Adopted Levels

Type Author Citation Literature Cutoff Date

Full Evaluation C. Morse NDS 182, 130 (2022). 14-Sep-2021

 $Q(\beta^-)=-1832 \ SY; \ S(n)=6442 \ SY; \ S(p)=2861 \ SY; \ Q(\alpha)=9.42\times10^3 \ 9$ 2021Wa16 $\Delta Q(\beta^-)=473, \ \Delta S(n)=486, \ \Delta S(p)=598 \ (2021WA16).$

S(2n)=11761 SY 536, S(2p)=7867 SY 732 (2021WA16).

²⁷¹Bh has been observed as the α -decay daughter of ²⁷⁵Mt at JINR (2004OG03,2013OG01) and GSI (2013RU11). Chains of correlated α decays terminated by spontaneous fission were observed, and comparison of their properties to previously observed chains allowed individual decays to be assigned to specific nuclei.

Half-lives, branching ratios, and α -decay energies in this evaluation have been computed from the individual events listed in the references above. Half-life uncertainties have been computed according to the method of 1984SC13. An additional 10 keV systematic uncertainty is assumed for the α -decay energies, which is added in quadrature to the averaged statistical uncertainty.

²⁷¹Bh Levels

Cross Reference (XREF) Flags

A 275 Mt α decay (20 ms)

E(level) $T_{1/2}$ XREF Comments 0 1.5 s + 28 - 6 A $\%\alpha = 100; \%\text{SF} \le 25$

E(level): Assumed ground state.

 $T_{1/2}$: From two events.