Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan	NDS 136, 1 (2016)	1-Jul-2016

S(n)=16590 *SY*; S(p)=2130 *SY*; Q(α)=−2010 *SY* 2012Wa38

ΔS(n)=450, ΔS(p)=200, ΔQ(α)=360 (2012Wa38) S(2p)=1340 syst *196*, Q(εp)=8200 syst *200* (2012Wa38).

1995Bl06: produced by projectile fragmentation of ^{78}Kr at E=73 MeV/nucleon (Ni(^{78}Kr,X)) at SISI/LISE facility at GANIL. ^{70}Kr was identified using TOF and ΔE-E.

2000Oi02: produced by 1 GeV proton-induced spallation in a Nb foil (Nb(p,X)) at Cern. Isotopes separated using ISOLDE. A plastic scintillator, a HPGe detector (as a β telescope) and a gas-Si detector (to detect the β-delayed protons) were used. Measured $T_{1/2}$ using the time correlation between the proton pulse and β(t). Subset of results presented in 2002Oi02.

2002Bl17: produced by fragmentation of ^{78}Kr beam (^{9}Be(^{78}Kr,X)) at E=73MeV/nucleon at GANIL. Separated using LISE3 and identified through ΔE and TOF measurements. A silicon telescope was used. Measured $T_{1/2}$ from time correlation between ion implantation and β events in the silicon strip detector.

2014Ro14: produced by fragmentation of a ^{78}Kr beam on a natural Ni target with E(^{78}Kr)=70 MeV/nucleon. Separated using the LISE3 spectrometer and identified using ΔE-TOF measurements. A silicon telescope was used. Measured $T_{1/2}$ from time correlation between ion implantation and β events in the silicon strip detector.

^{70}Kr Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	40 ms *6*	%ε+%β^+=100; %εp≤1.3 (2000Oi02) $T_{1/2}$: from implant-β(t) in 2014Ro14. Others: 42 ms *31* (2002Bl17) and 57 ms *21* (2000Oi02). $T_{1/2}$ is consistent with superallowed ε decay to ^{70}Br g.s. (2000Oi02).