+)	(E2)	4.44	α(K)=2.88; α(L)=1.26; α(M)=0.255; α(N+..)=0.052 Mult.: $\alpha\approx5$ from I(75.2γ)/I(281.0γ)≈0.2 measured by 1992Br06 and intensity balance at 2690 level. α(theory)=0.41 (E1), 1.28 (M1), 4.44 (E2), 68 (E3), 17 (M2).
163.2 *1*	2409.0	7^-	2245.8	5^-			
281.0 *1*	2690.0	(8^+)	2409.0	7^-			
1105.4 *1*	2245.8	5^-	1140.5	2^+			
1140.5 *1*	1140.5	2^+	0.0	0^+			

† From adopted gammas, unless otherwise noted.
‡ From 1992Br06.
# 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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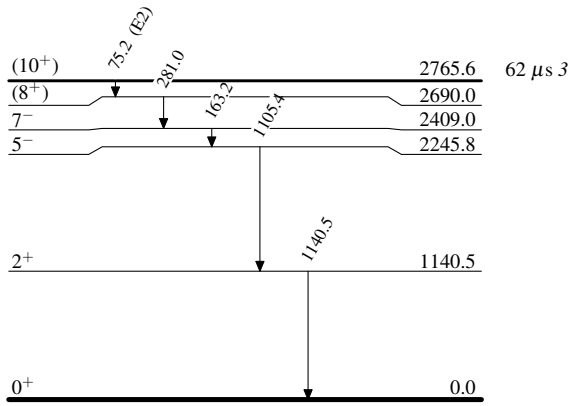
Decay Scheme

%IT=100.0



$^{122}_{50}Sn_{72}$