^{191}At α decay (1.7 ms) 2003Ke08,2005Ke10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 110, 999 (2009)	1-Nov-2008

Parent: ^{191}At: E=0.0; J^π=(1/2$^+$); $T_{1/2}$=1.7 ms *+11−5*; Q(α)=7820 *30*; %α decay≈100.0

^{191}At-$T_{1/2}$: From $T_{1/2}$=1.7 ms *+11−5* (2003Ke08).

^{191}At-%α decay: From 2007Va21.

2003Ke08, 2005Ke10: ^{191}At from ^{141}Pr(^{54}Fe,4n), E=248 to 266 MeV *8* 8 energy points were checked for an optimum cross section; fusion-evaporation residues (ER) were separated using gas-filled recoil separator RITU; Detectors: position sensitive silicon detector, quadrant silicon detector; Measured: Eα, Iα, $T_{1/2}$ from ER-α(^{191}Pt)-α(^{187}Bi) coin.

^{187}Bi Levels

E(level)	J^π	$T_{1/2}$	Comments
112 *20*	1/2$^+$	0.31 ms *+19−9*	E(level): From adopted level and 7552α from ^{191}At g.s. to this level (2003Ke08). J^π: From systematics. 2003Ke08 proposed π(2p-1h) configuration. $T_{1/2}$: From 7552α(t) (2003Ke08).

α radiations

Eα	E(level)	Iα[‡]	HF[†]
7552 *11*	112	100	0.4 *3*

[†] From 2003Ke08, calculated from the measured values using the method in 1959Ra14 and normalized to the α decay of ^{212}Pb.

[‡] For absolute intensity per 100 decays, multiply by ≈1.