

**Adopted Levels, Gammas**

| Type            | Author       | History Citation | Literature Cutoff Date |
|-----------------|--------------|------------------|------------------------|
| Full Evaluation | F. G. Kondev | NDS 192,1 (2023) | 1-Aug-2023             |

$Q(\beta^-) = -2456.6$ ;  $S(n) = 8028.52$  *11*;  $S(p) = 7698.5$  *6*;  $Q(\alpha) = 716.4$  *7*    [2021Wa16](#)

 $^{200}\text{Hg}$  LevelsCross Reference (XREF) Flags

|          |                                              |          |                                            |          |                                    |
|----------|----------------------------------------------|----------|--------------------------------------------|----------|------------------------------------|
| <b>A</b> | $^{200}\text{Au}$ $\beta^-$ decay (48.4 min) | <b>G</b> | $^{199}\text{Hg}(n,\gamma)$ E=th:secondary | <b>M</b> | $^{200}\text{Hg}(d,d')$            |
| <b>B</b> | $^{200}\text{Au}$ $\beta^-$ decay (18.7 h)   | <b>H</b> | $^{199}\text{Hg}(n,\gamma)$ E=33.5 eV res  | <b>N</b> | $^{200}\text{Hg}(\alpha,\alpha')$  |
| <b>C</b> | $^{200}\text{Tl}$ $\varepsilon$ decay        | <b>I</b> | $^{199}\text{Hg}(n,\gamma)$ E=129.7 eV res | <b>O</b> | $^{198}\text{Pt}(\alpha,2n\gamma)$ |
| <b>D</b> | Coulomb excitation                           | <b>J</b> | $^{199}\text{Hg}(n,\gamma)$ E=175.1 eV res | <b>P</b> | $^{198}\text{Pt}(\alpha,2n\gamma)$ |
| <b>E</b> | $^{200}\text{Hg}(n,n'\gamma)$                | <b>K</b> | $^{200}\text{Hg}(p,p')$                    | <b>Q</b> | $^{203}\text{Tl}(\mu,xn\gamma)$    |
| <b>F</b> | $^{199}\text{Hg}(n,\gamma)$ E=th:primary     | <b>L</b> | $^{202}\text{Hg}(p,t)$                     | <b>R</b> | Muonic atom                        |

| E(level) <sup>†</sup>          | $J^\pi$ &      | $T_{1/2}$         | XREF                                                              | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|----------------|-------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0.0 <sup>a</sup>               | 0 <sup>+</sup> | stable            | <a href="#">ABCDEFGHIJKLMN</a> <a href="#">OPQR</a>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 367.943 <sup>a</sup> <i>9</i>  | 2 <sup>+</sup> | 46.4 ps <i>4</i>  | <a href="#">ABCDEFGHIJKLMN</a> <a href="#">OPQR</a>               | <p>B(E2)<math>\uparrow</math>=0.853 <i>7</i> (<a href="#">1980Sp05</a>)<br/> <math>Q=+1.11</math> <i>11</i><br/> <math>\mu=+0.65</math> <i>5</i><br/> <math>J^\pi</math>: 367.942<math>\gamma</math> E2 to 0<sup>+</sup>; L(d,d')=2.<br/> <math>T_{1/2}</math>: From Coulomb excitation, using B(E2)<math>\uparrow</math>=0.853 <i>7</i> (<a href="#">1980Sp05</a>). Other: 44 ps <i>3</i> from <math>\gamma\gamma(\Delta t)</math> in <a href="#">2019OI05</a>.<br/> B(E2)<math>\uparrow</math>: Others: 0.853 <i>15</i> in <a href="#">1979Bo16</a>, 0.95 <i>11</i> in <a href="#">1970Ka09</a> and 0.855 in <a href="#">1981Gu07</a>.<br/> Q: Recommended by <a href="#">2021StZZ</a>, based on +1.11 <i>11</i> and +0.96 <i>11</i> in <a href="#">1979Bo16</a>. Other: +1.07 <i>19</i> in <a href="#">1980Sp05</a>.<br/> <math>\mu</math>: Recommended by <a href="#">2020StZV</a> based on <math>g=+0.326</math> <i>26</i> in <a href="#">1995Br34</a> (transient field integral perturbed angular correlations). Others: <math>g=0.40</math> <i>7</i> (<a href="#">1974Do01</a>), but revised in <a href="#">1986Ko02</a>, <math>g=0.31</math> <i>8</i> (<a href="#">1970Ka09</a>), but revised in <a href="#">1986Ko02</a>, <math>g=0.29</math> <i>6</i> in <a href="#">1986Ko02</a>, normalized to <math>g=0.52</math> for 2<sup>+</sup> state in <math>^{198}\text{Hg}</math>.<br/> B(E2)<math>\uparrow</math>=0.477 <i>21</i><br/> <math>\mu=1.02</math> <i>17</i><br/> XREF: K(950).<br/> <math>J^\pi</math>: 579.300<math>\gamma</math> E2 to 2<sup>+</sup>; L(d,d')=4.<br/> <math>T_{1/2}</math>: From B(E2)<math>\uparrow</math>=0.477 <i>21</i>. Other: 6 ps <i>3</i> from <math>\gamma\gamma(\Delta t)</math> in <a href="#">2019OI05</a>.<br/> B(E2)<math>\uparrow</math>: Weighted average of 0.466 <i>47</i> (<a href="#">1979Bo16</a>) and 0.479 <i>23</i> (<a href="#">1981Gu07</a>).<br/> <math>\mu</math>: Recommended by <a href="#">2021StZZ</a> based on <math>g=+0.254</math> <i>43</i> in <a href="#">1995Br34</a> (transient field integral perturbed angular correlations).<br/> XREF: K(1028).<br/> <math>J^\pi</math>: 1029.348<math>\gamma</math> E0 to 0<sup>+</sup>, 661.36<math>\gamma</math> E2 to 2<sup>+</sup>; L(d,d')=2 from <math>J^\pi=2^+</math>.<br/> <math>T_{1/2}</math>: From <math>\gamma\gamma(\Delta t)</math> in <a href="#">2019OI05</a>.<br/> B(E2)<math>\uparrow</math>=0.0080 <i>15</i> (<a href="#">1979Bo16</a>)<br/> XREF: F(1257.1)H(1253.0)I(1253.0)J(1253.0)K(1256).<br/> <math>J^\pi</math>: 1254.14<math>\gamma</math> E2 to 0<sup>+</sup>, 306.863<math>\gamma</math> to 4<sup>+</sup>; L(d,d')=2.<br/> <math>T_{1/2}</math>: From B(E2)<math>\uparrow</math>=0.0080 <i>15</i> (<a href="#">1979Bo16</a>). Other: 8 ps <i>6</i> from <math>\gamma\gamma(\Delta t)</math> in <a href="#">2019OI05</a>.<br/> B(E2)<math>\uparrow</math>: Other: B(E2)(2<sup>+</sup> to 2<sup>+</sup>)=0.015 <i>3</i> (<a href="#">1979Bo16</a>).</p> |
| 947.243 <sup>a</sup> <i>12</i> | 4 <sup>+</sup> | 3.21 ps <i>14</i> | <a href="#">ABCDE</a> <a href="#">GHIJKLM</a> <a href="#">OPQ</a> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1029.348 <i>9</i>              | 0 <sup>+</sup> | 8 ps <i>4</i>     | <a href="#">A</a> <a href="#">CDEFGHIJKLM</a>                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1254.101 <i>9</i>              | 2 <sup>+</sup> | 3.5 ps <i>7</i>   | <a href="#">A</a> <a href="#">CDEFGHIJKLM</a>                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1353.4 <sup>‡</sup> <i>7</i>   |                |                   | <a href="#">L</a>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1503.5 <sup>‡</sup> <i>5</i>   |                |                   | <a href="#">L</a>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>   | J <sup>π</sup> & | T <sub>1/2</sub> | XREF            | Comments                                                                                                                                                                                                                                           |
|-------------------------|------------------|------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1515.178 9              | 0 <sup>+</sup>   |                  | A C E G KLM     | XREF: K(1516)M(1516.1).<br>J <sup>π</sup> : 485.830γ E0 to 0 <sup>+</sup> ; 1147.20γ E2 to 2 <sup>+</sup> ; L(d,d')=2 from J <sup>π</sup> =2 <sup>+</sup> .                                                                                        |
| 1570.279 10             | 1 <sup>+</sup>   |                  | A C EFGHIJ      | J <sup>π</sup> : 540.948γ and 1570.45γ M1 to 0 <sup>+</sup> .                                                                                                                                                                                      |
| 1573.667 10             | 2 <sup>+</sup>   |                  | A CDEFGHIJKLM Q | XREF: F(1575.3)H(1572.8)I(1572.8)J(1572.8).<br>J <sup>π</sup> : 1205.75γ M1+E2 to 2 <sup>+</sup> , 626.62γ to 4 <sup>+</sup> , 1573.6γ to 0 <sup>+</sup> ;<br>L(d,d')=2.                                                                           |
| 1593.428 10             | 2 <sup>+</sup>   |                  | A C EFGHIJ L    | XREF: F(1594.9)H(1592.4)I(1592.4)J(1592.4).<br>J <sup>π</sup> : 564.19γ to 0 <sup>+</sup> , 646.44γ to 4 <sup>+</sup> , 1225.44γ M1+E2(+E0) to 2 <sup>+</sup> .                                                                                    |
| 1619.7 <sup>‡</sup> 10  |                  |                  | L               |                                                                                                                                                                                                                                                    |
| 1628.8 12               |                  |                  | HIJ             |                                                                                                                                                                                                                                                    |
| 1630.900 10             | 1 <sup>+</sup>   |                  | A C EFGHIJ      | XREF: F(1632.0)H(1630.3)I(1630.3)J(1630.3).<br>J <sup>π</sup> : 1630.7γ M1 to 0 <sup>+</sup> , 1262.96γ M1+E2 to 2 <sup>+</sup> .                                                                                                                  |
| 1641.447 10             | 2 <sup>+</sup>   |                  | A C EFGHIJ L    | XREF: H(1640.5)I(1640.5)J(1640.5).<br>J <sup>π</sup> : 1273.43γ M1+E2 to 2 <sup>+</sup> ; 612.12γ E2 to 0 <sup>+</sup> ; 694.14γ to 4 <sup>+</sup> .                                                                                               |
| 1659.010 13             | 3 <sup>+</sup>   |                  | A C E G KLM     | XREF: K(1660).<br>J <sup>π</sup> : From 711.70γ M1(+E2) to 4 <sup>+</sup> , 1291.1γ M1(+E2) to 2 <sup>+</sup> and<br>1610.9γ from 1 <sup>+</sup> . However, J <sup>π</sup> =4 <sup>+</sup> from p'(θ) in $^{200}\text{Hg}(p,p')$ and<br>L(d,d')=4. |
| 1706.73 <sup>a</sup> 9  | 6 <sup>+</sup>   | 0.70 ps 6        | B DE KLM OPQ    | B(E2)†=0.46 4 (1981Gu07)<br>J <sup>π</sup> : 759.5γ E2 to 4 <sup>+</sup> ; p'(θ) in $^{200}\text{Hg}(p,p')$ ; L(d,d')=2 from J <sup>π</sup> =4 <sup>+</sup> ;<br>band structure.                                                                   |
| 1718.307 9              | 1 <sup>+</sup>   |                  | A C EFGHIJ      | T <sub>1/2</sub> : From B(E2)†=0.46 4 in Coulomb excitation.<br>XREF: F(1719.4)H(1716.0)I(1716.0)J(1716.0).<br>J <sup>π</sup> : 1718.6γ M1 to 0 <sup>+</sup> , 1350.35γ M1+E2 to 2 <sup>+</sup> .                                                  |
| 1730.929 10             | 2 <sup>+</sup>   |                  | A C EFGHIJKLM   | XREF: F(1733.4)H(1732)I(1732)J(1732)k(1734).<br>J <sup>π</sup> : From 701.56γ (E2) to 0 <sup>+</sup> , 783.71γ E2 to 4 <sup>+</sup> ; L(d,d')=2.                                                                                                   |
| 1734.345 10             | 3 <sup>+</sup>   |                  | A C E G k       | XREF: k(1734).<br>J <sup>π</sup> : 787.10γ M1+E2 to 4 <sup>+</sup> and 1366.8γ M1(+E2) to 2 <sup>+</sup> .                                                                                                                                         |
| 1775.566 11             | 3 <sup>+</sup>   |                  | C E GHIJ L      | J <sup>π</sup> : 521.41γ M1+E2 to 2 <sup>+</sup> ; 828.27γ M1+E2 to 4 <sup>+</sup> .                                                                                                                                                               |
| 1845.779 10             | 3 <sup>+</sup>   |                  | C E G           | J <sup>π</sup> : 898.56γ M1+E2 to 4 <sup>+</sup> , 275.497γ to 1 <sup>+</sup> .                                                                                                                                                                    |
| 1851.49 <sup>c</sup> 10 | 5 <sup>-</sup>   |                  | B DE KLM OPQ    | XREF: K(1855).<br>J <sup>π</sup> : 904.2γ E1 to 4 <sup>+</sup> ; L(d,d')=5; band assignment.                                                                                                                                                       |
| 1856.784 10             | 0 <sup>+</sup>   |                  | A C E GHIJ L    | XREF: H(1857.8)I(1857.8)J(1857.8).<br>J <sup>π</sup> : 1856.784γ E0 to 0 <sup>+</sup> , 1488.5γ E2 to 2 <sup>+</sup> ; L(p,t)=0.                                                                                                                   |
| 1882.861 10             | 2 <sup>+</sup>   |                  | A C E G LM      | J <sup>π</sup> : 251.696γ M1+E2 to 1 <sup>+</sup> ; 936.1γ (E2) to 4 <sup>+</sup> ; L(d,d')=2.                                                                                                                                                     |
| 1919.4 <sup>‡</sup> 12  |                  |                  | L               |                                                                                                                                                                                                                                                    |
| 1962.62 <sup>c</sup> 10 | 7 <sup>-</sup>   |                  | B DE HI LM OP   | XREF: L(1961.9).<br>J <sup>π</sup> : 110.7γ E2 to 5 <sup>-</sup> and 255.8γ E1 to 6 <sup>+</sup> ; L(d,d')=2 from J <sup>π</sup> =5 <sup>-</sup> .                                                                                                 |
| 1965 4                  |                  |                  | J               |                                                                                                                                                                                                                                                    |
| 1972.281 11             | (2) <sup>+</sup> |                  | A C E GHIJ L    | J <sup>π</sup> : 1604.50γ M1+E2 to 2 <sup>+</sup> , 313.23γ to 3 <sup>+</sup> , 341.375γ to 1 <sup>+</sup> ; direct<br>beta feeding in $^{200}\text{Au } \beta^-$ decay (J <sup>π</sup> =(1 <sup>-</sup> )) favors J=1,2.                          |
| 1974.339 11             | (3) <sup>+</sup> |                  | C E G KL        | XREF: L(1978.4).<br>J <sup>π</sup> : 1027.1γ M1(+E2) to 4 <sup>+</sup> ; 243.4γ to 2 <sup>+</sup> .                                                                                                                                                |
| 1979.9 <sup>#</sup> 6   | (2) <sup>+</sup> |                  | M               | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                        |
| 2000.9 6                |                  |                  | L               |                                                                                                                                                                                                                                                    |
| 2048.92 <sup>b</sup> 21 | 6 <sup>-</sup>   |                  | KL OP           | J <sup>π</sup> : 197.4γ M1 to 5 <sup>-</sup> and 342.3γ E1 to 6 <sup>+</sup> ; band assignment.                                                                                                                                                    |
| 2061.257 10             | 1 <sup>+</sup>   |                  | A C EFGHIJ L    | XREF: H(2060.1)I(2060.1)J(2060.1).<br>J <sup>π</sup> : 546.1γ M1 to 0 <sup>+</sup> , 1693.13γ M1+E2 to 2 <sup>+</sup> .                                                                                                                            |
| 2074.335 16             | (2) <sup>+</sup> |                  | E GHIJ LM       | XREF: H(2075.7)I(2075.7)J(2075.7).<br>J <sup>π</sup> : 340.03γ to 3 <sup>+</sup> ; 1706.6γ to 2 <sup>+</sup> ; L(d,d')=2.                                                                                                                          |
| 2100 <sup>#</sup> 1     | (2) <sup>+</sup> |                  | LM              | XREF: L(2099.0).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                    |
| 2114.357 13             | 3 <sup>+</sup>   |                  | C E G           | J <sup>π</sup> : 483.3γ to 1 <sup>+</sup> , 1167.1γ to M1(+E2) 4 <sup>+</sup> .                                                                                                                                                                    |
| 2116.549 12             | 0 <sup>+</sup>   |                  | E GHIJ L        | XREF: H(2117.3)I(2117.3)J(2117.3).                                                                                                                                                                                                                 |

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**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>   | J <sup>π</sup> &                               | T <sub>1/2</sub> | XREF        | Comments                                                                                                                                                                                               |
|-------------------------|------------------------------------------------|------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2126.859 11             | 2 <sup>+</sup>                                 |                  | C E GHIJ L  | J <sup>π</sup> : 2116.549γ E0 to 0 <sup>+</sup> .<br>XREF: H(2126.1)I(2126.1)J(2126.1)l(2127.3).                                                                                                       |
| 2127.934 12             | (2,3) <sup>+</sup>                             |                  | E G L       | J <sup>π</sup> : 1180.5γ to 4 <sup>+</sup> ; 408.6γ M1 to 1 <sup>+</sup> .<br>XREF: l(2127.3).                                                                                                         |
| 2135.40 <sup>b</sup> 18 | 8 <sup>-</sup>                                 |                  |             | J <sup>π</sup> : 409.63γ to 1 <sup>+</sup> ; 1180.4γ to 4 <sup>+</sup> .                                                                                                                               |
| 2143.80 <sup>c</sup> 13 | 9 <sup>-</sup>                                 | 1.07 ns 4        | B L OP      | J <sup>π</sup> : 86.5γ to 6 <sup>-</sup> ; 172.8γ M1 to 7 <sup>-</sup> ; band assignment.<br>J <sup>π</sup> : 181.0γ E2 to 7 <sup>-</sup> .                                                            |
| 2151.35 10              | 3 <sup>-</sup>                                 |                  | C E KLM     | T <sub>1/2</sub> : From 497γ-181γ(Δt) in 1970To14.<br>XREF: K(2150).                                                                                                                                   |
| 2180.1 <sup>‡</sup> 3   |                                                |                  | L           | J <sup>π</sup> : p'(θ) in $^{200}\text{Hg}(p,p')$ ; L(d,d')=3.                                                                                                                                         |
| 2189.477 13             | 1 <sup>+</sup>                                 |                  | FGHIJKL     | XREF: F(2187.7)H(2188.8)I(2188.8)J(2188.8)K(2184)L(2190.8).<br>J <sup>π</sup> : 2188.7γ M1 to 0 <sup>+</sup> ; 935.45γ E2+M1 to 2 <sup>+</sup> ; p'(θ) in $^{200}\text{Hg}(p,p')$ .                    |
| 2222.7 <sup>‡</sup> 2   |                                                |                  | L           |                                                                                                                                                                                                        |
| 2229.274 13             | 1 <sup>+</sup>                                 |                  | C FGHIJKL   | XREF: F(2228.9)J(2227.8)K(2230).<br>J <sup>π</sup> : 713.9γ to 0 <sup>+</sup> , 975.15γ M1+E2 to 2 <sup>+</sup> ; p'(θ) in $^{200}\text{Hg}(p,p')$ .                                                   |
| 2238.51 22              | (3)                                            |                  | C E         | J <sup>π</sup> : 1870.6γ to 2 <sup>+</sup> ; non observation in res n-capture (J <sup>π</sup> =0 <sup>-</sup> and 1 <sup>-</sup> ) favors J=3.                                                         |
| 2246.446 13             | (1,2) <sup>+</sup>                             |                  | E GHIJ L    | J <sup>π</sup> : 272.109γ to (3) <sup>+</sup> , 676.2γ M1(+E2) to 1 <sup>+</sup> , L(p,t) consistent with 0 <sup>+</sup> .                                                                             |
| 2258.1 <sup>‡</sup> 5   |                                                |                  | L           |                                                                                                                                                                                                        |
| 2274.229 13             | (2) <sup>+</sup>                               |                  | C EFGHIJ LM | XREF: F(2276.0)H(2275.7)I(2275.7)J(2275.7)M(2275).<br>J <sup>π</sup> : 1906.2γ (E2) to 2 <sup>+</sup> ; 759.30γ to 0 <sup>+</sup> ; L(d,d')=2.                                                         |
| 2284.36 23              | 5 <sup>-</sup> ,6,7 <sup>-</sup>               |                  |             | J <sup>π</sup> : 321.8γ to 7 <sup>-</sup> ; 432.8γ to 5 <sup>-</sup> .                                                                                                                                 |
| 2288.93 4               | 2 <sup>+</sup>                                 |                  | C EFGHIJKL  | XREF: F(2289.5)J(2290.0).                                                                                                                                                                              |
| 2296.341 23             | 1 <sup>+</sup>                                 |                  | C EFGHIJ M  | J <sup>π</sup> : 2289.6γ to 0 <sup>+</sup> ; 1341.7γ (E2) to 4 <sup>+</sup> , 1921γ (M1) to 2 <sup>+</sup> .<br>XREF: H(2295.3)I(2295.3)J(2295.3).                                                     |
| 2297.5 14               | (1,2) <sup>-</sup>                             |                  | F L         | J <sup>π</sup> : 2296.3γ M1 to 0 <sup>+</sup> ; L(d,d')=2 from J <sup>π</sup> =2 <sup>+</sup> .<br>XREF: L(2298.6).                                                                                    |
| 2298.5 3                | 5 <sup>-</sup> ,6,7 <sup>-</sup>               |                  |             | J <sup>π</sup> : 5731.8γ primary M1,E2 from 0 <sup>-</sup> in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ .                                                                                         |
| 2307.8 <sup>‡</sup> 2   |                                                |                  | L           | J <sup>π</sup> : 335.9γ to 7 <sup>-</sup> and 447.0γ to 5 <sup>-</sup> .                                                                                                                               |
| 2321.6 2                | (2) <sup>+</sup>                               |                  | LM          | XREF: M(2319).                                                                                                                                                                                         |
| 2331.778 12             | 2 <sup>+</sup>                                 |                  | C E G L     | J <sup>π</sup> : L(d,d')=2.<br>J <sup>π</sup> : 475.08γ to 0 <sup>+</sup> ; 1385.0γ (E2) to 4 <sup>+</sup> ; however (0 <sup>+</sup> ) in $^{202}\text{Hg}(p,t)$ .                                     |
| 2343.594 20             | 1 <sup>+</sup> ,2 <sup>+</sup> ,3 <sup>+</sup> |                  | C EFG L     | XREF: F(2345.5).<br>J <sup>π</sup> : 1975.8γ M1(+E2) to 2 <sup>+</sup> ; 498.81γ to 3 <sup>+</sup> ; Non observation in res n-capture (J <sup>π</sup> =0 <sup>-</sup> and 1 <sup>-</sup> ) favors J=3. |
| 2370.043 12             | 1 <sup>+</sup>                                 |                  | C EFGHIJ    | XREF: H(2369.8)I(2369.8)J(2369.8).                                                                                                                                                                     |
| 2377.15 22              | (7) <sup>-</sup>                               |                  | KLM O       | J <sup>π</sup> : 2370.0γ M1 to 0 <sup>+</sup> , 710.93γ to 3 <sup>+</sup> ; γγ(θ) in 1989Ah01.<br>XREF: K(2379).                                                                                       |
| 2388.68 4               | (1,2,3) <sup>+</sup>                           |                  | C G L       | J <sup>π</sup> : 241.8γ to 8 <sup>-</sup> ; 328.3γ to 6 <sup>-</sup> ; L(d,d')=2 from J <sup>π</sup> =5 <sup>-</sup> .                                                                                 |
| 2408.8 5                |                                                |                  |             | J <sup>π</sup> : 2020.6γ M1+E2 to 2 <sup>+</sup> .                                                                                                                                                     |
| 2411.830 16             | (2) <sup>+</sup>                               |                  | GHIJKLM     | XREF: K(2416)L(2414.1)M(2415.2).                                                                                                                                                                       |
| 2442.7? 3               | 1 <sup>-</sup>                                 |                  | G           | J <sup>π</sup> : 677.5γ to 3 <sup>+</sup> ; 896.7γ to 0 <sup>+</sup> ; L(d,d')=2.                                                                                                                      |
| 2461.83 4               | (1 <sup>+</sup> )                              |                  | FGHIJ L     | J <sup>π</sup> : 2442.6γ E1 to 0 <sup>+</sup> .<br>XREF: F(2463.7)H(2462.5)I(2462.5)J(2462.5)L(2463.7).                                                                                                |
| 2475.2 <sup>‡</sup> 1   | 0 <sup>+</sup>                                 |                  | L           | J <sup>π</sup> : 1432.2γ (M1) to 0 <sup>+</sup> ; 2093.6γ to 2 <sup>+</sup> .<br>J <sup>π</sup> : From t(θ) in 2013Be21.                                                                               |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>   | J <sup>π</sup> &   | T <sub>1/2</sub> | XREF      | Comments                                                                                                                                                                                                                                                                 |
|-------------------------|--------------------|------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2480.3 <sup>‡</sup> 1   | (2) <sup>+</sup>   |                  | KLM       | XREF: K(2481).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                            |
| 2485.7 <sup>‡</sup> 2   |                    |                  | L         |                                                                                                                                                                                                                                                                          |
| 2491.430 16             | (2) <sup>+</sup>   |                  | GHIJ L    | XREF: H(2490.6)I(2490.6)J(2490.6).<br>J <sup>π</sup> : 634.66γ to 0 <sup>+</sup> ; 757.0γ to 3 <sup>+</sup> ; 2123.9γ (E2) to 2 <sup>+</sup> .                                                                                                                           |
| 2514.0 <sup>‡</sup> 4   |                    |                  | KL        | XREF: K(2515).                                                                                                                                                                                                                                                           |
| 2522.70 <sup>b</sup> 25 | 10 <sup>-</sup>    |                  | OP        | J <sup>π</sup> : 378.9 M1+E2 to 9 <sup>-</sup> , 387.3 E2 to 8 <sup>-</sup> .                                                                                                                                                                                            |
| 2524.6 <sup>‡</sup> 7   |                    |                  | L         |                                                                                                                                                                                                                                                                          |
| 2548.1 <sup>‡</sup> 2   |                    |                  | L         |                                                                                                                                                                                                                                                                          |
| 2565.6 <sup>‡</sup> 1   | (2) <sup>+</sup>   |                  | HIJKLM    | XREF: H(2563.0)I(2563.0)J(2563.0).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                        |
| 2590.79 14              | 1 <sup>-</sup>     |                  | G         | J <sup>π</sup> : 2590.5γ E1 to 0 <sup>+</sup> .                                                                                                                                                                                                                          |
| 2597.1 3                | (9)                |                  | OP        | J <sup>π</sup> : 461.7γ to 8 <sup>-</sup> ; relative population of this level in <sup>198</sup> Pt( <sup>9</sup> Be,α3nγ).                                                                                                                                               |
| 2610.42 <sup>‡</sup> 10 | 3 <sup>-</sup>     | 25.1 ps 24       | D KLMN    | B(E3)↑=0.41 4 (1991Li03)<br>XREF: K(2611)M(2612.1).<br>J <sup>π</sup> : 2609γ (E3) to 0 <sup>+</sup> ; p'(θ) in <sup>200</sup> Hg(p,p'); L(d,d')=3.<br>T <sub>1/2</sub> : Using B(E3)↑=0.41 4 and by assuming that Eγ=2609 keV<br>3 is the only depopulating transition. |
| 2621.1 <sup>‡</sup> 6   |                    |                  | kL        | XREF: k(2630).                                                                                                                                                                                                                                                           |
| 2639.929 17             | 1 <sup>+</sup>     |                  | FGHIJk    | XREF: k(2630).<br>J <sup>π</sup> : 2639.9γ M1 to 0 <sup>+</sup> , 2271.5γ M1+E2 to 2 <sup>+</sup> ; γγ(θ) in 1989Ah01.                                                                                                                                                   |
| 2641.57 <sup>c</sup> 16 | 11 <sup>-</sup>    |                  | B L OP    | XREF: L(2643.7).<br>J <sup>π</sup> : 497.8γ E2 to 9 <sup>-</sup> ; band structure.                                                                                                                                                                                       |
| 2661.9 <sup>‡</sup> 1   | 3 <sup>-</sup>     |                  | KLM       | XREF: K(2659)M(2663.9).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                   |
| 2680.1 3                | 8 <sup>+</sup>     | 0.19 ps 4        | D L OP    | B(E2)↑=0.38 8 (1981Gu07)<br>J <sup>π</sup> : 973.6γ E2 to 6 <sup>+</sup> ; band structure.<br>T <sub>1/2</sub> : From B(E2)↑=0.38 8 in (1981Gu07).                                                                                                                       |
| 2691.59 3               | (1,2) <sup>+</sup> |                  | fGhi j LM | XREF: f(2693.4)h(2693.2)i(2693.2)j(2693.2).<br>J <sup>π</sup> : 1121.4γ (M1) to 1 <sup>+</sup> ; 957.2γ to 3 <sup>+</sup> ; L(d,d')=2.                                                                                                                                   |
| 2697.137 19             | (1,2) <sup>+</sup> |                  | fGhi j L  | XREF: f(2693.4)h(2693.2)i(2693.2)j(2693.2).<br>J <sup>π</sup> : 467.86γ (M1) to 1 <sup>+</sup> ; 1442.5γ to 2 <sup>+</sup> ; t(θ) in 2013Be21<br>excludes 0 <sup>+</sup> .                                                                                               |
| 2701.366 25             | 2 <sup>+</sup>     |                  | GHIJ M    | J <sup>π</sup> : 1042.4γ M1 to 3 <sup>+</sup> ; 1754.6γ to 4 <sup>+</sup> , 331.3γ to 1 <sup>+</sup> ; feeding from n-capture (J <sup>π</sup> =1 <sup>-</sup> ) resonance state; L(d,d')=2.                                                                              |
| 2715.4 <sup>‡</sup> 5   |                    |                  | L         |                                                                                                                                                                                                                                                                          |
| 2729.9 <sup>‡</sup> 4   | 3 <sup>-</sup>     |                  | LM        | XREF: M(2731.6).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                          |
| 2736.8 <sup>‡</sup> 2   | 2 <sup>+</sup>     |                  | LM        | XREF: M(2741).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                            |
| 2763.097 18             | (1,2) <sup>+</sup> |                  | GHIJ L    | XREF: H(2761.8)I(2761.8)J(2761.8).<br>J <sup>π</sup> : 2764.0γ to 0 <sup>+</sup> ; 1121.4γ M1 to 2 <sup>+</sup> .                                                                                                                                                        |
| 2773.5 <sup>‡</sup> 4   | 3 <sup>-</sup>     |                  | LM        | XREF: M(2775).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                            |
| 2786.7 <sup>‡</sup> 23  |                    |                  | L         |                                                                                                                                                                                                                                                                          |
| 2794.16 3               | (1,2) <sup>+</sup> |                  | GHIJKLM   | XREF: K(2800).<br>J <sup>π</sup> : 2794.5γ to 0 <sup>+</sup> ; 1163.5γ M1(+E2) to 1 <sup>+</sup> ; L(d,d')=2.                                                                                                                                                            |
| 2832.3 25               | (1 <sup>-</sup> )  |                  | HIJKL     | XREF: H(2833.6)I(2833.6)J(2833.6)K(2837)L(2828.2).<br>J <sup>π</sup> : p'(θ) in <sup>200</sup> Hg(p,p') (1991Ho07).                                                                                                                                                      |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>  | J <sup>π</sup> &               | XREF    | Comments                                                                                                                                                                                                                                                                    |
|------------------------|--------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2841.9 <sup>‡</sup> 2  | 3 <sup>-</sup>                 | LM      | XREF: M(2844.5).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                             |
| 2847.51 9              | 1 <sup>-</sup>                 | G       | J <sup>π</sup> : 2847.3γ E1 to 0 <sup>+</sup> .                                                                                                                                                                                                                             |
| 2853.05 13             | (1,2) <sup>+</sup>             | GHIJ    | XREF: H(2856.0)I(2856.0)J(2856.0).<br>J <sup>π</sup> : 2485.3γ E2+M1 to 2 <sup>+</sup> , 738.5γ to 3 <sup>+</sup> , 2853.8γ to 0 <sup>+</sup> .                                                                                                                             |
| 2862.3 5               | (1,2) <sup>+</sup>             | GHIJ LM | XREF: H(2861.5)I(2861.5)J(2861.5)M(2865.2).<br>J <sup>π</sup> : 2862.4γ to 0 <sup>+</sup> ; L(d,d')=2.                                                                                                                                                                      |
| 2877.90 5              | 1 <sup>+</sup>                 | FGHIJ 1 | XREF: F(2879.6)H(2879.2)I(2879.2)J(2879.2)l(2880.6).<br>J <sup>π</sup> : 546.1γ (M1) to 2 <sup>+</sup> ; 903.5γ to 3 <sup>+</sup> ; direct feeding by E1 primary 5150.1γ in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ .                                  |
| 2883.5 <sup>#</sup> 5  | 3 <sup>-</sup>                 | LM      | XREF: l(2880.6).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                             |
| 2893.3 10              | (1,2) <sup>-</sup>             | F       | J <sup>π</sup> : 5134.7γ primary M1,E2 from 0 <sup>-</sup> in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ .                                                                                                                                                |
| 2907.3 <sup>#</sup> 5  | (2) <sup>+</sup>               | H LM    | XREF: H(2902)L(2907.6).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                      |
| 2937.55 13             | 1 <sup>+</sup> ,2 <sup>+</sup> | GHIJ M  | XREF: H(2940)I(2940)J(2940).<br>J <sup>π</sup> : 1054.7γ M1 to 2 <sup>+</sup> ; 1422.4γ and 2937.2γ to 0 <sup>+</sup> ; L(d,d')=2.                                                                                                                                          |
| 2953 <sup>#</sup> 1    | (2) <sup>+</sup>               | HIJK M  | XREF: H(2949.9)I(2949.9)J(2949.9)K(2948).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                    |
| 2959.93 11             | 1 <sup>-</sup>                 | G M     | J <sup>π</sup> : 2960.2γ E1 to 0 <sup>+</sup> and 1366.8γ to 2 <sup>+</sup> .                                                                                                                                                                                               |
| 2978.213 21            | 1 <sup>+</sup>                 | FGHIJ   | XREF: F(2979.5)H(2979.3)I(2979.3)J(2979.3).<br>J <sup>π</sup> : 851.36γ M1+E2 to 2 <sup>+</sup> , 1408.0γ E2+M1 to 1 <sup>+</sup> , 1121.4γ (M1) to 0 <sup>+</sup> ; direct feeding by primary E1 5050.3γ in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ . |
| 2995.2 <sup>#</sup> 8  | (2) <sup>+</sup>               | K M     | XREF: K(2989).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                               |
| 3029.2 <sup>@</sup> 21 |                                | HIJ     |                                                                                                                                                                                                                                                                             |
| 3043.1 <sup>@</sup> 7  |                                | HIJ     |                                                                                                                                                                                                                                                                             |
| 3053.32 8              | 1 <sup>+</sup>                 | FGHIJ   | XREF: F(3055.0)H(3055.6)I(3055.6)J(3055.6).<br>J <sup>π</sup> : 1322.4γ M1 to 2 <sup>+</sup> , 1538.2γ to 0 <sup>+</sup> ; direct feeding by primary E1 4974.7γ in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ .                                           |
| 3062.6 10              | (2) <sup>+</sup>               | HIJK M  | XREF: H(3063.9)I(3063.9)J(3063.9)K(3061)M(3063.2).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                           |
| 3073.823 25            | 1 <sup>+</sup>                 | FGHIJ M | XREF: F(3075.5)H(3076.3)I(3076.3)J(3076.3).<br>J <sup>π</sup> : 1503.2γ E2(+M1) to 1 <sup>+</sup> , 3074.2γ (M1) to 0 <sup>+</sup> ; direct feeding by primary E1 4954.2γ in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ .                                 |
| 3104.9 <sup>#</sup> 5  | (2) <sup>+</sup>               | HIJK M  | XREF: H(3106)I(3106)J(3106)K(3097).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                          |
| 3120.9 <sup>d</sup> 3  | 10 <sup>+</sup>                | OP      | J <sup>π</sup> : 977.1γ (E1) to 9 <sup>-</sup> , 94.2γ E2 from 12 <sup>+</sup> level.                                                                                                                                                                                       |
| 3123.0 <sup>b</sup> 4  | 12 <sup>-</sup>                | OP      | J <sup>π</sup> : 600.3γ E2 to 10 <sup>-</sup> ; band structure.                                                                                                                                                                                                             |
| 3131.4 <sup>#</sup> 5  | (2) <sup>+</sup>               | HIJ M   | XREF: H(3132.4)I(3132.4)J(3132.4).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                           |
| 3142 <sup>#</sup> 5    | 3 <sup>-</sup>                 | M       | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                                                 |
| 3171.1 <sup>#</sup> 5  | 3 <sup>-</sup>                 | K M     | XREF: K(3169).<br>J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                               |
| 3181.4 <sup>@</sup> 9  | (2) <sup>+</sup>               | HIJ M   | XREF: M(3182).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                               |
| 3186.34 3              | 1 <sup>+</sup>                 | FG      | XREF: F(3187.3).<br>J <sup>π</sup> : 1476.6γ M1+E2 to 1 <sup>+</sup> , 3185.8γ (M1) to 0 <sup>+</sup> ; direct feeding by primary E1 4842.4γ in $^{199}\text{Hg}(n,\gamma)\text{E}=\text{th};\text{primary}$ .                                                              |
| 3199.9 <sup>@</sup> 21 |                                | HIJ     |                                                                                                                                                                                                                                                                             |
| 3212.7 <sup>#</sup> 9  | 3 <sup>-</sup>                 | M       | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                                                 |

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**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>  | J <sup>π</sup> & | T <sub>1/2</sub> | XREF    | Comments                                                                                                                                                                       |
|------------------------|------------------|------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3215.2 <sup>d</sup> 3  | 12 <sup>+</sup>  | 1.0 ns 3         | OP      | J <sup>π</sup> : 573.5γ E1 to 11 <sup>-</sup> ; band structure.<br>T <sub>1/2</sub> : from 397γ-498γ(Δt) centroid-shift method in 2021Su02.                                    |
| 3216.84 19             | (2) <sup>+</sup> |                  | FGHIJ   | XREF: F(3217.9)H(3220)I(3220)J(3220).                                                                                                                                          |
| 3228.6 14              | (1) <sup>+</sup> |                  | F HIJ M | J <sup>π</sup> : 1557.7γ M1+E2 to 3 <sup>+</sup> , 1100.3γ to 0 <sup>+</sup> .<br>XREF: F(3230.0)M(3225).                                                                      |
| 3242 <sup>#</sup> 2    | 3 <sup>-</sup>   |                  | M       | J <sup>π</sup> : 4799.7γ (E1) primary from 0 <sup>-</sup> in $^{199}\text{Hg}(n,\gamma)$ ; L(d,d')=2.                                                                          |
| 3259.1 <sup>@</sup> 18 | (2) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                    |
| 3269.43 15             | 1 <sup>+</sup>   |                  | FGHIJ   | XREF: M(3256.1).                                                                                                                                                               |
| 3288.93 10             | 1 <sup>+</sup>   |                  | FGHIJ   | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3304 <sup>#</sup> 1    | 3 <sup>-</sup>   |                  | M       | XREF: F(3270.8)H(3272.2)I(3272.2)J(3272.2).                                                                                                                                    |
| 3324 <sup>@</sup> 6    | (2) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : 2901.3γ E2(+M1) to 2 <sup>+</sup> , 3269.4γ (M1) to 0 <sup>+</sup> ; direct feeding by primary E1 4758.9γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ . |
| 3339.1 <sup>@</sup> 11 |                  |                  | HIJ     | XREF: F(3290.5)H(3291.8)I(3291.8)J(3291.8).                                                                                                                                    |
| 3353.05 13             | 1 <sup>+</sup>   |                  | FGHIJ   | J <sup>π</sup> : 1557.7γ M1(+E2) to 2 <sup>+</sup> , 3288.9γ (M1) to 0 <sup>+</sup> ; direct feeding by primary E1 4739.2γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ . |
| 3371.3 <sup>@</sup> 13 | (2) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                    |
| 3387.1 <sup>@</sup> 22 | (2) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3398.1 <sup>c</sup> 4  | 13 <sup>-</sup>  |                  | P       | XREF: M(3372.1).                                                                                                                                                               |
| 3402.7 <sup>@</sup> 22 | (0) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3414.7 <sup>@</sup> 9  | (2) <sup>+</sup> |                  | HIJ M   | XREF: M(3384.2).                                                                                                                                                               |
| 3420.8 <sup>#</sup> 7  | 3 <sup>-</sup>   |                  | M       | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3434 <sup>#</sup> 1    | 3 <sup>-</sup>   |                  | M       | J <sup>π</sup> : 756.6γ E2 to 11 <sup>-</sup> ; band structure.                                                                                                                |
| 3443? 6                |                  |                  | HIJ     | XREF: M(3404).                                                                                                                                                                 |
| 3452.98 8              | (1) <sup>+</sup> |                  | FG      | J <sup>π</sup> : L(d,d')=2 from J <sup>π</sup> =2 <sup>+</sup> .                                                                                                               |
| 3460.3 <sup>@</sup> 18 |                  |                  | HIJ     | XREF: M(3411).                                                                                                                                                                 |
| 3477? 4                |                  |                  | HIJ     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3492.45 10             | 1 <sup>+</sup>   |                  | FG      | XREF: M(3454.3).                                                                                                                                                               |
| 3513.0 <sup>@</sup> 18 | (2) <sup>+</sup> |                  | HIJ M   | J <sup>π</sup> : 1811.2γ to 2 <sup>+</sup> , 2432.7γ to 0 <sup>+</sup> ; direct feeding by primary E1 4575.4γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ .              |
| 3529 <sup>#</sup> 9    | (3) <sup>-</sup> |                  | M       | XREF: F(3491.9).                                                                                                                                                               |
| 3537.4 19              |                  |                  | HIJ     | J <sup>π</sup> : 2462.6γ to 0 <sup>+</sup> ; 901.69γ to 1 <sup>-</sup> ; direct feeding by primary E1 4537.8γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ .              |
| 3541 <sup>#</sup> 1    | (3) <sup>-</sup> |                  | M       | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3547 <sup>#</sup> 1    | (2) <sup>+</sup> |                  | M       | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                    |
| 3555.7 17              |                  |                  | HIJ     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                    |
| 3559 <sup>#</sup> 1    | (3) <sup>-</sup> |                  | M       | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                    |
| 3569.5 16              | 1 <sup>+</sup>   |                  | FG M    | XREF: F(3570.9)M(3567.7).                                                                                                                                                      |
|                        |                  |                  |         | J <sup>π</sup> : L(d,d')=2 from J <sup>π</sup> =2 <sup>+</sup> ; direct feeding by primary E1 4458.8γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ .                      |

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**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup>  | J <sup>π</sup> &  | XREF  | Comments                                                                                                                                                                                                                                                 |
|------------------------|-------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3576.6 <sup>@</sup> 16 |                   | HIJ   |                                                                                                                                                                                                                                                          |
| 3584.9 <sup>#</sup> 9  | (2) <sup>+</sup>  | HIJ M | XREF: H(3588)I(3588)J(3588).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                              |
| 3606 <sup>#</sup> 1    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3611.8 <sup>d</sup> 4  | 14 <sup>+</sup>   | OP    | J <sup>π</sup> : 396.5γ E2 to 12 <sup>+</sup> ; band structure.                                                                                                                                                                                          |
| 3619 <sup>#</sup> 1    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3637 <sup>#</sup> 1    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3644.3 <sup>@</sup> 8  |                   | HIJ   |                                                                                                                                                                                                                                                          |
| 3655.06 5              | (1) <sup>+</sup>  | FGHIJ | XREF: F(3657.4)H(3658.6)I(3658.6)J(3658.6).<br>J <sup>π</sup> : 1163.5γ (M1+E2) to (1,2) <sup>+</sup> , 1879.3γ to 3 <sup>+</sup> , 2139.7γ to 0 <sup>+</sup> ; direct feeding by primary E1 4372.3γ in $^{199}\text{Hg}(n,\gamma)\text{E=th:primary}$ . |
| 3673.0 5               | 14 <sup>+</sup>   | P     | J <sup>π</sup> : 457.8γ E2 to 12 <sup>+</sup> .                                                                                                                                                                                                          |
| 3676 <sup>#</sup> 1    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3684.8 14              |                   | HIJ   |                                                                                                                                                                                                                                                          |
| 3695 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3702 <sup>?</sup> 1    | (2) <sup>+</sup>  | HIJ M | XREF: H(3702.6)I(3702.6)J(3702.6).<br>J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                        |
| 3710 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3722 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3732 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3743 <sup>#</sup> 1    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3764 <sup>#</sup> 1    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3774 <sup>#</sup> 1    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3782 5                 |                   | HIJ   |                                                                                                                                                                                                                                                          |
| 3790 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3797 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3808 <sup>#</sup> 1    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3826.7 13              | (2) <sup>+</sup>  | HIJ M | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3840 <sup>#</sup> 1    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3872.9 4               | (14) <sup>+</sup> | P     | J <sup>π</sup> : 261.1γ (M1) to 14 <sup>+</sup> and 474.8γ (E1) to 13 <sup>-</sup> .                                                                                                                                                                     |
| 3892 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3899 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3918 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3930 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 3961 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3984 <sup>#</sup> 2    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 3990 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 4000 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 4018 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 4025.3 <sup>b</sup> 7  | 14 <sup>-</sup>   | P     | J <sup>π</sup> : 902.3γ E2 to 12 <sup>-</sup> ; band structure.                                                                                                                                                                                          |
| 4027 <sup>#</sup> 3    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 4094.6 5               | (15)              | P     | J <sup>π</sup> : 482.9γ to 14 <sup>+</sup> .                                                                                                                                                                                                             |
| 4114 <sup>#</sup> 3    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 4122 <sup>#</sup> 3    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 4134 <sup>#</sup> 3    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |
| 4142 <sup>#</sup> 2    | (3) <sup>-</sup>  | M     | J <sup>π</sup> : L(d,d')=3.                                                                                                                                                                                                                              |
| 4159 <sup>#</sup> 3    | (2) <sup>+</sup>  | M     | J <sup>π</sup> : L(d,d')=2.                                                                                                                                                                                                                              |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $^{200}\text{Hg}$  Levels (continued)

| E(level) <sup>†</sup> | J <sup>π</sup> &      | XREF | Comments                                                                                      |
|-----------------------|-----------------------|------|-----------------------------------------------------------------------------------------------|
| 4196.0 <sup>d</sup> 5 | 16 <sup>+</sup>       | P    | J <sup>π</sup> : 584.2γ E2 to 14 <sup>+</sup> ; band structure.                               |
| 4296.6 5              | 16 <sup>+</sup>       | P    | J <sup>π</sup> : 684.9γ E2 to 14 <sup>+</sup> .                                               |
| 4443.9 <sup>c</sup> 4 | 15 <sup>-</sup>       | P    | J <sup>π</sup> : 1045.9γ E2 to 13 <sup>-</sup> ; band structure.                              |
| 4541.1 4              | 16 <sup>+</sup>       | P    | J <sup>π</sup> : 345.1γ M1 to 16 <sup>+</sup> ; 929.2γ E2 to 14 <sup>+</sup> .                |
| 4919.1 <sup>d</sup> 5 | 18 <sup>+</sup>       | P    | J <sup>π</sup> : 622.6γ E2 and 723.0γ E2 to 16 <sup>+</sup> ; band structure.                 |
| 4928.2 7              | (17,18 <sup>+</sup> ) | P    | J <sup>π</sup> : 631.6γ to 16 <sup>+</sup> level.                                             |
| 5181.6 5              | 18 <sup>+</sup>       | P    | J <sup>π</sup> : 885.0γ E2 and 985.7γ E2 to 16 <sup>+</sup> .                                 |
| 5260.0 <sup>c</sup> 5 | (17 <sup>-</sup> )    | P    | J <sup>π</sup> : 718.7γ (E1) to 16 <sup>+</sup> , 816.4γ to 15 <sup>-</sup> ; band structure. |
| 5344.2 6              | 18 <sup>+</sup>       | P    | J <sup>π</sup> : 803.1γ E2 to 16 <sup>+</sup> .                                               |
| 5568.3 <sup>c</sup> 5 | (19 <sup>-</sup> )    | P    | J <sup>π</sup> : 308.3γ E2 to (17 <sup>-</sup> ).                                             |
| 5661.6 4              | (1 <sup>-</sup> )     | R    |                                                                                               |
| 5915.8 <sup>d</sup> 6 | 20 <sup>+</sup>       | P    | J <sup>π</sup> : 996.7γ E2 to 18 <sup>+</sup> ; band structure.                               |
| 6162.2 <sup>c</sup> 6 | (21 <sup>-</sup> )    | P    | J <sup>π</sup> : 593.9γ E2 to (19 <sup>-</sup> ).                                             |

<sup>†</sup> From a least-squares fit to Eγ, unless otherwise stated.

<sup>‡</sup> From  $^{202}\text{Hg}(\text{p},\text{t})$ .

# From  $^{200}\text{Hg}(\text{d},\text{d}')$ .

@ From  $^{199}\text{Hg}(\text{n},\gamma)\text{E}=175.1\text{ eV res.}$

& From deduced γ-ray transition multipolarities and decay pattern, unless otherwise stated.

<sup>a</sup> Band(A): g.s. band.

<sup>b</sup> Band(B):  $\nu(\text{p}_{3/2}^{-1}, \text{i}_{13/2}^{-1})$  band ( $\sigma=0$ ).

<sup>c</sup> Band(C):  $\nu(\text{p}_{3/2}^{-1}, \text{i}_{13/2}^{-1})$  band ( $\sigma=1$ ) at low spin and configuration= $\nu(\text{p}_{3/2}^{-1}, \text{i}_{13/2}^{-3})$  at high spin.

<sup>d</sup> Band(D):  $\nu(\text{i}_{13/2}^{-2})$  band.

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ |                |                    |                    |          |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|----------------|--------------------|--------------------|----------|----------------|--------------------|------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$       | $J_i^\pi$      | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 367.943                   | 2 <sup>+</sup> | 367.942 10         | 100                | 0.0      | 0 <sup>+</sup> | E2                 |                  | 0.0594 8   | $\alpha(\text{K})=0.0388$ 5; $\alpha(\text{L})=0.01553$ 22; $\alpha(\text{M})=0.00389$ 5<br>$\alpha(\text{N})=0.000970$ 14; $\alpha(\text{O})=0.0001694$ 24; $\alpha(\text{P})=5.08\times 10^{-6}$ 7<br>$\text{B}(\text{E}2)(\text{W.u.})=24.56$ 22<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0395$ 8 (1961Le17), 0.0402 14 (1962Ja10), 0.0400 25 (1962Va10) and $\alpha(\text{K})_{\text{exp}}=0.036$ 7 (1974Br02); $\gamma(\theta)$ in 1981He10.                                                                                                                                                                                                                                                                       |
| 947.243                   | 4 <sup>+</sup> | 579.300 17         | 100                | 367.943  | 2 <sup>+</sup> | E2                 |                  | 0.01905 27 | $\alpha(\text{K})=0.01424$ 20; $\alpha(\text{L})=0.00365$ 5; $\alpha(\text{M})=0.000888$ 12<br>$\alpha(\text{N})=0.0002217$ 31; $\alpha(\text{O})=3.99\times 10^{-5}$ 6; $\alpha(\text{P})=1.891\times 10^{-6}$ 26<br>$\text{B}(\text{E}2)(\text{W.u.})=38.2$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.014$ 4 (1974Br02) and 0.016 2 (1965Sa02); $\gamma\gamma(\theta)$ in 1971Ha09, 1965Sa02, 1989Ah01.                                                                                                                                                                                                                                                                                                             |
| 1029.348                  | 0 <sup>+</sup> | 661.36 3           | 100                | 367.943  | 2 <sup>+</sup> | E2                 |                  | 0.01416 20 | $\alpha(\text{K})=0.01085$ 15; $\alpha(\text{L})=0.002524$ 35; $\alpha(\text{M})=0.000609$ 9<br>$\alpha(\text{N})=0.0001520$ 21; $\alpha(\text{O})=2.76\times 10^{-5}$ 4; $\alpha(\text{P})=1.439\times 10^{-6}$ 20<br>$\text{B}(\text{E}2)(\text{W.u.})=8$ 4<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0102$ 14 (1974Br02) and 0.023 6 (1965Sa02); $\gamma\gamma(\theta)$ in 1971Ha09, 1989Ah01.<br>$E_\gamma$ : From level energy.<br>Mult.: From 1987Su15; $\text{ce}(\text{K})(1029.3)/\text{ce}(\text{K})(886.2)=0.028$ 3 (1987Su15).                                                                                                                                                                               |
|                           |                | (1029.348 9)       |                    | 0.0      | 0 <sup>+</sup> | E0                 |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1254.101                  | 2 <sup>+</sup> | 224.750 6          | 0.37 4             | 1029.348 | 0 <sup>+</sup> | [E2]               |                  | 0.264 4    | $\alpha(\text{K})=0.1276$ 18; $\alpha(\text{L})=0.1021$ 14; $\alpha(\text{M})=0.0263$ 4<br>$\alpha(\text{N})=0.00653$ 9; $\alpha(\text{O})=0.001109$ 16; $\alpha(\text{P})=1.603\times 10^{-5}$ 22<br>$\text{B}(\text{E}2)(\text{W.u.})=10.2$ 24                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           |                | 306.863 11         | 0.24 3             | 947.243  | 4 <sup>+</sup> | [E2]               |                  | 0.0996 14  | $\alpha(\text{K})=0.0597$ 8; $\alpha(\text{L})=0.0300$ 4; $\alpha(\text{M})=0.00760$ 11<br>$\alpha(\text{N})=0.001892$ 26; $\alpha(\text{O})=0.000327$ 5; $\alpha(\text{P})=7.70\times 10^{-6}$ 11<br>$\text{B}(\text{E}2)(\text{W.u.})=1.4$ 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                           |                | 886.20 4           | 100 8              | 367.943  | 2 <sup>+</sup> | E2+M1              | -1.79 17         | 0.0108 5   | $\alpha(\text{K})=0.0087$ 4; $\alpha(\text{L})=0.00158$ 6; $\alpha(\text{M})=0.000370$ 15<br>$\alpha(\text{N})=9.3\times 10^{-5}$ 4; $\alpha(\text{O})=1.73\times 10^{-5}$ 7; $\alpha(\text{P})=1.18\times 10^{-6}$ 6<br>$\text{B}(\text{M}1)(\text{W.u.})=0.0015$ 4; $\text{B}(\text{E}2)(\text{W.u.})=2.2$ 5<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.0093$ 3 (1987Su15) and 0.0081 11 (1974Br02); $\gamma\gamma(\theta)$ in 2011Be36, 1989Ah01 and 1971Ha09.<br>$\delta$ : From $\delta=-1.72$ 12 (2011Be36), $-2.20 +16-5$ (1989Ah01) and $2.8 +13-8$ (1971Ha09) using $\gamma\gamma(\theta)$ , and $\alpha(\text{K})_{\text{exp}}=0.0093$ 3 (1987Su15) and 0.0081 11 (1974Br02), and the briccmixing program. |
|                           |                | 1254.14 10         | 45 4               | 0.0      | 0 <sup>+</sup> | E2                 |                  | 0.00391 5  | $\alpha(\text{K})=0.00318$ 4; $\alpha(\text{L})=0.000552$ 8; $\alpha(\text{M})=0.0001290$ 18<br>$\alpha(\text{N})=3.23\times 10^{-5}$ 5; $\alpha(\text{O})=6.02\times 10^{-6}$ 8; $\alpha(\text{P})=4.15\times 10^{-7}$ 6;<br>$\alpha(\text{IPF})=9.75\times 10^{-6}$ 14<br>$\text{B}(\text{E}2)(\text{W.u.})=0.23$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0033$ 7 (1974Br02) and 0.0033 11 in $^{200}\text{Tl}$ $\varepsilon$ decay; $A_2=0.27$ 5 (1984Kh02).                                                                                                                                                                                                                                                      |
| 1515.178                  | 0 <sup>+</sup> | (485.830 13)       |                    | 1029.348 | 0 <sup>+</sup> | E0                 |                  |            | $E_\gamma$ : From level energy differences.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Adopted Levels, Gammas (continued)

| $E_i(\text{level})$ | $J_i^\pi$      | $E_\gamma^\dagger$     | $I_\gamma^\dagger$  | $E_f$    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\gamma(^{200}\text{Hg})$ (continued) |            | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|----------------|------------------------|---------------------|----------|----------------|--------------------|---------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |                |                        |                     |          |                |                    | $\delta^\dagger$                      | $\alpha^d$ |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1515.178            | 0 <sup>+</sup> | 1147.20 8              | 100                 | 367.943  | 2 <sup>+</sup> | E2                 |                                       | 0.00463 6  | Mult.: From 1987Su15; ce(K)(485.6)/ce(K)(886.2)=0.046 5 (1987Su15).<br>$\alpha(\text{K})=0.00375$ 5; $\alpha(\text{L})=0.000668$ 9; $\alpha(\text{M})=0.0001568$ 22<br>$\alpha(\text{N})=3.92\times 10^{-5}$ 5; $\alpha(\text{O})=7.30\times 10^{-6}$ 10; $\alpha(\text{P})=4.91\times 10^{-7}$ 7;<br>$\alpha(\text{IPF})=9.74\times 10^{-7}$ 14                                                                                                                   |
|                     |                | (1515.178 9)           |                     | 0.0      | 0 <sup>+</sup> | E0                 |                                       |            | Mult.: $\alpha(\text{K})\text{exp}=0.0041$ 6 (1974Br02); $\gamma\gamma(\theta)$ in 1989Ah01.<br>$E_\gamma$ : From level energy.<br>Mult.: From 1987Su15; ce(K)(1515.0)/ce(K)(886.2)=0.068 3 (1987Su15).                                                                                                                                                                                                                                                            |
| 1570.279            | 1 <sup>+</sup> | 316.176 8              | 1.20 8              | 1254.101 | 2 <sup>+</sup> | M1(+E2)            |                                       | 0.20 11    | $\alpha(\text{K})=0.16$ 10; $\alpha(\text{L})=0.035$ 8; $\alpha(\text{M})=0.0084$ 16<br>$\alpha(\text{N})=0.0021$ 4; $\alpha(\text{O})=0.00038$ 9; $\alpha(\text{P})=2.2\times 10^{-5}$ 15                                                                                                                                                                                                                                                                         |
|                     |                | 540.948 16             | 10.5 7              | 1029.348 | 0 <sup>+</sup> | M1                 |                                       | 0.0745 10  | Mult.: $\alpha(\text{K})\text{exp}=0.33$ 15 (1974Br02).<br>$\alpha(\text{K})=0.0614$ 9; $\alpha(\text{L})=0.01008$ 14; $\alpha(\text{M})=0.002340$ 33<br>$\alpha(\text{N})=0.000587$ 8; $\alpha(\text{O})=0.0001111$ 16; $\alpha(\text{P})=8.57\times 10^{-6}$ 12                                                                                                                                                                                                  |
|                     |                | 1202.35 7              | 40 4                | 367.943  | 2 <sup>+</sup> | M1+E2              | -0.43 4                               | 0.00873 18 | Mult.: $\alpha(\text{K})\text{exp}=0.064$ 10 (1974Br02).<br>$\alpha(\text{K})=0.00721$ 15; $\alpha(\text{L})=0.001162$ 23; $\alpha(\text{M})=0.000269$ 5<br>$\alpha(\text{N})=6.75\times 10^{-5}$ 13; $\alpha(\text{O})=1.277\times 10^{-5}$ 26; $\alpha(\text{P})=9.87\times 10^{-7}$ 21; $\alpha(\text{IPF})=6.66\times 10^{-6}$ 12                                                                                                                              |
|                     |                | 1570.45 15             | 100 11              | 0.0      | 0 <sup>+</sup> | M1                 |                                       | 0.00501 7  | Mult.: From $\alpha(\text{K})\text{exp}=0.0071$ 13 (1974Br02); $\gamma\gamma(\theta)$ (2011Be36,1989Ah01).<br>$\delta$ : From 2011Be36. Other: +0.16 5 (1989Ah01).<br>$\alpha(\text{K})=0.00404$ 6; $\alpha(\text{L})=0.000641$ 9; $\alpha(\text{M})=0.0001483$ 21<br>$\alpha(\text{N})=3.72\times 10^{-5}$ 5; $\alpha(\text{O})=7.05\times 10^{-6}$ 10; $\alpha(\text{P})=5.52\times 10^{-7}$ 8;<br>$\alpha(\text{IPF})=0.0001423$ 20                             |
| 1573.667            | 2 <sup>+</sup> | 319.566 15             | 0.20 3              | 1254.101 | 2 <sup>+</sup> | (M1+E2)            |                                       | 0.20 11    | Mult.: $\alpha(\text{K})\text{exp}=0.0030$ 4 (1974Br02).<br>$\alpha(\text{K})=0.15$ 10; $\alpha(\text{L})=0.034$ 8; $\alpha(\text{M})=0.0081$ 16<br>$\alpha(\text{N})=0.0020$ 4; $\alpha(\text{O})=0.00037$ 9; $\alpha(\text{P})=2.1\times 10^{-5}$ 14                                                                                                                                                                                                             |
|                     |                | 544.21 7               | 0.24 5              | 1029.348 | 0 <sup>+</sup> |                    |                                       |            | Mult.: $\alpha(\text{K})\text{exp}=0.31$ 21 (1987Su15).                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |                | 626.52 10              | 0.32 10             | 947.243  | 4 <sup>+</sup> |                    |                                       |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                     |                | 1205.75 7              | 100 10              | 367.943  | 2 <sup>+</sup> | M1+E2              | +0.252 19                             | 0.00917 14 | $\alpha(\text{K})=0.00758$ 11; $\alpha(\text{L})=0.001217$ 18; $\alpha(\text{M})=0.000282$ 4<br>$\alpha(\text{N})=7.06\times 10^{-5}$ 10; $\alpha(\text{O})=1.338\times 10^{-5}$ 20; $\alpha(\text{P})=1.040\times 10^{-6}$ 16; $\alpha(\text{IPF})=7.43\times 10^{-6}$ 11                                                                                                                                                                                         |
|                     |                |                        |                     |          |                |                    |                                       |            | Mult.: From $\alpha(\text{K})\text{exp}=0.0077$ 17 (1987Su15), 0.0088 17 (1974Br02) and 0.0065 7 (1965Sa02); $\gamma\gamma(\theta)$ in 2011Be36,1989Ah01,1971Ha09,1957Li39.<br>$\delta$ : From +0.26 2 (2011Be36), +0.31 3 (1989Ah01), -0.27 +2-3 (1971Ha09) and -0.24 1 (1957Li39) using $\gamma\gamma(\theta)$ , and $\alpha(\text{K})\text{exp}=0.0077$ 17 (1987Su15), 0.0088 17 (1974Br02) and the briccmixing program. The sign of $\delta$ is from 2011Be36. |
|                     |                | 1573.6 <sup>#</sup> 10 | 0.17 <sup>#</sup> 9 | 0.0      | 0 <sup>+</sup> | [E2]               |                                       | 0.00264 4  | $\alpha(\text{K})=0.002105$ 30; $\alpha(\text{L})=0.000346$ 5; $\alpha(\text{M})=8.03\times 10^{-5}$ 11                                                                                                                                                                                                                                                                                                                                                            |

| Adopted Levels, Gammas (continued)    |                |                    |                     |          |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|---------------------------------------|----------------|--------------------|---------------------|----------|----------------|--------------------|------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--|
| $\gamma(^{200}\text{Hg})$ (continued) |                |                    |                     |          |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
| $E_i(\text{level})$                   | $J_i^\pi$      | $E_\gamma^\dagger$ | $I_\gamma^\dagger$  | $E_f$    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |  |
| 1593.428                              | 2 <sup>+</sup> | 339.40             | 0.60 30             | 1254.101 | 2 <sup>+</sup> | M1(+E0)            |                  |            | $\alpha(\text{N})=2.009\times 10^{-5}$ 28; $\alpha(\text{O})=3.77\times 10^{-6}$ 5;<br>$\alpha(\text{P})=2.73\times 10^{-7}$ 4; $\alpha(\text{IPF})=8.93\times 10^{-5}$ 13<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.20$ 8 (1987Su15).                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |  |
|                                       |                | 564.19 5           | 0.50 <sup>c</sup> 5 | 1029.348 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 646.17 7           | 0.25 <sup>c</sup> 5 | 947.243  | 4 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 1225.44 8          | 100 8               | 367.943  | 2 <sup>+</sup> | M1+E2(+E0)         | -2.48 +16-32     | 0.00479 15 | $\alpha(\text{K})=0.00391$ 13; $\alpha(\text{L})=0.000667$ 19; $\alpha(\text{M})=0.000156$ 4<br>$\alpha(\text{N})=3.90\times 10^{-5}$ 11; $\alpha(\text{O})=7.30\times 10^{-6}$ 21;<br>$\alpha(\text{P})=5.18\times 10^{-7}$ 18; $\alpha(\text{IPF})=7.06\times 10^{-6}$ 15<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.0043$ 6 (1965Sa02), 0.0078 10<br>(1974Br02) and 0.0068 14 (1987Su15); $\gamma\gamma(\theta)$<br>(2011Be36,1989Ah01,1971Ha09).<br>$\delta$ : From 1989Ah01. Others: 2.2 +3-4 (1971Ha09) and<br>-0.09 15 (2011Be36).<br>$E_\gamma$ : From $^{200}\text{Au}$ $\beta^-$ decay (48.4 min).                                                                           |            |  |
| 1630.900                              | 1 <sup>+</sup> | 1593.18 18         | 1.1 <sup>c</sup> 7  | 0.0      | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 115.714 9          | 2.2 6               | 1515.178 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 376.79 2           | 0.35 8              | 1254.101 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 601.48 5           | 0.42 8              | 1029.348 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 1262.96 8          | 100 9               | 367.943  | 2 <sup>+</sup> | M1+E2              | +0.12 5          | 0.00838 13 | $\alpha(\text{K})=0.00692$ 11; $\alpha(\text{L})=0.001108$ 17; $\alpha(\text{M})=0.000256$ 4<br>$\alpha(\text{N})=6.42\times 10^{-5}$ 10; $\alpha(\text{O})=1.218\times 10^{-5}$ 19;<br>$\alpha(\text{P})=9.50\times 10^{-7}$ 15; $\alpha(\text{IPF})=1.796\times 10^{-5}$ 27<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0062$ 7 in 1974Br02 and $\gamma\gamma(\theta)$ in<br>2011Be36,1989Ah01.<br>$\delta$ : From $\gamma\gamma(\theta)$ in 2011Be36. Other: +0.053 33 in<br>1989Ah01.                                                                                                                                                                                                    |            |  |
|                                       |                | 1630.7 4           | 8.6 19              | 0.0      | 0 <sup>+</sup> | (M1)               |                  | 0.00461 6  | $\alpha(\text{K})=0.00367$ 5; $\alpha(\text{L})=0.000583$ 8; $\alpha(\text{M})=0.0001347$ 19<br>$\alpha(\text{N})=3.38\times 10^{-5}$ 5; $\alpha(\text{O})=6.41\times 10^{-6}$ 9; $\alpha(\text{P})=5.02\times 10^{-7}$<br>7; $\alpha(\text{IPF})=0.0001767$ 25<br>Mult.: $\alpha(\text{K})_{\text{exp}}>0.0018$ (1974Br02).<br>$\alpha(\text{K})=0.1486$ 21; $\alpha(\text{L})=0.0246$ 4; $\alpha(\text{M})=0.00572$ 8;<br>$\alpha(\text{N}+..)=0.001728$ 25<br>$\alpha(\text{N})=0.001436$ 21; $\alpha(\text{O})=0.000272$ 4; $\alpha(\text{P})=2.09\times 10^{-5}$ 3<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.18$ 2 (1987Su15) and 0.12 2 in $^{200}\text{Tl}$<br>$\varepsilon$ decay. |            |  |
| 1641.447                              | 2 <sup>+</sup> | 387.345 9          | 4.8 3               | 1254.101 | 2 <sup>+</sup> | M1(+E0)            |                  |            | $\alpha(\text{K})=0.01271$ 18; $\alpha(\text{L})=0.00312$ 4; $\alpha(\text{M})=0.000757$ 11<br>$\alpha(\text{N})=0.0001890$ 26; $\alpha(\text{O})=3.41\times 10^{-5}$ 5;<br>$\alpha(\text{P})=1.686\times 10^{-6}$ 24<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.011$ 3 in $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                                                                                                                                                                                                                                                                           |            |  |
|                                       |                |                    |                     | 612.12 3 | 7.5 6          | 1029.348           | 0 <sup>+</sup>   | E2         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.01681 24 |  |
|                                       |                |                    |                     | 694.14 5 | 1.6 3          | 947.243            | 4 <sup>+</sup>   |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |  |
|                                       |                | 1273.43 10         | 100 9               | 367.943  | 2 <sup>+</sup> | M1(+E2)            | +0.02 3          | 0.00828 12 | $\alpha(\text{K})=0.00683$ 10; $\alpha(\text{L})=0.001093$ 15; $\alpha(\text{M})=0.0002527$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |  |

Adopted Levels, Gammas (continued)

| E <sub>i</sub> (level) | J <sup>π</sup> <sub>i</sub> | E <sub>γ</sub> <sup>†</sup> | I <sub>γ</sub> <sup>†</sup> | E <sub>f</sub>          | J <sup>π</sup> <sub>f</sub> | Mult. <sup>‡</sup> | <u>γ(<sup>200</sup>Hg) (continued)</u> |                | Comments                                                                                                                                                                                                                                                                                                                                  |
|------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------|--------------------|----------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                             |                             |                             |                         |                             |                    | δ <sup>†</sup>                         | α <sup>d</sup> |                                                                                                                                                                                                                                                                                                                                           |
| 1659.010               | 3 <sup>+</sup>              | 404.94 4                    | 1.8 3                       | 1254.101 2 <sup>+</sup> |                             |                    |                                        |                | 35<br>α(N)=6.33×10 <sup>-5</sup> 9; α(O)=1.201×10 <sup>-5</sup> 17; α(P)=9.38×10 <sup>-7</sup> 13;<br>α(IPF)=2.032×10 <sup>-5</sup> 29<br>Mult.: α(K)exp=0.0040 9 (1987Su15) and 0.0058 8<br>(1974Br02); γγ(θ) in 2011Be36,1989Ah01,1971Ha09.<br>δ: From γγ(θ) in 2011Be36. Others: +0.047 +29-30 in<br>1989Ah01 and -0.01 4 in 1971Ha09. |
|                        |                             | 711.70 5                    | 45 6                        | 947.243 4 <sup>+</sup>  |                             | M1(+E2)            |                                        | 0.024 12       | α(K)=0.020 10; α(L)=0.0035 14; α(M)=8.2×10 <sup>-4</sup> 32<br>α(N)=2.0×10 <sup>-4</sup> 8; α(O)=3.8×10 <sup>-5</sup> 16; α(P)=2.7×10 <sup>-6</sup> 15<br>I <sub>γ</sub> : From <sup>200</sup> Tl ε decay.<br>Mult.: From γ(θ) in <sup>200</sup> Hg(n,n') and α(K)exp=0.030 5 in<br><sup>200</sup> Tl ε decay.                            |
|                        |                             | 1291.11# 11                 | 100# 9                      | 367.943 2 <sup>+</sup>  |                             | M1(+E2)            |                                        | 0.0059 21      | α(K)=0.0048 18; α(L)=7.9×10 <sup>-4</sup> 27; α(M)=1.8×10 <sup>-4</sup> 6<br>α(N)=4.6×10 <sup>-5</sup> 15; α(O)=8.6×10 <sup>-6</sup> 30; α(P)=6.5×10 <sup>-7</sup> 26;<br>α(IPF)=2.0×10 <sup>-5</sup> 5<br>Mult.: From γ(θ) in <sup>200</sup> Hg(n,n').                                                                                   |
| 1706.73                | 6 <sup>+</sup>              | 759.50 <sup>a</sup> 10      | 100 <sup>a</sup>            | 947.243 4 <sup>+</sup>  |                             | E2                 |                                        | 0.01053 15     | B(E2)(W.u.)=46 4<br>α(K)=0.00823 12; α(L)=0.001757 25; α(M)=0.000420 6<br>α(N)=0.0001050 15; α(O)=1.920×10 <sup>-5</sup> 27; α(P)=1.089×10 <sup>-6</sup><br>15<br>Mult.: γ(θ) in <sup>198</sup> Pt(α,2nγ) and DCO in <sup>198</sup> Pt( <sup>9</sup> Be,α3nγ).                                                                            |
| 1718.307               | 1 <sup>+</sup>              | 76.857 4                    | 9.1 26                      | 1641.447 2 <sup>+</sup> |                             |                    |                                        |                |                                                                                                                                                                                                                                                                                                                                           |
|                        |                             | 144.639 10                  | 4.8 7                       | 1573.667 2 <sup>+</sup> |                             |                    |                                        |                |                                                                                                                                                                                                                                                                                                                                           |
|                        |                             | 148.026 4                   | 4.1 4                       | 1570.279 1 <sup>+</sup> |                             |                    |                                        |                |                                                                                                                                                                                                                                                                                                                                           |
|                        |                             | 203.135 7                   | 2.44 26                     | 1515.178 0 <sup>+</sup> |                             | M1                 |                                        | 1.058 15       | α(K)=0.868 12; α(L)=0.1460 20; α(M)=0.0340 5<br>α(N)=0.00852 12; α(O)=0.001612 23; α(P)=0.0001234 17<br>Mult.: α(K)exp=0.76 22 (1974Br02).                                                                                                                                                                                                |
|                        |                             | 464.214 12                  | 5.7 4                       | 1254.101 2 <sup>+</sup> |                             | E2+M1              |                                        | 0.07 4         | α(K)=0.057 34; α(L)=0.011 4; α(M)=0.0026 9<br>α(N)=6.6×10 <sup>-4</sup> 22; α(O)=1.2×10 <sup>-4</sup> 4; α(P)=8.E-6 5<br>Mult.: α(K)exp=0.05 (1974Br02).                                                                                                                                                                                  |
|                        |                             | 688.94 3                    | 40 3                        | 1029.348 0 <sup>+</sup> |                             | M1                 |                                        | 0.0397 6       | α(K)=0.0327 5; α(L)=0.00533 7; α(M)=0.001237 17<br>α(N)=0.000310 4; α(O)=5.87×10 <sup>-5</sup> 8; α(P)=4.54×10 <sup>-6</sup> 6<br>Mult.: α(K)exp=0.033 3 (1974Br02) and 0.038 7 in <sup>200</sup> Tl ε<br>decay.                                                                                                                          |
|                        |                             | 1350.35# 16                 | 45# 4                       | 367.943 2 <sup>+</sup>  |                             | M1+E2              | +0.035 31                              | 0.00716 10     | α(K)=0.00589 8; α(L)=0.000940 13; α(M)=0.0002174 31<br>α(N)=5.45×10 <sup>-5</sup> 8; α(O)=1.034×10 <sup>-5</sup> 15; α(P)=8.08×10 <sup>-7</sup> 11;<br>α(IPF)=4.16×10 <sup>-5</sup> 6                                                                                                                                                     |

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                |                                                    |                                  |                                                                                                          |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------|----------------|----------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------|----------------|--------------------|------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$      | $E_\gamma^\dagger$                                 | $I_\gamma^\dagger$               | $E_f$                                                                                                    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 1718.307                              | 1 <sup>+</sup> | 1718.35 <sup>#</sup> 14                            | 100 <sup>#</sup> 8               | 0.0                                                                                                      | 0 <sup>+</sup> | M1                 |                  | 0.00411 6  | $\alpha(\text{K})=0.00589$ 8; $\alpha(\text{L})=0.000940$ 13; $\alpha(\text{M})=0.0002174$ 31<br>$\alpha(\text{N})=5.45\times 10^{-5}$ 8; $\alpha(\text{O})=1.034\times 10^{-5}$ 15; $\alpha(\text{P})=8.08\times 10^{-7}$ 11; $\alpha(\text{IPF})=4.16\times 10^{-5}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0054$ 10 (1974Br02); $\gamma\gamma(\theta)$ in 2011Be36 and 1989Ah01.<br>$\delta$ : From $\delta=+0.03$ 5 (2011Be36) and $-0.036$ 24 (1989Ah01) using $\gamma\gamma(\theta)$ , and $\alpha(\text{K})_{\text{exp}}=0.0054$ 10 (1974Br02), and the briccmixing program. The sign of $\delta$ is from 2011Be36.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1730.929                              | 2 <sup>+</sup> | 137.50 2<br>160.659 11<br>215.743 13<br>476.815 13 | 2.22<br>0.39<br>0.33 8<br>10.8 7 | 1593.428 2 <sup>+</sup><br>1570.279 1 <sup>+</sup><br>1515.178 0 <sup>+</sup><br>1254.101 2 <sup>+</sup> |                | E2+M1(+E0)         |                  | 0.07 4     | $\alpha(\text{K})=0.00322$ 5; $\alpha(\text{L})=0.000511$ 7; $\alpha(\text{M})=0.0001180$ 17<br>$\alpha(\text{N})=2.96\times 10^{-5}$ 4; $\alpha(\text{O})=5.61\times 10^{-6}$ 8; $\alpha(\text{P})=4.40\times 10^{-7}$ 6; $\alpha(\text{IPF})=0.0002294$ 32<br>Mult.: $\alpha(\text{K})_{\text{exp}}>0.0027$ (1974Br02) and $\alpha(\text{K})_{\text{exp}}=0.0034$ 5 in $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                | 701.56 3                                           | 46 4                             | 1029.348 0 <sup>+</sup>                                                                                  |                | (E2)               |                  | 0.01246 17 | $\alpha(\text{K})=0.054$ 32; $\alpha(\text{L})=0.010$ 4; $\alpha(\text{M})=0.0024$ 8<br>$\alpha(\text{N})=6.1\times 10^{-4}$ 21; $\alpha(\text{O})=1.1\times 10^{-4}$ 4; $\alpha(\text{P})=7.E-6$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.022$ 5 (1987Su15).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                       |                | 783.71 4                                           | 16.7 13                          | 947.243 4 <sup>+</sup>                                                                                   |                | E2                 |                  | 0.00986 14 | $\alpha(\text{K})=0.00963$ 13; $\alpha(\text{L})=0.002156$ 30; $\alpha(\text{M})=0.000518$ 7<br>$\alpha(\text{N})=0.0001295$ 18; $\alpha(\text{O})=2.357\times 10^{-5}$ 33; $\alpha(\text{P})=1.276\times 10^{-6}$ 18<br>Mult.: $\alpha(\text{K})_{\text{exp}}<0.01$ (1974Br02).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                       |                | 1363.2 2                                           | 100 12                           | 367.943 2 <sup>+</sup>                                                                                   |                | M1+E2              | $-0.32$ 10       | 0.00666 23 | $\alpha(\text{K})=0.00774$ 11; $\alpha(\text{L})=0.001623$ 23; $\alpha(\text{M})=0.000388$ 5<br>$\alpha(\text{N})=9.68\times 10^{-5}$ 14; $\alpha(\text{O})=1.773\times 10^{-5}$ 25; $\alpha(\text{P})=1.023\times 10^{-6}$ 14<br>Mult.: $\gamma\gamma(\theta)$ in 2011Be36.<br>$\alpha(\text{K})=0.00548$ 19; $\alpha(\text{L})=0.000876$ 29; $\alpha(\text{M})=0.000203$ 7<br>$\alpha(\text{N})=5.08\times 10^{-5}$ 17; $\alpha(\text{O})=9.63\times 10^{-6}$ 32; $\alpha(\text{P})=7.49\times 10^{-7}$ 27; $\alpha(\text{IPF})=4.44\times 10^{-5}$ 12<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0064$ 13 (1974Br02), 0.0056 9 (1987Su15) and 0.0050 8 (1965Sa02); $\gamma\gamma(\theta)$ in 2011Be36, 1989Ah01 and 1971Ha09.<br>$\delta$ : From $\delta=-0.38$ 15 (2011Be36) and $-0.32$ +6-10 (1989Ah01) using $\gamma\gamma(\theta)$ , and $\alpha(\text{K})_{\text{exp}}=0.0050$ 8 (1965Sa02) and 0.0056 9 (1987Su15), and the briccmixing program. The sign of $\delta$ is from 2011Be36. Other: 1.0 +2-5 from $\gamma\gamma(\theta)$ in 1971Ha09. |
| 1734.345                              | 3 <sup>+</sup> | 140.898 12<br>160.659 11<br>480.24 3               | 16 5<br>$\approx 2.26$<br>7.1 8  | 1593.428 2 <sup>+</sup><br>1573.667 2 <sup>+</sup><br>1254.101 2 <sup>+</sup>                            |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Adopted Levels, Gammas (continued)**

$\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$      | $E_\gamma^\dagger$      | $I_\gamma^\dagger$   | $E_f$                                              | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|----------------|-------------------------|----------------------|----------------------------------------------------|----------------|--------------------|------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1734.345            | 3 <sup>+</sup> | 787.10 4                | 100 10               | 947.243                                            | 4 <sup>+</sup> | M1+E2              | +0.08 4          | 0.0280 4   | $\alpha(\text{K})=0.02314$ 35; $\alpha(\text{L})=0.00376$ 6; $\alpha(\text{M})=0.000870$ 13<br>$\alpha(\text{N})=0.0002182$ 32; $\alpha(\text{O})=4.13\times 10^{-5}$ 6; $\alpha(\text{P})=3.20\times 10^{-6}$ 5<br>Mult.: From $\gamma\gamma(\theta)$ in 2011Be36 and $\gamma(\theta)$ in<br><sup>200</sup> Hg(n,n' $\gamma$ ); $\alpha(\text{K})_{\text{exp}}=0.020$ 4 (1965Sa02).<br>$\delta$ : From $\gamma\gamma(\theta)$ in 2011Be36.                                                                                                       |
|                     |                | 1366.8 <sup>#</sup> 7   | 85 <sup>#</sup> 25   | 367.943                                            | 2 <sup>+</sup> | M1(+E2)            |                  | 0.0051 18  | $\alpha(\text{K})=0.0042$ 15; $\alpha(\text{L})=6.9\times 10^{-4}$ 23; $\alpha(\text{M})=1.6\times 10^{-4}$ 5<br>$\alpha(\text{N})=4.0\times 10^{-5}$ 13; $\alpha(\text{O})=7.5\times 10^{-6}$ 25; $\alpha(\text{P})=5.7\times 10^{-7}$ 22;<br>$\alpha(\text{IPF})=3.8\times 10^{-5}$ 9<br>Mult.: From <sup>200</sup> Hg(n,n' $\gamma$ ) and $\alpha(\text{K})_{\text{exp}}=0.0050$ 8<br>(1965Sa02).                                                                                                                                              |
| 1775.566            | 3 <sup>+</sup> | 116.51 <sup>#</sup> 15  | 1.1 <sup>#</sup> 3   | 1659.010                                           | 3 <sup>+</sup> |                    |                  |            | $\alpha(\text{K})=2.3$ 19; $\alpha(\text{L})=1.3$ 6; $\alpha(\text{M})=0.32$ 16; $\alpha(\text{N}+..)=0.09$ 5<br>$\alpha(\text{N})=0.08$ 4; $\alpha(\text{O})=0.014$ 6; $\alpha(\text{P})=0.0003$ 3                                                                                                                                                                                                                                                                                                                                               |
|                     |                | 144.639 10              | 23 4                 | 1630.900                                           | 1 <sup>+</sup> | [E2]               |                  | 1.264 18   | $\alpha(\text{K})=0.355$ 5; $\alpha(\text{L})=0.680$ 10; $\alpha(\text{M})=0.1771$ 25<br>$\alpha(\text{N})=0.0440$ 6; $\alpha(\text{O})=0.00735$ 10; $\alpha(\text{P})=4.63\times 10^{-5}$ 6                                                                                                                                                                                                                                                                                                                                                      |
|                     |                | 182.17 <sup>#</sup> 20  | 0.48 <sup>#</sup> 16 | 1593.428                                           | 2 <sup>+</sup> | M1+E2              | 1.9 4            | 0.74 8     | $\alpha(\text{K})=0.42$ 9; $\alpha(\text{L})=0.236$ 6; $\alpha(\text{M})=0.0601$ 18<br>$\alpha(\text{N})=0.0150$ 4; $\alpha(\text{O})=0.00257$ 6; $\alpha(\text{P})=5.7\times 10^{-5}$ 13<br>Mult., $\delta$ : From $\alpha(\text{K})_{\text{exp}}=0.42$ 17 in 1974Br02.                                                                                                                                                                                                                                                                          |
|                     |                | 201.91 2<br>521.41 7    | 0.8 3<br>2.7 8       | 1573.667 2 <sup>+</sup><br>1254.101 2 <sup>+</sup> | 2 <sup>+</sup> | M1+E2              | 1.0 +7-4         | 0.053 14   | $\alpha(\text{K})=0.043$ 12; $\alpha(\text{L})=0.0080$ 15; $\alpha(\text{M})=0.00190$ 33<br>$\alpha(\text{N})=0.00048$ 8; $\alpha(\text{O})=8.8\times 10^{-5}$ 17; $\alpha(\text{P})=5.9\times 10^{-6}$ 17<br>Mult., $\delta$ : From $\alpha(\text{K})_{\text{exp}}=0.043$ 12 in 1974Br02.                                                                                                                                                                                                                                                        |
|                     |                | 828.27 4                | 100 6                | 947.243                                            | 4 <sup>+</sup> | M1+E2              | -0.04 3          | 0.02466 35 | $\alpha(\text{K})=0.02037$ 29; $\alpha(\text{L})=0.00330$ 5; $\alpha(\text{M})=0.000764$ 11<br>$\alpha(\text{N})=0.0001916$ 27; $\alpha(\text{O})=3.63\times 10^{-5}$ 5; $\alpha(\text{P})=2.82\times 10^{-6}$ 4<br>$I_\gamma$ : From <sup>200</sup> Tl $\varepsilon$ decay.<br>Mult., $\delta$ : From $\gamma\gamma(\theta)$ in 2011Be36. Others ( $\gamma\gamma(\theta)$ ): -0.043<br>52 (1989Ah01), +0.07 (1965Sa02), 0.10 2 (1971Ha09) and<br>1.0 1 (1957Li39); $\alpha(\text{K})_{\text{exp}}=0.020$ 5 (1974Br02) and 0.025<br>3 (1965Sa02). |
|                     |                | 1407.64 <sup>#</sup> 11 | 13.4 <sup>#</sup> 12 | 367.943                                            | 2 <sup>+</sup> | M1+E2              | 0.44 +3-5        | 0.00594 13 | $\alpha(\text{K})=0.00487$ 11; $\alpha(\text{L})=0.000779$ 17; $\alpha(\text{M})=0.000180$ 4<br>$\alpha(\text{N})=4.52\times 10^{-5}$ 10; $\alpha(\text{O})=8.56\times 10^{-6}$ 18; $\alpha(\text{P})=6.64\times 10^{-7}$<br>15; $\alpha(\text{IPF})=5.93\times 10^{-5}$ 11<br>Mult., $\delta$ : From $\gamma\gamma(\theta)$ in 1971Ha09; Other: $\alpha(\text{K})_{\text{exp}}=0.0030$<br>6 (1965Sa02).                                                                                                                                          |
| 1845.779            | 3 <sup>+</sup> | 186.771 13              | 1.9 7                | 1659.010                                           | 3 <sup>+</sup> | E2+M1              |                  | 0.9 4      | $\alpha(\text{K})=0.6$ 4; $\alpha(\text{L})=0.203$ 19; $\alpha(\text{M})=0.050$ 7<br>$\alpha(\text{N})=0.0125$ 17; $\alpha(\text{O})=0.00222$ 18; $\alpha(\text{P})=9.E-5$ 7<br>Mult.: From A <sub>2</sub> =0.31 23 (1984Kh02), $\Delta J=0$ transition.                                                                                                                                                                                                                                                                                          |
|                     |                | 252.356 7<br>272.109 8  | 15.8 12<br>5.6 28    | 1593.428 2 <sup>+</sup><br>1573.667 2 <sup>+</sup> | 2 <sup>+</sup> | (M1)               |                  | 0.471 7    | $\alpha(\text{K})=0.387$ 5; $\alpha(\text{L})=0.0647$ 9; $\alpha(\text{M})=0.01504$ 21<br>$\alpha(\text{N})=0.00377$ 5; $\alpha(\text{O})=0.0007140$ 99; $\alpha(\text{P})=5.47\times 10^{-5}$ 8                                                                                                                                                                                                                                                                                                                                                  |

Adopted Levels, Gammas (continued)

| $E_i(\text{level})$ | $J_i^\pi$ | $\gamma(^{200}\text{Hg})$ (continued) |                                 |                |           |                    |                    |                       | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-----------|---------------------------------------|---------------------------------|----------------|-----------|--------------------|--------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |           | $E_\gamma^\dagger$                    | $I_\gamma^\dagger$              | $E_f$          | $J_f^\pi$ | Mult. <sup>‡</sup> | $\delta^\dagger$   | $\alpha^d$            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1845.779            | $3^+$     | 275.497 <sup>12</sup>                 | 2.3 <sup>4</sup>                | 1570.279 $1^+$ |           |                    |                    |                       | $I_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay.<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.60$ in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.031$ <sup>17</sup> ; $\alpha(\text{L})=0.0057$ <sup>23</sup> ; $\alpha(\text{M})=0.0013$ <sup>5</sup><br>$\alpha(\text{N})=3.4\times 10^{-4}$ <sup>13</sup> ; $\alpha(\text{O})=6.3\times 10^{-5}$ <sup>25</sup> ; $\alpha(\text{P})=4.3\times 10^{-6}$ <sup>25</sup><br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.027$ in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.01650$ <sup>24</sup> ; $\alpha(\text{L})=0.00267$ <sup>4</sup> ; $\alpha(\text{M})=0.000618$ <sup>9</sup><br>$\alpha(\text{N})=0.0001549$ <sup>23</sup> ; $\alpha(\text{O})=2.94\times 10^{-5}$ <sup>4</sup> ; $\alpha(\text{P})=2.279\times 10^{-6}$ <sup>34</sup><br>$I_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay.<br>Mult., $\delta$ : From $\gamma\gamma(\theta)$ in <a href="#">2011Be36</a> . Others: $\alpha(\text{K})_{\text{exp}}=0.0080$ <sup>32</sup><br>( <a href="#">1974Br02</a> ) and $0.0070$ <sup>14</sup> ( <a href="#">1965Sa02</a> ).<br>$\alpha(\text{K})=0.00470$ <sup>7</sup> ; $\alpha(\text{L})=0.000748$ <sup>10</sup> ; $\alpha(\text{M})=0.0001730$ <sup>24</sup><br>$\alpha(\text{N})=4.34\times 10^{-5}$ <sup>6</sup> ; $\alpha(\text{O})=8.22\times 10^{-6}$ <sup>12</sup> ; $\alpha(\text{P})=6.44\times 10^{-7}$ <sup>9</sup> ;<br>$\alpha(\text{IPF})=9.43\times 10^{-5}$ <sup>13</sup><br>$\alpha(\text{K})=0.002316$ <sup>32</sup> ; $\alpha(\text{L})=0.000349$ <sup>5</sup> ; $\alpha(\text{M})=8.00\times 10^{-5}$ <sup>11</sup><br>$\alpha(\text{N})=1.997\times 10^{-5}$ <sup>28</sup> ; $\alpha(\text{O})=3.75\times 10^{-6}$ <sup>5</sup> ; $\alpha(\text{P})=2.80\times 10^{-7}$ <sup>4</sup><br>Mult.: From $\alpha(\text{K})_{\text{exp}}<0.004$ ( <a href="#">1972Cu07</a> ) and $\gamma(\theta)$ in<br>$^{198}\text{Pt}(\alpha,2n\gamma)$ and DCO in $^{198}\text{Pt}(^9\text{Be},\alpha3n\gamma)$ .<br>$\alpha(\text{K})=0.646$ <sup>9</sup> ; $\alpha(\text{L})=0.1084$ <sup>15</sup> ; $\alpha(\text{M})=0.02523$ <sup>35</sup><br>$\alpha(\text{N})=0.00633$ <sup>9</sup> ; $\alpha(\text{O})=0.001198$ <sup>17</sup> ; $\alpha(\text{P})=9.17\times 10^{-5}$ <sup>13</sup><br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.63$ <sup>20</sup> ( <a href="#">1974Br02</a> ).<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(341.8)/\text{ce}(\text{K})(886.2)=0.06$ <sup>2</sup><br>( <a href="#">1987Su15</a> ).<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(827.4)/\text{ce}(\text{K})(886.2)=0.028$ <sup>10</sup><br>( <a href="#">1987Su15</a> ).<br>$\alpha(\text{K})=0.002328$ <sup>33</sup> ; $\alpha(\text{L})=0.000387$ <sup>5</sup> ; $\alpha(\text{M})=8.99\times 10^{-5}$ <sup>13</sup><br>$\alpha(\text{N})=2.250\times 10^{-5}$ <sup>32</sup> ; $\alpha(\text{O})=4.22\times 10^{-6}$ <sup>6</sup> ; $\alpha(\text{P})=3.03\times 10^{-7}$ <sup>4</sup> ;<br>$\alpha(\text{IPF})=6.14\times 10^{-5}$ <sup>9</sup><br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0028$ <sup>10</sup> in <a href="#">1974Br02</a> ; $\gamma\gamma(\theta)$ in <a href="#">1989Ah01</a> .<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(1857.4)/\text{ce}(\text{K})(886.2)=0.19$ <sup>1</sup><br>( <a href="#">1987Su15</a> ). |
|                     |           | 591.66 <sup>3</sup>                   | 47 <sup>4</sup>                 | 1254.101 $2^+$ |           | (M1+E2)            |                    | 0.039 <sup>20</sup>   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 898.56 <sup>7</sup>                   | 100 <sup>9</sup>                | 947.243 $4^+$  |           | M1+E2              | -0.07 <sup>4</sup> | 0.01997 <sup>29</sup> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 1477.78 <sup>#</sup> <sup>14</sup>    | 24.5 <sup>#</sup> <sup>21</sup> | 367.943 $2^+$  |           | [M1]               |                    | 0.00577 <sup>8</sup>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1851.49             | $5^-$     | 904.23 <sup>a</sup> <sup>12</sup>     | 100 <sup>a</sup>                | 947.243 $4^+$  |           | E1                 |                    | 0.00277 <sup>4</sup>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1856.784            | $0^+$     | 138.471 <sup>16</sup>                 | $\approx 4.0$                   | 1718.307 $1^+$ |           |                    |                    |                       | $E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(341.8)/\text{ce}(\text{K})(886.2)=0.06$ <sup>2</sup><br>( <a href="#">1987Su15</a> ).<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(827.4)/\text{ce}(\text{K})(886.2)=0.028$ <sup>10</sup><br>( <a href="#">1987Su15</a> ).<br>$\alpha(\text{K})=0.002328$ <sup>33</sup> ; $\alpha(\text{L})=0.000387$ <sup>5</sup> ; $\alpha(\text{M})=8.99\times 10^{-5}$ <sup>13</sup><br>$\alpha(\text{N})=2.250\times 10^{-5}$ <sup>32</sup> ; $\alpha(\text{O})=4.22\times 10^{-6}$ <sup>6</sup> ; $\alpha(\text{P})=3.03\times 10^{-7}$ <sup>4</sup> ;<br>$\alpha(\text{IPF})=6.14\times 10^{-5}$ <sup>9</sup><br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0028$ <sup>10</sup> in <a href="#">1974Br02</a> ; $\gamma\gamma(\theta)$ in <a href="#">1989Ah01</a> .<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(1857.4)/\text{ce}(\text{K})(886.2)=0.19$ <sup>1</sup><br>( <a href="#">1987Su15</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                     |           | 225.885 <sup>6</sup>                  | 6.5 <sup>4</sup>                | 1630.900 $1^+$ |           | M1                 |                    | 0.788 <sup>11</sup>   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 286.518 <sup>13</sup>                 | 0.70 <sup>11</sup>              | 1570.279 $1^+$ |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | (341.606 <sup>14</sup> )              |                                 | 1515.178 $0^+$ |           | E0                 |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 602.73 <sup>7</sup>                   | 1.8 <sup>4</sup>                | 1254.101 $2^+$ |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | (827.436 <sup>14</sup> )              |                                 | 1029.348 $0^+$ |           | E0                 |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 1488.5 <sup>4</sup>                   | 100 <sup>20</sup>               | 367.943 $2^+$  |           | E2                 |                    | 0.00289 <sup>4</sup>  | $E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(827.4)/\text{ce}(\text{K})(886.2)=0.028$ <sup>10</sup><br>( <a href="#">1987Su15</a> ).<br>$\alpha(\text{K})=0.002328$ <sup>33</sup> ; $\alpha(\text{L})=0.000387$ <sup>5</sup> ; $\alpha(\text{M})=8.99\times 10^{-5}$ <sup>13</sup><br>$\alpha(\text{N})=2.250\times 10^{-5}$ <sup>32</sup> ; $\alpha(\text{O})=4.22\times 10^{-6}$ <sup>6</sup> ; $\alpha(\text{P})=3.03\times 10^{-7}$ <sup>4</sup> ;<br>$\alpha(\text{IPF})=6.14\times 10^{-5}$ <sup>9</sup><br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0028$ <sup>10</sup> in <a href="#">1974Br02</a> ; $\gamma\gamma(\theta)$ in <a href="#">1989Ah01</a> .<br>$E_\gamma$ : From level energy differences.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(1857.4)/\text{ce}(\text{K})(886.2)=0.19$ <sup>1</sup><br>( <a href="#">1987Su15</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                     |           |                                       |                                 | 0.0 $0^+$      |           | E0                 |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | (1856.784 <sup>10</sup> )             |                                 |                |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1882.861            | $2^+$     | 148.500 <sup>6</sup>                  | 1.9 <sup>4</sup>                | 1734.345 $3^+$ |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 151.932 <sup>5</sup>                  | 3.1 <sup>6</sup>                | 1730.929 $2^+$ |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     |           | 164.544 <sup>6</sup>                  | 4.3 <sup>4</sup>                | 1718.307 $1^+$ |           |                    |                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                  |                                      |                              |                                                                               |           |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|------------------|--------------------------------------|------------------------------|-------------------------------------------------------------------------------|-----------|--------------------|------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$        | $E_\gamma^\dagger$                   | $I_\gamma^\dagger$           | $E_f$                                                                         | $J_f^\pi$ | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1882.861                              | 2 <sup>+</sup>   | 241.425 10<br>251.969 7              | 0.78 20<br>8.0 6             | 1641.447 2 <sup>+</sup><br>1630.900 1 <sup>+</sup>                            |           | M1+E2              | 0.38 21          | 0.53 5     | $\alpha(\text{K})=0.43$ 5; $\alpha(\text{L})=0.0780$ 23; $\alpha(\text{M})=0.0183$ 4<br>$\alpha(\text{N})=0.00460$ 10; $\alpha(\text{O})=0.000860$ 27; $\alpha(\text{P})=6.1\times 10^{-5}$ 7<br>Mult., $\delta$ : $\alpha(\text{K})_{\text{exp}}=0.43$ 5 in $^{200}\text{Tl}$ $\varepsilon$ decay.<br>$\alpha(\text{K})=0.255$ 20; $\alpha(\text{L})=0.0498$ 15; $\alpha(\text{M})=0.01181$ 30<br>$\alpha(\text{N})=0.00296$ 8; $\alpha(\text{O})=0.000548$ 17; $\alpha(\text{P})=3.58\times 10^{-5}$ 29<br>Mult., $\delta$ : $\alpha(\text{K})_{\text{exp}}=0.37$ 10 in 1974Br02 and 0.25 2 in $^{200}\text{Tl}$ $\varepsilon$ decay. |
|                                       |                  | 289.425 9                            | 14.4 9                       | 1593.428 2 <sup>+</sup>                                                       |           | M1+E2              | 0.62 12          | 0.320 22   | $\alpha(\text{K})=0.250$ 31; $\alpha(\text{L})=0.0437$ 24; $\alpha(\text{M})=0.0102$ 5<br>$\alpha(\text{N})=0.00256$ 12; $\alpha(\text{O})=0.000482$ 27; $\alpha(\text{P})=3.5\times 10^{-5}$ 4<br>Mult., $\delta$ : $\alpha(\text{K})_{\text{exp}}=0.25$ 3 ( $^{200}\text{Tl}$ $\varepsilon$ decay).                                                                                                                                                                                                                                                                                                                                   |
|                                       |                  | 309.209 8                            | 6.1 4                        | 1573.667 2 <sup>+</sup>                                                       |           | M1+E2              | 0.35 23          | 0.307 34   | $\alpha(\text{K})=0.0403$ 13; $\alpha(\text{L})=0.00662$ 19; $\alpha(\text{M})=0.00154$ 4<br>$\alpha(\text{N})=0.000385$ 11; $\alpha(\text{O})=7.29\times 10^{-5}$ 20; $\alpha(\text{P})=5.60\times 10^{-6}$ 19<br>Mult., $\delta$ : $\alpha(\text{K})_{\text{exp}}=0.037$ 10 (1974Br02) and 0.044 12 (1965Sa02).                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 312.613 13<br>628.80 3               | 0.89 11<br>20.9 16           | 1570.279 1 <sup>+</sup><br>1254.101 2 <sup>+</sup>                            |           | M1(+E2)            | $\leq 0.3$       | 0.0489 16  | $\alpha(\text{K})=0.00550$ 8; $\alpha(\text{L})=0.001057$ 15; $\alpha(\text{M})=0.0002500$ 35<br>$\alpha(\text{N})=6.25\times 10^{-5}$ 9; $\alpha(\text{O})=1.154\times 10^{-5}$ 16;<br>$\alpha(\text{P})=7.23\times 10^{-7}$ 10<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.0094$ in 1974Br02.                                                                                                                                                                                                                                                                                                                                     |
|                                       |                  | 936.1 <sup>#</sup> 4                 | 1.5 <sup>#</sup> 8           | 947.243 4 <sup>+</sup>                                                        |           | (E2)               |                  | 0.00688 10 | $\alpha(\text{K})=0.00440$ 6; $\alpha(\text{L})=0.000699$ 10; $\alpha(\text{M})=0.0001617$ 24<br>$\alpha(\text{N})=4.05\times 10^{-5}$ 6; $\alpha(\text{O})=7.69\times 10^{-6}$ 11; $\alpha(\text{P})=6.02\times 10^{-7}$ 9; $\alpha(\text{IPF})=0.0001121$ 16<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.0070$ 17 in 1974Br02 and 0.0042 5 (1965Sa02); $\gamma\gamma(\theta)$ in 2011Be36,1989Ah01,1971Ha09,1965Sa02.                                                                                                                                                                                                             |
|                                       |                  | 1514.90 <sup>#</sup> 10              | 100 <sup>#</sup> 7           | 367.943 2 <sup>+</sup>                                                        |           | M1+E2(+E0)         | +0.10 4          | 0.00542 8  | $\delta$ : From $\gamma\gamma(\theta)$ in 2011Be36; Others: $-0.14$ 4 in 1971Ha09, $-0.25$ in 1965Sa02 and $+0.120$ +43–47 in 1989Ah01.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1962.62                               | 7 <sup>-</sup>   | 111.12 <sup>a</sup> 12               | 2.6 <sup>a</sup> 8           | 1851.49 5 <sup>-</sup>                                                        |           | E2                 |                  | 3.58 5     | $\alpha(\text{K})=0.560$ 8; $\alpha(\text{L})=2.257$ 34; $\alpha(\text{M})=0.590$ 9<br>$\alpha(\text{N})=0.1463$ 22; $\alpha(\text{O})=0.0243$ 4; $\alpha(\text{P})=8.93\times 10^{-5}$ 13<br>Mult.: $\gamma(\theta)$ in $^{198}\text{Pt}(\alpha,2n\gamma)$ .                                                                                                                                                                                                                                                                                                                                                                           |
|                                       |                  | 255.87 <sup>a</sup> 8                | 100 <sup>a</sup> 8           | 1706.73 6 <sup>+</sup>                                                        |           | E1                 |                  | 0.0405 6   | $\alpha(\text{K})=0.0333$ 5; $\alpha(\text{L})=0.00558$ 8; $\alpha(\text{M})=0.001295$ 18<br>$\alpha(\text{N})=0.000322$ 5; $\alpha(\text{O})=5.89\times 10^{-5}$ 8; $\alpha(\text{P})=3.68\times 10^{-6}$ 5<br>Mult.: $\gamma(\theta)$ in $^{198}\text{Pt}(\alpha,2n\gamma)$ ; $\alpha(\text{K})_{\text{exp}}=0.033$ 23 (1972Cu07).                                                                                                                                                                                                                                                                                                    |
| 1972.281                              | (2) <sup>+</sup> | 241.356 12<br>253.991 15<br>313.23 3 | 0.42 15<br>0.33 10<br>0.33 8 | 1730.929 2 <sup>+</sup><br>1718.307 1 <sup>+</sup><br>1659.010 3 <sup>+</sup> |           |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Adopted Levels, Gammas (continued)**

$\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$        | $E_\gamma^\dagger$                                                                                    | $I_\gamma^\dagger$                                                            | $E_f$                                                                                                                                                                                                                | $J_f^\pi$ | Mult. <sup>‡</sup>                 | $\delta^\dagger$ | $\alpha^d$                                              | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------|------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1972.281            | (2) <sup>+</sup> | 330.84 3<br>341.375 12<br>398.63 2<br>718.04 10<br>1604.50 <sup>#</sup> 14                            | ≈0.50<br>1.75 14<br>1.83 25<br>4.2 11<br>100 <sup>#</sup> 8                   | 1641.447 2 <sup>+</sup><br>1630.900 1 <sup>+</sup><br>1573.667 2 <sup>+</sup><br>1254.101 2 <sup>+</sup><br>367.943 2 <sup>+</sup>                                                                                   |           |                                    |                  |                                                         | $\alpha(\text{K})=0.00379$ 6; $\alpha(\text{L})=0.000602$ 9; $\alpha(\text{M})=0.0001390$ 21<br>$\alpha(\text{N})=3.48\times10^{-5}$ 5; $\alpha(\text{O})=6.61\times10^{-6}$ 10; $\alpha(\text{P})=5.18\times10^{-7}$ 8;<br>$\alpha(\text{IPF})=0.0001602$ 24<br>Mult.: From $\alpha(\text{K})\text{exp}=0.0032$ 8 in <a href="#">1974Br02</a> and 0.007 3<br>( <a href="#">1965Sa02</a> ); $\gamma\gamma(\theta)$ in <a href="#">2011Be36</a> and <a href="#">1989Ah01</a> .<br>$\delta$ : From $\gamma\gamma(\theta)$ in <a href="#">2011Be36</a> ; Other: +0.87 +18-14 in <a href="#">1989Ah01</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1974.339            | (3) <sup>+</sup> | 243.411 7<br>720.21 5<br>1027.11 <sup>#</sup> 20                                                      | 19.2 15<br>60 5<br>100 <sup>#</sup> 30                                        | 1730.929 2 <sup>+</sup><br>1254.101 2 <sup>+</sup><br>947.243 4 <sup>+</sup>                                                                                                                                         |           | M1(+E2)                            |                  | 0.010 4                                                 | $\alpha(\text{K})=0.008$ 4; $\alpha(\text{L})=0.0014$ 5; $\alpha(\text{M})=3.2\times10^{-4}$ 12<br>$\alpha(\text{N})=8.0\times10^{-5}$ 30; $\alpha(\text{O})=1.5\times10^{-5}$ 6; $\alpha(\text{P})=1.1\times10^{-6}$ 5<br>Mult.: $\gamma(\theta)$ in <sup>200</sup> Hg(n,n' $\gamma$ ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2048.92             | 6 <sup>-</sup>   | 197.4 <sup>@</sup> 5<br>342.3 <sup>@</sup> 3                                                          | 11.3 <sup>@</sup> 18<br>100 <sup>@</sup> 8                                    | 1851.49 5 <sup>-</sup><br>1706.73 6 <sup>+</sup>                                                                                                                                                                     |           | M1<br>E1                           |                  | 1.146 18<br>0.02046 29                                  | $\alpha(\text{K})=0.940$ 15; $\alpha(\text{L})=0.1582$ 25; $\alpha(\text{M})=0.0368$ 6<br>$\alpha(\text{N})=0.00923$ 15; $\alpha(\text{O})=0.001747$ 27; $\alpha(\text{P})=0.0001337$ 21<br>Mult.: $\gamma\gamma(\theta)$ in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).<br>$\alpha(\text{K})=0.01688$ 24; $\alpha(\text{L})=0.00275$ 4; $\alpha(\text{M})=0.000637$ 9<br>$\alpha(\text{N})=0.0001584$ 22; $\alpha(\text{O})=2.93\times10^{-5}$ 4; $\alpha(\text{P})=1.925\times10^{-6}$ 27<br>Mult.: $\gamma\gamma(\theta)$ in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ); $\alpha(\text{K})\text{exp}<0.02$ ( <a href="#">1977Gu05</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2061.257            | 1 <sup>+</sup>   | 204.477 8<br>330.303 16<br>342.939 12<br>419.828 10<br>430.368 10<br>467.86 2<br>487.56 2<br>490.95 2 | 0.14 1<br>0.07 1<br>0.24 2<br>1.10 7<br>2.85 18<br>1.00 6<br>1.10 8<br>0.70 4 | 1856.784 0 <sup>+</sup><br>1730.929 2 <sup>+</sup><br>1718.307 1 <sup>+</sup><br>1641.447 2 <sup>+</sup><br>1630.900 1 <sup>+</sup><br>1593.428 2 <sup>+</sup><br>1573.667 2 <sup>+</sup><br>1570.279 1 <sup>+</sup> |           | M1<br>M1<br>M1<br>M1(+E2)<br>E2+M1 |                  | 0.1458 20<br>0.1364 19<br>0.1093 15<br>0.063 35<br>≈1.2 | $\alpha(\text{K})=0.1199$ 17; $\alpha(\text{L})=0.01984$ 28; $\alpha(\text{M})=0.00461$ 6<br>$\alpha(\text{N})=0.001156$ 16; $\alpha(\text{O})=0.0002187$ 31; $\alpha(\text{P})=1.682\times10^{-5}$ 24<br>Mult.: From $\alpha(\text{K})\text{exp}=0.12$ 3 in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.1123$ 16; $\alpha(\text{L})=0.01856$ 26; $\alpha(\text{M})=0.00431$ 6<br>$\alpha(\text{N})=0.001081$ 15; $\alpha(\text{O})=0.0002046$ 29; $\alpha(\text{P})=1.574\times10^{-5}$ 22<br>Mult.: From $\alpha(\text{K})\text{exp}=0.13$ 3 in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.0900$ 13; $\alpha(\text{L})=0.01484$ 21; $\alpha(\text{M})=0.00344$ 5<br>$\alpha(\text{N})=0.000864$ 12; $\alpha(\text{O})=0.0001636$ 23; $\alpha(\text{P})=1.259\times10^{-5}$ 18<br>Mult.: From $\alpha(\text{K})\text{exp}=0.14$ 4 in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.051$ 30; $\alpha(\text{L})=0.010$ 4; $\alpha(\text{M})=0.0023$ 8<br>$\alpha(\text{N})=5.7\times10^{-4}$ 20; $\alpha(\text{O})=1.1\times10^{-4}$ 4; $\alpha(\text{P})=7\text{E}-6$ 4<br>Mult.: From $\alpha(\text{K})\text{exp}>0.048$ in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})\approx0.0444$ ; $\alpha(\text{L})\approx0.00888$ ; $\alpha(\text{M})\approx0.002110$<br>$\alpha(\text{N})\approx0.000528$ ; $\alpha(\text{O})\approx9.75\times10^{-5}$ ; $\alpha(\text{P})\approx6.12\times10^{-6}$<br>Mult., $\delta$ : From $\alpha(\text{K})\text{exp}=0.044$ in <a href="#">1974Br02</a> . |

## Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                  |                                                                                                              |                                                                                            |                                                                                                                                                                                          |                |                    |                  |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$        | $E_\gamma^\dagger$                                                                                           | $I_\gamma^\dagger$                                                                         | $E_f$                                                                                                                                                                                    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$             | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2061.257                              | 1 <sup>+</sup>   | 546.10 2                                                                                                     | 0.43 3                                                                                     | 1515.178                                                                                                                                                                                 | 0 <sup>+</sup> | M1                 |                  | 0.0727 10              | $\alpha(\text{K})=0.0599$ 8; $\alpha(\text{L})=0.00983$ 14; $\alpha(\text{M})=0.002282$ 32<br>$\alpha(\text{N})=0.000572$ 8; $\alpha(\text{O})=0.0001083$ 15; $\alpha(\text{P})=8.36\times 10^{-6}$ 12<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.094$ 35 in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.018$ 5; $\alpha(\text{L})=0.0030$ 7; $\alpha(\text{M})=0.00070$ 15<br>$\alpha(\text{N})=0.00017$ 4; $\alpha(\text{O})=3.3\times 10^{-5}$ 7; $\alpha(\text{P})=2.5\times 10^{-6}$ 7<br>Mult., $\delta$ : From $\alpha(\text{K})_{\text{exp}}=0.018$ 5 in <a href="#">1974Br02</a> .<br>$\alpha(\text{K})=0.00334$ 5; $\alpha(\text{L})=0.000530$ 7; $\alpha(\text{M})=0.0001224$ 17<br>$\alpha(\text{N})=3.07\times 10^{-5}$ 4; $\alpha(\text{O})=5.82\times 10^{-6}$ 8; $\alpha(\text{P})=4.57\times 10^{-7}$ 6;<br>$\alpha(\text{IPF})=0.0002137$ 30<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.0031$ 4 in <a href="#">1974Br02</a> ; $\gamma\gamma(\theta)$ in<br><a href="#">2011Be36</a> and <a href="#">1989Ah01</a> .<br>$\delta$ : From $\gamma\gamma(\theta)$ in <a href="#">2011Be36</a> ; Other: +0.003 13 in <a href="#">1989Ah01</a> . |
| 2074.335                              | (2) <sup>+</sup> | 340.03 2<br>343.38 2<br>1706.6 3                                                                             | 1.18 13<br>0.92 13<br>100 16                                                               | 1734.345 3 <sup>+</sup><br>1730.929 2 <sup>+</sup><br>367.943 2 <sup>+</sup>                                                                                                             |                |                    |                  |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2114.357                              | 3 <sup>+</sup>   | 268.49 <sup>f</sup> 3<br>338.75 2<br>380.03 2<br>383.437 11<br>483.34 9<br>520.91 5<br>1167.1 <sup>#</sup> 3 | $\approx 3.00$<br>21.0 17<br>10.0 13<br>32 3<br>$\approx 7$<br>21 4<br>100 <sup>#</sup> 33 | 1845.779 3 <sup>+</sup><br>1775.566 3 <sup>+</sup><br>1734.345 3 <sup>+</sup><br>1730.929 2 <sup>+</sup><br>1630.900 1 <sup>+</sup><br>1593.428 2 <sup>+</sup><br>947.243 4 <sup>+</sup> |                | M1(+E2)            |                  | 0.0074 29              | $\alpha(\text{K})=0.0061$ 24; $\alpha(\text{L})=1.0\times 10^{-3}$ 4; $\alpha(\text{M})=2.3\times 10^{-4}$ 8<br>$\alpha(\text{N})=5.8\times 10^{-5}$ 21; $\alpha(\text{O})=1.1\times 10^{-5}$ 4; $\alpha(\text{P})=8.2\times 10^{-7}$ 35;<br>$\alpha(\text{IPF})=2.4\times 10^{-6}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.013$ 4 in $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                       |                  | 1746.40 <sup>#</sup> 18                                                                                      | 54 <sup>#</sup> 6                                                                          | 367.943 2 <sup>+</sup>                                                                                                                                                                   |                | M1(+E2)            |                  | 0.0031 9               | $\alpha(\text{K})=0.0024$ 7; $\alpha(\text{L})=3.9\times 10^{-4}$ 10; $\alpha(\text{M})=8.9\times 10^{-5}$ 24<br>$\alpha(\text{N})=2.2\times 10^{-5}$ 6; $\alpha(\text{O})=4.2\times 10^{-6}$ 12; $\alpha(\text{P})=3.2\times 10^{-7}$ 10;<br>$\alpha(\text{IPF})=0.00020$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0055$ 13 in $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2116.549                              | 0 <sup>+</sup>   | 398.249 9<br>475.08 4<br>485.62 2                                                                            | 100 5<br>2.7 5<br>65 5                                                                     | 1718.307 1 <sup>+</sup><br>1641.447 2 <sup>+</sup><br>1630.900 1 <sup>+</sup>                                                                                                            | 1 <sup>+</sup> | M1<br>(M1)         |                  | 0.1678 23<br>0.0990 14 | $\alpha(\text{K})=0.1380$ 19; $\alpha(\text{L})=0.02287$ 32; $\alpha(\text{M})=0.00531$ 7<br>$\alpha(\text{N})=0.001332$ 19; $\alpha(\text{O})=0.0002522$ 35; $\alpha(\text{P})=1.938\times 10^{-5}$ 27<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.21$ 4 ( <a href="#">1974Br02</a> ).<br>$\alpha(\text{K})=0.0815$ 11; $\alpha(\text{L})=0.01343$ 19; $\alpha(\text{M})=0.00312$ 4<br>$\alpha(\text{N})=0.000782$ 11; $\alpha(\text{O})=0.0001481$ 21; $\alpha(\text{P})=1.140\times 10^{-5}$ 16<br>Mult.: $\alpha(\text{K})_{\text{exp}}>0.056$ ( <a href="#">1974Br02</a> ).<br>$E_\gamma$ : From level energy.<br>Mult.: From <a href="#">1987Su15</a> ; $\text{ce}(\text{K})(2116.8)/\text{ce}(\text{K})(886.2)=0.035$ 3<br>( <a href="#">1987Su15</a> ).                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                       |                  | 2116.549 12                                                                                                  |                                                                                            | 0.0                                                                                                                                                                                      | 0 <sup>+</sup> | E0                 |                  |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2126.859                              | 2 <sup>+</sup>   | 281.08 2                                                                                                     | 1.48 30                                                                                    | 1845.779 3 <sup>+</sup>                                                                                                                                                                  |                |                    |                  |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Adopted Levels, Gammas (continued)

| $E_i(\text{level})$ | $J_i^\pi$ | $\gamma(^{200}\text{Hg})$ (continued) |                        | $E_f$    | $J_f^\pi$ | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$       | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------|-----------|---------------------------------------|------------------------|----------|-----------|--------------------|------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |           | $E_\gamma^\dagger$                    | $I_\gamma^\dagger$     |          |           |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2126.859            | $2^+$     | 351.27 2                              | 5.7 10                 | 1775.566 | $3^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 392.524 17                            | 2.2 3                  | 1734.345 | $3^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 395.97 4                              | 1.1 3                  | 1730.929 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 408.556 10                            | 24 3                   | 1718.307 | $1^+$     | M1                 |                  | 0.1567 22        | $\alpha(\text{K})=0.1289$ 18; $\alpha(\text{L})=0.02135$ 30; $\alpha(\text{M})=0.00496$ 7<br>$\alpha(\text{N})=0.001244$ 17; $\alpha(\text{O})=0.0002354$ 33; $\alpha(\text{P})=1.810\times 10^{-5}$ 25<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.18$ 5 (1974Br02).                                                                                                                                                                                                                       |
|                     |           | 467.86 2                              | 30 3                   | 1659.010 | $3^+$     | (M1)               |                  | 0.1093 15        | $\alpha(\text{K})=0.0900$ 13; $\alpha(\text{L})=0.01484$ 21; $\alpha(\text{M})=0.00344$ 5<br>$\alpha(\text{N})=0.000864$ 12; $\alpha(\text{O})=0.0001636$ 23; $\alpha(\text{P})=1.259\times 10^{-5}$ 18                                                                                                                                                                                                                                                                                    |
|                     |           | 485.36 2                              | 18 2                   | 1641.447 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 495.93 2                              | 43 19                  | 1630.900 | $1^+$     | M1                 |                  | 0.0937 13        | $\alpha(\text{K})=0.0772$ 11; $\alpha(\text{L})=0.01270$ 18; $\alpha(\text{M})=0.00295$ 4<br>$\alpha(\text{N})=0.000739$ 10; $\alpha(\text{O})=0.0001400$ 20; $\alpha(\text{P})=1.078\times 10^{-5}$ 15<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.061$ (1974Br02).                                                                                                                                                                                                                        |
|                     |           | 533.48 2                              | 24 10                  | 1593.428 | $2^+$     | M1                 |                  | 0.0773 11        | $\alpha(\text{K})=0.0637$ 9; $\alpha(\text{L})=0.01046$ 15; $\alpha(\text{M})=0.002428$ 34<br>$\alpha(\text{N})=0.000609$ 9; $\alpha(\text{O})=0.0001153$ 16; $\alpha(\text{P})=8.89\times 10^{-6}$ 12<br>Mult.: $\alpha(\text{K})_{\text{exp}}>0.13$ (1974Br02).                                                                                                                                                                                                                          |
|                     |           | 553.18 2                              | 27 3                   | 1573.667 | $2^+$     | M1                 |                  | 0.0703 10        | $\alpha(\text{K})=0.0579$ 8; $\alpha(\text{L})=0.00950$ 13; $\alpha(\text{M})=0.002205$ 31<br>$\alpha(\text{N})=0.000553$ 8; $\alpha(\text{O})=0.0001047$ 15; $\alpha(\text{P})=8.08\times 10^{-6}$ 11<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.056$ 20 (1974Br02).                                                                                                                                                                                                                      |
|                     |           | 556.58 2                              | 52 19                  | 1570.279 | $1^+$     | M1(+E2)            | $\approx 0.4$    | $\approx 0.0625$ | $\alpha(\text{K})\approx 0.0513$ ; $\alpha(\text{L})\approx 0.00863$ ; $\alpha(\text{M})\approx 0.002008$<br>$\alpha(\text{N})\approx 0.000503$ ; $\alpha(\text{O})\approx 9.50\times 10^{-5}$ ; $\alpha(\text{P})\approx 7.13\times 10^{-6}$<br>$I_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay.<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.050$ 13 (1974Br02).<br>$\delta$ : From $\gamma\gamma(\theta)$ (1974Br02).<br>$I_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay. |
|                     |           | 872.93 14                             | 38 10                  | 1254.101 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 1180.5 <sup>#</sup> 3                 | 62 <sup>#</sup> 19     | 947.243  | $4^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 1759.15 <sup>#</sup> 14               | 100 <sup>#</sup> 10    | 367.943  | $2^+$     | M1(+E2)            |                  | 0.0031 8         | $\alpha(\text{K})=0.0024$ 7; $\alpha(\text{L})=3.8\times 10^{-4}$ 10; $\alpha(\text{M})=8.8\times 10^{-5}$ 24<br>$\alpha(\text{N})=2.2\times 10^{-5}$ 6; $\alpha(\text{O})=4.2\times 10^{-6}$ 11; $\alpha(\text{P})=3.2\times 10^{-7}$ 10;<br>$\alpha(\text{IPF})=0.00021$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0030$ 6 in $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                  |
| 2127.934            | $(2,3)^+$ | 352.353 12                            | 4.9 6                  | 1775.566 | $3^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 397.01 2                              | 2.9 4                  | 1730.929 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 409.63 3                              | 1.6 3                  | 1718.307 | $1^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 468.93 2                              | 6.4 13                 | 1659.010 | $3^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 486.44 7                              | 1.5 6                  | 1641.447 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 534.48 3                              | 3.1 6                  | 1593.428 | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 1180.4 4                              | 18 7                   | 947.243  | $4^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |           | 1759.3 3                              | 100 10                 | 367.943  | $2^+$     |                    |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2135.40             | $8^-$     | 86.5 3                                |                        | 2048.92  | $6^-$     |                    |                  |                  | $E_\gamma$ : From $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .<br>Mult.: $\gamma\gamma(\theta)$ in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                                                                                                                                                                                                                                                                                                    |
|                     |           | 172.8 <sup>&amp;</sup> 2              | 100 <sup>&amp;</sup> 7 | 1962.62  | $7^-$     | M1                 |                  | 1.666 24         | $\alpha(\text{K})=1.366$ 20; $\alpha(\text{L})=0.2302$ 33; $\alpha(\text{M})=0.0536$ 8                                                                                                                                                                                                                                                                                                                                                                                                     |

## Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                |                         |                    |          |                |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|----------------|-------------------------|--------------------|----------|----------------|--------------------|------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$      | $E_\gamma^\dagger$      | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2143.80                               | 9 <sup>-</sup> | 181.18 <sup>a</sup> 8   | 100 <sup>a</sup>   | 1962.62  | 7 <sup>-</sup> | E2                 |                  | 0.552 8    | $\alpha(\text{N})=0.01344$ 19; $\alpha(\text{O})=0.00254$ 4; $\alpha(\text{P})=0.0001945$ 28<br>Mult.: $\gamma\gamma(\theta)$ in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ ; $\alpha(\text{K})_{\text{exp}}=1.8$ 4 (1977Gu05).<br>$\text{B}(\text{E}2)(\text{W.u.})=25.1$ 10<br>$\alpha(\text{K})=0.2146$ 30; $\alpha(\text{L})=0.253$ 4; $\alpha(\text{M})=0.0655$ 9<br>$\alpha(\text{N})=0.01627$ 23; $\alpha(\text{O})=0.00274$ 4; $\alpha(\text{P})=2.68\times 10^{-5}$ 4<br>Mult.: $\gamma\gamma(\theta)$ in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ ; $\alpha(\text{L})_{\text{exp}}=0.017$ 4 (1972Cu07).<br>Mult.: $\text{A}_2=-0.31$ 8 in 1984Kh02. |
| 2151.35                               | 3 <sup>-</sup> | 1783.4 <sup>b</sup> 1   | 100 <sup>b</sup>   | 367.943  | 2 <sup>+</sup> | D                  |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2189.477                              | 1 <sup>+</sup> | 306.618 11              | 4.2 4              | 1882.861 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 332.67 4                | 1.2 4              | 1856.784 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 455.13 4                | 2.6 4              | 1734.345 | 3 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 471.19 3                | 3.3 5              | 1718.307 | 1 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 558.61 5                | 3.5 7              | 1630.900 | 1 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 596.06 3                | 10.0 12            | 1593.428 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 615.82 10               | $\approx 11.4$     | 1573.667 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 674.29 7                | 6.3 19             | 1515.178 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 935.45 8                | 49 7               | 1254.101 | 2 <sup>+</sup> | E2+M1              |                  | 0.012 6    | $\alpha(\text{K})=0.010$ 5; $\alpha(\text{L})=0.0017$ 7; $\alpha(\text{M})=4.0\times 10^{-4}$ 15<br>$\alpha(\text{N})=1.0\times 10^{-4}$ 4; $\alpha(\text{O})=1.9\times 10^{-5}$ 7; $\alpha(\text{P})=1.4\times 10^{-6}$ 7<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0094$ (1974Br02).                                                                                                                                                                                                                                                                                                                                                                                 |
|                                       |                | 1822.3 7                | 49 19              | 367.943  | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 2188.7 6                | 100 21             | 0.0      | 0 <sup>+</sup> | M1                 |                  | 0.00266 4  | $\alpha(\text{K})=0.001757$ 25; $\alpha(\text{L})=0.000277$ 4; $\alpha(\text{M})=6.39\times 10^{-5}$ 9<br>$\alpha(\text{N})=1.602\times 10^{-5}$ 22; $\alpha(\text{O})=3.04\times 10^{-6}$ 4; $\alpha(\text{P})=2.396\times 10^{-7}$ 34;<br>$\alpha(\text{IPF})=0.000547$ 8<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0032$ 10 (1974Br02).                                                                                                                                                                                                                                                                                                                             |
| 2229.274                              | 1 <sup>+</sup> | 346.406 14              | 3.5 4              | 1882.861 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 453.60 16               | $\approx 1.30$     | 1775.566 | 3 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 587.88 4                | 5.0 7              | 1641.447 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 598.35 3                | 12.2 11            | 1630.900 | 1 <sup>+</sup> | M1(+E2)            |                  | 0.037 20   | $\alpha(\text{K})=0.030$ 17; $\alpha(\text{L})=0.0055$ 22; $\alpha(\text{M})=0.0013$ 5<br>$\alpha(\text{N})=3.3\times 10^{-4}$ 12; $\alpha(\text{O})=6.1\times 10^{-5}$ 24; $\alpha(\text{P})=4.2\times 10^{-6}$ 24<br>Mult.: $\alpha(\text{K})_{\text{exp}}>0.025$ (1974Br02).                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 635.86 16               | $\approx 2.59$     | 1593.428 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 655.59 5                | 5.9 9              | 1573.667 | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 659.01 3                | 27 3               | 1570.279 | 1 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 713.94 10               | 4.8 9              | 1515.178 | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 975.15 7                | 100 9              | 1254.101 | 2 <sup>+</sup> | M1+E2              | 0.8 +6-4         | 0.0124 27  | $\alpha(\text{K})=0.0102$ 23; $\alpha(\text{L})=0.00170$ 33; $\alpha(\text{M})=0.00039$ 7<br>$\alpha(\text{N})=9.9\times 10^{-5}$ 19; $\alpha(\text{O})=1.9\times 10^{-5}$ 4; $\alpha(\text{P})=1.39\times 10^{-6}$ 32<br>Mult., $\delta$ : From $\alpha(\text{K})_{\text{exp}}=0.0100$ 23 (1974Br02).<br>$\text{I}_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay.<br>$\text{I}_\gamma$ : From $^{200}\text{Tl}$ $\varepsilon$ decay.                                                                                                                                                                                                                            |
|                                       |                | 1861.0 5                | 10 4               | 367.943  | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                | 2229.0 10               | 4.4 22             | 0.0      | 0 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2238.51                               | (3)            | 1870.56 <sup>#</sup> 22 | 100 <sup>#</sup>   | 367.943  | 2 <sup>+</sup> |                    |                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                                  |                          |                         |          |                  |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------|----------------------------------|--------------------------|-------------------------|----------|------------------|--------------------|------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$                        | $E_\gamma^\dagger$       | $I_\gamma^\dagger$      | $E_f$    | $J_f^\pi$        | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2246.446                              | (1,2) <sup>+</sup>               | 272.109 8                | 12.8 9                  | 1974.339 | (3) <sup>+</sup> |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 363.72 8                 | 1.6 6                   | 1882.861 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 615.54 4                 | 32 7                    | 1630.900 | 1 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 652.91 8                 | 8.2 16                  | 1593.428 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 676.15 3                 | 100 8                   | 1570.279 | 1 <sup>+</sup>   | M1(+E2)            | ≤1.2             | 0.033 8                 | $\alpha(\text{K})=0.027\ 7$ ; $\alpha(\text{L})=0.0047\ 10$ ; $\alpha(\text{M})=0.00108\ 21$<br>$\alpha(\text{N})=0.00027\ 5$ ; $\alpha(\text{O})=5.1\times 10^{-5}\ 11$ ; $\alpha(\text{P})=3.8\times 10^{-6}\ 10$<br>Mult., $\delta$ : $\alpha(\text{K})\text{exp}=0.029\ 9$ (1974Br02).                                                                                                                                          |
|                                       |                                  | 992.35 17                | 53 7                    | 1254.101 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 1879.3 3                 | ≈47                     | 367.943  | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 2246 <sup>f</sup> 2      |                         | 0.0      | 0 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 299.887 12               | 1.61 25                 | 1974.339 | (3) <sup>+</sup> |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 301.963 13               | 1.25 20                 | 1972.281 | (2) <sup>+</sup> |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2274.229                              | (2) <sup>+</sup>                 | 428.45 3                 | 2.3 3                   | 1845.779 | 3 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 498.63 4                 | 3.2 4                   | 1775.566 | 3 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 632.85 5                 | 3.4 7                   | 1641.447 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 643.29 4                 | 11.1 13                 | 1630.900 | 1 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 700.17 15                | 4.8 18                  | 1573.667 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 703.82 5                 | 22 3                    | 1570.279 | 1 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 759.30 11                | 6.1 11                  | 1515.178 | 0 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 1906.30 <sup>#</sup> 18  | 100 <sup>#</sup> 9      | 367.943  | 2 <sup>+</sup>   | (E2)               |                  | 2.02×10 <sup>-3</sup> 3 | $\alpha(\text{K})=0.001488\ 21$ ; $\alpha(\text{L})=0.0002366\ 33$ ; $\alpha(\text{M})=5.47\times 10^{-5}\ 8$<br>$\alpha(\text{N})=1.368\times 10^{-5}\ 19$ ; $\alpha(\text{O})=2.58\times 10^{-6}\ 4$ ;<br>$\alpha(\text{P})=1.925\times 10^{-7}\ 27$ ; $\alpha(\text{IPF})=0.0002248\ 31$<br>Mult.: $\alpha(\text{K})\text{exp}=0.0011$ (1974Br02).                                                                               |
|                                       |                                  | 2274.0 <sup>#</sup> 6    | 15 <sup>#</sup> 4       | 0.0      | 0 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 321.8 <sup>&amp;</sup> 3 | 83 <sup>&amp;</sup> 33  | 1962.62  | 7 <sup>-</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2284.36                               | 5 <sup>-</sup> ,6,7 <sup>-</sup> | 432.8 <sup>&amp;</sup> 3 | 100 <sup>&amp;</sup> 17 | 1851.49  | 5 <sup>-</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2288.93                               | 2 <sup>+</sup>                   | 695.72 20                | 3.8                     | 1593.428 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 718.55 13                | 8 3                     | 1570.279 | 1 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 1034.9 10                | 18                      | 1254.101 | 2 <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       |                                  | 1341.7 5                 | 66 20                   | 947.243  | 4 <sup>+</sup>   | (E2)               |                  | 0.00346 5               | $\alpha(\text{K})=0.00281\ 4$ ; $\alpha(\text{L})=0.000479\ 7$ ; $\alpha(\text{M})=0.0001117\ 16$<br>$\alpha(\text{N})=2.79\times 10^{-5}\ 4$ ; $\alpha(\text{O})=5.22\times 10^{-6}\ 7$ ; $\alpha(\text{P})=3.66\times 10^{-7}\ 5$ ;<br>$\alpha(\text{IPF})=2.354\times 10^{-5}\ 34$<br>Mult.: $\alpha(\text{K})=0.0038\ 15$ (1965Sa02).                                                                                           |
|                                       |                                  | 1921.1 3                 | 100 12                  | 367.943  | 2 <sup>+</sup>   | (M1)               |                  | 0.00330 5               | $\alpha(\text{K})=0.002435\ 34$ ; $\alpha(\text{L})=0.000385\ 5$ ; $\alpha(\text{M})=8.89\times 10^{-5}\ 12$<br>$\alpha(\text{N})=2.228\times 10^{-5}\ 31$ ; $\alpha(\text{O})=4.23\times 10^{-6}\ 6$ ;<br>$\alpha(\text{P})=3.32\times 10^{-7}\ 5$ ; $\alpha(\text{IPF})=0.000363\ 5$<br>$I_\gamma$ : From <sup>200</sup> Tl $\varepsilon$ decay.<br>Mult.: $\alpha(\text{K})=0.0011\ 4$ in <sup>200</sup> Tl $\varepsilon$ decay. |

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                                                |                    |                    |          |                    |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|------------------------------------------------|--------------------|--------------------|----------|--------------------|--------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$                                      | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$          | Mult. <sup>‡</sup> | $\alpha^d$             | Comments                                                                                                                                                                                                                                                                                                                                  |
| 2288.93                               | 2 <sup>+</sup>                                 | 2289.6 7           | $\approx 34$       | 0.0      | 0 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
| 2296.341                              | 1 <sup>+</sup>                                 | 439.52 4           | 0.84 21            | 1856.784 | 0 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 577.98 6           | 2.1 7              | 1718.307 | 1 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 722.2 5            | 2.1                | 1573.667 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 780.96 11          | 3.0 7              | 1515.178 | 0 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 1042.4 3           | 19 5               | 1254.101 | 2 <sup>+</sup>     | M1                 | 0.01372 19             | $\alpha(\text{K})=0.01134$ 16; $\alpha(\text{L})=0.001824$ 26; $\alpha(\text{M})=0.000422$ 6<br>$\alpha(\text{N})=0.0001059$ 15; $\alpha(\text{O})=2.007\times 10^{-5}$ 28; $\alpha(\text{P})=1.562\times 10^{-6}$ 22<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.012$ (1974Br02).                                                         |
|                                       |                                                | 1266.9 6           | 25                 | 1029.348 | 0 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 1928.2 3           | 20 6               | 367.943  | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 2296.3 3           | 100 11             | 0.0      | 0 <sup>+</sup>     | M1                 | $2.50\times 10^{-3}$ 4 | $\alpha(\text{K})=0.001559$ 22; $\alpha(\text{L})=0.0002453$ 34; $\alpha(\text{M})=5.66\times 10^{-5}$ 8<br>$\alpha(\text{N})=1.419\times 10^{-5}$ 20; $\alpha(\text{O})=2.69\times 10^{-6}$ 4; $\alpha(\text{P})=2.124\times 10^{-7}$ 30; $\alpha(\text{IPF})=0.000621$ 9<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0015$ 5 (1974Br02). |
| 2298.5                                | 5 <sup>-</sup> ,6,7 <sup>-</sup>               | 335.9& 3           | 100& 12            | 1962.62  | 7 <sup>-</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 447.0& 4           | 47& 18             | 1851.49  | 5 <sup>-</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
| 2331.778                              | 2 <sup>+</sup>                                 | 203.832 12         | 1.0 3              | 2127.934 | (2,3) <sup>+</sup> |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 270.530 12         | 1.17 23            | 2061.257 | 1 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 359.48 4           | 1.2 3              | 1972.281 | (2) <sup>+</sup>   |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 448.91 2           | 18.2 15            | 1882.861 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 475.08 4           | 1.7 3              | 1856.784 | 0 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 597.41 4           | 5.2 8              | 1734.345 | 3 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 600.82 4           | 6.2 7              | 1730.929 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 613.55 5           | 4.2 8              | 1718.307 | 1 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 690.28 6           | 10.0 25            | 1641.447 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 738.5 2            | $\approx 4.2$      | 1593.428 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 761.43 12          | 10 4               | 1570.279 | 1 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 1385.0 3           | 100 20             | 947.243  | 4 <sup>+</sup>     | (E2)               | 0.00327 5              | $\alpha(\text{K})=0.00265$ 4; $\alpha(\text{L})=0.000448$ 6; $\alpha(\text{M})=0.0001045$ 15<br>$\alpha(\text{N})=2.61\times 10^{-5}$ 4; $\alpha(\text{O})=4.89\times 10^{-6}$ 7; $\alpha(\text{P})=3.45\times 10^{-7}$ 5;<br>$\alpha(\text{IPF})=3.31\times 10^{-5}$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0040$ 10 (1974Br02).   |
| 2343.594                              | 1 <sup>+</sup> ,2 <sup>+</sup> ,3 <sup>+</sup> | 1963.5 4           | 43 10              | 367.943  | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 460.76 5           | 2.3 6              | 1882.861 | 2 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 497.81 2           | 22.1 15            | 1845.779 | 3 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 568.04 7           | 3.3 10             | 1775.566 | 3 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |
|                                       |                                                | 1975.8 3           | 100 21             | 367.943  | 2 <sup>+</sup>     | M1(+E2)            | 0.0025 6               | $\alpha(\text{K})=0.0018$ 4; $\alpha(\text{L})=0.00029$ 7; $\alpha(\text{M})=6.7\times 10^{-5}$ 16<br>$\alpha(\text{N})=1.7\times 10^{-5}$ 4; $\alpha(\text{O})=3.2\times 10^{-6}$ 8; $\alpha(\text{P})=2.5\times 10^{-7}$ 6;<br>$\alpha(\text{IPF})=0.00033$ 7<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0038$ 16 (1974Br02).           |
| 2370.043                              | 1 <sup>+</sup>                                 | 308.801 11         | 0.18 2             | 2061.257 | 1 <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                           |

**Adopted Levels, Gammas (continued)**

$\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$            | $E_\gamma^\dagger$                                                                                           | $I_\gamma^\dagger$                                                                        | $E_f$                                                                                                    | $J_f^\pi$                                                                                                                                                        | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|----------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2370.043            | 1 <sup>+</sup>       | 397.765 14<br>487.12 3<br>635.86 16<br>639.11 4<br>651.4 3<br>710.93 12<br>728.45 7<br>739.05 16<br>796.41 6 | 0.38 5<br>0.68 8<br>≈0.18<br>1.04 9<br>0.25 8<br>0.27 12<br>1.05 10<br>0.53 17<br>2.17 18 | 1972.281<br>1882.861<br>1734.345<br>1730.929<br>1718.307<br>1659.010<br>1641.447<br>1630.900<br>1573.667 | (2) <sup>+</sup><br>2 <sup>+</sup><br>3 <sup>+</sup><br>2 <sup>+</sup><br>1 <sup>+</sup><br>3 <sup>+</sup><br>2 <sup>+</sup><br>1 <sup>+</sup><br>2 <sup>+</sup> | M1                 |                  | 0.0273 4                | $\alpha(\text{K})=0.02254$ 32; $\alpha(\text{L})=0.00366$ 5; $\alpha(\text{M})=0.000847$ 12<br>$\alpha(\text{N})=0.0002124$ 30; $\alpha(\text{O})=4.02\times 10^{-5}$ 6;<br>$\alpha(\text{P})=3.12\times 10^{-6}$ 4<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.029$ 8 (1974Br02).                                                                                                            |
|                     |                      | 799.90 18<br>1116 <sup>f</sup> 1<br>2002.1 2                                                                 | 0.74 22<br>≈0.52<br>100 10                                                                | 1570.279<br>1254.101<br>367.943                                                                          | 1 <sup>+</sup><br>2 <sup>+</sup><br>2 <sup>+</sup>                                                                                                               | M1(+E2)            | -0.014 19        | 0.00307 4               | $\alpha(\text{K})=0.002196$ 31; $\alpha(\text{L})=0.000347$ 5;<br>$\alpha(\text{M})=8.01\times 10^{-5}$ 11<br>$\alpha(\text{N})=2.007\times 10^{-5}$ 28; $\alpha(\text{O})=3.81\times 10^{-6}$ 5;<br>$\alpha(\text{P})=3.00\times 10^{-7}$ 4; $\alpha(\text{IPF})=0.000418$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0018$ 3 (1974Br02); $\gamma\gamma(\theta)$ (1989Ah01).              |
|                     |                      | 2370.0 3                                                                                                     | 4.3 9                                                                                     | 0.0                                                                                                      | 0 <sup>+</sup>                                                                                                                                                   | M1                 |                  | 2.41×10 <sup>-3</sup> 3 | $\delta$ : From $\gamma\gamma(\theta)$ in 1989Ah01.<br>$\alpha(\text{K})=0.001441$ 20; $\alpha(\text{L})=0.0002265$ 32;<br>$\alpha(\text{M})=5.23\times 10^{-5}$ 7<br>$\alpha(\text{N})=1.311\times 10^{-5}$ 18; $\alpha(\text{O})=2.488\times 10^{-6}$ 35;<br>$\alpha(\text{P})=1.962\times 10^{-7}$ 27; $\alpha(\text{IPF})=0.000671$ 9<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0012$ . |
| 2377.15             | (7) <sup>-</sup>     | 241.8 <sup>&amp;</sup> 3<br>328.3 <sup>&amp;</sup> 3<br>414.4 <sup>&amp;</sup> 3                             | 40 <sup>&amp;</sup> 20<br>60 <sup>&amp;</sup> 20<br>100 <sup>&amp;</sup> 20               | 2135.40<br>2048.92<br>1962.62                                                                            | 8 <sup>-</sup><br>6 <sup>-</sup><br>7 <sup>-</sup>                                                                                                               |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                              |
| 2388.68             | (1,2,3) <sup>+</sup> | 414.41 <sup>f</sup> 7<br>747.30 9<br>818.33 11<br>2020.5 <sup>#</sup> 7                                      | 1.2<br>11.2 21<br>19 3<br>100 <sup>#</sup> 12                                             | 1974.339<br>1641.447<br>1570.279<br>367.943                                                              | (3) <sup>+</sup><br>2 <sup>+</sup><br>1 <sup>+</sup><br>2 <sup>+</sup>                                                                                           | M1+E2              |                  | 0.0025 6                | $\alpha(\text{K})=0.0017$ 4; $\alpha(\text{L})=0.00028$ 6; $\alpha(\text{M})=6.4\times 10^{-5}$ 15<br>$\alpha(\text{N})=1.6\times 10^{-5}$ 4; $\alpha(\text{O})=3.0\times 10^{-6}$ 7;<br>$\alpha(\text{P})=2.3\times 10^{-7}$ 6; $\alpha(\text{IPF})=0.00035$ 8<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0018$ (1974Br02).                                                                 |
| 2408.8              |                      | 446.2 4                                                                                                      | 100                                                                                       | 1962.62                                                                                                  | 7 <sup>-</sup>                                                                                                                                                   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                              |
| 2411.830            | (2) <sup>+</sup>     | 182.53 3                                                                                                     | 3.5                                                                                       | 2229.274                                                                                                 | 1 <sup>+</sup>                                                                                                                                                   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                                              |

## Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                  |                        |                      |          |                    |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|------------------|------------------------|----------------------|----------|--------------------|--------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$        | $E_\gamma^\dagger$     | $I_\gamma^\dagger$   | $E_f$    | $J_f^\pi$          | Mult. <sup>‡</sup> | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                              |
| 2411.830                              | (2) <sup>+</sup> | 283.88 3               | 2.0 6                | 2127.934 | (2,3) <sup>+</sup> |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 337.51 2               | 2.5 5                | 2074.335 | (2) <sup>+</sup>   |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 437.56 <sup>f</sup> 13 | 3.0 12               | 1974.339 | (3) <sup>+</sup>   |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 439.52 4               | 4.0 10               | 1972.281 | (2) <sup>+</sup>   |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 566.15 5               | 13.0 20              | 1845.779 | 3 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 677.45 7               | 28 4                 | 1734.345 | 3 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 780.96 11              | 14 4                 | 1630.900 | 1 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 818.33 11              | 32 6                 | 1593.428 | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 896.7 2                | 10.00                | 1515.178 | 0 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 1158.3 7               | 55 20                | 1254.101 | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 2044.2 5               | 100 30               | 367.943  | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
| 2442.7?                               | 1 <sup>-</sup>   | 2442.6 3               | 100                  | 0.0      | 0 <sup>+</sup>     | E1                 | $1.34 \times 10^{-3}$ 2 | $\alpha(\text{K})=0.000429$ 6; $\alpha(\text{L})=6.19 \times 10^{-5}$ 9; $\alpha(\text{M})=1.411 \times 10^{-5}$ 20<br>$\alpha(\text{N})=3.53 \times 10^{-6}$ 5; $\alpha(\text{O})=6.68 \times 10^{-7}$ 9; $\alpha(\text{P})=5.28 \times 10^{-8}$ 7;<br>$\alpha(\text{IPF})=0.000831$ 12<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0002$ (1974Br02). |
| 2461.83                               | (1) <sup>+</sup> | 743.52 8               | 12.6 17              | 1718.307 | 1 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 1432.2 2               | 95 19                | 1029.348 | 0 <sup>+</sup>     | (M1)               | 0.00621 9               | $\alpha(\text{K})=0.00508$ 7; $\alpha(\text{L})=0.000810$ 11; $\alpha(\text{M})=0.0001873$ 26<br>$\alpha(\text{N})=4.69 \times 10^{-5}$ 7; $\alpha(\text{O})=8.91 \times 10^{-6}$ 12; $\alpha(\text{P})=6.97 \times 10^{-7}$ 10;<br>$\alpha(\text{IPF})=7.37 \times 10^{-5}$ 10<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0040$ (1974Br02).          |
| 2491.430                              | (2) <sup>+</sup> | 2093.6 4               | 100 21               | 367.943  | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 2462.6 15              | 45 19                | 0.0      | 0 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 301.963 13             | 1.7 3                | 2189.477 | 1 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 517.14 7               | 3.6 10               | 1974.339 | (3) <sup>+</sup>   |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 634.66 10              | 4.1 12               | 1856.784 | 0 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 757.01 6               | 29 3                 | 1734.345 | 3 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 860.6 2                | 12 4                 | 1630.900 | 1 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 917.9 3                | 19 5                 | 1573.667 | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 1237.1                 |                      | 1254.101 | 2 <sup>+</sup>     |                    |                         |                                                                                                                                                                                                                                                                                                                                                       |
|                                       |                  | 2123.9 7               | 100 21               | 367.943  | 2 <sup>+</sup>     | (E2)               | $1.80 \times 10^{-3}$ 3 | $\alpha(\text{K})=0.001225$ 17; $\alpha(\text{L})=0.0001919$ 27; $\alpha(\text{M})=4.43 \times 10^{-5}$ 6<br>$\alpha(\text{N})=1.108 \times 10^{-5}$ 16; $\alpha(\text{O})=2.090 \times 10^{-6}$ 29; $\alpha(\text{P})=1.582 \times 10^{-7}$ 22;<br>$\alpha(\text{IPF})=0.000324$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0012$ (1974Br02).      |
| 2522.70                               | 10 <sup>-</sup>  | 378.9 <sup>@</sup> 3   | 16.9 <sup>@</sup> 16 | 2143.80  | 9 <sup>-</sup>     | M1+E2              | 0.12 7                  | $\alpha(\text{K})=0.10$ 6; $\alpha(\text{L})=0.020$ 6; $\alpha(\text{M})=0.0048$ 13<br>$\alpha(\text{N})=0.00120$ 33; $\alpha(\text{O})=2.2 \times 10^{-4}$ 7; $\alpha(\text{P})=1.3 \times 10^{-5}$ 9<br>Mult.: $\gamma\gamma(\theta)$ in $^{198}\text{Pt}(^9\text{Be}, \alpha 3n\gamma)$ .                                                          |
|                                       |                  | 387.3 <sup>@</sup> 3   | 100 <sup>@</sup> 10  | 2135.40  | 8 <sup>-</sup>     | E2                 | 0.0517 7                | $\alpha(\text{K})=0.0345$ 5; $\alpha(\text{L})=0.01300$ 19; $\alpha(\text{M})=0.00325$ 5<br>$\alpha(\text{N})=0.000809$ 12; $\alpha(\text{O})=0.0001418$ 20; $\alpha(\text{P})=4.53 \times 10^{-6}$ 6<br>Mult.: $\gamma\gamma(\theta)$ in $^{198}\text{Pt}(^9\text{Be}, \alpha 3n\gamma)$ ; $\alpha(\text{K})_{\text{exp}}=0.045$ 7 (1977Gu05).       |
| 2590.79                               | 1 <sup>-</sup>   | 2590.5 3               | 100                  | 0.0      | 0 <sup>+</sup>     | E1                 | $1.39 \times 10^{-3}$ 2 | $\alpha(\text{K})=0.000391$ 5; $\alpha(\text{L})=5.63 \times 10^{-5}$ 8; $\alpha(\text{M})=1.283 \times 10^{-5}$ 18                                                                                                                                                                                                                                   |

**Adopted Levels, Gammas (continued)**

| $\gamma(^{200}\text{Hg})$ (continued)                                                                                                                                                                                                                                                                                                                                                                                        |                 |                        |                    |          |                  |                    |                  |                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|--------------------|----------|------------------|--------------------|------------------|-------------------------|
| $E_i(\text{level})$                                                                                                                                                                                                                                                                                                                                                                                                          | $J_i^\pi$       | $E_\gamma^\dagger$     | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$        | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$              |
| Comments                                                                                                                                                                                                                                                                                                                                                                                                                     |                 |                        |                    |          |                  |                    |                  |                         |
| $\alpha(\text{N})=3.21\times 10^{-6}$ 4; $\alpha(\text{O})=6.08\times 10^{-7}$ 9; $\alpha(\text{P})=4.81\times 10^{-8}$ 7; $\alpha(\text{IPF})=0.000921$ 13<br>Mult.: $\alpha(\text{K})\text{exp}<0.0002$ (1974Br02).                                                                                                                                                                                                        |                 |                        |                    |          |                  |                    |                  |                         |
| 2597.1                                                                                                                                                                                                                                                                                                                                                                                                                       | (9)             | 461.7@ 3               | 100@               | 2135.40  | 8 <sup>-</sup>   |                    |                  |                         |
| 2610.42                                                                                                                                                                                                                                                                                                                                                                                                                      | 3 <sup>-</sup>  | 2610.4 1               | 100                | 0.0      | 0 <sup>+</sup>   | (E3)               |                  | 2.24×10 <sup>-3</sup> 3 |
| $\alpha(\text{K})=0.001539$ 22; $\alpha(\text{L})=0.000256$ 4; $\alpha(\text{M})=5.95\times 10^{-5}$ 8<br>$\alpha(\text{N})=1.490\times 10^{-5}$ 21; $\alpha(\text{O})=2.81\times 10^{-6}$ 4;<br>$\alpha(\text{P})=2.076\times 10^{-7}$ 29; $\alpha(\text{IPF})=0.000371$ 5<br>B(E3)(W.u.)=24.6 24<br>E <sub>γ</sub> : From level energy.<br>Mult.: From Coulomb excitation.                                                 |                 |                        |                    |          |                  |                    |                  |                         |
| 2639.929                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 <sup>+</sup>  | 148.500 6              | 0.52 12            | 2491.430 | (2) <sup>+</sup> |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 757.01 6               | 3.7 4              | 1882.861 | 2 <sup>+</sup>   |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 905.3 4                | ≈1.8               | 1734.345 | 3 <sup>+</sup>   |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 1008.7 4               | ≈3.0               | 1630.900 | 1 <sup>+</sup>   |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 1385.0 3               | 18 4               | 1254.101 | 2 <sup>+</sup>   |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 1610.9 6               | 7.3 24             | 1029.348 | 0 <sup>+</sup>   |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 2271.5 4               | 58 9               | 367.943  | 2 <sup>+</sup>   | M1+E2              | -0.43 +6-5       | 0.00240 4               |
| $\alpha(\text{K})=0.001521$ 28; $\alpha(\text{L})=0.000239$ 4; $\alpha(\text{M})=5.52\times 10^{-5}$ 10<br>$\alpha(\text{N})=1.383\times 10^{-5}$ 26; $\alpha(\text{O})=2.62\times 10^{-6}$ 5;<br>$\alpha(\text{P})=2.06\times 10^{-7}$ 4; $\alpha(\text{IPF})=0.000571$ 11<br>Mult.: $\alpha(\text{K})\text{exp}=0.0011$ 2 (1974Br02); $\gamma\gamma(\theta)$ (1989Ah01).<br>$\delta$ : $\gamma\gamma(\theta)$ in 1989Ah01. |                 |                        |                    |          |                  |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 2639.9 2               | 100 12             | 0.0      | 0 <sup>+</sup>   | M1                 |                  | 2.17×10 <sup>-3</sup> 3 |
| $\alpha(\text{K})=0.001101$ 15; $\alpha(\text{L})=0.0001726$ 24;<br>$\alpha(\text{M})=3.98\times 10^{-5}$ 6<br>$\alpha(\text{N})=9.99\times 10^{-6}$ 14; $\alpha(\text{O})=1.896\times 10^{-6}$ 27;<br>$\alpha(\text{P})=1.498\times 10^{-7}$ 21; $\alpha(\text{IPF})=0.000849$ 12<br>Mult.: $\alpha(\text{K})\text{exp}=0.00105$ 15 (1974Br02).                                                                             |                 |                        |                    |          |                  |                    |                  |                         |
| 2641.57                                                                                                                                                                                                                                                                                                                                                                                                                      | 11 <sup>-</sup> | 497.77 <sup>a</sup> 10 | 100 <sup>a</sup>   | 2143.80  | 9 <sup>-</sup>   | E2                 |                  | 0.0272 4                |
| $\alpha(\text{K})=0.01967$ 28; $\alpha(\text{L})=0.00573$ 8; $\alpha(\text{M})=0.001409$ 20<br>$\alpha(\text{N})=0.000352$ 5; $\alpha(\text{O})=6.27\times 10^{-5}$ 9; $\alpha(\text{P})=2.61\times 10^{-6}$ 4<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be,α3nγ); $\alpha(\text{K})\text{exp}=0.021$ 4 (1972Cu07) decay (18.7 h).                                                                                    |                 |                        |                    |          |                  |                    |                  |                         |
| 2680.1                                                                                                                                                                                                                                                                                                                                                                                                                       | 8 <sup>+</sup>  | 716.8@ 5               | 18@ 6              | 1962.62  | 7 <sup>-</sup>   | [E1]               |                  | 0.00430 6               |
| $\alpha(\text{K})=0.00358$ 5; $\alpha(\text{L})=0.000548$ 8; $\alpha(\text{M})=0.0001260$ 18<br>$\alpha(\text{N})=3.14\times 10^{-5}$ 4; $\alpha(\text{O})=5.89\times 10^{-6}$ 8; $\alpha(\text{P})=4.29\times 10^{-7}$ 6<br>B(E1)(W.u.)=0.00043 16                                                                                                                                                                          |                 |                        |                    |          |                  |                    |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 973.6@ 3               | 100@ 14            | 1706.73  | 6 <sup>+</sup>   | E2                 |                  | 0.00636 9               |
| $\alpha(\text{K})=0.00510$ 7; $\alpha(\text{L})=0.000965$ 14; $\alpha(\text{M})=0.0002278$ 32<br>$\alpha(\text{N})=5.70\times 10^{-5}$ 8; $\alpha(\text{O})=1.053\times 10^{-5}$ 15;<br>$\alpha(\text{P})=6.71\times 10^{-7}$ 9                                                                                                                                                                                              |                 |                        |                    |          |                  |                    |                  |                         |

Adopted Levels, Gammas (continued) $\gamma(^{200}\text{Hg})$  (continued)

| <u><math>E_i(\text{level})</math></u> | <u><math>J_i^\pi</math></u> | <u><math>E_\gamma^\dagger</math></u>                                 | <u><math>I_\gamma^\dagger</math></u>         | <u><math>E_f</math></u>                                                                                                                   | <u><math>J_f^\pi</math></u> | <u>Mult.<sup>‡</sup></u> | <u><math>\alpha^d</math></u> | <u>Comments</u>                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------|-----------------------------|----------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       |                             |                                                                      |                                              |                                                                                                                                           |                             |                          |                              | $\alpha(\text{K})=0.00510\ 7$ ; $\alpha(\text{L})=0.000965\ 14$ ; $\alpha(\text{M})=0.0002278\ 32$<br>$\alpha(\text{N})=5.70\times 10^{-5}\ 8$ ; $\alpha(\text{O})=1.053\times 10^{-5}\ 15$ ; $\alpha(\text{P})=6.71\times 10^{-7}\ 9$<br>$\text{B}(\text{E}2)(\text{W.u.})=41\ 9$<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .     |
| 2691.59                               | (1,2) <sup>+</sup>          | 321.55 3<br>563.63 9<br>957.19 13<br>1121.4 2                        | 1.7 3<br>3.1 11<br>25 5<br>71 20             | 2370.043 1 <sup>+</sup><br>2127.934 (2,3) <sup>+</sup><br>1734.345 3 <sup>+</sup><br>1570.279 1 <sup>+</sup>                              |                             | (M1)                     | 0.01139 16                   | $\alpha(\text{K})=0.00943\ 13$ ; $\alpha(\text{L})=0.001513\ 21$ ; $\alpha(\text{M})=0.000350\ 5$<br>$\alpha(\text{N})=8.77\times 10^{-5}\ 12$ ; $\alpha(\text{O})=1.664\times 10^{-5}\ 23$ ; $\alpha(\text{P})=1.297\times 10^{-6}\ 18$ ;<br>$\alpha(\text{IPF})=6.63\times 10^{-7}\ 11$<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.012\ 4$ (1974Br02). |
| 2697.137                              | (1,2) <sup>+</sup>          | 2323.5 4<br>308.47 4<br>467.86 <sup>e</sup> 2                        | 100 25<br>1.8 7<br>100 <sup>e</sup>          | 367.943 2 <sup>+</sup><br>2388.68 (1,2,3) <sup>+</sup><br>2229.274 1 <sup>+</sup>                                                         |                             | (M1)                     | 0.1093 15                    | $\alpha(\text{K})=0.0900\ 13$ ; $\alpha(\text{L})=0.01484\ 21$ ; $\alpha(\text{M})=0.00344\ 5$<br>$\alpha(\text{N})=0.000864\ 12$ ; $\alpha(\text{O})=0.0001636\ 23$ ; $\alpha(\text{P})=1.259\times 10^{-5}\ 18$<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.14\ 4$ (1974Br02).                                                                          |
|                                       |                             | 635.86 16<br>1181.9 <sup>f</sup><br>1442.5 10<br>1667.8 <sup>f</sup> | $\approx 9$<br>$\approx 61$                  | 2061.257 1 <sup>+</sup><br>1515.178 0 <sup>+</sup><br>1254.101 2 <sup>+</sup><br>1029.348 0 <sup>+</sup>                                  |                             |                          |                              |                                                                                                                                                                                                                                                                                                                                                          |
| 2701.366                              | 2 <sup>+</sup>              | 331.34 3<br>472.12 8<br>573.41 4<br>586.98 12<br>1042.4 3            | 1.9 5<br>2.7 8<br>10.4 15<br>3.5 15<br>69 19 | 2370.043 1 <sup>+</sup><br>2229.274 1 <sup>+</sup><br>2127.934 (2,3) <sup>+</sup><br>2114.357 3 <sup>+</sup><br>1659.010 3 <sup>+</sup>   |                             | M1                       | 0.01372 19                   | $\alpha(\text{K})=0.01134\ 16$ ; $\alpha(\text{L})=0.001824\ 26$ ; $\alpha(\text{M})=0.000422\ 6$<br>$\alpha(\text{N})=0.0001059\ 15$ ; $\alpha(\text{O})=2.007\times 10^{-5}\ 28$ ; $\alpha(\text{P})=1.562\times 10^{-6}\ 22$<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.012$ (1974Br02).<br>Mult.: $\alpha(\text{K})_{\text{exp}}<0.009$ (1974Br02).  |
|                                       |                             | 1059.6 2<br>1070.0 4<br>1447.5 7<br>1754.6 7                         | 77 19<br>15.4<br>73 23<br>100 42             | 1641.447 2 <sup>+</sup><br>1630.900 1 <sup>+</sup><br>1254.101 2 <sup>+</sup><br>947.243 4 <sup>+</sup>                                   |                             | (E2)                     |                              |                                                                                                                                                                                                                                                                                                                                                          |
| 2763.097                              | (1,2) <sup>+</sup>          | 271.68 2<br>351.27 2<br>466.72 3<br>788.77 6<br>1121.4 2             | 2.4 4<br>12.4 16<br>4.0 10<br>45 6<br>100 28 | 2491.430 (2) <sup>+</sup><br>2411.830 (2) <sup>+</sup><br>2296.341 1 <sup>+</sup><br>1974.339 (3) <sup>+</sup><br>1641.447 2 <sup>+</sup> |                             | M1                       | 0.01139 16                   | $\alpha(\text{K})=0.00943\ 13$ ; $\alpha(\text{L})=0.001513\ 21$ ; $\alpha(\text{M})=0.000350\ 5$<br>$\alpha(\text{N})=8.77\times 10^{-5}\ 12$ ; $\alpha(\text{O})=1.664\times 10^{-5}\ 23$ ; $\alpha(\text{P})=1.297\times 10^{-6}\ 18$ ;<br>$\alpha(\text{IPF})=6.63\times 10^{-7}\ 11$<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.012\ 4$ (1974Br02). |
|                                       |                             | 1192.9 6                                                             | 32                                           | 1570.279 1 <sup>+</sup>                                                                                                                   |                             |                          |                              |                                                                                                                                                                                                                                                                                                                                                          |

Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                    |                        |                    |          |                      |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------|--------------------|------------------------|--------------------|----------|----------------------|--------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$          | $E_\gamma^\dagger$     | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$            | Mult. <sup>‡</sup> | $\alpha^d$             | Comments                                                                                                                                                                                                                                                                                                                                           |
| 2763.097                              | (1,2) <sup>+</sup> | 1733.7 <sup>f</sup> 10 | 40                 | 1029.348 | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 2764.0 15              | 72                 | 0.0      | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
| 2794.16                               | (1,2) <sup>+</sup> | 497.81 2               | 30.7 21            | 2296.341 | 1 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 505.23 3               | 5.0 9              | 2288.93  | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 733.4 3                | 15 4               | 2061.257 | 1 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 911.5 6                | 29 11              | 1882.861 | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1059.6 2               | 71 18              | 1734.345 | 3 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1163.5 3               | 100 21             | 1630.900 | 1 <sup>+</sup>       | M1(+E2)            | 0.0074 29              | $\alpha(\text{K})=0.0061$ 25; $\alpha(\text{L})=1.0\times 10^{-3}$ 4; $\alpha(\text{M})=2.4\times 10^{-4}$ 8<br>$\alpha(\text{N})=5.9\times 10^{-5}$ 21; $\alpha(\text{O})=1.1\times 10^{-5}$ 4; $\alpha(\text{P})=8.3\times 10^{-7}$ 35;<br>$\alpha(\text{IPF})=2.2\times 10^{-6}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0078$ (1974Br02). |
| 2847.51                               | 1 <sup>-</sup>     | 2794.5 4               | 86 29              | 0.0      | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 404.94 4               | $\leq 1.4$         | 2442.7?  | 1 <sup>-</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 458.80 9               | 1.7 6              | 2388.68  | (1,2,3) <sup>+</sup> |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 558.61 5               | 3.6 7              | 2288.93  | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 573.41 4               | 6.4 10             | 2274.229 | (2) <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 733.40 3               | 10 3               | 2114.357 | 3 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 2847.3 6               | 100 21             | 0.0      | 0 <sup>+</sup>       | E1                 | $1.47\times 10^{-3}$ 2 | $\alpha(\text{K})=0.000337$ 5; $\alpha(\text{L})=4.84\times 10^{-5}$ 7; $\alpha(\text{M})=1.103\times 10^{-5}$ 15<br>$\alpha(\text{N})=2.76\times 10^{-6}$ 4; $\alpha(\text{O})=5.23\times 10^{-7}$ 7; $\alpha(\text{P})=4.15\times 10^{-8}$ 6;<br>$\alpha(\text{IPF})=0.001066$ 15<br>Mult.: $\alpha(\text{K})_{\text{exp}}<0.0003$ (1974Br02).   |
| 2853.05                               | (1,2) <sup>+</sup> | 738.5 2                | 13                 | 2114.357 | 3 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 996.5 7                | 30                 | 1856.784 | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1337.4 15              | 90                 | 1515.178 | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 2485.3 15              | 100 35             | 367.943  | 2 <sup>+</sup>       | E2+M1              | 0.00194 34             | $\alpha(\text{K})=0.00110$ 18; $\alpha(\text{L})=0.000172$ 29; $\alpha(\text{M})=4.0\times 10^{-5}$ 7<br>$\alpha(\text{N})=9.9\times 10^{-6}$ 17; $\alpha(\text{O})=1.88\times 10^{-6}$ 33; $\alpha(\text{P})=1.47\times 10^{-7}$ 28;<br>$\alpha(\text{IPF})=0.00062$ 13<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0011$ (1974Br02).              |
| 2862.3                                | (1,2) <sup>+</sup> | 2853.8 10              | 70                 | 0.0      | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 573.41 4               | 4.7 7              | 2288.93  | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 615.82 10              | 8.5                | 2246.446 | (1,2) <sup>+</sup>   |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1347.1 5               | 100 41             | 1515.178 | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 2862.4 15              | 8.6                | 0.0      | 0 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
| 2877.90                               | 1 <sup>+</sup>     | 546.10 2               | 10.6 8             | 2331.778 | 2 <sup>+</sup>       | (M1)               |                        | Mult.: $\alpha(\text{K})_{\text{exp}}=0.094$ 35 (1974Br02).                                                                                                                                                                                                                                                                                        |
|                                       |                    | 588.96 6               | 2.5 5              | 2288.93  | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 631.50 9               | 2.1 6              | 2246.446 | (1,2) <sup>+</sup>   |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 749.9 2                | 2.7 10             | 2127.934 | (2,3) <sup>+</sup>   |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 903.5 2                | 6                  | 1974.339 | (3) <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 905.3 4                | 9                  | 1972.281 | (2) <sup>+</sup>     |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1247.3 3               | 51 11              | 1630.900 | 1 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |
|                                       |                    | 1283.9 7               | 15                 | 1593.428 | 2 <sup>+</sup>       |                    |                        |                                                                                                                                                                                                                                                                                                                                                    |

**Adopted Levels, Gammas (continued)**

$\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$                      | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$                                      | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                       |
|---------------------|--------------------------------|--------------------|--------------------|----------|------------------------------------------------|--------------------|------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2877.90             | 1 <sup>+</sup>                 | 1623.5 3           | 100 21             | 1254.101 | 2 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
| 2937.55             | 1 <sup>+</sup> ,2 <sup>+</sup> | 1054.7 4           | 24 10              | 1882.861 | 2 <sup>+</sup>                                 | M1                 |                  | 0.01331 19              | $\alpha(\text{K})=0.01101$ 15; $\alpha(\text{L})=0.001770$ 25; $\alpha(\text{M})=0.000410$ 6<br>$\alpha(\text{N})=0.0001027$ 14; $\alpha(\text{O})=1.947\times 10^{-5}$ 27;<br>$\alpha(\text{P})=1.516\times 10^{-6}$ 21<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.019$ (1974Br02).                                                           |
|                     |                                | 1081.3 3           | 17 5               | 1856.784 | 0 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1366.8 7           | 43                 | 1570.279 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1422.4 3           | 36 12              | 1515.178 | 0 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 2569.1 5           | 100 21             | 367.943  | 2 <sup>+</sup>                                 |                    |                  |                         | $\alpha(\text{K})=0.000870$ 12; $\alpha(\text{L})=0.0001336$ 19; $\alpha(\text{M})=3.07\times 10^{-5}$ 4<br>$\alpha(\text{N})=7.69\times 10^{-6}$ 11; $\alpha(\text{O})=1.454\times 10^{-6}$ 20;<br>$\alpha(\text{P})=1.121\times 10^{-7}$ 16; $\alpha(\text{IPF})=0.000531$ 7<br>$\alpha(\text{K})_{\text{exp}}<0.0003$ (1974Br02).           |
| 2959.93             | 1 <sup>-</sup>                 | 2937.2 10          | 36                 | 0.0      | 0 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 468.73 3           | 3                  | 2491.430 | (2) <sup>+</sup>                               |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1366.8 7           | 19                 | 1593.428 | 2 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 2960.2 3           | 100 16             | 0.0      | 0 <sup>+</sup>                                 | E1                 |                  | 1.50×10 <sup>-3</sup> 2 | $\alpha(\text{K})=0.000317$ 4; $\alpha(\text{L})=4.55\times 10^{-5}$ 6; $\alpha(\text{M})=1.038\times 10^{-5}$ 15<br>$\alpha(\text{N})=2.59\times 10^{-6}$ 4; $\alpha(\text{O})=4.92\times 10^{-7}$ 7; $\alpha(\text{P})=3.91\times 10^{-8}$ 5; $\alpha(\text{IPF})=0.001128$ 16<br>Mult.: $\alpha(\text{K})_{\text{exp}}<0.00013$ (1974Br02). |
| 2978.213            | 1 <sup>+</sup>                 | 281.08 2           | 0.16 3             | 2697.137 | (1,2) <sup>+</sup>                             |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 516.35 3           | 0.84 12            | 2461.83  | (1 <sup>+</sup> )                              |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 608.22 9           | 0.59 22            | 2370.043 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 634.66 10          | 0.53 16            | 2343.594 | 1 <sup>+</sup> ,2 <sup>+</sup> ,3 <sup>+</sup> |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 681.87 8           | 1.2 3              | 2296.341 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 748.84 10          | 1.5 3              | 2229.274 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 788.77 6           | 3.5 5              | 2189.477 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 851.36 4           | 28.4 22            | 2126.859 | 2 <sup>+</sup>                                 | M1+E2              |                  | 0.016 7                 | $\alpha(\text{K})=0.013$ 6; $\alpha(\text{L})=0.0022$ 9; $\alpha(\text{M})=5.1\times 10^{-4}$ 20<br>$\alpha(\text{N})=1.3\times 10^{-4}$ 5; $\alpha(\text{O})=2.4\times 10^{-5}$ 10; $\alpha(\text{P})=1.7\times 10^{-6}$ 9<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.016$ 3 (1974Br02).                                                      |
|                     |                                | 861.71 12          | 3.0 6              | 2116.549 | 0 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1121.4 2           | 7.8 22             | 1856.784 | 0 <sup>+</sup>                                 | (M1)               |                  | 0.01139 16              | $\alpha(\text{K})=0.00943$ 13; $\alpha(\text{L})=0.001513$ 21; $\alpha(\text{M})=0.000350$ 5<br>$\alpha(\text{N})=8.77\times 10^{-5}$ 12; $\alpha(\text{O})=1.664\times 10^{-5}$ 23;<br>$\alpha(\text{P})=1.297\times 10^{-6}$ 18; $\alpha(\text{IPF})=6.63\times 10^{-7}$ 11<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.012$ 4 (1974Br02).    |
|                     |                                | 1247.3 3           | 10.6 22            | 1730.929 | 2 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1337.4 15          | ≤6                 | 1641.447 | 2 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |
|                     |                                | 1347.1 5           | ≤18                | 1630.900 | 1 <sup>+</sup>                                 |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                |

## Adopted Levels, Gammas (continued)

| $\gamma(^{200}\text{Hg})$ (continued) |                 |                        |                      |          |                      |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------|-----------------|------------------------|----------------------|----------|----------------------|--------------------|------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$       | $E_\gamma^\dagger$     | $I_\gamma^\dagger$   | $E_f$    | $J_f^\pi$            | Mult. <sup>‡</sup> | $\delta^\dagger$ | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                                                   |
| 2978.213                              | 1 <sup>+</sup>  | 1408.0 2               | 100 13               | 1570.279 | 1 <sup>+</sup>       | E2+M1              | +1.44 +21-10     | 0.00425 20              | $\alpha(\text{K})=0.00346$ 16; $\alpha(\text{L})=0.000568$ 25;<br>$\alpha(\text{M})=0.000132$ 6<br>$\alpha(\text{N})=3.30\times 10^{-5}$ 14; $\alpha(\text{O})=6.21\times 10^{-6}$ 27;<br>$\alpha(\text{P})=4.63\times 10^{-7}$ 23; $\alpha(\text{IPF})=4.68\times 10^{-5}$ 15<br>Mult., $\delta$ : From $\gamma\gamma(\theta)$ in <a href="#">1989Ah01</a> .              |
| 3053.32                               | 1 <sup>+</sup>  | 1462.5 15              | 5.9 19               | 1515.178 | 0 <sup>+</sup>       | M1                 |                  | 0.00754 11              | $\alpha(\text{K})=0.00621$ 9; $\alpha(\text{L})=0.000992$ 14;<br>$\alpha(\text{M})=0.0002295$ 32<br>$\alpha(\text{N})=5.75\times 10^{-5}$ 8; $\alpha(\text{O})=1.091\times 10^{-5}$ 15;<br>$\alpha(\text{P})=8.53\times 10^{-7}$ 12; $\alpha(\text{IPF})=3.27\times 10^{-5}$ 5<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.007$ ( <a href="#">1974Br02</a> ).               |
|                                       |                 | 2611.0 7               | 9.4 19               | 367.943  | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 2978.5 6               | 9.4 19               | 0.0      | 0 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 721.0 <sup>f</sup> 8   | 5.7                  | 2331.778 | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 823.95 14              | 12 4                 | 2229.274 | 1 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1081.3 3               | 20 6                 | 1972.281 | (2) <sup>+</sup>     |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1318.0 6               | 54 17                | 1734.345 | 3 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1322.4 3               | 100 26               | 1730.929 | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
| 3073.823                              | 1 <sup>+</sup>  | 1422.4 3               | 43 14                | 1630.900 | 1 <sup>+</sup>       | E2(+M1)            |                  | 0.0042 13               | $\alpha(\text{K})=0.0034$ 11; $\alpha(\text{L})=5.5\times 10^{-4}$ 17;<br>$\alpha(\text{M})=1.3\times 10^{-4}$ 4<br>$\alpha(\text{N})=3.2\times 10^{-5}$ 10; $\alpha(\text{O})=6.0\times 10^{-6}$ 19;<br>$\alpha(\text{P})=4.6\times 10^{-7}$ 16; $\alpha(\text{IPF})=8.6\times 10^{-5}$ 20<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0018$ ( <a href="#">1974Br02</a> ). |
|                                       |                 | 1479.6 <sup>f</sup> 15 | 29                   | 1573.667 | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1538.2 5               | 57 17                | 1515.178 | 0 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1799.2 5               | 94 28                | 1254.101 | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 376.68 2               | 3.1 8                | 2697.137 | (1,2) <sup>+</sup>   |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 685.19 12              | 3.1 9                | 2388.68  | (1,2,3) <sup>+</sup> |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 703.82 5               | 19 3                 | 2370.043 | 1 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 784.9 3                | 3.7                  | 2288.93  | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1432.2 2               | 62 12                | 1641.447 | 2 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1442.5 10              | 15.4                 | 1630.900 | 1 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 1503.2 4               | 100 20               | 1570.279 | 1 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
|                                       |                 | 2044.2 5               | 31 9                 | 1029.348 | 0 <sup>+</sup>       | (M1)               |                  | 2.02 $\times 10^{-3}$ 3 | $\alpha(\text{K})=0.000755$ 11; $\alpha(\text{L})=0.0001178$ 17;<br>$\alpha(\text{M})=2.72\times 10^{-5}$ 4<br>$\alpha(\text{N})=6.81\times 10^{-6}$ 10; $\alpha(\text{O})=1.294\times 10^{-6}$ 18;<br>$\alpha(\text{P})=1.024\times 10^{-7}$ 14; $\alpha(\text{IPF})=0.001112$ 16<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00058$ 25 ( <a href="#">1974Br02</a> ).      |
|                                       |                 | 3074.2 6               | 77 15                | 0.0      | 0 <sup>+</sup>       |                    |                  |                         |                                                                                                                                                                                                                                                                                                                                                                            |
| 3120.9                                | 10 <sup>+</sup> | 523.8 <sup>@</sup> 3   | 23.1 <sup>@</sup> 20 | 2597.1   | (9)                  | D                  |                  |                         | Mult.: From DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3\text{n}\gamma)$ .                                                                                                                                                                                                                                                                                                 |

Adopted Levels, Gammas (continued) $\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$        | $E_\gamma^\dagger$                                                                                                   | $I_\gamma^\dagger$                                                                             | $E_f$                                                                                                            | $J_f^\pi$                                                                                                                                                                                     | Mult. <sup>‡</sup> | $\alpha^d$              | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3120.9              | 10 <sup>+</sup>  | 977.1 @ 3                                                                                                            | 100 @ 8                                                                                        | 2143.80                                                                                                          | 9 <sup>-</sup>                                                                                                                                                                                | (E1)               | $2.40 \times 10^{-3}$ 3 | $\alpha(\text{K})=0.002011$ 28; $\alpha(\text{L})=0.000301$ 4; $\alpha(\text{M})=6.91 \times 10^{-5}$ 10<br>$\alpha(\text{N})=1.725 \times 10^{-5}$ 24; $\alpha(\text{O})=3.24 \times 10^{-6}$ 5; $\alpha(\text{P})=2.435 \times 10^{-7}$ 34<br>Mult.: From DCO in $^{198}\text{Pt}(^9\text{Be}, \alpha 3n\gamma)$ . Note, that Mult=M1+E2<br>is given in $^{198}\text{Pt}(\alpha, 2n\gamma)$ based on $\gamma(\theta)$ (1981He10).                              |
| 3123.0              | 12 <sup>-</sup>  | 600.3 @ 3                                                                                                            | 100 @                                                                                          | 2522.70                                                                                                          | 10 <sup>-</sup>                                                                                                                                                                               | E2                 | 0.01756 25              | $\alpha(\text{K})=0.01323$ 19; $\alpha(\text{L})=0.00330$ 5; $\alpha(\text{M})=0.000801$ 11<br>$\alpha(\text{N})=0.0001999$ 28; $\alpha(\text{O})=3.61 \times 10^{-5}$ 5; $\alpha(\text{P})=1.756 \times 10^{-6}$ 25<br>Mult.: From DCO in $^{198}\text{Pt}(^9\text{Be}, \alpha 3n\gamma)$ ; $\gamma(\theta)$ in $^{198}\text{Pt}(\alpha, 2n\gamma)$ .                                                                                                           |
| 3186.34             | 1 <sup>+</sup>   | 308.47 4<br>423.24 3<br>724.78 10<br>743.52 8<br>797.4 2<br>854.2 2<br>890.0 f 5<br>957.19 13<br>996.5 7<br>1467.6 3 | $\leq 0.10$<br>0.57 8<br>0.70 20<br>1.77 23<br>1.1 4<br>2.0 7<br>1.3<br>2.9 5<br>2.0 8<br>31 5 | 2877.90<br>2763.097<br>2461.83<br>2442.7?<br>2388.68<br>2331.778<br>2296.341<br>2229.274<br>2189.477<br>1718.307 | 1 <sup>+</sup><br>(1,2) <sup>+</sup><br>(1 <sup>+</sup> )<br>1 <sup>-</sup><br>(1,2,3) <sup>+</sup><br>2 <sup>+</sup><br>1 <sup>+</sup><br>1 <sup>+</sup><br>1 <sup>+</sup><br>1 <sup>+</sup> |                    |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                     |                  |                                                                                                                      |                                                                                                |                                                                                                                  |                                                                                                                                                                                               | M1+E2              | 0.0044 15               | $\alpha(\text{K})=0.0036$ 12; $\alpha(\text{L})=5.8 \times 10^{-4}$ 18; $\alpha(\text{M})=1.3 \times 10^{-4}$ 4<br>$\alpha(\text{N})=3.4 \times 10^{-5}$ 10; $\alpha(\text{O})=6.4 \times 10^{-6}$ 20; $\alpha(\text{P})=4.8 \times 10^{-7}$ 17;<br>$\alpha(\text{IPF})=7.2 \times 10^{-5}$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0036$ 10 (1974Br02).                                                                                                   |
|                     |                  | 2818.6 3                                                                                                             | 40 4                                                                                           | 367.943                                                                                                          | 2 <sup>+</sup>                                                                                                                                                                                | E2(+M1)            | 0.00181 28              | $\alpha(\text{K})=0.000836$ 99; $\alpha(\text{L})=0.000129$ 17; $\alpha(\text{M})=3.0 \times 10^{-5}$ 4<br>$\alpha(\text{N})=7.5 \times 10^{-6}$ 10; $\alpha(\text{O})=1.41 \times 10^{-6}$ 19; $\alpha(\text{P})=1.11 \times 10^{-7}$ 16;<br>$\alpha(\text{IPF})=0.00080$ 16<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00063$ 15 (1974Br02).                                                                                                                   |
|                     |                  | 3185.8 4                                                                                                             | 100 10                                                                                         | 0.0                                                                                                              | 0 <sup>+</sup>                                                                                                                                                                                | (M1)               | $2.00 \times 10^{-3}$ 3 | $\alpha(\text{K})=0.000691$ 10; $\alpha(\text{L})=0.0001078$ 15; $\alpha(\text{M})=2.486 \times 10^{-5}$ 35<br>$\alpha(\text{N})=6.23 \times 10^{-6}$ 9; $\alpha(\text{O})=1.183 \times 10^{-6}$ 17; $\alpha(\text{P})=9.37 \times 10^{-8}$ 13;<br>$\alpha(\text{IPF})=0.001172$ 16<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00072$ 10 (1974Br02).                                                                                                             |
| 3215.2              | 12 <sup>+</sup>  | 94.2 @ 5                                                                                                             | 4.5 @ 20                                                                                       | 3120.9                                                                                                           | 10 <sup>+</sup>                                                                                                                                                                               | E2                 | 7.14 19                 | $\alpha(\text{K})=0.625$ 9; $\alpha(\text{L})=4.88$ 14; $\alpha(\text{M})=1.28$ 4<br>$\alpha(\text{N})=0.316$ 9; $\alpha(\text{O})=0.0524$ 15; $\alpha(\text{P})=0.0001383$ 28<br>B(E2)(W.u.)=36 16<br>Mult.: From $\alpha(\text{tot})$ in 1999Go21.                                                                                                                                                                                                             |
|                     |                  | 573.5 @ 3                                                                                                            | 100 @ 5                                                                                        | 2641.57                                                                                                          | 11 <sup>-</sup>                                                                                                                                                                               | E1                 | 0.00670 9               | $\alpha(\text{K})=0.00557$ 8; $\alpha(\text{L})=0.000867$ 12; $\alpha(\text{M})=0.0001996$ 28<br>$\alpha(\text{N})=4.98 \times 10^{-5}$ 7; $\alpha(\text{O})=9.29 \times 10^{-6}$ 13; $\alpha(\text{P})=6.60 \times 10^{-7}$ 9<br>B(E1)(W.u.)=7.6 $\times 10^{-7}$ 25<br>Mult.: From $\alpha(\text{K})_{\text{exp}}=0.008$ 3 (1977Gu05); DCO in<br>$^{198}\text{Pt}(^9\text{Be}, \alpha 3n\gamma)$ and $\gamma(\theta)$ in $^{198}\text{Pt}(\alpha, 2n\gamma)$ . |
| 3216.84             | (2) <sup>+</sup> | 453.60 16<br>1100.3 5                                                                                                | $\leq 0.7$<br>7.53                                                                             | 2763.097<br>2116.549                                                                                             | (1,2) <sup>+</sup><br>0 <sup>+</sup>                                                                                                                                                          |                    |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Adopted Levels, Gammas (continued)**

| $\gamma(^{200}\text{Hg})$ (continued) |                  |                       |                    |          |                                                  |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|------------------|-----------------------|--------------------|----------|--------------------------------------------------|--------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $E_i(\text{level})$                   | $J_i^\pi$        | $E_\gamma^\dagger$    | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$                                        | Mult. <sup>‡</sup> | $\alpha^d$             | Comments                                                                                                                                                                                                                                                                                                                                                |
| 3216.84                               | (2) <sup>+</sup> | 1557.7 3              | 100 20             | 1659.010 | 3 <sup>+</sup>                                   | M1+E2              | 0.0039 12              | $\alpha(\text{K})=0.0031$ 10; $\alpha(\text{L})=5.0\times 10^{-4}$ 15; $\alpha(\text{M})=1.17\times 10^{-4}$ 35<br>$\alpha(\text{N})=2.9\times 10^{-5}$ 9; $\alpha(\text{O})=5.5\times 10^{-6}$ 17; $\alpha(\text{P})=4.2\times 10^{-7}$ 14;<br>$\alpha(\text{IPF})=0.000110$ 26<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0037$ (1974Br02).           |
|                                       |                  | 1623.5 3              | 67 14              | 1593.428 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 3216.9 8              | 93 19              | 0.0      | 0 <sup>+</sup>                                   | (E2)               | $1.51\times 10^{-3}$ 2 | $\alpha(\text{K})=0.000582$ 8; $\alpha(\text{L})=8.77\times 10^{-5}$ 12; $\alpha(\text{M})=2.012\times 10^{-5}$ 28<br>$\alpha(\text{N})=5.03\times 10^{-6}$ 7; $\alpha(\text{O})=9.54\times 10^{-7}$ 13; $\alpha(\text{P})=7.48\times 10^{-8}$ 10;<br>$\alpha(\text{IPF})=0.000814$ 11<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00058$ 20 (1974Br02). |
| 3269.43                               | 1 <sup>+</sup>   | 568.04 7              | 0.9 3              | 2701.366 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 980.2 5               | 6.4                | 2288.93  | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1022.5 <sup>f</sup> 4 | 5.0                | 2246.446 | (1,2) <sup>+</sup>                               |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1294.6 6              | 12                 | 1974.339 | (3) <sup>+</sup>                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1538.2 5              | 14 4               | 1730.929 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1610.9 6              | 17 6               | 1659.010 | 3 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1638.3 5              | 25 6               | 1630.900 | 1 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1676.3 3              | 21 6               | 1593.428 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1699.1 10             | 7                  | 1570.279 | 1 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1754.6 7              | 19 8               | 1515.178 | 0 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 2240.6 7              | 21 6               | 1029.348 | 0 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 2901.3 3              | 100 10             | 367.943  | 2 <sup>+</sup>                                   | E2(+M1)            | 0.00179 27             | $\alpha(\text{K})=0.00079$ 9; $\alpha(\text{L})=0.000121$ 15; $\alpha(\text{M})=2.79\times 10^{-5}$ 35<br>$\alpha(\text{N})=7.0\times 10^{-6}$ 9; $\alpha(\text{O})=1.33\times 10^{-6}$ 17; $\alpha(\text{P})=1.04\times 10^{-7}$ 14;<br>$\alpha(\text{IPF})=0.00085$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00067$ 10 (1974Br02).               |
|                                       |                  | 3269.4 6              | 48 10              | 0.0      | 0 <sup>+</sup>                                   | (M1)               | $2.00\times 10^{-3}$ 3 | $\alpha(\text{K})=0.000648$ 9; $\alpha(\text{L})=0.0001011$ 14; $\alpha(\text{M})=2.330\times 10^{-5}$ 33<br>$\alpha(\text{N})=5.84\times 10^{-6}$ 8; $\alpha(\text{O})=1.109\times 10^{-6}$ 16; $\alpha(\text{P})=8.79\times 10^{-8}$ 12;<br>$\alpha(\text{IPF})=0.001218$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0010$ 3 (1974Br02).           |
| 3288.93                               | 1 <sup>+</sup>   | 797.4 2               | $\leq 1$           | 2491.430 | (2) <sup>+</sup>                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 945.4 3               | 1.8 6              | 2343.594 | 1 <sup>+</sup> , 2 <sup>+</sup> , 3 <sup>+</sup> |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 957.19 13             | 2.7 5              | 2331.778 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1042.4 3              | 5.6 16             | 2246.446 | (1,2) <sup>+</sup>                               |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1059.6 2              | 6.3 16             | 2229.274 | 1 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1172.8 5              | 3.1 13             | 2116.549 | 0 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1432.2 2              | 12.5 25            | 1856.784 | 0 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1557.7 3              | 31 6               | 1730.929 | 2 <sup>+</sup>                                   | M1(+E2)            | 0.0039 12              | $\alpha(\text{K})=0.0031$ 10; $\alpha(\text{L})=5.0\times 10^{-4}$ 15; $\alpha(\text{M})=1.17\times 10^{-4}$ 35<br>$\alpha(\text{N})=2.9\times 10^{-5}$ 9; $\alpha(\text{O})=5.5\times 10^{-6}$ 17; $\alpha(\text{P})=4.2\times 10^{-7}$ 14;<br>$\alpha(\text{IPF})=0.000110$ 26<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0037$ (1974Br02).           |
|                                       |                  | 1647.2 3              | 5.9 19             | 1641.447 | 2 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |
|                                       |                  | 1658.2 3              | 4.4 16             | 1630.900 | 1 <sup>+</sup>                                   |                    |                        |                                                                                                                                                                                                                                                                                                                                                         |

Adopted Levels, Gammas (continued) $\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$        | $E_\gamma^\dagger$                                                                                          | $I_\gamma^\dagger$                                                           | $E_f$                                                                                                | $J_f^\pi$                                                                                                                                                                  | Mult. <sup>‡</sup> | $\alpha^d$             | Comments                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3288.93             | 1 <sup>+</sup>   | 1715.2 <sup>f</sup> 10<br>2259.5 5                                                                          | 3<br>18 4                                                                    | 1573.667<br>1029.348                                                                                 | 2 <sup>+</sup><br>0 <sup>+</sup>                                                                                                                                           | (M1)               | 0.00255 4              | $\alpha(\text{K})=0.001623$ 23; $\alpha(\text{L})=0.000255$ 4; $\alpha(\text{M})=5.90\times 10^{-5}$ 8<br>$\alpha(\text{N})=1.478\times 10^{-5}$ 21; $\alpha(\text{O})=2.81\times 10^{-6}$ 4; $\alpha(\text{P})=2.212\times 10^{-7}$ 31;<br>$\alpha(\text{IPF})=0.000596$ 8<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0013$ 3 (1974Br02).               |
|                     |                  | 2921.1 3                                                                                                    | 50 5                                                                         | 367.943                                                                                              | 2 <sup>+</sup>                                                                                                                                                             | E2(+M1)            | 0.00179 27             | $\alpha(\text{K})=0.00077$ 8; $\alpha(\text{L})=0.000119$ 15; $\alpha(\text{M})=2.75\times 10^{-5}$ 34<br>$\alpha(\text{N})=6.9\times 10^{-6}$ 9; $\alpha(\text{O})=1.31\times 10^{-6}$ 17; $\alpha(\text{P})=1.03\times 10^{-7}$ 14;<br>$\alpha(\text{IPF})=0.00086$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00064$ 17 (1974Br02).                |
|                     |                  | 3288.9 4                                                                                                    | 100 13                                                                       | 0.0                                                                                                  | 0 <sup>+</sup>                                                                                                                                                             | (M1)               | $2.00\times 10^{-3}$ 3 | $\alpha(\text{K})=0.000639$ 9; $\alpha(\text{L})=9.96\times 10^{-5}$ 14; $\alpha(\text{M})=2.296\times 10^{-5}$ 32<br>$\alpha(\text{N})=5.75\times 10^{-6}$ 8; $\alpha(\text{O})=1.093\times 10^{-6}$ 15; $\alpha(\text{P})=8.66\times 10^{-8}$ 12;<br>$\alpha(\text{IPF})=0.001228$ 17<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.00078$ 12 (1974Br02). |
| 3353.05             | 1 <sup>+</sup>   | 415.50 3<br>762.10 19<br>1163.5 3                                                                           | 1.10 15<br>4<br>34 7                                                         | 2937.55<br>2590.79<br>2189.477                                                                       | 1 <sup>+</sup> ,2 <sup>+</sup><br>1 <sup>-</sup><br>1 <sup>+</sup>                                                                                                         | M1+E2              | 0.0074 29              | $\alpha(\text{K})=0.0061$ 25; $\alpha(\text{L})=1.0\times 10^{-3}$ 4; $\alpha(\text{M})=2.4\times 10^{-4}$ 8<br>$\alpha(\text{N})=5.9\times 10^{-5}$ 21; $\alpha(\text{O})=1.1\times 10^{-5}$ 4; $\alpha(\text{P})=8.3\times 10^{-7}$ 35;<br>$\alpha(\text{IPF})=2.2\times 10^{-6}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0078$ (1974Br02).       |
|                     |                  | 1711.7 5<br>1722.2 6<br>1783.3 10<br>1838.1 15<br>2323.5 4                                                  | 59 15<br>100 26<br>18<br>18<br>$\leq 43$                                     | 1641.447<br>1630.900<br>1570.279<br>1515.178<br>1029.348                                             | 2 <sup>+</sup><br>1 <sup>+</sup><br>1 <sup>+</sup><br>0 <sup>+</sup><br>0 <sup>+</sup>                                                                                     |                    |                        |                                                                                                                                                                                                                                                                                                                                                          |
| 3398.1              | 13 <sup>-</sup>  | 756.6 <sup>@</sup> 3                                                                                        | 100 <sup>@</sup>                                                             | 2641.57                                                                                              | 11 <sup>-</sup>                                                                                                                                                            | E2                 | 0.01062 15             | $\alpha(\text{K})=0.00829$ 12; $\alpha(\text{L})=0.001774$ 25; $\alpha(\text{M})=0.000424$ 6<br>$\alpha(\text{N})=0.0001060$ 15; $\alpha(\text{O})=1.938\times 10^{-5}$ 27; $\alpha(\text{P})=1.097\times 10^{-6}$ 15<br>Mult.: From DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3\text{n}\gamma)$ .                                                      |
| 3452.98             | (1) <sup>+</sup> | 399.65 5<br>599.93 11<br>755.92 18<br>761.43 12<br>1010.2 5<br>1722.2 6<br>1811.2 4<br>1822.3 7<br>2423.7 7 | 0.49 20<br>1.1 5<br>2.2 10<br>7 3<br>10<br>100<br>37 7<br>$\leq 26$<br>39 12 | 3053.32<br>2853.05<br>2697.137<br>2691.59<br>2442.7?<br>1730.929<br>1641.447<br>1630.900<br>1029.348 | 1 <sup>+</sup><br>(1,2) <sup>+</sup><br>(1,2) <sup>+</sup><br>(1,2) <sup>+</sup><br>1 <sup>-</sup><br>2 <sup>+</sup><br>2 <sup>+</sup><br>1 <sup>+</sup><br>0 <sup>+</sup> |                    |                        |                                                                                                                                                                                                                                                                                                                                                          |
| 3492.45             | 1 <sup>+</sup>   | 532.53 6<br>644.93 5<br>901.69 17<br>2462.6 15                                                              | 5.8 16<br>12.1 21<br>32<br>100                                               | 2959.93<br>2847.51<br>2590.79<br>1029.348                                                            | 1 <sup>-</sup><br>1 <sup>-</sup><br>1 <sup>-</sup><br>0 <sup>+</sup>                                                                                                       |                    |                        |                                                                                                                                                                                                                                                                                                                                                          |

Adopted Levels, Gammas (continued) $\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$                                                                | $I_\gamma^\dagger$                                  | $E_f$                                                                                                                                                                                         | $J_f^\pi$       | Mult. <sup>‡</sup> | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                                                           |
|---------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3611.8              | 14 <sup>+</sup>    | 396.5 @ 3                                                                         | 100 @                                               | 3215.2                                                                                                                                                                                        | 12 <sup>+</sup> | E2                 | 0.0485 7   | $\alpha(\text{K})=0.0327$ 5; $\alpha(\text{L})=0.01199$ 17; $\alpha(\text{M})=0.00299$ 4<br>$\alpha(\text{N})=0.000746$ 11; $\alpha(\text{O})=0.0001309$ 19; $\alpha(\text{P})=4.29\times 10^{-6}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.046$ 7 (1977Gu05) and DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                      |
| 3655.06             | (1) <sup>+</sup>   | 468.73 3<br>860.6 2<br>1163.5 3                                                   | 5.8 16<br>$\leq 9.8$<br>56 12                       | 3186.34 1 <sup>+</sup><br>2794.16 (1,2) <sup>+</sup><br>2491.430 (2) <sup>+</sup>                                                                                                             |                 | (M1+E2)            | 0.0074 29  | $\alpha(\text{K})=0.0061$ 25; $\alpha(\text{L})=1.0\times 10^{-3}$ 4; $\alpha(\text{M})=2.4\times 10^{-4}$ 8<br>$\alpha(\text{N})=5.9\times 10^{-5}$ 21; $\alpha(\text{O})=1.1\times 10^{-5}$ 4; $\alpha(\text{P})=8.3\times 10^{-7}$ 35;<br>$\alpha(\text{IPF})=2.2\times 10^{-6}$ 6<br>Mult.: $\alpha(\text{K})_{\text{exp}}=0.0078$ (1974Br02). |
|                     |                    | 1192.9 6<br>1538.2 5<br>1681.1 15<br>1771.9 7<br>1879.3 3<br>2139.7 3<br>2625.5 7 | 16<br>40 12<br>38<br>58 24<br>24<br>100 20<br>52 16 | 2461.83 (1 <sup>+</sup> )<br>2116.549 0 <sup>+</sup><br>1974.339 (3) <sup>+</sup><br>1882.861 2 <sup>+</sup><br>1775.566 3 <sup>+</sup><br>1515.178 0 <sup>+</sup><br>1029.348 0 <sup>+</sup> |                 |                    |            |                                                                                                                                                                                                                                                                                                                                                    |
| 3673.0              | 14 <sup>+</sup>    | 457.8 @ 3                                                                         | 100 @                                               | 3215.2                                                                                                                                                                                        | 12 <sup>+</sup> | E2                 | 0.0335 5   | $\alpha(\text{K})=0.02363$ 33; $\alpha(\text{L})=0.00746$ 11; $\alpha(\text{M})=0.001844$ 26<br>$\alpha(\text{N})=0.000460$ 7; $\alpha(\text{O})=8.15\times 10^{-5}$ 12; $\alpha(\text{P})=3.13\times 10^{-6}$ 4<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                                 |
| 3872.9              | (14 <sup>+</sup> ) | 261.1 @ 3                                                                         | 100 @ 12                                            | 3611.8                                                                                                                                                                                        | 14 <sup>+</sup> | (M1)               | 0.528 8    | $\alpha(\text{K})=0.433$ 6; $\alpha(\text{L})=0.0725$ 10; $\alpha(\text{M})=0.01686$ 24<br>$\alpha(\text{N})=0.00423$ 6; $\alpha(\text{O})=0.000800$ 11; $\alpha(\text{P})=6.13\times 10^{-5}$ 9<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                                                 |
|                     |                    | 474.8 @ 5                                                                         | 18 @ 4                                              | 3398.1                                                                                                                                                                                        | 13 <sup>-</sup> | (E1)               | 0.00993 14 | $\alpha(\text{K})=0.00823$ 12; $\alpha(\text{L})=0.001302$ 18; $\alpha(\text{M})=0.000300$ 4<br>$\alpha(\text{N})=7.49\times 10^{-5}$ 11; $\alpha(\text{O})=1.392\times 10^{-5}$ 20; $\alpha(\text{P})=9.64\times 10^{-7}$ 14<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                    |
| 4025.3              | 14 <sup>-</sup>    | 902.3 @ 5                                                                         | 100 @                                               | 3123.0                                                                                                                                                                                        | 12 <sup>-</sup> | E2                 | 0.00740 10 | $\alpha(\text{K})=0.00589$ 8; $\alpha(\text{L})=0.001152$ 16; $\alpha(\text{M})=0.000273$ 4<br>$\alpha(\text{N})=6.82\times 10^{-5}$ 10; $\alpha(\text{O})=1.258\times 10^{-5}$ 18; $\alpha(\text{P})=7.76\times 10^{-7}$ 11<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                     |
| 4094.6              | (15)               | 221.7 @ 5<br>482.9 @ 5                                                            | 18 @ 7<br>100 @ 15                                  | 3872.9 (14 <sup>+</sup> )<br>3611.8 14 <sup>+</sup>                                                                                                                                           |                 |                    |            |                                                                                                                                                                                                                                                                                                                                                    |
| 4196.0              | 16 <sup>+</sup>    | 584.2 @ 3                                                                         | 100 @ 8                                             | 3611.8                                                                                                                                                                                        | 14 <sup>+</sup> | E2                 | 0.01868 26 | $\alpha(\text{K})=0.01400$ 20; $\alpha(\text{L})=0.00356$ 5; $\alpha(\text{M})=0.000867$ 12<br>$\alpha(\text{N})=0.0002163$ 30; $\alpha(\text{O})=3.89\times 10^{-5}$ 5; $\alpha(\text{P})=1.858\times 10^{-6}$ 26<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                               |
| 4296.6              | 16 <sup>+</sup>    | 423.7 @ 5<br>684.9 @ 3                                                            | 15 @ 3<br>100 @ 16                                  | 3872.9 (14 <sup>+</sup> )<br>3611.8 14 <sup>+</sup>                                                                                                                                           |                 | E2                 | 0.01312 18 | $\alpha(\text{K})=0.01011$ 14; $\alpha(\text{L})=0.002298$ 32; $\alpha(\text{M})=0.000553$ 8<br>$\alpha(\text{N})=0.0001382$ 19; $\alpha(\text{O})=2.512\times 10^{-5}$ 35; $\alpha(\text{P})=1.340\times 10^{-6}$ 19<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .                                                            |

**Adopted Levels, Gammas (continued)**

$\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$             | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$                     | $J_f^\pi$       | Mult. <sup>‡</sup> | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                                      |
|---------------------|-----------------------|--------------------|--------------------|---------------------------|-----------------|--------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4443.9              | 15 <sup>-</sup>       | 1045.9 @ 3         | 100 @              | 3398.1                    | 13 <sup>-</sup> | E2                 | 0.00553 8  | $\alpha(\text{K})=0.00446$ 6; $\alpha(\text{L})=0.000820$ 11; $\alpha(\text{M})=0.0001930$ 27<br>$\alpha(\text{N})=4.83 \times 10^{-5}$ 7; $\alpha(\text{O})=8.95 \times 10^{-6}$ 13; $\alpha(\text{P})=5.85 \times 10^{-7}$ 8<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).   |
| 4541.1              | 16 <sup>+</sup>       | 345.1 @ 5          | 13 @ 4             | 4196.0                    | 16 <sup>+</sup> | M1                 | 0.247 4    | $\alpha(\text{K})=0.2027$ 29; $\alpha(\text{L})=0.0337$ 5; $\alpha(\text{M})=0.00784$ 11<br>$\alpha(\text{N})=0.001965$ 29; $\alpha(\text{O})=0.000372$ 5; $\alpha(\text{P})=2.86 \times 10^{-5}$ 4<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).                              |
|                     |                       | 446.4 @ 5          | 6 @ 3              | 4094.6 (15)               |                 |                    |            |                                                                                                                                                                                                                                                                                                               |
|                     |                       | 929.2 @ 3          | 100 @ 14           | 3611.8                    | 14 <sup>+</sup> | E2                 | 0.00698 10 | $\alpha(\text{K})=0.00557$ 8; $\alpha(\text{L})=0.001075$ 15; $\alpha(\text{M})=0.000254$ 4<br>$\alpha(\text{N})=6.36 \times 10^{-5}$ 9; $\alpha(\text{O})=1.174 \times 10^{-5}$ 16; $\alpha(\text{P})=7.34 \times 10^{-7}$ 10<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).   |
| 4919.1              | 18 <sup>+</sup>       | 622.6 @ 5          | 25 @ 5             | 4296.6                    | 16 <sup>+</sup> | E2                 | 0.01618 23 | $\alpha(\text{K})=0.01227$ 17; $\alpha(\text{L})=0.00298$ 4; $\alpha(\text{M})=0.000721$ 10<br>$\alpha(\text{N})=0.0001801$ 26; $\alpha(\text{O})=3.25 \times 10^{-5}$ 5; $\alpha(\text{P})=1.628 \times 10^{-6}$ 23<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).             |
|                     |                       | 723.0 @ 3          | 100 @ 8            | 4196.0                    | 16 <sup>+</sup> | E2                 | 0.01169 16 | $\alpha(\text{K})=0.00907$ 13; $\alpha(\text{L})=0.001993$ 28; $\alpha(\text{M})=0.000478$ 7<br>$\alpha(\text{N})=0.0001195$ 17; $\alpha(\text{O})=2.179 \times 10^{-5}$ 31; $\alpha(\text{P})=1.201 \times 10^{-6}$ 17<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).          |
| 4928.2              | (17,18 <sup>+</sup> ) | 631.6 @ 5          | 100 @              | 4296.6                    | 16 <sup>+</sup> |                    |            |                                                                                                                                                                                                                                                                                                               |
| 5181.6              | 18 <sup>+</sup>       | 885.0 @ 5          | 100 @ 22           | 4296.6                    | 16 <sup>+</sup> | E2                 | 0.00769 11 | $\alpha(\text{K})=0.00612$ 9; $\alpha(\text{L})=0.001206$ 17; $\alpha(\text{M})=0.000286$ 4<br>$\alpha(\text{N})=7.15 \times 10^{-5}$ 10; $\alpha(\text{O})=1.317 \times 10^{-5}$ 19; $\alpha(\text{P})=8.06 \times 10^{-7}$ 11<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).  |
|                     |                       | 985.7 @ 5          | 93 @ 19            | 4196.0                    | 16 <sup>+</sup> | E2                 | 0.00621 9  | $\alpha(\text{K})=0.00498$ 7; $\alpha(\text{L})=0.000938$ 13; $\alpha(\text{M})=0.0002213$ 31<br>$\alpha(\text{N})=5.53 \times 10^{-5}$ 8; $\alpha(\text{O})=1.024 \times 10^{-5}$ 14; $\alpha(\text{P})=6.55 \times 10^{-7}$ 9<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).  |
| 5260.0              | (17 <sup>-</sup> )    | 718.7 @ 5          | 100 @ 17           | 4541.1                    | 16 <sup>+</sup> | (E1)               | 0.00427 6  | $\alpha(\text{K})=0.00357$ 5; $\alpha(\text{L})=0.000545$ 8; $\alpha(\text{M})=0.0001253$ 18<br>$\alpha(\text{N})=3.13 \times 10^{-5}$ 4; $\alpha(\text{O})=5.86 \times 10^{-6}$ 8; $\alpha(\text{P})=4.27 \times 10^{-7}$ 6<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).     |
|                     |                       | 816.4 @ 5          | 13 @ 6             | 4443.9                    | 15 <sup>-</sup> |                    |            |                                                                                                                                                                                                                                                                                                               |
| 5344.2              | 18 <sup>+</sup>       | 803.1 @ 5          | 100 @              | 4541.1                    | 16 <sup>+</sup> | E2                 | 0.00938 13 | $\alpha(\text{K})=0.00738$ 10; $\alpha(\text{L})=0.001527$ 22; $\alpha(\text{M})=0.000364$ 5<br>$\alpha(\text{N})=9.10 \times 10^{-5}$ 13; $\alpha(\text{O})=1.669 \times 10^{-5}$ 24; $\alpha(\text{P})=9.75 \times 10^{-7}$ 14<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ). |
| 5568.3              | (19 <sup>-</sup> )    | 224.0 @ 5          | 65 @ 20            | 5344.2                    | 18 <sup>+</sup> | (E1)               | 0.0560 8   | $\alpha(\text{K})=0.0458$ 7; $\alpha(\text{L})=0.00780$ 12; $\alpha(\text{M})=0.001812$ 27<br>$\alpha(\text{N})=0.000450$ 7; $\alpha(\text{O})=8.21 \times 10^{-5}$ 12; $\alpha(\text{P})=4.99 \times 10^{-6}$ 7<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).                 |
|                     |                       | 308.3 @ 5          | 100 @ 25           | 5260.0 (17 <sup>-</sup> ) |                 | E2                 | 0.0982 15  | $\alpha(\text{K})=0.0590$ 9; $\alpha(\text{L})=0.0295$ 5; $\alpha(\text{M})=0.00747$ 11<br>$\alpha(\text{N})=0.001859$ 28; $\alpha(\text{O})=0.000321$ 5; $\alpha(\text{P})=7.62 \times 10^{-6}$ 11<br>Mult.: DCO in <sup>198</sup> Pt( <sup>9</sup> Be, $\alpha$ 3n $\gamma$ ).                              |

**Adopted Levels, Gammas (continued)** $\gamma(^{200}\text{Hg})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$ | $I_\gamma^\dagger$     | $E_f$  | $J_f^\pi$          | Mult. <sup>‡</sup> | $\alpha^d$ | Comments                                                                                                                                                                                                                                                                                      |
|---------------------|--------------------|--------------------|------------------------|--------|--------------------|--------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5568.3              | (19 <sup>-</sup> ) | 386.8 @ 5          | 10 @ 5                 | 5181.6 | 18 <sup>+</sup>    | (E1)               | 0.01552 22 | $\alpha(\text{K})=0.01283$ 18; $\alpha(\text{L})=0.002067$ 30; $\alpha(\text{M})=0.000478$ 7<br>$\alpha(\text{N})=0.0001190$ 17; $\alpha(\text{O})=2.203\times 10^{-5}$ 32; $\alpha(\text{P})=1.480\times 10^{-6}$ 21<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .       |
|                     |                    | 649.1 @ 5          | 20 @ 8                 | 4919.1 | 18 <sup>+</sup>    | (E1)               | 0.00522 7  | $\alpha(\text{K})=0.00435$ 6; $\alpha(\text{L})=0.000670$ 9; $\alpha(\text{M})=0.0001542$ 22<br>$\alpha(\text{N})=3.85\times 10^{-5}$ 5; $\alpha(\text{O})=7.19\times 10^{-6}$ 10; $\alpha(\text{P})=5.18\times 10^{-7}$ 7<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .  |
| 5915.8              | 20 <sup>+</sup>    | 996.7 @ 5          | 100 @                  | 4919.1 | 18 <sup>+</sup>    | E2                 | 0.00608 9  | $\alpha(\text{K})=0.00488$ 7; $\alpha(\text{L})=0.000914$ 13; $\alpha(\text{M})=0.0002157$ 30<br>$\alpha(\text{N})=5.39\times 10^{-5}$ 8; $\alpha(\text{O})=9.98\times 10^{-6}$ 14; $\alpha(\text{P})=6.41\times 10^{-7}$ 9<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ . |
| 6162.2              | (21 <sup>-</sup> ) | 246.4 @ 5          | 50 @ 25                | 5915.8 | 20 <sup>+</sup>    | (E1)               | 0.0444 7   | $\alpha(\text{K})=0.0364$ 5; $\alpha(\text{L})=0.00613$ 9; $\alpha(\text{M})=0.001423$ 21<br>$\alpha(\text{N})=0.000354$ 5; $\alpha(\text{O})=6.47\times 10^{-5}$ 10; $\alpha(\text{P})=4.01\times 10^{-6}$ 6<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .               |
|                     |                    | 593.9 @ 5          | 10×10 <sup>1</sup> @ 4 | 5568.3 | (19 <sup>-</sup> ) | E2                 | 0.01800 25 | $\alpha(\text{K})=0.01352$ 19; $\alpha(\text{L})=0.00340$ 5; $\alpha(\text{M})=0.000826$ 12<br>$\alpha(\text{N})=0.0002062$ 29; $\alpha(\text{O})=3.72\times 10^{-5}$ 5; $\alpha(\text{P})=1.795\times 10^{-6}$ 25<br>Mult.: DCO in $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .          |

<sup>†</sup> From  $^{199}\text{Hg}(n,\gamma)$  E=th:secondary, unless otherwise stated.

<sup>‡</sup> From  $^{199}\text{Hg}(n,\gamma)$  E=th:secondary and  $^{200}\text{Tl}$   $\varepsilon$  decay, based on  $\alpha(\text{K})_{\text{exp}}$  and  $\gamma\gamma(\theta)$ , unless otherwise stated.

# From  $^{200}\text{Tl}$   $\varepsilon$  decay.

@ From  $^{198}\text{Pt}(^9\text{Be},\alpha 3n\gamma)$ .

& From  $^{198}\text{Pt}(\alpha,2n\gamma)$ .

<sup>a</sup> From  $^{200}\text{Au}$   $\beta^-$  decay (18.7 h).

<sup>b</sup> From  $^{200}\text{Hg}(n,n'\gamma)$ .

<sup>c</sup> From  $^{200}\text{Au}$   $\beta^-$  decay (48.4 min).

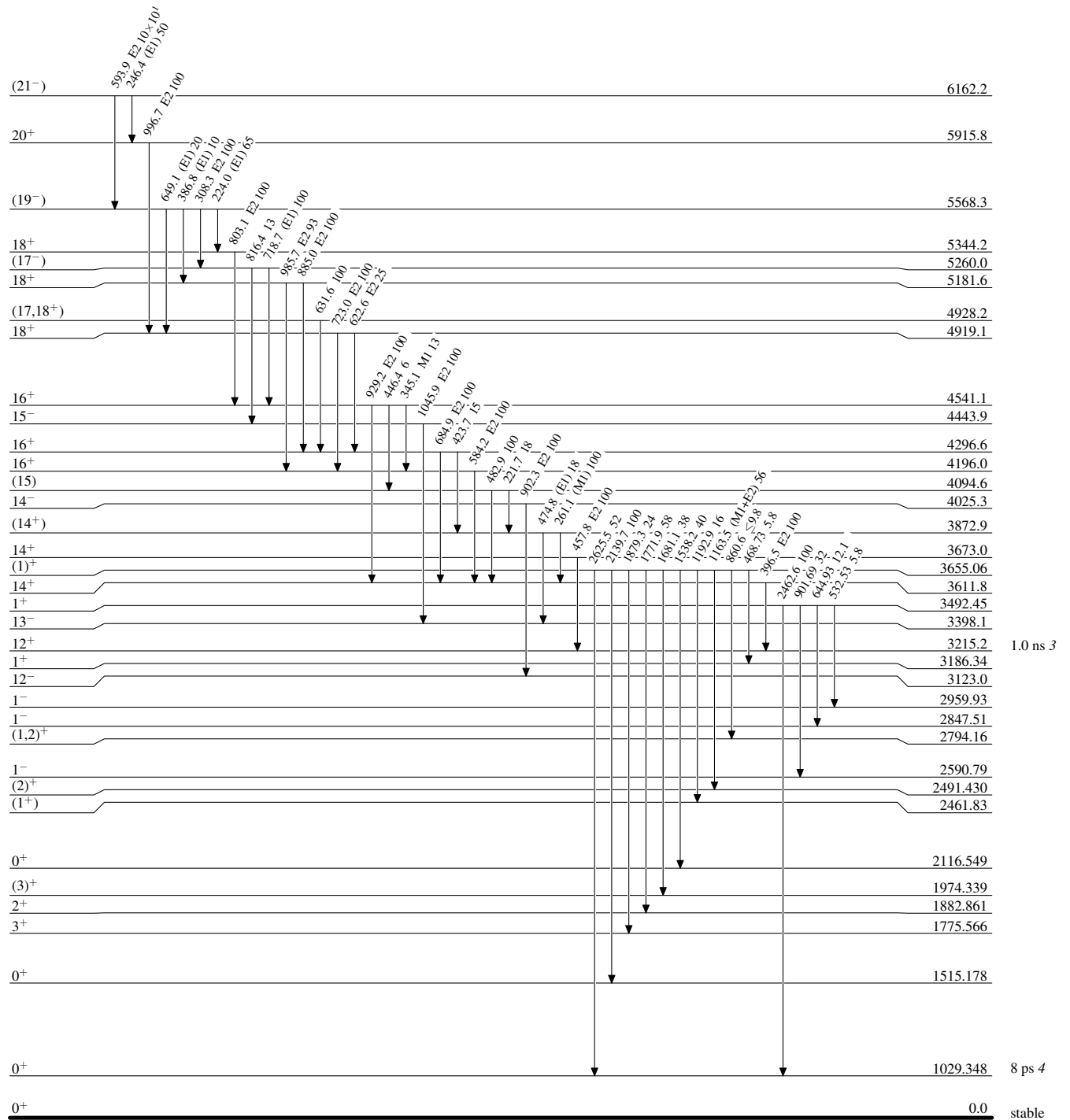
<sup>d</sup> [Additional information 1.](#)

<sup>e</sup> Multiply placed with undivided intensity.

<sup>f</sup> Placement of transition in the level scheme is uncertain.

**Adopted Levels, Gammas****Level Scheme**

Intensities: Relative photon branching from each level

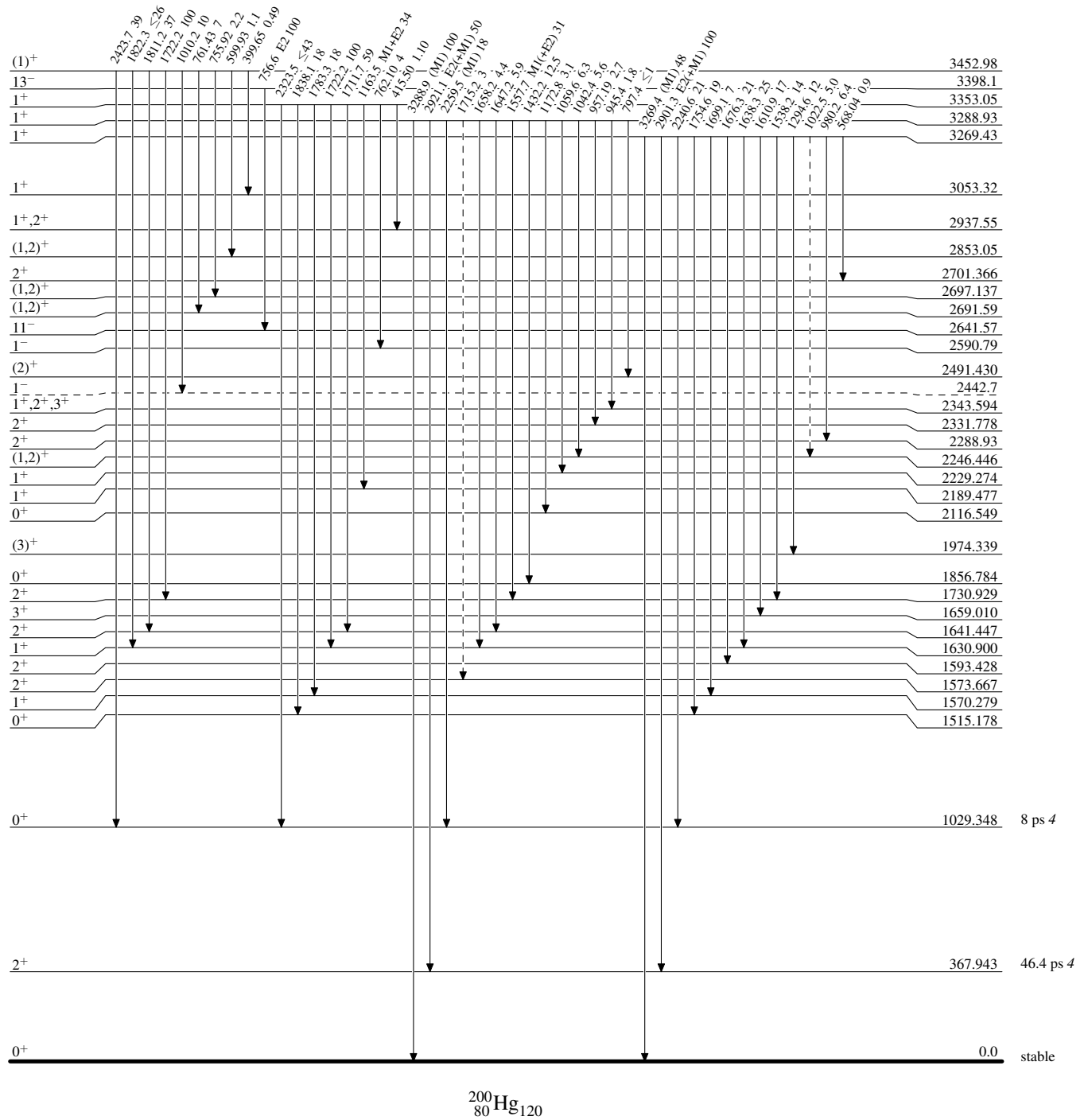


## Adopted Levels, Gammas

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

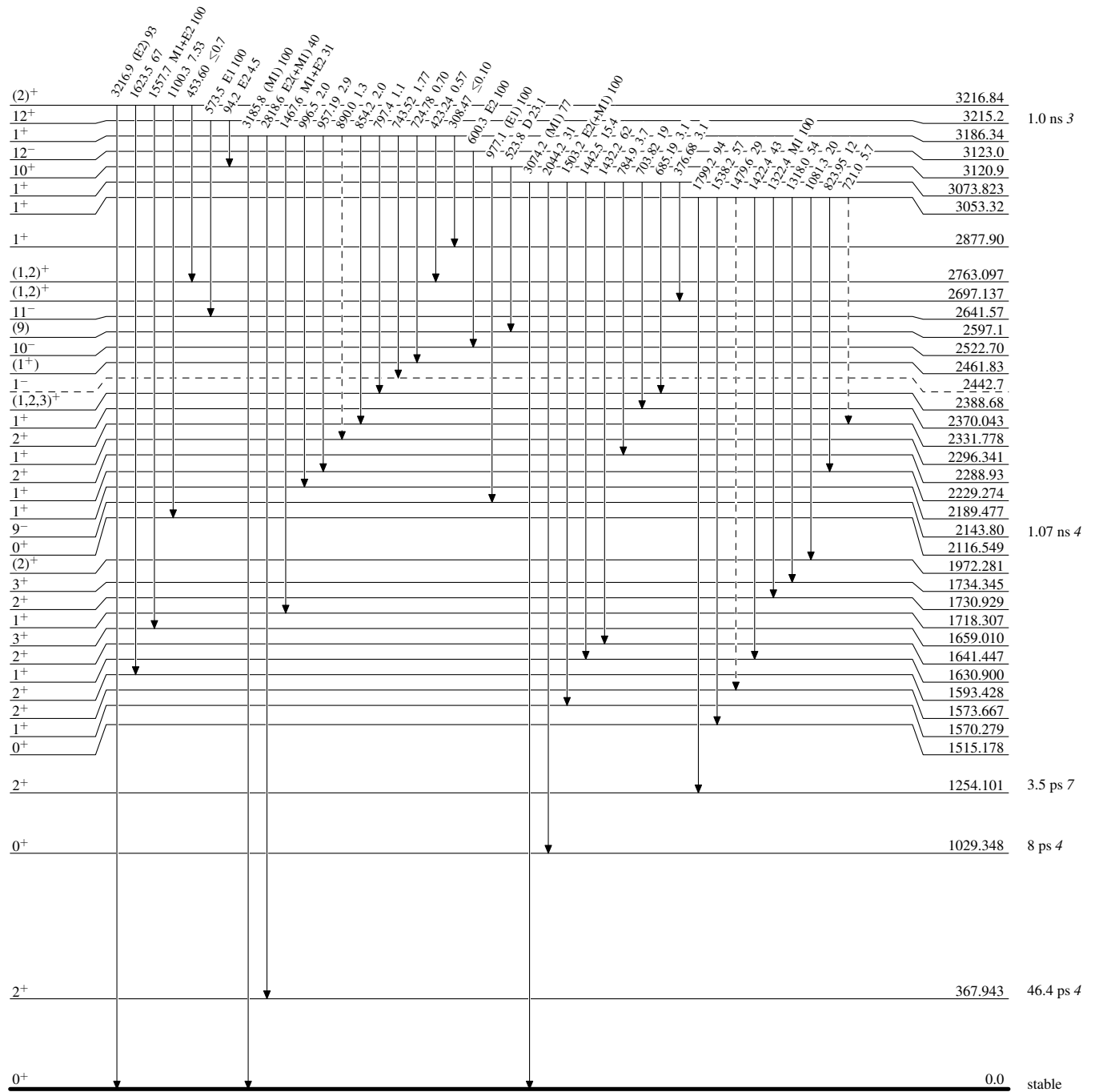
-----►  $\gamma$  Decay (Uncertain)

**Adopted Levels, Gammas**

Legend

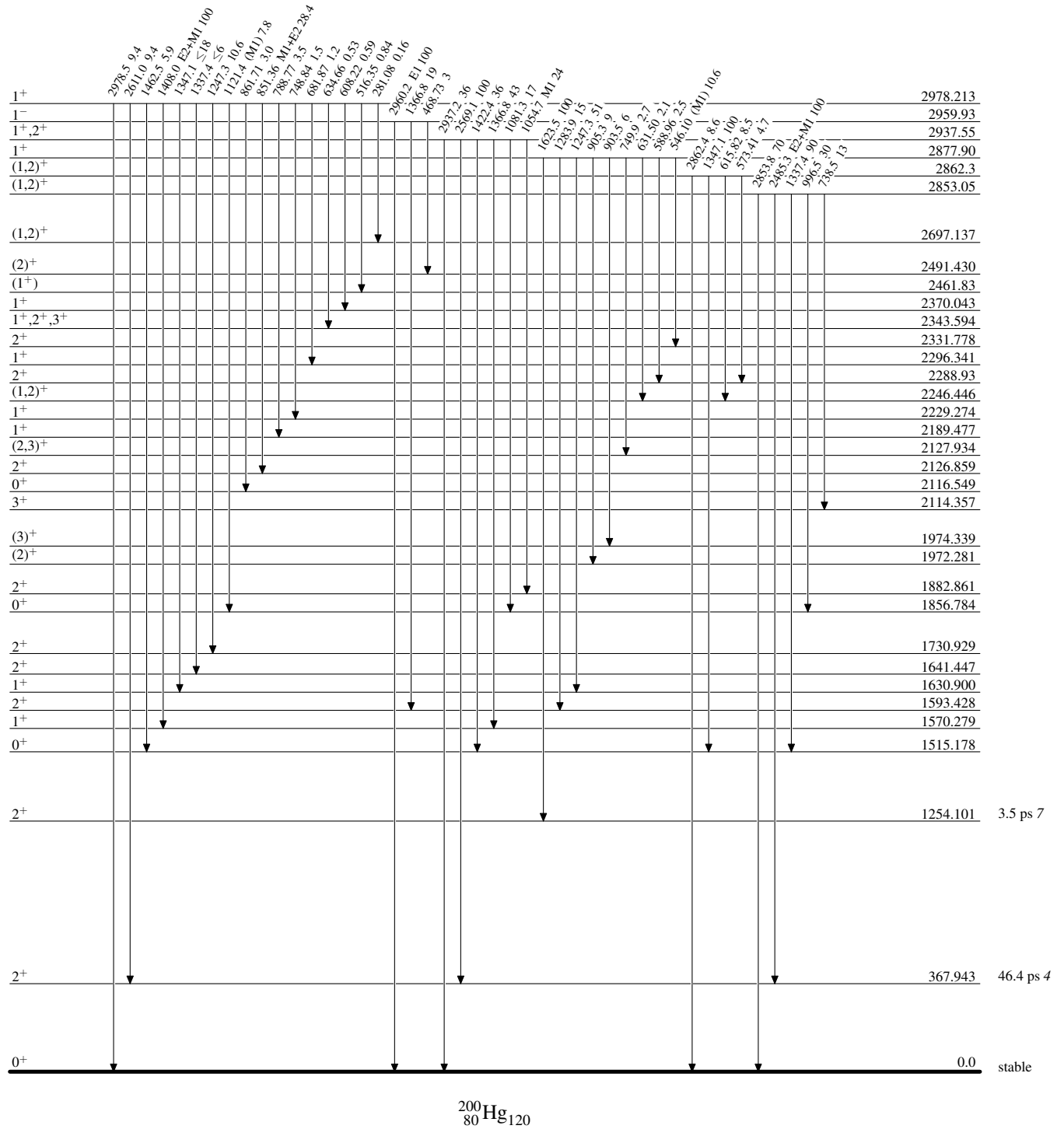
**Level Scheme (continued)**

Intensities: Relative photon branching from each level

-----►  $\gamma$  Decay (Uncertain)

**Adopted Levels, Gammas****Level Scheme (continued)**

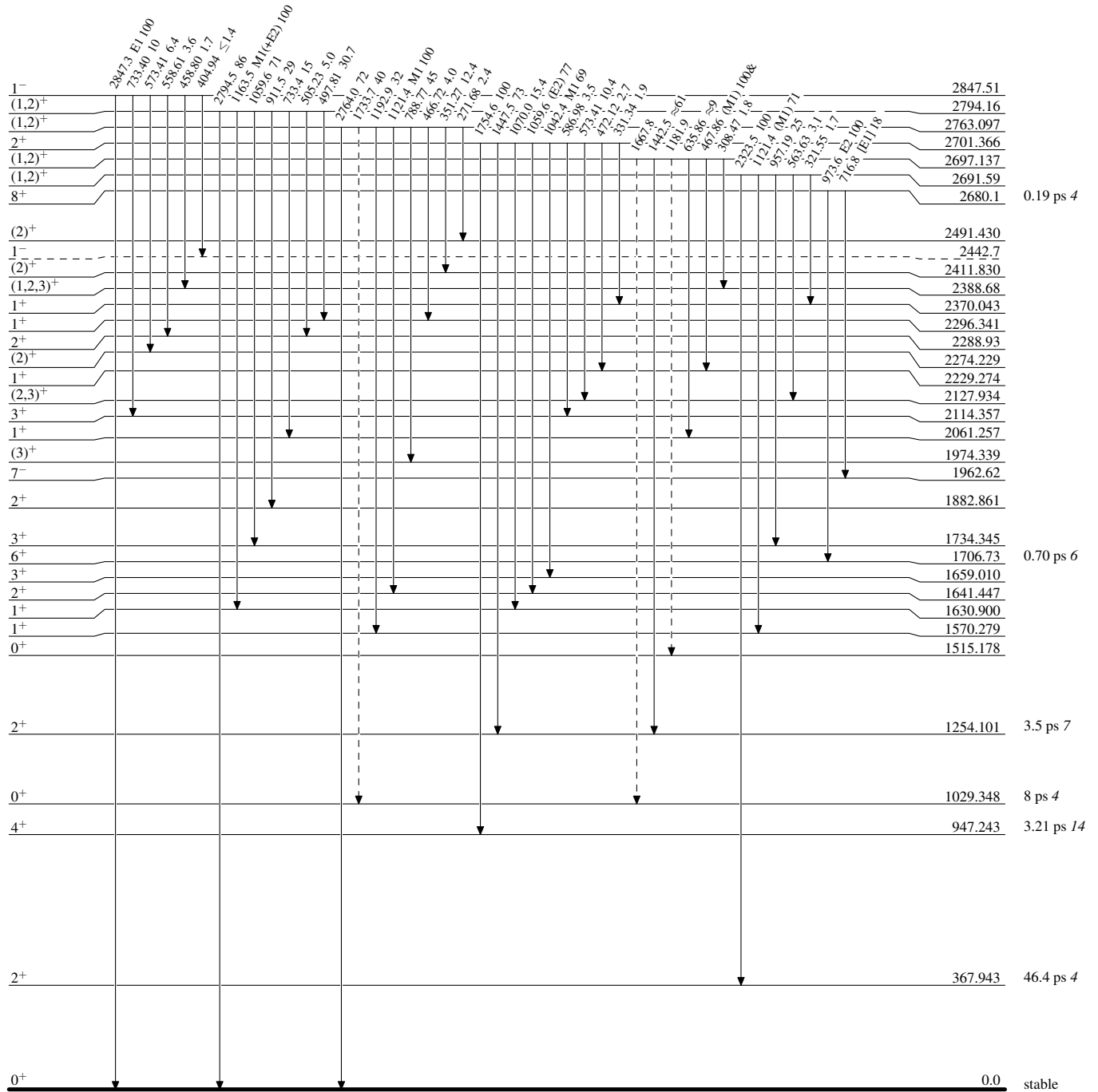
Intensities: Relative photon branching from each level



## Adopted Levels, Gammas

Legend

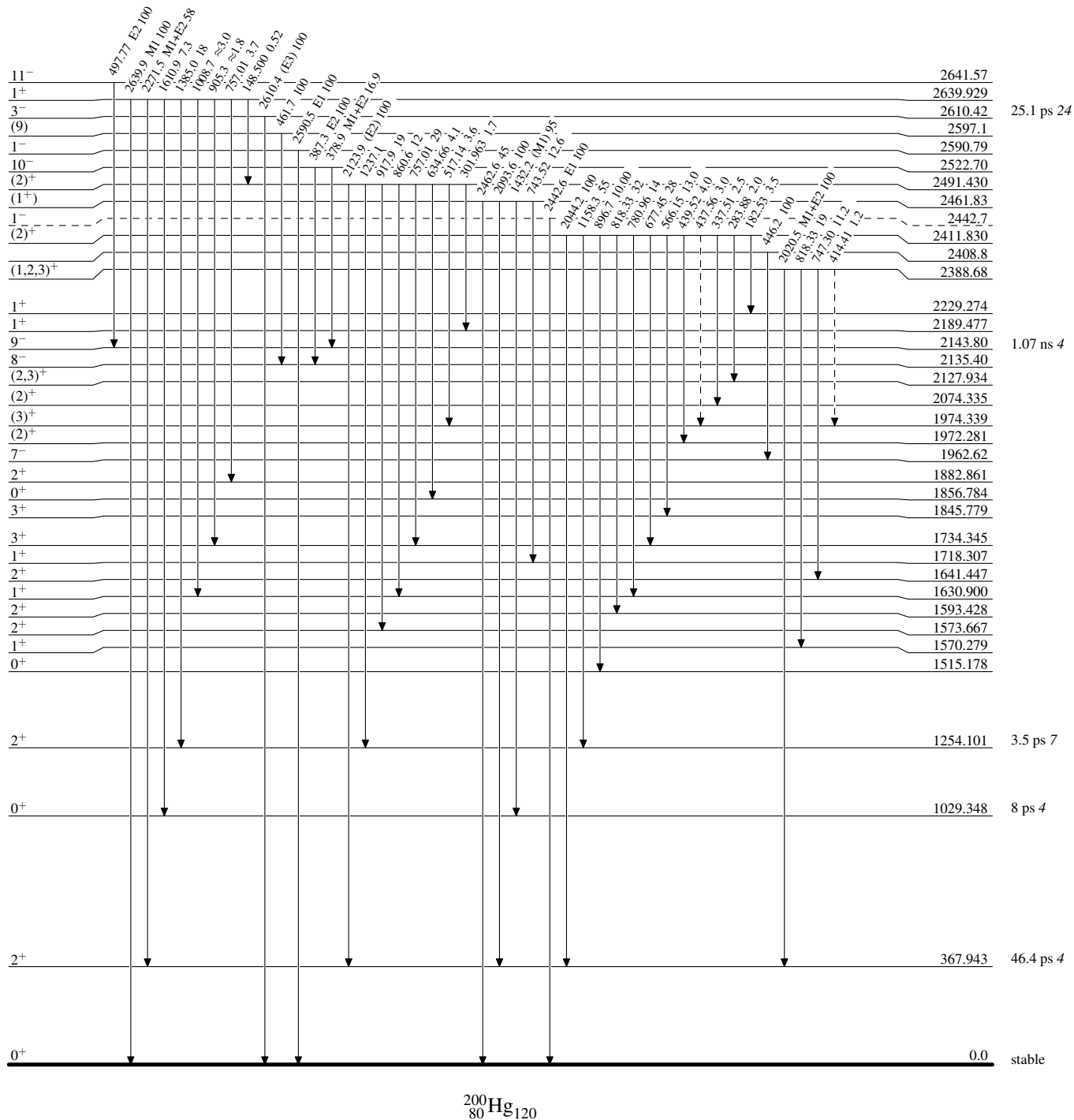
## Level Scheme (continued)

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given-----►  $\gamma$  Decay (Uncertain)

## Adopted Levels, Gammas

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given-----►  $\gamma$  Decay (Uncertain)

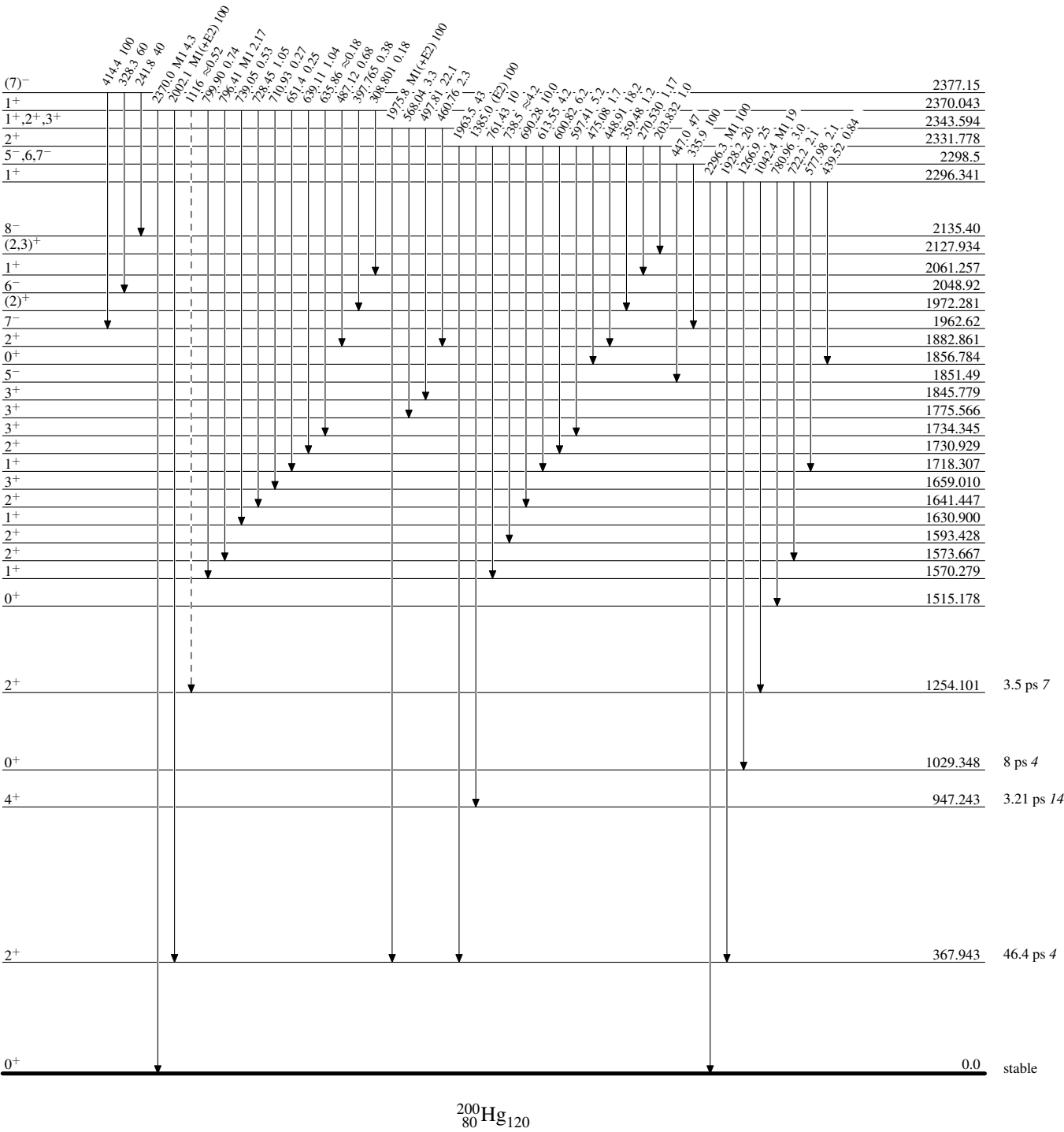
Adopted Levels, Gammas

Legend

Level Scheme (continued)

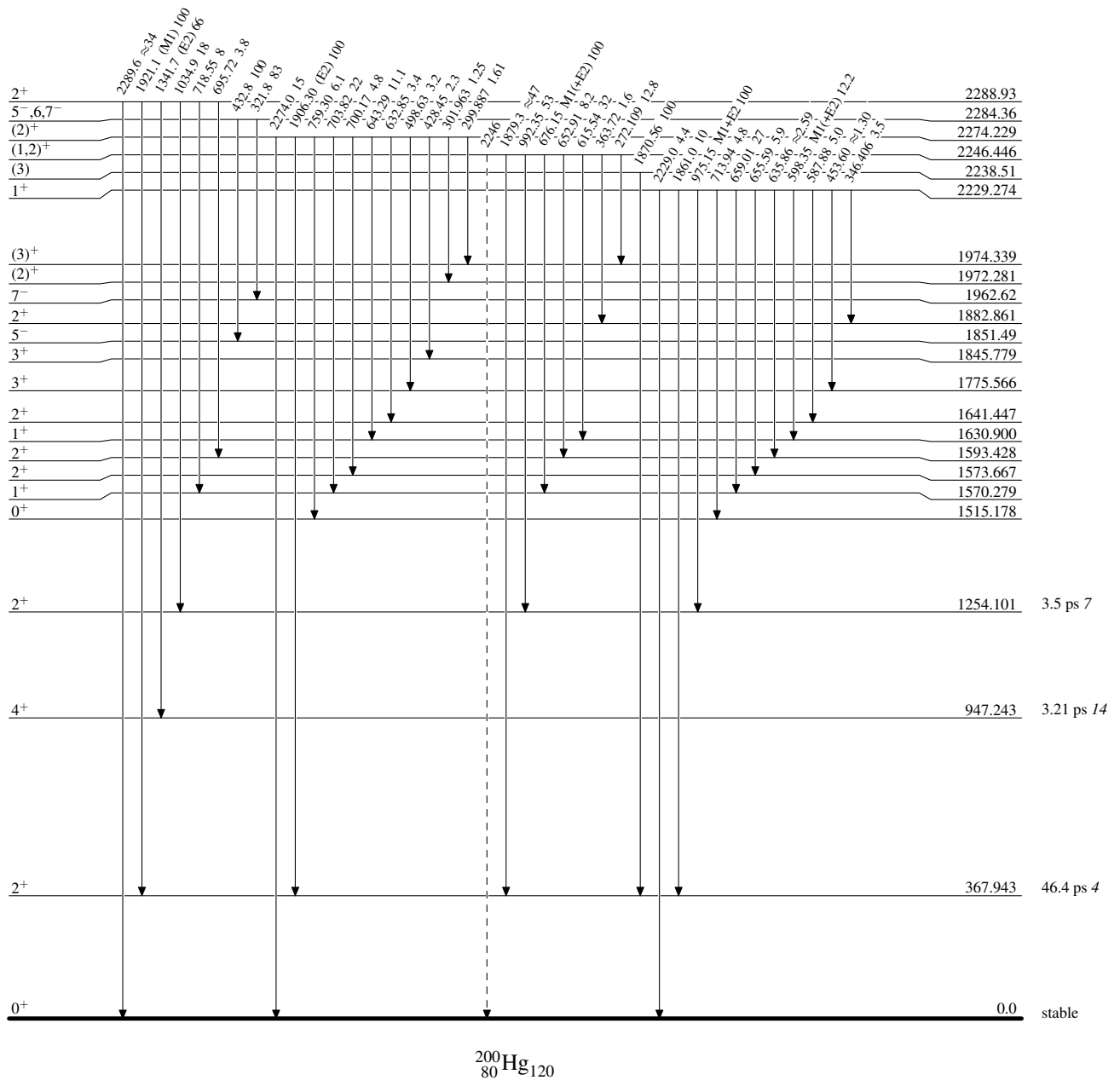
Intensities: Relative photon branching from each level  
& Multiplicity placed: undivided intensity given

-----► γ Decay (Uncertain)



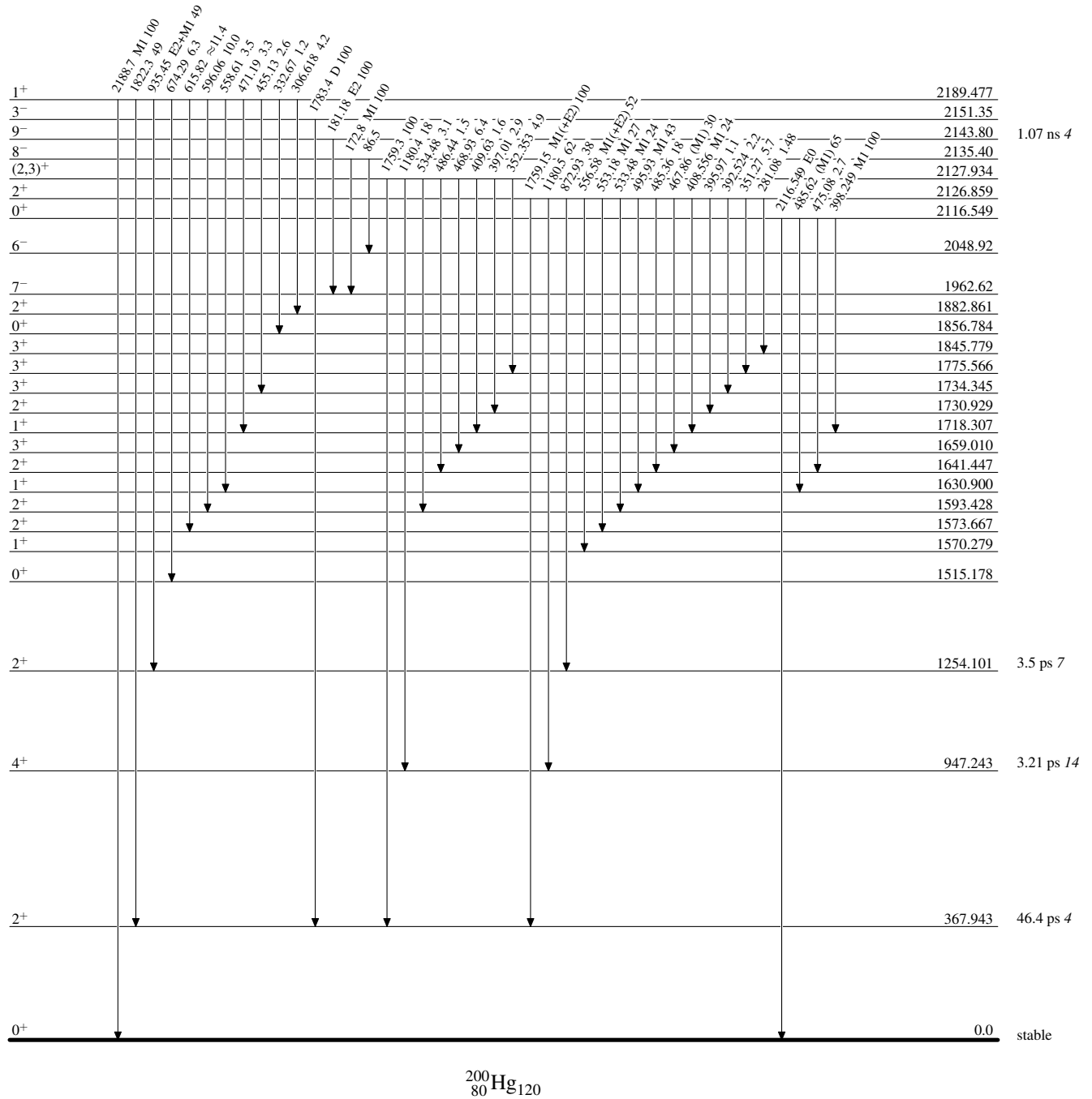
**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given-----►  $\gamma$  Decay (Uncertain)

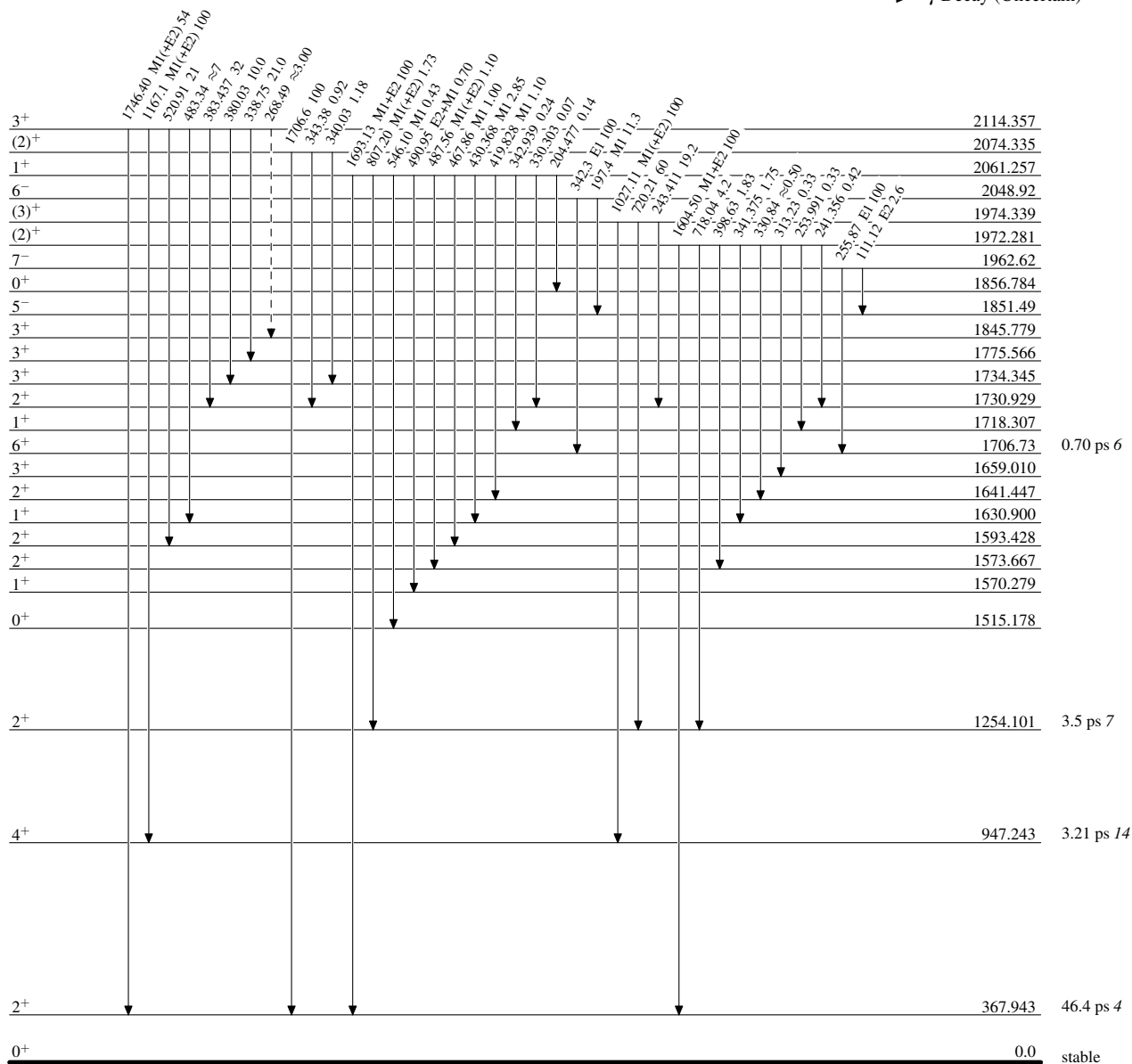
**Adopted Levels, Gammas****Level Scheme (continued)**

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given



Adopted Levels, Gammas

Legend

Level Scheme (continued)Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given-----►  $\gamma$  Decay (Uncertain)

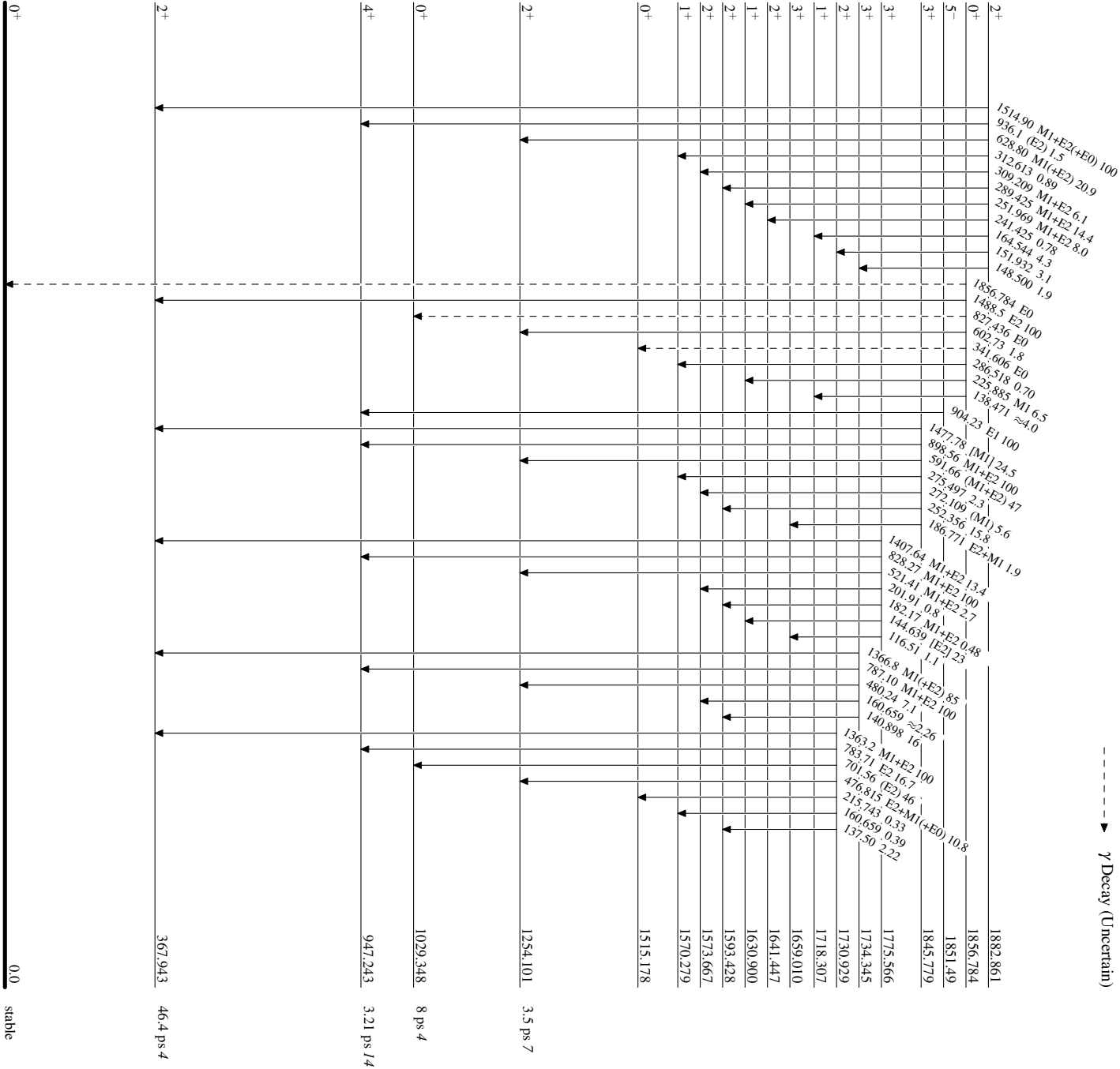
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given

Legend

----->  $\gamma$  Decay (Uncertain)



<sup>200</sup>Hg<sub>120</sub>

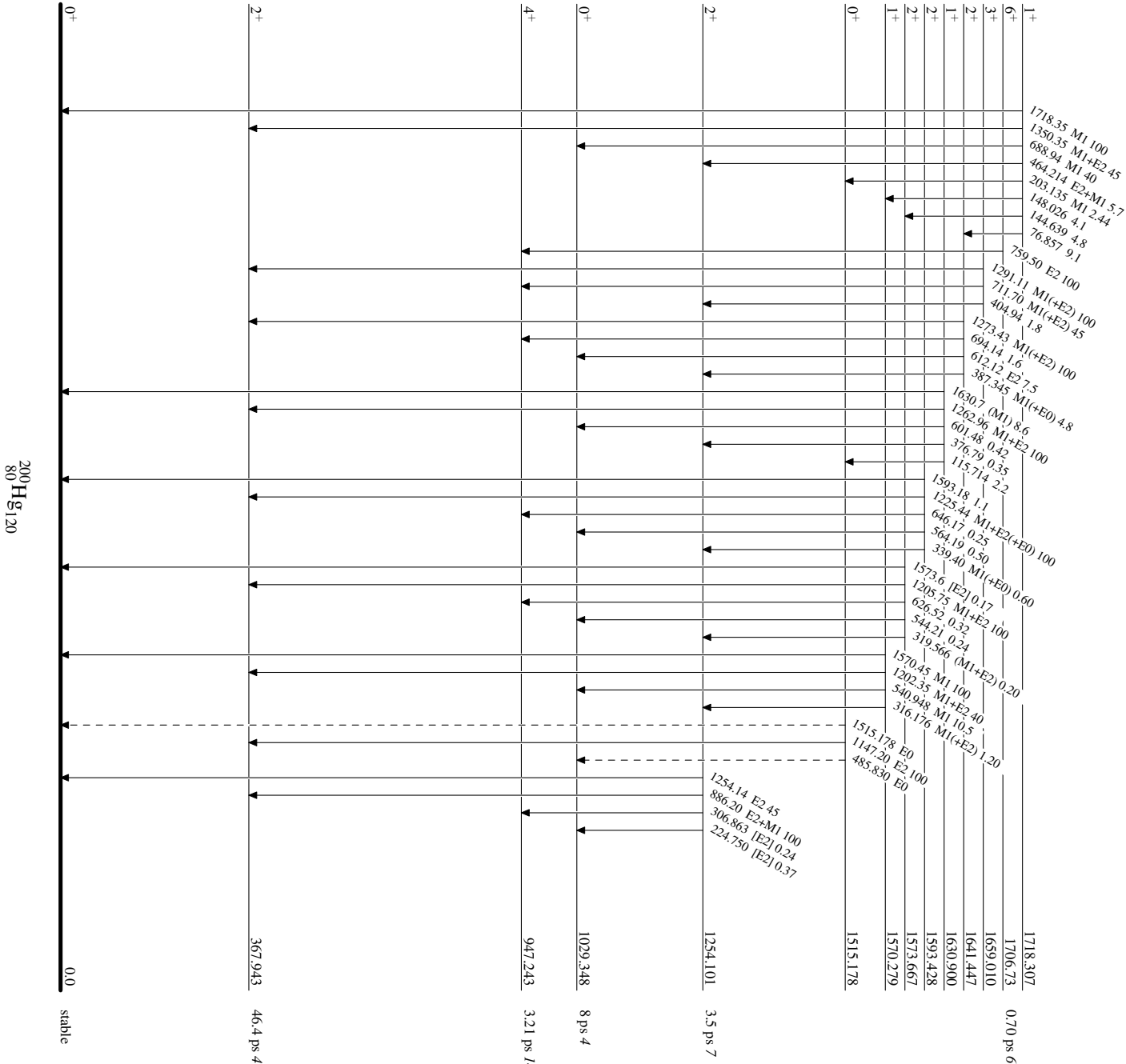
Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given

----->  $\gamma$  Decay (Uncertain)



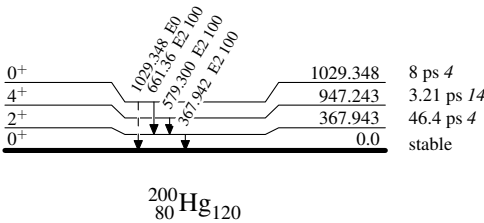
Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level  
& Multiply placed: undivided intensity given

-----►  $\gamma$  Decay (Uncertain)



Adopted Levels, Gammas