

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Khalifeh Abusaleem	NDS 116, 163 (2014)	31-Dec-2012

$Q(\beta^-)=-298.15$ ;  $S(n)=5979.9$ ;  $S(p)=4171.5$ ;  $Q(\alpha)=6264.5.15$  [2012Wa38](#)

Calculations, compilations, systematics:

Deduced g.s.  $J=3^+$  from quadrupole-octupole model: [1988Sh01](#).

Properties of prolate superdeformed states: [1992Ch20](#).

Rotational level structure in odd-odd actinides: [1994So16](#).

 $^{228}\text{Pa}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0	$3^+$	22 h 1	$\% \epsilon + \% \beta^+ = 98.15.17$ ; $\% \alpha = 1.85.17$ $\mu = 3.5.5$ Configuration = $((\pi 7/2(633))(\nu 1/2(631)))$ $J^\pi$ : $\log ft = 7.4$ to $2^+$ , 1900 level ( $\log f^{lu}_t = 6.6$ ); $\log ft = 6.8$ to $4^+$ , 1432 level ( $\log f^{lu}_t = 7.0$ ); $\log f^{lu}_t = 10.3$ to $5^-$ , 519 level ( $\log ft = 9.4$ ); from configuration based on $\mu$ . $T_{1/2}$ : from <a href="#">1951Me10</a> ; other: 29 h 1 ( <a href="#">1964Ge08</a> ). $\mu$ : from low temperature nuclear orientation ( <a href="#">1989He07</a> ). $\% \epsilon + \% \beta^+, \% \alpha$ : from $\alpha/(\alpha + \epsilon + \beta^+) = 0.020.2$ ( <a href="#">1994Ah03</a> ); other: $(\epsilon + \beta^+)/\alpha = 53.5$ ( <a href="#">1951Me10</a> ). configuration: from comparison with $\mu$ ( <a href="#">1989He07</a> ).