^{200}At α decay (43 s) 1992Hu04,1987Va09

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108, 1093 (2007)	1-Jan-2006

Parent: ^{200}At: E=0; $J^\pi=(3^+)$; $T_{1/2}$=43 s *1*; Q(α)=6596.4 *14*; %α decay=57 *6*

^{200}At-$T_{1/2}$: from 1992Hu04. Others: 42 s *2* (1967Tr06), 44 s *3* (1975BaYJ).

$J^\pi=(3^+)$, $T_{1/2}$=43 s ground state.

The decay scheme is from 1992Hu04.

2005Uu02: 141Pr(63,65Cu, xnypzα), 170Yb(36Ar, xnypzα),E=278-293MeV, measured Eα.

1992Hu04: source prepared by natural Re(^{20}Ne,xn) E<245 MeV. Mass separated with LISOL facility. Measured Eγ, Iγ, x-ray, ce, Eα, Iα, Ag(t).

1987Va09: measured Eγ,Iγ (Ge detectors, FWHM=2.0−keV at 1332-keV, FWHM=580 eV at 122-keV), E(ce),I(ce) (Si(Li), FWHM=2.5−keV at 624-keV), $\gamma\gamma$ coin, ceγ coin, triparameter coin.

1974Ho27: ^{232}Th(p,spallation)^{204}Fr α decay, E(p)=600 MeV.

1967Tr06: ^{185}Re,^{187}Re(^{20}Ne,xn), x=5,7; E(^{20}Ne)=100-200 MeV.

1963Ho18: ^{197}Au(^{12}C,^{9}N), E(^{12}C)=60-125 MeV.

^{196}Bi Levels

E(level)†	J^π†
0	(3^+)

† From ^{196}Bi Adopted Levels.

α radiations

Eα	E(level)	Iα‡	HF†	Comments
6464.6 *13*	0	100	2.6 *3*	Eα: weighted average of 6467 *6*(2005Uu02), 6464 *2* (1992Hu04), 6465 *2* (1975BaYJ), 6468 *11* (1963Ho18), 6466 *8* (1974Ho27), and 6463 *5* (1967Tr06). Except for 1992Hu04, the values are as given by 1991Ry01, corrected for revised calibration energies.

† r_0=1.502 *2*.

‡ For absolute intensity per 100 decays, multiply by 0.57 *6*.