Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	P. K. Joshi, B. Singh, S. Singh, A. K. Jain	NDS 138, 1 (2016)	15-Oct-2016

Q(β^-)=−10490 *SY*; S(n)=12530 *SY*; S(p)=−240 *SY*; Q(α)=3590 *SY* 2012Wa38
Estimated uncertainties (2012Wa38): ΔQ(β^-)=590, ΔS(n)=420, ΔS(p)=360, ΔQ(α)=360.
Q(εp)=6300 *300*, S(2n)=23310 *590*, S(2p)=2590 *360* (syst,2012Wa38).
1999Xi04: ^{139}Tb identified in ^{106}Cd(^{36}Ar,X) at 220 MeV; measured $\gamma\gamma$(t), (x ray)γ(t); He-jet; HPGe detectors.
2000So11: ^{90}Zr(^{197}Au,X) E=30 MeV/nucleon; measured fragments charge and mass distribution and isotopic production σ=200 μb for the production of ^{139}Tb.
No information is available about the decay scheme of ^{139}Dy ε decay.

^{139}Tb Levels

Cross Reference (XREF) Flags

A ^{139}Dy ε decay (0.6 s)

E(level)	$T_{1/2}$	XREF	Comments
0.0	1.6 s *2*	A	%ε+%β^+>0; %εp=?; %p=? J$^\pi$: 3/2$^+$ predicted by 1997Mo25; 11/2$^-$ from syst (2012Au07). Lack of correlation between decay gammas observed and those observed in ^{139}Gd from ^{92}Mo(^{50}Cr,n2pγ) supports a low spin of 3/2$^+$. $T_{1/2}$: from decay curves for 109γ and 120γ in ^{139}Gd (1999Xi04).