^{168}W α decay (50.9 s)

History

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

Parent: ^{168}W: E=0.0; $J^\pi=0^+$; $T_{1/2}$=50.9 s *19*; Q(α)=4500 *11*; %α decay=0.0032 *10*

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

^{168}W-Q(α): From 2017Wa10.

^{168}W-%α decay: %α=3.2×10^{-3} *10* (from ^{168}W Adopted Levels, 2010Ba27). Other: 2.7×10^{-3} *5* or 3.6×10^{-3} *6* was derived by 1991Me05 from their measured value of Iγ(178.5γ from ε decay)/Iα=4.1×10^{-5} *6*, depending on whether the 178.5γ is E2 or E1, respectively. Ti(178.5γ) was taken by 1991Me05 to represent >90% of ε decays.

^{164}Hf Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
4399 *12*	0.0	97.7 *23*	1.0	Eα: measured by 1991Me05. Iα: only one α group was observed. An upper limit of 4.6% of α decay is calculated for an unobserved 4193-keV α to the 2^+ state at 211.05 keV in ^{164}Hf by requiring Hf(4193α)>1. Iα(4399α)=97.7 *23* per 100 α decays is used in computing the r_0 parameter.

[†] $r_0(^{164}Hf)$=1.56 *4* is deduced from Hf(4399α)=1.0.

[‡] For absolute intensity per 100 decays, multiply by 3.2×10^{-5} *10*.