Adopted Levels

| | | History | |
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 113,1735 (2012)	1-Mar-2012

$Q(\beta^-)$=1.55×10^4 *syst*; S(n)=3.1×10^3 *syst*; S(p)=1.71×10^4 *syst*; Q(α)=−1.46×10^4 *syst*   2012Wa38

Note: Current evaluation has used the following Q record 15200   syst 3180 syst 16760 syst −14750 syst 2011AuZZ.

ΔQ(β^-)=860, ΔS(n)=640, ΔS(p)=780, ΔQ(α)=710.

S(2n)=7350 syst *500*, S(2p)=37190 syst *860*, Q(β^-n)=9670 syst *650* (2011AuZZ).

2011Da08: Ta(^{86}Kr,X) with E(^{86}Kr)=57.8 MeV/nucleon. Fragments separated by LISE2000 spectrometer and identified by ΔE and time of flight. Measured T$_{1/2}$, Eβ, β(t) with three element Si detector telescope surrounded by four Clover type EXOGAM detectors.

2003So21: ^{58}Ni(^{76}Ge,X) with E(^{76}Ge)=61.8 MeV/nucleon. Fragments separated by LISE3 spectrometer and identified by ΔE, total E, and time of flight. Measured T$_{1/2}$, Eβ, β(t).

1999Ha05: U(p,X) with E(p)=1 GeV. Chemically selective LASER ionization at ISOLDE facility. Measured T$_{1/2}$ from β-delayed-n(t) using 4π ^{3}He neutron counter.

1997Be70: ^{9}Be(^{238}U, F) with E(^{238}U)=750 MeV/nucleon. Fission fragments separated using the FRS and identified by ΔE-Bρ-time of flight and trajectory.

^{68}Mn Levels

E(level)	J$^\pi$	T$_{1/2}$	Comments
0.0	>3	28 ms *3*	%β^-=100; %β^-n>0
			E(level): assuming that observed events correspond to the g.s.
			T$_{1/2}$: weighted average of 29 ms *4* (2011Da08), 28 ms *8* (2003So21), and 28 ms *4* (1999Ha05).
			%β^-n: from existence of β-delayed neutrons (1999Ha05). This level is expected to undergo β-delayed neutron emission with a calculated value of %β^-n=13 (1997Mo25).
			J$^\pi$: suggested by non observation of β feeding to the (2$^+$) state in ^{68}Fe (2011Da08).