

$^{165}\text{Ho}(\pi^-, 11n\gamma)$ [1975Eb06,1984Sh09](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 200,2 (2025)	22-Aug-2022

Observed nuclear γ 's from pionic atoms of ^{165}Ho .

 ^{154}Dy Levels

E(level)	J^π [†]
0	0 ⁺
334.44 <i>10</i>	2 ⁺
746.41 <i>14</i>	4 ⁺
1224 [‡]	6 ⁺
1747 [‡]	8 ⁺
2304 [‡]	10 ⁺

[†] From ^{154}Dy Adopted Levels.

[‡] Nominal value from Adopted Levels.

 $\gamma(^{154}\text{Dy})$

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	α [‡]	Comments
334.44 <i>10</i>	3.9 <i>8</i>	334.44	2 ⁺	0	0 ⁺	E2	0.0467	E_γ : 1975Eb06 give 344.44 which is assumed to be misprint.
411.97 <i>9</i>	8.6 <i>12</i>	746.41	4 ⁺	334.44	2 ⁺	E2	0.0256	I_γ : Other: 1.7 <i>1</i> γ 's per 100 stopped π^- (1984Sh09).
477 [#]		1224	6 ⁺	746.41	4 ⁺	E2		I_γ : 1.1 <i>1</i> γ 's per 100 stopped π^- (1984Sh09).
523 [#]		1747	8 ⁺	1224	6 ⁺	E2		I_γ : 0.6 <i>3</i> γ 's per 100 stopped π^- (1984Sh09).
556 [#]		2304	10 ⁺	1747	8 ⁺	E2		I_γ : 0.3 <i>1</i> γ 's per 100 stopped π^- (1984Sh09).

[†] The transition intensities, $I_\gamma(1+\alpha)$, per 100 captured π^- are given by [1975Eb06](#) for the γ 's from 2⁺ and 4⁺ levels. Evaluators converted these values to I_γ . In [1984Sh09](#), the γ 's per 100 stopped π^- 's are reported for the γ 's from the 4⁺, 6⁺, 8⁺ and 10⁺ levels; these values are given in comments.

[‡] From Adopted γ radiations.

[#] Nominal value from Adopted γ radiations.

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Level Scheme

Intensities: I_γ per 100 captured π^- .

Legend

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

