^{168}Pt α decay (2.02 ms) 1996Bi07,1981Ho10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen[#]	NDS 147, 1 (2018)	30-Nov-2017

Parent: ^{168}Pt: E=0.0; $J^\pi=0^+$; $T_{1/2}$=2.02 ms *10*; Q(α)=6990 *3*; %α decay=99.3 *7*

^{168}Pt-$T_{1/2}$: From ^{168}Pt Adopted Levels (2010Ba27).

^{168}Pt-Q(α): From 2017Wa10.

^{168}Pt-%α decay: The decay branching has not been experimentally determined. The gross β calculations of 1973Ta30 give approximately 1 s for partial $\varepsilon+\beta^+$ decay half-life which corresponds to ≈0.2% $\varepsilon+\beta^+$ decay branch. The calculations by 1997Mo25, on the other hand, give $T_{1/2}$(ε decay)=148.8 ms from which one obtains %ε+%β^+=1.3. %α=99.3 *7* is recommended here, and it is used in calculations of the r_0 parameter. In 2010Ba27 evaluation, %α≈100 is given in ^{168}Pt Adopted Levels.

^{164}Os Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[†#]	HF[‡]	Comments
6832 *10*	0.0	100	1.0	Eα: measured Eα=6824 *20* (1981Ho10), 6832 *10* (1996Bi07). Iα: only one α group was observed. Any α to excited levels in ^{164}Os is assumed negligible.

† Per 100 α decays.

‡ r_0(^{164}Os)=1.554 *17*, deduced from HF(6832α)=1.0.

For absolute intensity per 100 decays, multiply by 0.993 *7*.