

^{204}Fr α decay (1.9 s) [1992Hu04](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski		NDS 108,1471 (2007)	1-Aug-2006

Parent: ^{204}Fr : $E=0$; $J^\pi=(3^+)$; $T_{1/2}=1.9$ s 5; $Q(\alpha)=7171.3$ 25; $\% \alpha$ decay=70 15

^{204}Fr - $T_{1/2}$ (^{204}Fr) from [2005Uu02](#). Other: 1.7 s 3 ([1992Hu04](#)), 2.1 s ([1974Ho27](#)), 2.2 s 2 ([1967Va20](#)) and 2.0 s 5 ([1965Gr04](#)).

^{204}Fr - $\% \alpha$ (^{204}Fr) from [1974Ho27](#).

 ^{200}At Levels

E(level) [†]	J^π [†]	$T_{1/2}$ [†]	Comments
0	(3 ⁺)	43 s 1	$E\alpha=6467$ keV 6 (2005Uu02), 6464 keV 2 and 6305 keV 6 (1992Hu04), and 6463 keV 5 (1967Tr06). Probable Configuration= $((\pi h_{9/2})^{+1}(\nu f_{5/2})^{-1})(\pi^{+2} \nu^{-6})_{0+}$.
113 1	(2,4) ⁺		

[†] From Adopted Levels.

 α radiations

$E\alpha$ [‡]	E(level)	$I\alpha$ ^{‡#}	HF [†]	Comments
6916 8	113	0.6 2	191 91	$E\alpha$: Other: 7033 keV 6 (2005Uu02), correlated with $E\alpha=6467$ keV 6 depopulating the $J^\pi=(3^+)$ g.s. in the daughter nucleus ^{200}At , 7027 keV 5 (1974Ho27), 7028 keV 5 (1967Va20) and 7020 30 (1964Gr04).
7031 5	0	99.4 2	2.9 10	

[†] Using $r_0(^{200}\text{At})=1.516$ 8 weighted average of 1.533 4 (^{204}Ra), 1.527 8 (^{206}Ra), 1.516 7 (^{202}Rn) and 1.504 3 (^{204}Rn) from [1998Ak04](#).

[‡] From [1992Hu04](#).

[#] For absolute intensity per 100 decays, multiply by 0.70 15.

 $\gamma(^{200}\text{At})$

E_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult.	Comments
113 1	113	(2,4) ⁺	0	(3 ⁺)	M1	Mult.: Reported in 1992Hu04 , but no spectroscopic information is presented by the authors.

[†] From [1992Hu04](#).

^{204}Fr α decay (1.9 s) 1992Hu04Decay Scheme