Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 122, 205 (2014)	1-Feb-2014

Q(β^-)=1729 *19*; S(n)=4668 *14*; S(p)=8112 *19*; Q(α)=3376 *17* 2012Wa38

Q(β^-): This value is inconsistent with Eβ= 1440 keV *50* measured by 1989Yu01 (see ^{235}Th β^- decay). The adopted value of 1729 keV *19* is in better agreement with the systematic trend than the 1440-keV value of 1989Yu01.

Additional information 1.

Discovery of ^{235}Th: 2013Fr03.

Mass measurements: 2012Ch19, 2012Zh46.

Neutron fission cross-section measurements: 2012Pr13, 2011Ch57, 2010Pr07.

Cluster decay half-lives. ^{235}Th (^{16}O, ^{18}O, ^{20}O, ^{22}O, ^{24}Ne, ^{26}Ne): 2012Sa31.

Nuclear Structure: 2005Pa73.

^{235}Th Levels

E(level)	J$^\pi$	T$_{1/2}$	Comments
0	(1/2$^+$)	7.2 min *1*	%β^-=100 J$^\pi$: probable Nilsson configuration assignment 1/2[631] is from analogy with ^{237}U (1972El21). T$_{1/2}$: weighted average of 6.9 min *2* by following the decay of β- particles (1969Tr05); 7.3 min *1* by following the decay of 417.0γ (1986Mi10); 6.9 min *3* by following the decay of β- particles, and 7.3 min *3* by following the decay of 417.0γ (1989Yu01). Assignment: ^{234}Th(n,γ), ^{238}U(n,α) chem, parent of ^{235}Pa.