

^{163}Ho IT decay (1.09 s) [1967Ge09](#),[1966Bo02](#),[1958Go78](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich, Balraj Singh		NDS 111, 1211 (2010)	12-Apr-2010

Parent: ^{163}Ho : E=297.88 10; $J^\pi=1/2^+$; $T_{1/2}=1.09$ s 3; %IT decay=100.0

[Additional information 1.](#)

[1967Ge09](#): γ , $T_{1/2}$.

[1966Bo02](#): x rays, γ , ce (mag spect).

[1958Go78](#): x rays, γ , and excitation functions.

[1957Ha12](#): γ , $T_{1/2}$.

 ^{163}Ho Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0.0	$7/2^-$		$\pi 7/2[523]$ bandhead.
297.88 10	$1/2^+$	1.09 s 3	$\pi 1/2[411]$ bandhead.

[†] From Adopted Levels.

 $\gamma(^{163}\text{Ho})$

E_γ	I_γ [†]	$E_i(\text{level})$	J^π_i	E_f	J^π_f	Mult.	α [‡]	$I_{(\gamma+ce)}$ [†]	Comments
297.88 10	77.7 5	297.88	$1/2^+$	0.0	$7/2^-$	E3	0.287	100	ce(K)/($\gamma+ce$)=0.1182 15; ce(L)/($\gamma+ce$)=0.0801 11; ce(M)/($\gamma+ce$)=0.0195 3; ce(N+)/($\gamma+ce$)=0.00498 8; ce(N)/($\gamma+ce$)=0.00443 7; ce(O)/($\gamma+ce$)=0.000548 8; ce(P)/($\gamma+ce$)= 6.94×10^{-6} 10 E $_\gamma$: from the Adopted Values. I $_\gamma$: from I($\gamma+ce$) and α . Mult.: from $\alpha(K)\text{exp}=0.17$ 6 (1958Go78), 0.2 (1966Bo02).

[†] 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

