Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Khalifeh Abusaleem	NDS 116, 163 (2014)	31-Dec-2012

Q(β^-)=−2483 *59*; S(n)=7038 *88*; S(p)=2715 *53*; Q(α)=7309 *60* 2012Wa38

Compilations, systematics:
Level structure in odd-odd actinides: 1994So16.

Assignment: ^{233}U(50-MeV p,6n), ion chem, observation of ^{216}Fr (from α-decay) and ^{212}Po (from ε decay) activities (1994Kr13).
Others: 1966Ku13 report a SF activity with $T_{1/2}$=60 s *5* produced by ^{209}Bi (≈100−MeV ^{22}Ne) and assign this activity, on theoretical grounds, as a possible precursor of an ε-delayed isomer in ^{228}U or ^{227}U (from ^{237}Np parent). 1978SoZZ report $T_{1/2}$=52 s *8* for this same activity produced by ^{209}Bi(115-MeV ^{22}Ne). Five events of α-decay are observed in 2003Ni10. The following partial half-lives are measured in 2003Ni10 following the Geiger-Nuttal curve:
Q(α)=7183, $T_{1/2}(\alpha)$=20.1 s.
Q(α)=7062, $T_{1/2}(\alpha)$=88.7 s.
Q(α)=7126, $T_{1/2}(\alpha)$=135.8 s.
Q(α)=7177, $T_{1/2}(\alpha)$=24.3 s.
Q(α)=7065, $T_{1/2}(\alpha)$=10.4 s.

^{228}Np Levels

E(level)	$T_{1/2}$	Comments
0.0	61.4 s *14*	%ε=60 *7*; %α=40 *7* Delayed fission probability =2.0×10^{-4} *9* per ε decay (1994Kr13). Other: %α=83 *+17−36* (2003Ni10). $T_{1/2}$: from 1994Kr13 (measured delayed fission activity); others: 60 s *5* (1966Ku13), 52 s *8* (1978SoZZ), 56 s *+45−17* (2003Ni10). %ε,%α: From ε/α=1.5 *4* (1994Kr13) based on the measured ratio of ^{212}Po/^{216}Fr activities.