^{146}Tm p decay (68 ms) 2006Ta08,2005Bb02

History

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

Parent: ^{146}Tm: E=0; $J^\pi=5^-$; $T_{1/2}$=68 ms *3*; Q(p)=1199 *1*; %p decay=100.0

^{146}Tm-Q(p): from E(p)=1191 *1* (g.s. to g.s. proton transition).

^{146}Tm-$T_{1/2}$: From 2006Ta08. Others: 72 ms *23* (1973Li18), 82 ms *4* (2005Ro40), 70 ms *5* (2005Bi24).

^{146}Tm-J^π: Predominant Configuration=((π $h_{11/2}$)(ν $s_{1/2}$)).

2006Ta06,2005Bb02,2005Bi24:^{146}Tm isotope produced in ^{92}Mo(^{58}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, 1995PeZY.

2005Ro40,2005Se26: ^{146}Tm formed in the reaction ^{58}Ni(^{92}Mo,3$\nu\pi$), beam produced at ATLAS accelerator. Measured Eγ, Eπ, 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. Other: 2005RoZY, 2004DaZX.

1973Li18: Source produced by ^{92}Mo(^{58}Ni,2p3n) E=287 MeV. Recoil mass separator. Measured E(p)=1189 *5* with Si strip detector.

Additional information 1.

^{145}Er Levels

E(level)	J^π	$T_{1/2}$	Comments
0	$(1/2^+)$		J^π: configuration =(N,$s_{1/2}$).
175	$(3/2^+)$		J^π: Configuration=((ν $s_{1/2}$)$\otimes 2^+$).
253	$(11/2^-)$	0.7 s	J^π: Configuration=(ν $h_{11/2}$).

Protons (^{145}Er)

E(p)	E(^{145}Er)	I(p)	Comments
938 *4*	253	13.8 *9*	L=0 transition.
1016 *4*	175	18.3 *11*	L=3(+5) transition.
1191 *1*	0	68.1 *19*	L=5 transition.