

$^{182}\text{W}(\text{p,t})$  [1980Mo11,2006Me25](#)

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

[2006Me25](#): E(p)=25 MeV. Measured  $\sigma(\theta)$  for  $\theta=5^\circ$ ,  $17.5^\circ$ , and  $30^\circ$  using Q3D magnetic spectrometer and 1 m focal plane detector; DWBA analysis using CHUCK3 code.

[1980Mo11](#): E(p)=21 MeV. Measured  $\sigma(\theta)$  using multiangle spectrograph and photographic emulsions (FWHM $\approx$ 20 keV); DWBA and CCBA analysis. Subset of results presented in [1977Mo15](#).

Other: [1973Oo01](#), [1972Ma15](#).

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

| E(level) <sup>†</sup>  | J $\pi$ @         | L <sup>†</sup>    | Comments                                                                                                                                                                     |
|------------------------|-------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0.0                    | 0 <sup>+</sup>    | 0                 |                                                                                                                                                                              |
| 104 3                  | (2 <sup>+</sup> ) | (2)               | E(level): weighted average of 109 5 ( <a href="#">1980Mo11</a> ) and 102 3 ( <a href="#">1972Ma15</a> ).                                                                     |
| 335 3                  | (4 <sup>+</sup> ) | (4)               | E(level): weighted average of 332 5 ( <a href="#">1980Mo11</a> ) and 336 3 ( <a href="#">1972Ma15</a> ).                                                                     |
| 688 5                  |                   |                   |                                                                                                                                                                              |
| 746? 10                |                   |                   |                                                                                                                                                                              |
| 831? 10                |                   |                   |                                                                                                                                                                              |
| 1012? 10               |                   |                   |                                                                                                                                                                              |
| 1037.6? $\frac{3}{2}$  |                   |                   | E(level): indicated as a probable contaminant by <a href="#">2006Me25</a> . Level is not adopted by the evaluator.<br>E(level): other: 1034 10 ( <a href="#">1980Mo11</a> ). |
| 1083 5                 |                   |                   |                                                                                                                                                                              |
| 1120 5                 | (2 <sup>+</sup> ) | (2)               |                                                                                                                                                                              |
| 1190 5                 |                   |                   |                                                                                                                                                                              |
| 1229 5                 |                   |                   |                                                                                                                                                                              |
| 1321 5                 |                   |                   |                                                                                                                                                                              |
| 1359 5                 |                   |                   |                                                                                                                                                                              |
| 1380.8 $\frac{3}{2}$   | 0 <sup>+</sup>    | 0 $\frac{3}{2}$   | E(level): other: 1382 5 ( <a href="#">1980Mo11</a> ).                                                                                                                        |
| 1472.1 $\frac{3}{2}$ 4 | (0 <sup>+</sup> ) | (0) $\frac{3}{2}$ | E(level): other: 1470 5 ( <a href="#">1980Mo11</a> ).                                                                                                                        |
| 1513.6 $\frac{3}{2}$ 4 | 0 <sup>+</sup>    | 0                 | E(level): other: 1516 5 ( <a href="#">1980Mo11</a> ).                                                                                                                        |
| 1589 5                 | 2 <sup>+</sup>    | 2                 |                                                                                                                                                                              |
| 1635 5                 |                   |                   |                                                                                                                                                                              |
| 1689.4 $\frac{3}{2}$ 5 | 0 <sup>+</sup>    | 0                 | E(level): other: 1695 5 ( <a href="#">1980Mo11</a> ).                                                                                                                        |
| $\approx$ 1740 #       |                   |                   |                                                                                                                                                                              |
| 1768.4 $\frac{3}{2}$ 5 | 0 <sup>+</sup>    | 0 $\frac{3}{2}$   |                                                                                                                                                                              |
| 1824 5                 |                   |                   |                                                                                                                                                                              |
| 1906 5                 |                   |                   |                                                                                                                                                                              |
| 1932.3 $\frac{3}{2}$ 6 | (0 <sup>+</sup> ) | (0) $\frac{3}{2}$ |                                                                                                                                                                              |
| 1944 5                 |                   |                   |                                                                                                                                                                              |
| 2036.7 $\frac{3}{2}$ 6 | 0 <sup>+</sup>    | 0 $\frac{3}{2}$   |                                                                                                                                                                              |
| 2057 10                |                   |                   |                                                                                                                                                                              |
| 2095 10                |                   |                   |                                                                                                                                                                              |
| 2164 10                |                   |                   |                                                                                                                                                                              |
| 2181.6 $\frac{3}{2}$ 6 | 0 <sup>+</sup>    | 0 $\frac{3}{2}$   |                                                                                                                                                                              |
| 2203 10                |                   |                   |                                                                                                                                                                              |
| 2212 10                |                   |                   |                                                                                                                                                                              |
| 2265 10                |                   |                   |                                                                                                                                                                              |
| 2293 10                |                   |                   |                                                                                                                                                                              |
| 2326.8 $\frac{3}{2}$ 7 | 0 <sup>+</sup>    | 0 $\frac{3}{2}$   |                                                                                                                                                                              |
| 2356 10                |                   |                   |                                                                                                                                                                              |
| 2400 10                |                   |                   |                                                                                                                                                                              |

<sup>†</sup> From [1980Mo11](#), except where noted. L values come from a comparison of measured cross sections with calculated values

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$^{182}\text{W}(\text{p,t})$  [1980Mo11,2006Me25](#) (continued)

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$^{180}\text{W}$  Levels (continued)

(DWBA and coupled-channel Born approximation (CCBA)) at various angles.

<sup>‡</sup> From [2006Me25](#). L=0 is identified by comparing the ratio of the cross section at 5° and 17.5°.

# Doublet.

@ From measured L value.