^{168}Tm β^- decay 1987Me04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111, 1807 (2010)	15-Jun-2010

Parent: ^{168}Tm: E=0.0; $J^\pi=3^+$; $T_{1/2}$=93.1 d *2*; Q(β^-)=257 *4*; %β^- decay=0.010 *7*
^{168}Tm-%β^- decay: from total I(γ+ce) to (^{168}Er(g.s.) + ^{168}Yb(g.s.))=100%.
See ^{168}Tm ε decay for experimental details (same sources used). Others: 1949Wi03, 1983Me17.

^{168}Yb Levels

E(level)	J^π[†]	$T_{1/2}$	Comments
0.0	0^+	stable	
87.73 *2*	2^+		E(level): from Eγ.

[†] From Adopted Levels.

β^- radiations

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
(169 *4*)	87.73	0.010 *7*	10.2 *3*	av Eβ=45.5 *12* Iβ^-: deduced from Ti(87.7γ) (g.s. feeding not expected (ΔJ=3)).

[†] Absolute intensity per 100 decays.

$\gamma(^{168}Yb)$

Iγ normalization: from total I(γ+ce) to (^{168}Er(g.s.) + ^{168}Yb(g.s.))=100%.

E$_\gamma$[†]	I$_\gamma$[†#]	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.[‡]	α[@]	Comments
87.73 *2*	0.03 *2*	87.73	2^+	0.0	0^+	E2	5.35	α(K)=1.316 *19*; α(L)=3.08 *5*; α(M)=0.760 *11*; α(N+..)=0.193 *3* α(N)=0.1732 *25*; α(O)=0.0198 *3*; α(P)=5.82×10^{-5} *9* %Iγ=0.0016 *11* assuming recommended decay scheme normalization.

[†] From 1987Me04.
[‡] From Adopted Gammas.
[#] For absolute intensity per 100 decays, multiply by 0.05 *4*.
[@] 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