

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS	113,715 (2012)	31-May-2011

$Q(\beta^-) = -1.10 \times 10^4$ syst; $S(n) = 1.29 \times 10^4$ syst; $S(p) = -8. \times 10^2$ syst; $Q(\alpha) = 3.7 \times 10^3$ syst 2012Wa38

Note: Current evaluation has used the following Q record -10796 SY12841 syst -551 syst 3546 syst 2011AuZZ.

$\Delta Q = 718$, $\Delta(S(n)) = 643$, $\Delta(S(p)) = 831$, $\Delta(Q(\alpha)) = 499$ (syst, 2011AuZZ) $Q(\epsilon p) = 7251$ 807 (syst, 2011AuZZ).

2003Au03: $Q(\beta^-) = 10040$ syst, $S(n) = 12880$ syst, $S(p) = -390$ syst, $Q(\alpha) = 3460$ syst. $Dq = 450$, $\Delta S(n) = 640$, $\Delta S(p) = 540$, $\Delta Q(\alpha) = 500$ (2003Au03).

^{143}Ho identified by 2000So11 in $^{90}\text{Zr}(^{197}\text{Au}, x)$ $E = 30$ MeV/nucleon, followed by detection with a fragment separator. Measured cross section = 230 μb . ^{143}Ho is expected to decay by delayed protons, although no proton decay was observed in an earlier study (1983La27), where the identification of ^{143}Ho was not well established.

2000O110: Produced by $^{92}\text{Mo}(^{54}\text{Fe}, p2n)$. Measured γ rays, $\gamma\gamma$ coin, $p\gamma$ coin, Detector: gammasphere, array of HPGe detectors.

2003SeZW: Preliminary study using $^{92}\text{Mo}(^{54}\text{Fe}, p2n)$, measured γ in coin with p, n, α . Three γ 's observed in p2n channel and considered to form decoupled h11/2 proton band.

Theory: Shape calculations (2009Zh44).

 ^{143}Ho Levels

E(level)	J^π	Comments
0.0?	(11/2 ⁻)	$\% \epsilon + \% \beta^+ = ?$; $\% \epsilon p = ?$ $T_{1/2}$: unknown experimentally, 0.3 s from systematics (2003Au02). J^π : 11/2 ⁻ from systematics (2003SeZW).
318?	(15/2 ⁻)	E(level), J^π : From 2003SeZW.

 $\gamma(^{143}\text{Ho})$

$E_i(\text{level})$	J_i^π	E_γ	E_f	J_f^π	Comments
318?	(15/2 ⁻)	318 [†]	0.0?	(11/2 ⁻)	E_γ : From 2003SeZW.

[†] Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Legend

Level Scheme

-----► γ Decay (Uncertain)

