^{142}Ho εp decay (0.4 s) 2001Xu02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

Parent: ^{142}Ho: E=0.0; J^π=(7$^-$,8$^+$); $T_{1/2}$=0.4 s *1*; Q(εp)=10000 *syst*; %εp decay=?

^{142}Ho-E,J^π,$T_{1/2}$: From 2011Jo05.

^{142}Ho-Q(εp): 10000 *410* (2021Wa16).

2001Xu02: ^{106}Cd(^{40}Ca,3np) E=232 MeV at the cyclotron of IMP Lanzhou. Used He jet and tape transport, Si surface barrier detectors and HPGe detectors. Measured β-delayed proton spectra, Eγ, Iγ, p-γ coin, $T_{1/2}$(^{141}Ho).

^{141}Tb Levels

E(level)[†]	J^π[†]
0.0+x	(11/2$^-$)
307.3+x *2*	(15/2$^-$)
811.1+x *4*	(19/2$^-$)

[†] From Adopted Levels, Gammas dataset.

γ(^{141}Tb)

E_γ[†]	E_i(level)	J^π_i	E_f	J^π_f
307.3 *2*	307.3+x	(15/2$^-$)	0.0+x	(11/2$^-$)
503.8[‡#] *3*	811.1+x	(19/2$^-$)	307.3+x	(15/2$^-$)

[†] From Adopted Levels, Gammas dataset.

[‡] γ ray swamped in the background in Fig. 1 "The measured γ-ray spectrum in coincidence with 2.5-6.5 MeV protons" of 2001Xu02 reason for which this γ ray and its proton branch are uncertain.

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

Delayed Protons (^{141}Tb)

E(^{141}Tb)	I(p)[†]
307.3+x	100
811.1+x	10[‡]

[†] Normalized to 100 for proton branch to 307.3+y.

[‡] Estimated by 2001Xu02.

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Legend

Decay Scheme