

${}^{62}\text{V}$ β^- decay (33.6 ms) 2003So02,1999So20

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alan L. Nichols, Balraj Singh, Jagdish K. Tuli		NDS 113, 973 (2012)	15-Apr-2012

Parent: ${}^{62}\text{V}$: $E=0$; $T_{1/2}=33.6$ ms 23; $Q(\beta^-)=15767$ SY; $\% \beta^-$ decay=100.0

${}^{62}\text{V}$ - $T_{1/2}$: ADOPTED value.

${}^{62}\text{V}$ - $Q(\beta^-)$: 15767 523 (syst,2011AuZZ). 2003Au03 give 15990 610 from syst.

${}^{62}\text{V}$ - $\% \beta^-$ decay: $\% \beta^-$ is expected to be 100.

1997Be70: ${}^{62}\text{V}$ first identified in ${}^9\text{Be}({}^{238}\text{U},\text{F})$, $E=750$ MeV/nucleon, U beam 2×10^7 ion/s at GSI facility, identification by energy loss and time-of-flight.

1999So20 (also 1999Le67): ${}^{62}\text{V}$ produced in ${}^{58}\text{Ni}({}^{86}\text{Kr},\text{X})$, $E=60.4$ MeV/nucleon at GANIL facility using LISE3 doubly achromatic spectrometer. Measured isotopic half-life from β decay timing.

2003So02 (also 2002MaZN thesis, 2005Ga01): ${}^{62}\text{V}$ produced in ${}^{58}\text{Ni}({}^{76}\text{Ge},\text{X})$, $E=61.8$ MeV/nucleon at GANIL facility using LISE3 doubly achromatic spectrometer. Measured β , γ , isotopic half-life from β decay timing.

The decay scheme is poorly known.

 ${}^{62}\text{Cr}$ Levels

<u>E(level)</u>	<u>J^π</u>
0	0^+
446 1	(2^+)

 $\gamma({}^{62}\text{Cr})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
${}^x154^\dagger$ 2				
${}^x349^\dagger$ 1				
446 1	446	(2^+)	0	0^+

† This γ listed by 2002MaZN from ${}^{62}\text{V}$ decay. 155-355 cascade is also known in ${}^{61}\text{Mn}$. Possible that this γ is from β^- -n decay of ${}^{62}\text{Cr}$.

x γ ray not placed in level scheme.

 ${}^{62}\text{V} \beta^-$ decay (33.6 ms) 2003So02,1999So20Decay Scheme