

^{47}Fe β^+ decay 2001Gi01

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

Parent: ^{47}Fe : $E=0.0$; $J^\pi=(7/2^-)$; $T_{1/2}=21.8$ ms 7; $Q(\beta^+)=1.564\times 10^4$ SY; $\% \beta^+$ decay=100.0

^{47}Fe - $Q(\beta^+)$: From 2003Au03. Estimated uncertainty=310 keV.

$\text{Ni}(^{58}\text{Ni},\text{X})$ $E=74.5$ MeV/nucleon. GANIL/SISSI. Measured P' 's, γ' 's, $p\gamma$ -coincidences, and $T_{1/2}(\text{P})$. Si detector telescope, Ge detector and Ge clovers, silicon and Si(Li) veto detectors; tof, energy loss In Si detector telescope.

 ^{47}Mn Levels

E(level)	J^π	$T_{1/2}$	Comments
0	$(5/2^-)$	100 ms 50	$\% \epsilon + \% \beta^+ = 100$; $\% \epsilon p \geq 3.4$ 9 E(level), $T_{1/2}$: from the Adopted Levels. J^π : from the Adopted Levels. Assumed to Be mirror state of the ^{47}Ti g.s..
6.87×10^3 17	$(7/2^-)$		$\% p = 100$ E(level): mean value from $E(p)=5975$ 25 and $E(p)=4880$ 20 and the mass excesses of ^{46}Cr and ^{47}Mn . Uncertainty is the sum In quadrature of 35 keV from $\Delta(E_p)$ and 160 keV from the ^{47}Mn mass excess uncertainty. Others: 6867 keV +30-160 from $E(p)=5975$ keV 25 and 6868 keV +25-160 from $E(p)=4880$ lev 20. J^π : IAS of ^{47}Ti $7/2^-$, 3226 assuming ^{47}Mn g.s. is the mirror state of the ^{47}Ti g.s..