

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Kumar(a), J. Chen(b) and F. G. Kondev		NDS 137, 1 (2016)	31-May-2016

$Q(\beta^-)=10427$ SY; $S(n)=2910$ SY; $S(p)=16190$ SY; $Q(\alpha)=-10010$ SY [2012Wa38](#)
 $\Delta Q(\beta^-)=727$, $\Delta S(n)=640$, $\Delta S(p)=780$, $\Delta Q(\alpha)=710$ ([2012Wa38](#)).

 ^{109}Zr Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$(5/2^+)$	56 ms 3	$\% \beta^- = 100$ J^π : from systematics of odd-A Zr isotopes; probable direct β^- feeding to the $(7/2^+)$ state in ^{109}Nb (2011Wa03 , 2012Wa41); $J^\pi=7/2^-$, associated with the $\nu 7/2^- [523]$ orbital, is predicted in 1997Mo25 . $T_{1/2}$: using ion- $\beta(t)$ in 2015Lo04 . Other: 63 ms $+38-17$ using the maximum likelihood method in 2011Ni01 . configuration: likely $\nu 5/2^+ [402]$ orbital. The assignment is tentative. $\% \beta^- n=3.2$ is predicted in 1997Mo25 .