Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

Q(β^-)=21770 *SY*; S(n)=2160 *SY*; S(p)=22010 *SY*; Q(α)=−21680 *SY* 2012Wa38
ΔQ(β^-)=700; ΔS(n)=780; ΔS(p)=840; ΔQ(α)=850 (2012Wa38).
S(2n)=3250 syst *780*; Q(β^-n)=20390 syst *639* (2012Wa38).

2011FuZZ: Be(^{48}Ca,X) with E(^{48}Ca)=345 MeV/nucleon. Isotopes separated with the BigRIPS in-flight separator and identified through Bρ, time-of-flight, and energy loss measurements. Measured production cross section for ^{41}Al as $\sigma\approx10^{-8}$ mb (value extracted from Figure 1 by evaluators).

1997Sa14: ^{181}Ta(^{48}Ca,X) with E(^{48}Ca)=70 MeV/nucleon. Isotopes separated with the fragment separator RIPS and identified through Bρ, time-of-flight, energy loss, and total kinetic energy measurements. A total of 4 events were observed for ^{41}Al. Subset of results given in 1997SaZV.

^{41}Al Levels

E(level)	Comments
0.0	%β^-=100; %β^-n=? E(level): assuming observed events correspond to the ground state. J$^\pi$: 3/2$^+$ proposed from systematics (2012Au07); 3/2$^+$ or 5/2$^+$ from shell model calculations (2013Li39). T$_{1/2}$: theoretical calculations give 3.6 ms (2003Mo09) and 5.1 or 5.9 ms (2013Li39). %β^-n: theoretical calculations give %β^-n=40 (2003Mo09) and 65 (2013Li39).