

^{148}Ho IT decay (2.36 ms) [1989Br22,1984Br07](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 117, 1 (2014)	1-Oct-2013

Parent: ^{148}Ho : $E=694.4+x$; $J^\pi=(10)^+$; $T_{1/2}=2.36$ ms 6; %IT decay=100.0

[1989Br22,1984Br07](#): $^{90}\text{Zr}(^{60}\text{Ni},p\text{n}\gamma)$, $E(^{60}\text{Ni})=230$ MeV, 250 MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin, (K x ray) γ coin, $T_{1/2}$.

 ^{148}Ho Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0.0+x	(5) ⁻		
32.3+x	(5) ⁻		
141.5+x	(6) ⁻		
321.3+x	(7) ⁻		
694.4+x	(10) ⁺	2.36 ms 6	$T_{1/2}$: from $\gamma(t)$. Weighted average of 2.62 ms 18 (2010Ko12) and 2.35 ms 4 (1989Br22,1984Br07).

[†] From Adopted Levels.

 $\gamma(^{148}\text{Ho})$

E_γ [†]	I_γ ^{‡@}	$E_i(\text{level})$	J^π_i	E_f	J^π_f	Mult. [#]	α ^{&}	Comments
32.3 7	5 4	32.3+x	(5) ⁻	0.0+x	(5) ⁻			
108.5 2	9.8 7	141.5+x	(6) ⁻	32.3+x	(5) ⁻			
141.5 4	4.4 8	141.5+x	(6) ⁻	0.0+x	(5) ⁻			
180.2 1	29.4 10	321.3+x	(7) ⁻	141.5+x	(6) ⁻	[M1+E2]	0.42 8	
321.3 1	62.3 17	321.3+x	(7) ⁻	0.0+x	(5) ⁻	E2	0.0543	
373.1 1	100.0 22	694.4+x	(10) ⁺	321.3+x	(7) ⁻	E3	0.1229	$\alpha(\text{K})=0.0759$; $\alpha(\text{L})=0.0361$; $\alpha(\text{M})=0.00867$; $\alpha(\text{N})=0.00198$; $\alpha(\text{O})=0.000250$ Mult.: from α estimated from intensity balance, see also Adopted Gammas.

[†] From [1989Br22](#).

[‡] Relative intensity ([1989Br22](#)).

[#] From Adopted Gammas.

[@] For absolute intensity per 100 decays, multiply by 0.8906 14.

[&] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

^{148}Ho IT decay (2.36 ms) 1989Br22,1984Br07**Decay Scheme**

Intensities: I_γ per 100 parent decays
%IT=100.0

Legend

→ $I_\gamma < 2\% \times I_\gamma^{\max}$
→ $I_\gamma < 10\% \times I_\gamma^{\max}$
→ $I_\gamma > 10\% \times I_\gamma^{\max}$

