^{187}Pb α decay (18.3 s) 1981Mi12

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 134, 149 (2016)	15-Apr-2015

Parent: ^{187}Pb: E=0.0; J^{π}=(13/2$^+$); $T_{1/2}$=18.3 s *3*; Q(α)=6393 *6*; %α decay=12.0 *20*
^{187}Pb-See comment on ^{187}Pb parent energy in α decay (15.2 s).
^{187}Pb-%α decay: From α-α correlation data of 1999An36.
Others: 1972Ga27, 1974Le02, 2000By02.
For this decay, QxBR=767 *128*.

^{183}Hg Levels

E(level)	J^{π}[†]	Comments
183 *9*	(13/2$^+$)	$T_{1/2}$: absence of 6077α-γ coin may indicate that $T_{1/2}$(266 level) exceeds the 8 μs coincidence time employed in the experiment of 1981Mi12. E(level): from Q(α)=6393 *6* (2012Wa38) and Eα=6077 *7* from ^{187}Pb(g.s.).

[†] From Adopted Levels.

α radiations

Eα[†]	E(level)	Iα[‡@]	HF[#]	Comments
6077 *7*	183	100	1.5 *3*	Eα: weighted average of 6073 *10* (1981Mi12), 6080 *20* (1974Le02), 6080 *10* (1972Ga27).

[†] From 1981Mi12.
[‡] Intensity per 100 parent α decays; only one α group has been observed (1981Mi12).
[#] If r_0=1.496 *15* (based on $r_0(^{182}Hg)$=1.50 *2*, $r_0(^{184}Hg)$=1.491 *14* in 1998Ak04), %α=12 *2*, Q(α)=6395 *6* and $T_{1/2}$=18.3 s *5* for ^{187}Pb parent.
[@] For absolute intensity per 100 decays, multiply by 0.12 *2*.