

^{146}Tm p decay (198 ms) [2006Ta08,2005Bb02](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 110, 507 (2009)	1-Oct-2008

Parent: ^{146}Tm : E=182; $J^\pi=10^+$; $T_{1/2}=198$ ms 3; Q(p)=1199 I; %p decay=100.0

^{146}Tm -Q(p): from E(p)=1191 I (g.s. to g.s. proton transition).

^{146}Tm - $T_{1/2}$: Other: 235 ms 27 ([1993Li18](#)), ≈ 200 ms (@005RO40).

^{146}Tm - J^π : Predominant Configuration= $((\pi h_{11/2})(\nu h_{11/2}))$.

[2006Ta06,2005Bb02,2005Bi24](#): ^{146}Tm isotope produced in $^{92}\text{Mo}(^{58}\text{Ni},p3n)$ reaction at E=292, 297 MeV; Ion-beam facility at HRIBF, recoil mass separator. Measured proton spectra, half-lives. Others: [2005RyZZ](#), [2003Gi10](#), [2001Ry01](#), [2001Ry02](#).

[2005Ro40,2005Se26](#): ^{146}Tm formed in the reaction $^{58}\text{Ni}(^{92}\text{Mo},3\nu\pi)$, beam produced at ATLAS accelerator. Measured E_γ , E_π , spin-parity using Gammasphere array and double-sided silicon strip detectors. They report p decay from 5^+ , 10^+ and 1^+ isomers, p decay from 1^+ isomer is not confirmed by [2006Ta08](#) but is not completely ruled out. Others: [2005RoZY](#), [2004DaZX](#).

[1993Li18](#): Source produced by $^{92}\text{Mo}(^{58}\text{Ni},2p2n)$ E=287 MeV. Recoil mass separator. Measured E(p)=1119 5 with Si strip detector.

All data are from [2006Ta08](#).

 ^{145}Er Levels

E(level)	J^π
253	(11/2 ⁻)
484	(13/2 ⁻)

Protons (^{145}Er)

E(p)	E(^{145}Er)	I(p)	Comments
889 8	484	1.0 4	L=3 transition.
1120 I	253	99 I	L=5 transition.