^{69}Fe β^- decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 207,1 (2026)	1-Apr-2023

Parent: ^{69}Fe: E=0; J^π=(1/2$^-$); $T_{1/2}$=162 ms *7*; Q(β^-)=1088×10^1 *9*; %β^- decay=100

^{69}Fe-Q(β^-),$T_{1/2}$: From Adopted Levels in ^{69}Fe.

^{69}Fe-%β^- decay: Assumed 100% β^- decay.

2015Li33: ^{69}Fe produced by projectile fragmentation of ^{86}Kr beam on ^{9}Be target at 140 MeV/nucleon beam using the Coupled Cyclotron facility at the NSCL-MSU facility. The fragmentation products were separated using the A1900 fragment separator. They were then identified and delivered to the Beta Counting System surrounded by the Segmented Germanium Array (SeGA) where the β and γ radiation were detected. Measured Eγ, half-life of ^{69}Fe isotope by time distribution of β particles detected in correlation with implanted ^{69}Fe ions and strong γ rays from the decay of ^{69}Fe.

No decay scheme for ^{69}Fe to ^{69}Co was proposed by 2015Li33.

$\gamma(^{69}Co)$

E$_\gamma$ [†]
[x]250
[x]291
[x]446
[x]648
[x]663
[x]680
[x]880
[x]1105
[x]1582
[x]1886

[†] From spectral Figure 2b of 2015Li33.

[x] γ ray not placed in level scheme.