

$^{199}\text{At}$   $\alpha$  decay (0.31 s)    2013Ja06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 121, 395 (2014)	1-Mar-2014

Parent:  $^{199}\text{At}$ : E=240;  $J^\pi=1/2^+$ ;  $T_{1/2}=0.31$  s 8;  $Q(\alpha)=6777.2$  12; % $\alpha$  decay≈1.0

$^{199}\text{At}$ - $T_{1/2}$ : From 2013Ja06.

$^{199}\text{At}$ -% $\alpha$  decay: % $\alpha$ ≈1 (2013Ja06).

**2013JA06:**  $^{199}\text{At}$  from  $^{203}\text{Fr}(\alpha)$ [from  $^{169}\text{Tm}(^{40}\text{Ar},6\text{n})$ ]. E( $^{40}\text{Ar}$ )=205 MeV provided by the K-130 cyclotron at the Accelerator Laboratory in the University of Jyvaskyla (JYFL). Target= $^{169}\text{Tm}$  (99.8%). Measured  $E\gamma$ ,  $I\gamma$ ,  $E\alpha$ ,  $I\alpha$ ,  $E(\text{ce})$ ,  $I(\text{ce})$ ,  $\gamma\gamma$ , ( $\text{ce}$ ) $\gamma$ -coin,  $T_{1/2}$  using the recoil-decay tagging (RDT) technique with JUROGAM array. Deduced  $\alpha$  branching ratio.

 $^{195}\text{Bi}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
401	[ $1/2^+$ ]	87 s 1	$T_{1/2}$ : from $^{195}\text{Bi}$ Adopted Levels.

 $\alpha$  radiations

E $\alpha$	E(level)	I $\alpha$ <sup>†</sup>	Comments
≈6480	401	100	E $\alpha$ : from 2013Ja06.

<sup>†</sup> For absolute intensity per 100 decays, multiply by ≈0.01.