## $^{204}$Pt $\beta^-$ decay 2009Mo17

History

| Type | Author | Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | C. J. Chiara and F. G. Kondev | NDS 111,141 (2010) | 1-Oct-2009 |

Parent: $^{204}$Pt: E=0.0; $J^\pi=0^+$; $T_{1/2}$=10.3 s *14*; Q($\beta^-$)=2320 *SY*; %$\beta^-$ decay=?

$^{204}$Pt-$T_{1/2}$: Weighted averages of 10.4 s *18* (165$\gamma$(t)) and 10.1 s *22* (305$\gamma$(t)) in 2009Mo17. The 165$\gamma$ and 305$\gamma$ were identified in 2009Mo17 as belonging to $^{204}$Au, produced following $\beta^-$ decay of $^{204}$Pt.

$^{204}$Pt-Q($\beta^-$) is from theoretical predictions in 1997Mo25.

2009Mo17: Source produced by bombarding a 2.5-g/cm$^2$ $^9$Be target with E($^{208}$Pb)=1 GeV/A, beam; GSI Fragment Separator; A/Q measured using magnetic rigidity and ToF; two multi sampling ionization chambers for $\Delta$E; fragments were implanted on an active stopper consisting of three DSSD′s each with 16 horizontal and vertical strips. An array of 15 HPGe cluster detectors with 15% total efficiency at 662 keV surrounded the active stopper; measured E$\gamma$, $\gamma\gamma$ coin and $\gamma$(t).

### $^{204}$Au Levels

| E(level)† | $J^\pi$† | $T_{1/2}$† |
|---|---|---|
| 0.0 | (2$^-$) | 39.8 s *9* |

† From Adopted Levels.

### $\gamma$($^{204}$Au)

| $E_\gamma$† | $E_i$(level) | Comments |
|---|---|---|
| $^x$165 | | $E_\gamma$: In coincidence with 305$\gamma$. $T_{1/2}$(165$\gamma$)=10.4 s *18*. |
| $^x$305 | | $E_\gamma$: In coincidence with 165$\gamma$. $T_{1/2}$(305$\gamma$)=10.1 s *22*. |

† From 2009Mo17.

$^x$ $\gamma$ ray not placed in level scheme.