Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 112,1115 (2011)	31-Oct-2010

$Q(\beta^-)$=-2.72×10^3 *syst*; $S(n)$=6.39×10^3 *syst*; $S(p)$=1.54×10^3 *syst*; $Q(\alpha)$=9.65×10^3 *syst*   2012Wa38
Note: Current evaluation has used the following Q record −2630   *syst* 6210 *70* 1360 *70* 9830 *50*   2009AuZZ.
Q-   Estimated $\Delta Q(\beta^-)$=210 keV (2009AuZZ).

Production and assignment: ^{204}Pb(^{19}F,3n), excit (1987FaZS).
^{205}Tl(^{20}Ne,xn), E=102-110 MeV (1987MiZO) observed an α group with Eα=9.15 MeV, $T_{1/2}$=1.1 μs *1* and assign it to ^{220}Pa
   because of approximate fit with expected $Q(\alpha)$ value.
Production and yield of fully-stripped ^{220}Pa in projectile fragmentation of ^{238}U at 1 GeV/u (2005Li17).
Evaporation residue cross section for ^{82}Se+(nat)Ce compared with calculated values (2001Ni06).

^{220}Pa Levels

E(level)	$T_{1/2}$	Comments
0.0+x	0.78 μs *16*	%α=100; %ε+%β^+=3×10^{-7}
		J^π=(1$^-$) or (9$^-$) depending on which isomer in ^{216}Ac is fed by the α decay of this level.
		$T_{1/2}$: from 1987FaZS; other: 1.1 μs *1* (1987MiZO).
		%EC+%B+ From gross β decay strength function (1973Ta30). From log ft>3.6 one obtains a limit of
		I(ε+β^+)<0.008% to any single level.