^{194}Pb α decay (10.7 min) 1987El09,2003Su30,1982Hi04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, [1] and Jun Chen[2]	NDS 169, 1 (2020)	15-Oct-2020

Parent: ^{194}Pb: E=0.0; $J^\pi=0^+$; $T_{1/2}$=10.7 min *6*; Q(α)=4738 *17*; %α decay=7.3×10^{-6} *29*

^{194}Pb-$T_{1/2}$: From ^{194}Pb Adopted Levels in the ENSDF database (April 2006 update).

^{194}Pb-Q(α): From 2017Wa10.

^{194}Pb-%α decay: %$\alpha=7.3\times10^{-6}$% *29*, measured by 1987El09.

2003Su30, 1987El09, 1982Hi04, 1960Ju01: measured $T_{1/2}$ of ^{194}Pb decay. 1987El09 also measured Eα and branching ratio for α decay.

^{190}Hg Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
4640 *20*	0.0	100	1.0	Eα: measured by 1987El09. Iα: only one α group has been observed. Intensity of an unobserved 4232-keV α to the 2^+, 416.4 level is estimated as Iα(4232α)<0.15 per 100 α decays by requiring its hindrance factor to be greater than 1. Possible α rays to higher levels are neglected. Iα(4640α to g.s.)=99.9 *1* per 100 α decays is used in computation.

[†] $r_0(^{190}Hg)$=1.437 *22* is deduced by requiring HF(4640α)=1.0.

[‡] For absolute intensity per 100 decays, multiply by 7.3×10^{-8} *29*.