^{213}Pa α decay 2000He17,1996An21

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Chen [#] and F. G. Kondev	NDS 126, 373 (2015)	30-Sep-2013

Parent: ^{213}Pa: E=0.0; J^π=(9/2$^-$); $T_{1/2}$=5.3 ms *+40−16*; Q(α)=8390 *50*; %α decay=100.0
^{213}Pa-J^π: Favored α decay to ^{209}Ac g.s. (J^π=(9/2$^-$)).
2000He17: ^{213}Pa activities were produced by ^{170}Er(^{50}Ti,^{7}n) with E=215-235 MeV ^{50}Ti beams from the UNILAC accelerator at GSI. Reaction products were separated by the velocity filter SHIP. Measured Eα, $T_{1/2}$.
1996An21,1995Ni05: ^{213}Pa activities were produced by ^{170}Er(^{51}V,^{8}N). Measured Eα, Iα, $T_{1/2}$.

^{209}Ac Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(9/2$^-$)	0.087 s *+12−9*	J^π,$T_{1/2}$: from Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
8236 *15*	0.0	100	2.0 *8*	Eα: from 2000He17. Other: 8236 keV *20* in 1995Ni05. HF: symmetrized from HF=1.5 *+12−4*.

[†] $r_0(^{209}Ac)$=1.51 *3*, taken from the known value for the ^{208}Ra, N=120 isotone, which is deduced from Hf(7802α)=1.
[‡] Absolute intensity per 100 decays.