

$^{182}\text{Pb}$   $\alpha$  decay    2000Je09,1999To11,1987To09

| Type            | Author                                    | History | Citation             | Literature Cutoff Date |
|-----------------|---|---------|----------------------|------------------------|
| Full Evaluation | E. Achterberg, O. A. Capurro, G. V. Marti |         | NDS 110, 1473 (2009) | 31-May-2008            |

Parent:  $^{182}\text{Pb}$ : E=0.0;  $J^\pi=0^+$ ;  $T_{1/2}=59$  ms 6;  $Q(\alpha)=7066$  6; % $\alpha$  decay=98.0

$^{182}\text{Pb}$ -Weighted average from 55 5 ms (1999To11), 55 +40–35 ms (1987To09), and 68 7 ms (2000Je09).

$^{182}\text{Pb}$ -Q( $\alpha$ ) from 2003Au03.

$^{182}\text{Pb}$ -Branching from estimate of  $\%e\approx 2$  from systematics (2003Au02).

Activity produced by the  $^{90}\text{Zr}(^{94}\text{Mo},2n)$  reaction at E=321-390 MeV (1986Ke03), by  $^{147}\text{Sm}(^{40}\text{Ca},5n)$  at E=222 MeV (1987To09), and by  $^{92}\text{Zr}(^{92}\text{Mo},2n)$  at E=410 MeV (1999To11).

 $^{178}\text{Hg}$  Levels

| E(level) | $J^\pi$ |
|----------|---------|
| 0.0      | $0^+$   |

 $\alpha$  radiations

| $E\alpha$ | E(level) | $HF^\dagger$ | Comments  |
|-----------|----------|--------------|---|
| 6911 6    | 0.0      | 1.0          | $E\alpha$ : from $Q_\alpha$ values in 2003Au03. The weighted average of experimental values: 6919 15 (1987To09), 6921 10 (1986Ke03), 6895 10 (1999To11) and 6911 10 (2000Je09), yields $E_\alpha(\text{av})=6910$ 6 keV.<br>1999To11 estimate a reduced $\alpha$ width $\delta^2=61$ 7 keV. |

<sup>†</sup>  $r_0(^{178}\text{Hg})=1.51$  4 calculated by requiring  $Hf(6911\alpha)=1.0$ .