^{62}V β^- decay (33.5 ms) 2003So02,1999So20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Huang Xiaolong, and Wang Xianghan	NDS 204,1 (2025)	30-Jun-2023

Parent: ^{62}V: E=0; $T_{1/2}$=33.5 ms *20*; Q(β^-)=1564×10[1] *26*; %β^- decay=100

^{62}V-$T_{1/2}$: From ^{62}V Adopted Levels.

^{62}V-Q(β^-): From 2021Wa16.

^{62}V-%β^- decay: %β^- is expected to be 100.

1997Be70: ^{62}V first identified in ^{9}Be(^{238}U,F), E=750 MeV/nucleon, U beam 2x10^{7} ion/s at GSI facility, identification by energy loss and time-of-flight.

1999So20 (also 1999Le67): ^{62}V produced in ^{58}Ni(^{86}Kr,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}V produced in ^{58}Ni(^{76}Ge,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}Cr Levels

E(level)	J^π †	$T_{1/2}$ †
0	0^+	200 ms *12*
446 *1*	2^+	93 ps *9*

† From the Adopted Levels.

γ(^{62}Cr)

E_γ	E_i(level)	J_i^π	E_f	J_f^π
x154† *2*				
x349† *1*				
446 *1*	446	2^+	0	0^+

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

x γ ray not placed in level scheme.

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Decay Scheme