^{169}Yb IT decay (46 s)

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 109, 2033 (2008)	15-Jun-2008

Parent: ^{169}Yb: E=24.1999 *16*; $J^\pi=1/2^-$; $T_{1/2}$=46 s *2*; %IT decay=100.0
Isomer identified with L x ray coincidence data in ^{168}Yb(n,γ): E=slow (1949De16), E=thermal (1960Ho10).

^{169}Yb Levels

E(level)†	Jπ†	$T_{1/2}$	Comments
0.0	$7/2^+$	32.018 d *5*	$T_{1/2}$: from Adopted Levels.
24.199 *3*	$1/2^-$	46 s *2*	%IT=100 $T_{1/2}$: from 1960Ho10. Other value: 50 s (1949De16).

† From Adopted Levels.

$\gamma(^{169}Yb)$

Iγ normalization: from Ti(24γ)=100%.

E_γ†	I_γ‡#	E_i(level)	J_i^π	E_f	J_f^π	Mult.†	α@	$I_{(\gamma+ce)}$#	Comments
24.20 *2*	3.88×10^{-4} *5*	24.199	$1/2^-$	0.0	$7/2^+$	E3	2.58×10^5	100	ce(L)/(γ+ce)=0.717 *8*; ce(M)/(γ+ce)=0.225 *5*; ce(N+)/(γ+ce)=0.0580 *12* ce(N)/(γ+ce)=0.0526 *11*; ce(O)/(γ+ce)=0.00541 *12*; ce(P)/(γ+ce)=2.64×10^{-6} *6* See ^{169}Lu ε decay (34.06 h) for ce subshell data.

† From Adopted Gammas.
‡ Deduced from I(γ+ce) and α.
# Absolute intensity per 100 decays.
@ 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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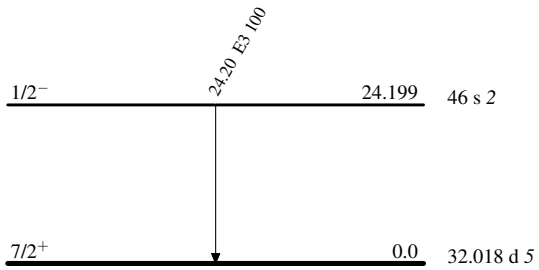
Decay Scheme

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

%IT=100.0



$^{169}_{70}Yb_{99}$