

$^{181}\text{Hg}$   $\varepsilon\text{p}$  decay    1972Ho18

| Type            | Author          | History | Citation            | Literature Cutoff Date |
|-----------------|-----------------|---------|---------------------|------------------------|
| Full Evaluation | E. A. Mccutchan |         | NDS 126, 151 (2015) | 1-Feb-2015             |

Parent:  $^{181}\text{Hg}$ : E=0.0;  $J^\pi=1/2^-$ ;  $T_{1/2}=3.6$  s *I*;  $Q(\varepsilon\text{p})=6485$  *I9*; % $\varepsilon\text{p}$  decay=0.013 *3*

$^{181}\text{Hg}$  activity from Pb(p,3pxn), E(p)=600 MeV. Reaction products separated with the ISOLDE electromagnetic isotope separator.

Measured  $E\gamma$ ,  $I\gamma$ , Ep, Ip, p- $\gamma$  using two Si detectors and a NaI(Tl) detector.

 $^{180}\text{Pt}$  Levels

| E(level)      | $J^\pi$ |
|---------------|---------|
| 0.0           | $0^+$   |
| 150 <i>I5</i> | $2^+$   |
| 470?          | $4^+$   |

 $\gamma(^{180}\text{Pt})$ 

| $E_\gamma$    | $E_i$ (level) | $J_i^\pi$ | $E_f$ | $J_f^\pi$ |
|---------------|---------------|-----------|-------|-----------|
| 150 <i>I5</i> | 150           | $2^+$     | 0.0   | $0^+$     |

Delayed Protons ( $^{180}\text{Pt}$ )

| $E(^{180}\text{Pt})$ | $I(p)^\dagger$ | Comments   |
|----------------------|----------------|--|
| 0.0                  | 50 <i>I0</i>   |  |
| 150                  | 50 <i>I0</i>   |  |
| 470?                 | <6             | I(p): limit based on number of counts in expected 310 keV region of $\gamma$ spectrum. |

<sup>†</sup> For absolute intensity per 100 decays, multiply by  $1.3 \times 10^{-4}$  *3*.

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