Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	ENSDF	31-Mar-2015

S(p)=1280 *SY*; Q(α)=−1700 *SY* 2012Wa38
ΔS(p)=510, ΔQ(α)=720 (syst,2012Wa38).

2014De41:^{69}Kr isotope produced in the fragmentation of 70 MeV/nucleon ^{78}Kr beam with Be target at the NSCL. Fragments selected with the A1900 separator and purified. Measured $T_{1/2}$ of ^{69}Kr from β^+ decay correlation time spectrum.

2014Ro14, 2011Ro47: ^{69}Kr produced from fragmentation ^{78}Kr on natural Ni target and mass selected by α-LISE3 at GANIL. tof, ΔE and decay spectroscopy of implanted fragments on DSSD correlated with β delayed protons were performed. Deduced $T_{1/2}$ of ^{69}Kr from β^+ decay correlation time spectrum.

2010He02: Summary and compilation of the discovery of Kr isotopes.

1997Xu01: ^{69}Kr produced by ^{40}Ca(^{32}S,3n) reaction using a E(^{32}S)=170 MeV beam incident on a natural calcium target Measured $T_{1/2}$ and delayed proton emission by pulsed-beam technique and ΔE-E telescope and Si(Au) surface barrier detectors.

1995Bl06: ^{69}Kr identified by projectile fragmentation of 73 MeV/u ^{78}Kr beam incident on a Ni target followed by the time-of-flight and ΔE-E measurements at GANIL. The identification was confirmed by measuring γ-rays of known isomers.

^{69}Kr Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(5/2$^-$)	28 ms *1*	%ε+%β^+=100; %β^+p=99 *+1−11* (2011Ro47) T_z=−3/2 $T_{1/2}$: from weighted average of 27 ms *3* (2011Ro47) and 28 ms *1* (2014De41). Other: 32 ms *10* (1997Xu01). J^π: Member of ^{69}As T_z=3/2 analog nuclei. From the β delayed proton spectrum for ^{69}Kr in 2014De41, an upperlimit of 6.7% proton decay from the IAS ^{69}Br to the g.s of ^{68}Se (J^π=0$^+$) was estimated. A lower branching ratio suggests ^{69}Kr g.s with Jp=5/2$^-$ for an increased angular momentum barrier for the g.s state decay. Consistent with this, is the weakly populated proton group at 3.81 MeV *20* observed by 2011Ro47 (see also 2014Ro14) suggesting a J^π=(5/2$^-$) for g.s ^{69}Kr.