

Adopted Levels

Type	Author	History	Literature Cutoff Date
Full Evaluation	T. W. Burrows <sup>a</sup>	NDS 109,1879 (2008)	14-Jul-2008

$Q(\beta^-)=1.28\times 10^4$  syst;  $S(n)=2.5\times 10^3$  syst;  $S(p)=2.01\times 10^4$  syst;  $Q(\alpha)=-1.53\times 10^4$  syst    [2012Wa38](#)

Note: Current evaluation has used the following Q record 12170    SY2500    SY20730 syst-17030 syst    [2003Au03](#).

$Q(\beta^-)$ : Estimated uncertainty=510 keV.

$S(n)$ : Estimated uncertainty=590 keV.

$S(p)$ : Estimated uncertainty=860 keV.

$Q(\alpha)$ : Estimated uncertainty=490 keV.

$Q(\beta^-n)=3.91$  MeV 30 ([2003Au03](#). Systematics).

[2003We09](#): U(p,F) E=1.4 GeV. Isotopes extracted, mass separated, and implanted into an aluminized mylar tape; implantation point in center of cylindrical  $4\pi$  neutron long counter consisting of 12 parallel-coupled  $^3\text{He}$  pc's embedded in a paraffin moderator.  $\beta^-$ 's detected by a 1.5-mm plastic detector. Measured  $\beta^-(t)$ ,  $n(t)$ , and  $\beta^-n(t)$ . Analysis of time spectra restricted to data from a doubly charged  $^{49}\text{Ar}$  beam; beam gate set to 200 ms after every proton pulse and a 20 ms delay; 3 h measurement (1320 proton pulses on target).

Other: [1988GuZV](#).

 $^{49}\text{Ar}$  Levels

E(level)	T <sub>1/2</sub>	Comments
0.0	170 ms 50	% $\beta^-$ =100; % $\beta^-n$ =65 20 ( <a href="#">2003We09</a> ) $J^\pi$ : (3/2 <sup>-</sup> ) from <a href="#">2003Au02</a> based on systematics. T <sub>1/2</sub> : from <a href="#">2003We09</a> .