Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 159, 1 (2019)	30-Aug-2019

Q(β^-)=3517 *SY*; S(n)=6169 *SY*; S(p)=8127 *SY*; Q(α)=−543 *SY* 2017Wa10

^{177}Tm Levels

E(level)	J$^\pi$	$T_{1/2}$	Comments
0.0	(1/2$^+$)	95 s *7*	%β^-=100 E(level): The observation of 227γ in the spectrum shown in Fig. 7 by 1989Ry04, known to depopulate the J^π=1/2$^-$ state in ^{177}Yb, suggest the existence of a low-spin, β^--decaying state in ^{177}Tm that is associated by the evaluator with the ^{177}Tm g.s. J$^\pi$: Systematics of the ground state J^π in even-N $^{169-175}$Tm nuclei suggest that the ^{177}Tm g.s. should have J^π=1/2$^+$ and associated with the π1/2[411] Nilsson orbital. $T_{1/2}$: From Yb Kα x ray time spectrum in 1989Ry04. The value also contains contributions from the ^{177}Tm isomer decay. configuration: Probable π1/2[411] Nilsson configuration.
0.0+x	(7/2$^-$)	77 s *11*	%$\beta^-\leq$100; %IT=? J$^\pi$: Tentative assignment, based on the apparent β^--decay branch to the 622.0-keV level in ^{177}Yb and subsequent 622.0γ and 517.5γ decays to the 9/2$^+$ and 7/2$^-$ levels in ^{177}Yb, respectively (1989Ry04). Systematics of known excited structures in neighboring even-N Tm isotopes, suggest that the J^π=7/2$^-$ state associated with the π7/2[523] orbital is located at relatively low excitation energy. $T_{1/2}$: From 517.5γ(t) in 1989Ry04. Others: 84 s *11* (104.5γ(t)) and 95 s *7* (Yb Kα x ray time spectrum) in 1989Ry04, but values may contain contributions from the ^{177}Tm g.s. decay. configuration: Probable π7/2[523] Nilsson configuration.