

Adopted Levels

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	15-Aug-2010

$Q(\beta^-)=1.37\times 10^4$  syst;  $S(n)=2.1\times 10^3$  syst [2012Wa38](#)

Note: Current evaluation has used the following Q record \$ 13410 calc 2080 calc 18630 calc -12200 calc [1997Mo25](#).

$S(2n)=6550$ ,  $S(2p)=35630$  ([1997Mo25](#),calculated).

[2010Oh02](#):  $^{101}\text{Kr}$  nuclide identified in  $\text{Be}(^{238}\text{U},\text{F})$  and  $\text{Pb}(^{238}\text{U},\text{F})$  reactions with a  $^{238}\text{U}^{86+}$  beam energy of 345 MeV/nucleon produced by the cascade operation of the RBIF accelerator complex of the linear accelerator RILAC and four cyclotrons RRC, fRC, IRC and SRC. Identification of  $^{101}\text{Kr}$  nuclei was made on the basis of magnetic rigidity, time-of-flight and energy loss of the fragments using BigRIPS fragment separator. Experiments performed at RIKEN facility.

Based on A/Q spectrum and Z versus A/Q plot, 5 counts in one setting and 4 counts in another were assigned to  $^{101}\text{Kr}$  isotope. (Q=charge state).

 $^{101}\text{Kr}$  Levels

E(level)	$T_{1/2}$	Comments
0	>635 ns	$\% \beta^- = ?$ ; $\% \beta^- n = ?$ ; $\% \beta^- 2n = ?$ Measured $\sigma = 10$ pb ( <a href="#">2010Oh02</a> ), systematic uncertainty $\approx 50\%$ . $T_{1/2}$ : lower limit from time-of-flight in <a href="#">2010Oh02</a> , as communicated to the evaluator by T. Kubo in an e-mail reply of July 14, 2010. Actual half-life is expected to be much longer as suggested by the calculated value of 15.7 ms ( <a href="#">1997Mo25</a> ). Probability of misidentification of $^{101}\text{Kr}$ isotope $< 0.001\%$ ( <a href="#">2010Oh02</a> ). $J^\pi$ : $5/2^+$ predicted in calculations ( <a href="#">1997Mo25</a> ). Calculated $\% \beta^- n = 22.8$ , $\% \beta^- 2n = 1.9$ ( <a href="#">1997Mo25</a> ).