^{207}Fr α decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 177, 509, 2021	4-Jul-2021

Parent: ^{207}Fr: E=0; $J^{\pi}=9/2^{-}$; $T_{1/2}$=14.8 s *1*; Q(α)=6900 *3*; %α decay=95 *2*
^{207}Fr-J^{π},$T_{1/2}$: From 2011Ko04.
^{207}Fr-Q(α): From 2017Wa10.
^{207}Fr-%α decay: From 2011Ko04.

^{203}At Levels

E(level)	J^{π}[†]	$T_{1/2}$[†]
0	$9/2^{-}$	7.4 min *2*

[†] From Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
6768 *3*	0	100	1.22 *4*	Eα: Recommended in 1991Ry01. Measured energies are 6773 keV *5* (1967Va20), 6761 keV *5* (1974Ho27) and 6766 keV *5* (1981Ri04). Other: 6900 keV *20* (1964Gr04).

[†] Using $r_0(^{203}At)$=1.493 *4*, weighted average of 1.492 *5* (^{202}Po, N=118) and 1.496 *8* (^{204}Rn, N=118), deduced using HF_{α}=1.0.
[‡] For absolute intensity per 100 decays, multiply by 0.95 *2*.