Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 108,681 (2007)	1-Jun-2006

Q(β^-)=−2.26×10^3 *syst*; S(n)=6.87×10^3 *syst*; S(p)=2.88×10^3 *syst*; Q(α)=6.80×10^3 *syst* 2012Wa38
Note: Current evaluation has used the following Q record −2190 SY6710 SY2810 SY6700 syst 2003Au03.
Additional information 1.
Assignment: ^{230}Th(^{10}B,6n), ^{230}Th(^{11}B,7n) excit (1967Ku17); ^{237}Np(α,7n) chem, Eα=70.0-73.5 MeV (1990Ha02).
^{233}U(^{6}Li,5n), E=51 MeV; mass separated sources. Measured α particles, x rays.Production of 234Am was confirmed by observation of Pu ka1. Detectors: photodiode for α particles; Germanium detector for x rays (2004Sa05, 2002As08). Other: 2003Na10.

^{234}Am Levels

E(level)	$T_{1/2}$	Comments
0.0	2.32 min *8*	%ε=100; %α=? No Eα=6.46 MeV with %IA=0.039 *12* reported in 1990Ha02 was observed (limit %IA<0.04). ε decay was inferred from the observation of Pu ka1 (2002As08,2004Sa05). 1972Sk03 proposed from the systematics of fission- isomer half lives that an observed 2.6-min fission activity was probably not caused by SF decay of an isomeric state in ^{234}Am, but perhaps was due to SF decay of a shape isomer (second well of the nuclear potential) in ^{234}Pu populated by the ε decay of ^{234}Am. Plutonium K x-rays reported in 1990Ha02 were observed in coincidence with fission fragments, which have shown that the SF activities indeed originate from a SF isomer in ^{234}Pu, populated in the ε decay of ^{234}Am. For calculations of delayed-fission probabilities see 1979Ku22. $T_{1/2}$: From 1990Ha02. 2.6 min *2* (1967Ku17), 3.5 min *13* (2004Sa05). Other measurements: 1974ArYU, 1978SoZZ.