Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Wang Jimin and Huang Xiaolong	NDS 144, 1 (2017)	1-Mar-2016

$Q(\beta^-)=-1.54\times10^4$ SY; $S(n)=1.78\times10^4$ SY; $S(p)=1.5\times10^2$ 5; $Q(\alpha)=-7.20\times10^3$ 6 2017Wa10
Estimated uncertainties (2017Wa10): $\Delta Q(\beta^-)=500$, $\Delta S(n)=400$.

^{51}Co Levels

Cross Reference (XREF) Flags

A   Ni(^{58}Ni,X)
B ^{12}C(^{50}Fe,^{51}Coγ)

E(level)	J^{π}	$T_{1/2}$	XREF	Comments
0	$7/2^-$	68.8 ms 19	AB	$\%\varepsilon+\%\beta^+=100$; $\%\varepsilon p<3.8$ (2007Do17)

$\%\varepsilon p$: No delayed protons were detected. The total proton branching ratio is from time spectrum of events with energy >900 keV in the charged-particle spectrum. Thus ^{51}Co decays mostly by $\beta^++\varepsilon$ decay to ^{51}Fe (2007Do17).

$T_{1/2}$: By time correlation of implantation events due to ^{51}Co and subsequent emission of protons and γ rays (2007Do17). Other: >200 ns (TOF, 1987Po04).

J^{π}: from analysis of cross section data and parallel momentum distribution (2012Mc01).

$\Sigma^{inc}_{exp}(^{12}C)=0.53$ mb 13, $\Sigma^{inc}_{exp}(^{9}Be)=0.57$ mb 8 (2012Mc01).