Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ashok Jain, Sukhjeet Singh, Suresh Kumar, Jagdish Tuli	NDS 108,883 (2007)	15-Jan-2007

Q(β^-)=−4.11×10^3 *syst*; S(n)=7.91×10^3 *syst*; S(p)=1.58×10^3 *6*; Q(α)=9.25×10^3 *5* 2012Wa38

Note: Current evaluation has used the following Q record −4210 syst 8070 80 *1580* 60 *9250* 50 2003Au03.

Estimated ΔQ(β^-)=110 (2003Au03).

Q(α): From Eα(^{221}Pa)=9080 *30*, assuming it populates ^{217}Ac g.s. Q(α)=9200 *200* was estimated by 1985Wa02 from Q(α) systematics.

Assignment: ^{209}Bi(^{16}O,4n), E(^{16}O)=87.4-101.9 MeV and 105 MeV; excit, recoil mass separation (1989Mi17); daughter of ^{217}Ac (1983Hi12,1989Mi17).

Calculated levels, deformation, Reflection Asymmetric Mean Field Approach: 1991Cw01.

^{221}Pa Levels

E(level)	J$^\pi$	T$_{1/2}$	Comments
0.0	9/2$^-$	5.9 μs *17*	%α=100 Only α decay was observed. From gross β^- decay theory of 1973Ta30, %ε+%β^+<1.0×10^{-6}. J$^\pi$: favored α decay to ^{217}Ac g.s. (J^π=9/2$^-$). T$_{1/2}$: measurement of 1989Mi17. Other measurement: 6.1 μs *+37−24* (1983Hi12).