

Adopted Levels

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

$Q(\beta^-)=1.51\times 10^4$ syst; $S(n)=4.4\times 10^3$ syst; $S(p)=1.74\times 10^4$ syst; $Q(\alpha)=-1.72\times 10^4$ syst [2012Wa38](#)

Note: Current evaluation has used the following Q record 15390 syst 3880 syst 18500 syst [2003Au03](#).

$Q(\beta^-)$: Estimated uncertainty=600 keV.

$S(n)$: Estimated uncertainty=930 keV.

$S(p)$: Estimated uncertainty=920 keV.

$Q(\beta^-n)=11.13$ MeV 60 (syst).

$Q(2\beta^-)=25.18$ MeV 60 (syst).

[1993So06](#): $^{64}\text{Ni}(^{48}\text{Ca},X)$ E=60 MeV/u. Mass separation. Measured β^-n coincidences and delayed-neutron emission probability (doubly-achromatic spectrometer; polyethylene-moderated ^3He pc's).

[2004Gr20,2003Gr22](#): $\text{Be}(^{48}\text{Ca},X)$ E=60 MeV/nucleon. 530 μm -thick Be target; selection by LISE3 spectrometer. Particle identification by ΔE -tof technique. Residual energy measured in double-sided Si-strip implantation detector (DSDD). Measured β^- 's (two plastic scintillators on either side of the DSDD).

Other: [1988GuZV](#).

 ^{47}Cl Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0.0	101 ms 6	$\% \beta^- = 100$; $\% \beta^-n > 0 < 3$ (1993So06) $T_{1/2}$: from 2004Gr20 .