^{54}Mn β^- decay 1997Ki37,1996Du15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 121, 1 (2014)	20-Jun-2014

Parent: ^{54}Mn: E=0.0; $J^\pi=3^+$; $T_{1/2}$=312.20 d *20*; Q(β^-)=697.3 *11*; %β^- decay=100.0

^{54}Mn-Partial $T_{1/2}(\beta^-) > 2.2\times10^4$ y (1997Ki37), Partial $T_{1/2}(\beta^-)$ between 1-2×10^6 y (1996Du15).

Additional information 1.

1997Ki37: radioactive ^{54}Mn material dissolved In hcl and kept In storage for≈1 year, chemical pertication; a superconducting solenoid electron spectrometer operated In the lens. The Compton electron and other instrumental backgrounds were largely reduced by special shielding of the absorber system.

1996Du15: galactic cosmic ray, solid-state charged-particle high energy telescope aboard the Ulysses spacecraft.

^{54}Fe Levels

E(level)	J^π	$T_{1/2}$
0.0	0^+	stable

β^- radiations

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
(697.3 *11*)	0.0	0.93×10^{-4}	>14.3	av Eβ=239.71 *45* Iβ^-: From ^{54}Mn Adopted Levels.

[†] Absolute intensity per 100 decays.