Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113,1 (2012)	31-Dec-2011

Q(β^-)=1.834×10^4 *13*; S(n)=1.90×10^3 *13*; S(p)=1.698×10^4 *21*; Q(α)=−1.528×10^4 *16* 2012Wa38
Note: Current evaluation has used the following Q record 18.37E3 11 *1*.90E3 12 *16*.98E321-15.28E316 2011AuZZ.
Q(β^-n)=12239 *107*, S(2n)=7145 *116*, S(2p)=39916 *513* (syst) (2011AuZZ).
Values in 2003Au03: Q(β^-)=18260 *250*, S(n)=2160 *280*, S(p)=17660 *450* (syst), Q(α)=−15710 *420*, S(2n)=7430 *240*, S(2p)=41560 *920* (syst), Q(β^-n)=14360 *350*.
1979We10: identification of ^{36}Al in ^{9}Be(^{48}Ca,X) at 212 MeV/nucleon; measured production cross section.
1991Or01: Ta(^{48}Ca,X) E=55 MeV/nucleon, measured fragment spectra, deduced mass excess.
1991Zh24: Th(p,X) E=800 MeV, measured fragment spectra, deduced mass excess.
1995ReZZ: TOF1 spectrometer at the LAMPF accelerator.
Additional information 1.
Mass measurements: 2007Ju03, 2000Sa21 (also 2001Sa72).
2006Kh08: Si(^{36}Al,X) E=39.56, 45.38 MeV/nucleon, measured energy integrated cross sections, deduced radius.
No details of ^{36}Mg to ^{36}Al decay are available.

^{36}Al Levels

E(level)	$T_{1/2}$	Comments
0.0	90 ms *40*	%β^-=100; %β^-n<31 (1995ReZZ) $T_{1/2}$: from 1995ReZZ. Calculated $T_{1/2}$=10.7 ms for β decay, %β^-n=2.8, %β^-2n=6.7 (1997Mo25). Mean radius r_0^2=1.216 fm^2 *25* from measured integrated σ_R=2.52 b *7* at 45.38 MeV/nucleon and 2.51 b *8* at 39.56 MeV/nucleon in Si(^{36}Al,X) reaction (2006Kh08).