

Adopted Levels

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Update	Balraj Singh	ENSDF	12-Jun-2015

$Q(\beta^-)=1.05\times 10^4$ SY; $S(n)=4.3\times 10^3$ SY [2012Wa38](#)

[2010Oh02](#): ^{112}Zr 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 at RIKEN. Identification of ^{112}Zr nuclei was made on the basis of magnetic rigidity, time-of-flight and energy loss of the fragments using BigRIPS fragment separator. 1 count was associated with ^{112}Zr , based on Z versus A/Q identification.

[2015Lo04](#): measured half-life from ion- β correlations, isotope produced in $^9\text{Be}(^{238}\text{U},\text{F})$ reaction at E=345 MeV/nucleon at RIKEN facility.

 ^{112}Zr Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0	0^+	30 ms +30-10	$\% \beta^- = 100$; $\% \beta^- n = ?$; $\% \beta^- 2n = ?$ Measured $\sigma = 7$ pb (2010Oh02), systematic uncertainty $\approx 40\%$. $T_{1/2}$: measured by 2015Lo04 from the analysis of the (implanted ions) β correlated decay curve in time and position. $T_{1/2} \approx 15$ ms (from systematics). A value of ≈ 43 ms is predicted in 2003Mo09 . $\% \beta^- n, \% \beta^- 2n$: Calculated $\% \beta^- n = 26.3$ and $\% \beta^- 2n = 0.47$ in 2003Mo09 .