Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu	NDS 182, 2 (2022).	1-Apr-2022

Q(β^-)=−1812 *SY*; S(n)=6655 *SY*; S(p)=3431 *SY*; Q(α)=6.26×10^3 *6* 2021Wa16
ΔQ(β^-)=120; ΔS(n)=130; ΔS(p)=120 (2021Wa16).
S(2n)=14564 syst *200*, S(2p)=8492 syst 120 (2021Wa16).
2005As01: ^{236}Am produced in ^{235}U(^{6}Li,5n) reaction at E=43-48 MeV; mass-separated with a resolution of M/ΔM≈800; implanted and transported to a measuring position with a short coaxial Ge detector (ORTEC LOAX) and a 35% n-type Ge detector (ORTEC GMX); Measured Eγ, Iγ, Iβ, $\gamma\gamma$, γ-x ray coin, γ-x ray(t) coin, lifetimes. Also reported in 2004Sa05, 2002As08, 2002AsZX and 2000AsZY.
Growth and decay of 5760α of ^{236}Pu in an Am fraction chemically separated from W target irradiated with 24-GeV protons was reported in 1987Ma21. The deduced $T_{1/2}$ of 0.6 y *2* was ascribed in 1987Ma21 to a long-lived isomer of Am decaying by ε to ^{236}Pu. The activity was followed for 15 y.

^{236}Am Levels

E(level)	J$^\pi$	$T_{1/2}$	Comments
0.0	5$^-$	3.6 min *2*	%ε=100 J$^\pi$: log *ft*=4.9 ε decay to 5$^-$; proposed configuration=((π 5/2$^-$[523])(ν 5/2$^+$[633])) (2005As01). $T_{1/2}$: from 2005As01; others: 4.4 min *8* Pu Kα x ray(t) (1998Ts02) and 3.73 min *28* (1989HaZO). %α: 0.004 *1* for α decay with E=6150 keV and $T_{1/2}$=3.1 min *13* of g.s. or isomer of ^{236}Am (2004Sa05). An Eα=6.41 MeV with %α=0.042 *6* was reported in 1989HaZO, but not observed in 2004Sa05 with %α≤0.002.
x	(1$^-$)	2.9 min *2*	%ε=100 J$^\pi$: log *ft*=4.8 ε to (0$^-$), log *ft*=5.3 ε to (2$^-$) and ε decay to 1$^-$; proposed configuration=((π 5/2$^-$[523])(ν 5/2$^+$[633])) (2005As01). $T_{1/2}$: from 2005As01. %α: 0.004 *1* for α decay with E=6150 keV and $T_{1/2}$=3.1 min *13* of g.s. or isomer of ^{236}Am (2004Sa05).