

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev		NDS 113,1315 (2012)	1-Aug-2011

$Q(\beta^-)=1.241\times 10^4$  *syst*;  $S(n)=3.6\times 10^3$  *syst*;  $S(p)=1.32\times 10^4$  *syst*;  $Q(\alpha)=-8.5\times 10^3$  *syst* [2012Wa38](#)

Note: Current evaluation has used the following Q record \$  $1.23\times 10^4$  *syst*  $3.6e^+3SY1.34E+4$  *syst*  $-8.7\times 10^3$  *syst* [2011AuZZ](#).

$\Delta Q(\beta^-)=300$  keV,  $\Delta S(n)=400$  keV,  $\Delta S(p)=600$  keV,  $\Delta Q(\alpha)=600$  keV in [2011AuZZ](#).

Isotope also produced in Pb( $^{238}\text{U},F$ ) ([1998Do08](#) and [1994Be24](#)) and in fragmentation of  $^{136}\text{Xe}$  on a Be target ([2008Be33](#)).

 $^{110}\text{Nb}$  LevelsCross Reference (XREF) Flags

**A** Be( $^{238}\text{U},F$ )  
**B** U(p,F)

E(level)	$J^\pi$	$T_{1/2}$	XREF	Comments
0	(5)	82 ms 4	<b>AB</b>	<p><math>\% \beta^- = 100</math>; <math>\% \beta^- n = 40</math> 8</p> <p><math>\% \beta^- n</math>: from intensities of neutrons, <math>\beta</math> particles and <math>\beta n</math> coincidences in <a href="#">1996Me09</a>.</p> <p><math>J^\pi</math>: Direct feeding of <math>J^\pi=4^+</math>, <math>5^+</math> and <math>6^+</math> levels in <math>^{110}\text{Mo}</math> following <math>^{110}\text{Nb}</math> <math>\beta^-</math> decay. Since the decay scheme is incomplete (pandemonium), the proposed assignment is tentative.</p> <p><math>T_{1/2}</math>: Weighted average of 86 ms 6 (from <a href="#">2011Ni01</a> using the analysis of the (ion)<math>\beta</math>-correlated decay curve) and 79 ms 5 (from <a href="#">2011Wa26</a>, weighted average of 81 ms 6 (214<math>\gamma(t)</math>) and 75 ms 9 (a sum of 281, 421, 463, 487 and 494<math>\gamma(t)</math>)). Other: 170 ms 2, from both <math>\beta</math>-gated and neutron-singles multiscaling curves by fitting the total growth-in and decay periods of time spectra (<a href="#">1996Me09</a>).</p> <p><math>J^\pi</math>: Direct feeding of <math>J^\pi=4^+</math>, <math>5^+</math> and <math>6^+</math> levels in <math>^{110}\text{Mo}</math> following <math>^{110}\text{Nb}</math> <math>\beta^-</math> decay. Since the decay scheme is incomplete (pandemonium), the proposed assignment is tentative.</p>