^{46}Sc IT decay 1972BeWN,1967Yu01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 91,1 (2000)	15-Jul-2000

Parent: ^{46}Sc: E=142.528 *8*; $J^\pi=1^-$; $T_{1/2}$=18.75 s *4*; %IT decay=100
Level produced in ^{45}Sc(n,γ); NaI detectors.
Other: 1951De06.

^{46}Sc Levels

E(level)	J^π †	$T_{1/2}$	Comments
0.0	4^+	83.83 d *2*	
142.528 *8*	1^-	18.75 s *4*	$T_{1/2}$: weighted average of 18.765 s *45* (1972BeWN) and 18.67 s *9* (1967Yu01) from decay of 142.5γ. See also 1972Bf03, 1948Go16.

† From Adopted Levels.

γ(^{46}Sc)

E_γ	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α‡	Comments
142.528 *8*	100	142.528	1^-	0.0	4^+	E3	0.612	α(K)=0.539; α(L)=0.0549; α(M+..)=0.018 E_γ: from ^{45}Sc(n,γ). Mult.: from adopted γ's. α(K)exp/α(L)exp=10 *3* (1952Bu25); $\alpha\approx1$ (1948Go16).

† For absolute intensity per 100 decays, multiply by 0.62 *2*.
‡ 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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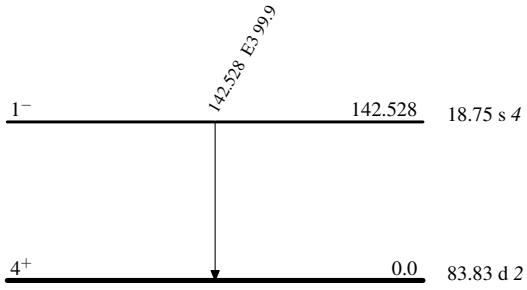
Decay Scheme

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

%IT=100



$^{46}_{21}Sc_{25}$