^{180}Au α decay 1993Wa03,1986Ke03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107, 791 (2006)	15-Sep-2005

Parent: ^{180}Au: E=0.0; $T_{1/2}$=8.1 s *3*; Q(α)=5840 *18*; %α decay>1.8

^{180}Au-%α decay: %α>1.8 from 1986Ke03.

1986Ke03: activity produced by ^{92}Zr(^{90}Zr,P_n) and ^{94}Mo(^{90}Zr,3P_n). Measured Eα, Iα. Determined %α branching. Detector: semi.

1993Wa03: activity produced by ^{144}Sm(^{40}Ar,4n)^{180}Hg ε ^{180}Au, E(^{40}Ar)=225 MeV. Measured Eα, Iα (not reported), $\alpha\gamma$ coin, a ce coin, Ag(t), a Ce(t). Detectors: semi, germanium hyperpure, plastic scintillator. Measured $T_{1/2}$(lev).

$T_{1/2}$(^{180}Au)=56 s *2* is the adopted half-life in 2003Wu10.

^{176}Ir Levels

Decay scheme is from 1993Wa03.

E(level)	$T_{1/2}$	Comments
0.0	8.3 s *6*	$T_{1/2}$: from Adopted Levels.
0.0+x		
37+x	6.9 ns *5*	$T_{1/2}$: from 5648$\alpha\gamma$(t) 1993Wa03.
79+x		
197+x		

α radiations

Eα[†]	E(level)	Comments
5497 *10*		
5611 *10*		
5648 *10*		
5497 *10*	197+x	
5611 *10*	79+x	
5648 *10*	37+x	
5685 *10*	0.0+x	Eα: from 1986Ke03. Not observed by 1993Wa03, due to contamination, but not ruled out.

[†] From 1993Wa03, unless otherwise specified.

γ(^{176}Ir)

E$_\gamma$[†]	E$_i$(level)	E$_f$
37	37+x	0.0+x
42	79+x	37+x
118	197+x	79+x
195	197+x	0.0+x

[†] From 1993Wa03.

^{180}Au α decay 1993Wa03,1986Ke03

Decay Scheme