

^{168}Ho IT decay (132 s) 1990Ch37

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

Parent: ^{168}Ho : $E \approx 59$; $J^\pi = (6^+)$; $T_{1/2} = 132 \text{ s } 4$; %IT decay ≥ 99.5

Sources from ^{170}Er bombardments of natural tungsten, mass separation (see ^{168}Dy β^- decay). New ^{168}Ho activity evident from short-lived component in x ray spectrum.

 ^{168}Ho Levels

E(level)	J^π [†]	$T_{1/2}$ [†]	Comments
0.0 ≈ 59	3^+ (6^+)	2.99 min 7 132 s 4	%IT ≥ 99.5 ; % $\beta^- \leq 0.5$ E(level): from E_γ .

[†] From Adopted Levels.

 $\gamma(^{168}\text{Ho})$

E_γ [†]	I_γ [‡]	$E_i(\text{level})$	J^π_i	E_f	J^π_f	Mult. [†]	α [#]	$I_{(\gamma+ce)}$ [‡]	Comments
(≈ 59)	0.0414 12	≈ 59	(6^+)	0.0	3^+	(M3)	2.41×10^3	100	ce(K)/($\gamma+ce$) ≈ 0.139 ; ce(L)/($\gamma+ce$) ≈ 0.639 ; ce(M)/($\gamma+ce$) ≈ 0.175 ; ce(N+)/($\gamma+ce$) ≈ 0.0462 ; ce(N)/($\gamma+ce$) ≈ 0.0410 ; ce(O)/($\gamma+ce$) ≈ 0.00509 ; ce(P)/($\gamma+ce$) ≈ 0.0001241 I_γ : deduced from $I(\gamma+ce)$ and α .

[†] Plausible values consistent with $T_{1/2}$, x-ray data, growth and decay of ^{168}Ho activity, and comparison with analogous isomer in ^{172}Lu (B(M3)(W.u.)=0.053 8).

[‡] For absolute intensity per 100 decays, multiply by ≥ 0.995 .

[#] 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.

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Legend

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
 $\%IT \geq 99.5$

-----► γ Decay (Uncertain)

