

**Adopted Levels**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 108,923 (2007)	20-Feb-2007

Q( $\beta^-$ )= $-1.74 \times 10^4$  syst; S(n)= $1.63 \times 10^4$  syst; S(p)= $1.9 \times 10^3$  syst; Q( $\alpha$ )= $-7.7 \times 10^3$  syst [2012Wa38](#)  
 Note: Current evaluation has used the following Q record  $-17.33E+3$  SY15.45E+3syst 1.54e+3syst-6.92e+3syst [2003Au03](#).

Q( $\beta^-$ ): Estimated uncertainty=0.57 MeV.

S(n): Estimated uncertainty=0.44 MeV.

S(p): Estimated uncertainty=0.28 MeV.

Q( $\alpha$ ): Estimated uncertainty=0.34 MeV.

Q( $\epsilon p$ )=15.78 MeV 52 ([2003Au03](#), Systematics).

Q( $\epsilon 2p$ )=10.68 MeV 26 (syst) from  $\Delta(^{47}\text{Fe})=-6620$  keV 260 (syst),  $\Delta(^1\text{H})=7288.97050$  keV 11, and  $\Delta(^{45}\text{V})=-31880$  keV 17 ([2003Au03](#)).

[1992Bo37](#), [1993BoZO](#): Ni(<sup>58</sup>Ni,X) E=69 MeV/nucleon. GANIL/LISE3. Measured p's and T<sub>1/2</sub>(p). Si detector telescope; tof, energy loss in Si detector telescope.

[2001Gi01](#): Ni(<sup>58</sup>Ni,X) E=74.5 MeV/nucleon. GANIL/SISSI. Measured p's,  $\gamma$ 's, p $\gamma$ -coincidences, and T<sub>1/2</sub>(p). Si detector telescope, Ge detector and Ge clovers, silicon and Si(Li) veto detectors; tof, energy loss in Si detector telescope.

[2003Au02](#) suggest a state at 770 keV 100 with J <sup>$\pi$</sup> =3/2<sup>+</sup> and possibly decaying by IT decay based on systematics.

<sup>47</sup>Fe Levels

E(level)	J <sup><math>\pi</math></sup>	T <sub>1/2</sub>	Comments
0.0	(7/2 <sup>-</sup> )	21.8 ms 7	% $\epsilon$ +% $\beta^+$ =100; % $\epsilon p$ >0; % $\epsilon 2p$ =? J <sup><math>\pi</math></sup> : systematics ( <a href="#">2003Au02</a> ). T <sub>1/2</sub> : from <a href="#">2001Gi01</a> . Other: 27 ms +32-10 ( <a href="#">1992Bo37</a> ; 13 protons detected; maximum-likelihood method).