

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	A. K. Jain (a), R. Raut (b), J. K. Tuli		NDS 110,1409 (2009)	1-Dec-2008

$Q(\beta^-) = -3.04 \times 10^3$  eV;  $S(n) = 7.59 \times 10^3$  eV;  $S(p) = 2.94 \times 10^3$  eV;  $Q(\alpha) = 7.39 \times 10^3$  eV [2012Wa38](#)

Note: Current evaluation has used the following Q record  $-3.0E+3$  7 7.60 $\times 10^3$  7 2940 50 7390 50 [2003Au03](#).

Assignment: parent of  ${}^{221}\text{Ac}$ ,  ${}^{217}\text{Fr}$ ,  ${}^{213}\text{At}$  ([1951Ke53](#)); daughter of  ${}^{229}\text{Np}$  ([1968Ha14](#)); excitation functions, cross bombardments ([1970Bo13](#));  ${}^{232}\text{Th}(\alpha, xnyp)$  mass separation ([1978IbZZ](#)).

 ${}^{225}\text{Pa}$  Levels

E(level)	$T_{1/2}$	Comments
0.0	1.7 s <sup>2</sup>	<p><math>\% \alpha = 100</math></p> <p><math>T_{1/2}</math>: measured values: 1.8 s <sup>3</sup> (<a href="#">1970Bo13</a>), 1.7 s <sup>1</sup> (<a href="#">1978IbZZ</a>). Other measurements: <math>\approx 2</math> s (<a href="#">1951Ke53</a>), 0.8 s <sup>3</sup> (<a href="#">1958To25</a>).</p> <p><math>\% \alpha</math>: only <math>\alpha</math> decay was observed. From gross <math>\beta</math> decay theory of <a href="#">1973Ta30</a>, <math>\% \epsilon &lt; 0.03</math>.</p>