Table 16.3 from (1977AJ02): Energy levels of $^{16}\text{Ne}$

<table>
<thead>
<tr>
<th>$E_x$ (MeV ± keV)</th>
<th>$J^\pi; T$</th>
<th>$\tau$ or $\Gamma_{c.m.}$ (keV)</th>
<th>Decay</th>
<th>Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$2^-; 1$</td>
<td>$\tau_{1/2} = 7.13 \pm 0.02$ sec</td>
<td>$\beta^-$</td>
<td>1, 15, 16, 17, 18, 22, 26, 28, 29, 31, 33</td>
</tr>
<tr>
<td>0.1201 ± 0.5</td>
<td>$0^-$</td>
<td>$\tau_m = 7.58 \pm 0.09$ µsec</td>
<td>$\gamma, \beta^-$</td>
<td>1, 15, 17, 22, 28, 31, 33</td>
</tr>
<tr>
<td>0.2970 ± 0.7</td>
<td>$3^-$</td>
<td>$\tau_m = 6.5 \pm 0.5$ psec</td>
<td>$\gamma$</td>
<td>5, 15, 16, 17, 22, 28, 29, 31, 33</td>
</tr>
<tr>
<td>0.3975 ± 0.7</td>
<td>$1^-$</td>
<td>$</td>
<td>g</td>
<td>= 1.83 \pm 0.13$</td>
</tr>
<tr>
<td>3.355 ± 5</td>
<td>$1^+$</td>
<td>$\Gamma = 15 \pm 5$</td>
<td>n</td>
<td>3, 15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>3.519 ± 5</td>
<td>$(2^+)$</td>
<td>3</td>
<td>n</td>
<td>3, 15, 17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>3.960 ± 5</td>
<td>$(3^+)$</td>
<td>≤ 2</td>
<td>n</td>
<td>3, 15, 16, 17, 19, 22, 31</td>
</tr>
<tr>
<td>4.319 ± 5</td>
<td>$1^+$</td>
<td>20 ± 5</td>
<td>n</td>
<td>3, 15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>4.387 ± 6</td>
<td>$1^-$</td>
<td>82 ± 20</td>
<td>n</td>
<td>3, 15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>4.76 ± 50</td>
<td>$1^-$</td>
<td>250 ± 50</td>
<td>n</td>
<td>17, 19, 22</td>
</tr>
<tr>
<td>4.776 ± 10</td>
<td>$2^+$</td>
<td>59 ± 8</td>
<td>n</td>
<td>15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>(4.90 ± 10)</td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>5.050 ± 6</td>
<td>$2^-$</td>
<td>19 ± 6</td>
<td>n</td>
<td>15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>5.130 ± 7</td>
<td>≥ 2</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>5.150 ± 7</td>
<td>$(2, 3)^-$</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 17, 19, 22, 29</td>
</tr>
<tr>
<td>5.232 ± 5</td>
<td>$(2, 3)^+$</td>
<td>≤ 4</td>
<td>n</td>
<td>15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>5.24</td>
<td>$1^+$</td>
<td>260</td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>5.25 ± 70</td>
<td>$2^-$</td>
<td>320 ± 80</td>
<td>n</td>
<td>17, 19, 22</td>
</tr>
<tr>
<td>5.518 ± 6</td>
<td>$(1, 2, 3)^+$</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 17, 19, 22, 31</td>
</tr>
<tr>
<td>5.730 ± 6</td>
<td>$(5^+)$</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 16, 17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>6.009 ± 10</td>
<td>$1^-$</td>
<td>270 ± 30</td>
<td>n</td>
<td>17, 19, 31</td>
</tr>
<tr>
<td>6.168 ± 4</td>
<td>$(2, 3, 4)^-$</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>6.373 ± 6</td>
<td>$(3^-)$</td>
<td>30 ± 6</td>
<td>n</td>
<td>17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>6.426 ± 7</td>
<td></td>
<td>300 ± 30</td>
<td></td>
<td>17, 22</td>
</tr>
<tr>
<td>6.513 ± 6</td>
<td>$(0, 1, 2)^+$</td>
<td>34 ± 6</td>
<td>n</td>
<td>17, 19, 22, 31</td>
</tr>
<tr>
<td>6.613 ± 6</td>
<td></td>
<td>≤ 7 ± 4</td>
<td></td>
<td>17, 22, 31</td>
</tr>
<tr>
<td>6.848 ± 6</td>
<td></td>
<td>≤ 7 ± 4</td>
<td></td>
<td>15, 17, 22, 31</td>
</tr>
<tr>
<td>(6.84)</td>
<td>≥ 2</td>
<td>&gt; 140</td>
<td>n</td>
<td>19</td>
</tr>
</tbody>
</table>

1
Table 16.3 from (1977AJ02): Energy levels of $^{16}$N (continued)

<table>
<thead>
<tr>
<th>$E_x$ (MeV ± keV)</th>
<th>$J^\pi; T$</th>
<th>$\tau$ or $\Gamma_{c.m.}$ (keV)</th>
<th>Decay</th>
<th>Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.02 ± 20</td>
<td>≥ 1</td>
<td>22 ± 5</td>
<td>n</td>
<td>17, 19, 22, 31</td>
</tr>
<tr>
<td>7.134 ± 7</td>
<td></td>
<td>≤ 7 ± 4</td>
<td></td>
<td>15, 17, 22, 31</td>
</tr>
<tr>
<td>7.250 ± 7</td>
<td>≥ 2</td>
<td>17 ± 5</td>
<td>n</td>
<td>17, 19, 22, 31</td>
</tr>
<tr>
<td>7.573 ± 6</td>
<td>≥ 3</td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 16, 17, 19, 22, 31</td>
</tr>
<tr>
<td>7.637 ± 5</td>
<td></td>
<td>≤ 7 ± 4</td>
<td>15, 17, 22, 31</td>
<td></td>
</tr>
<tr>
<td>7.675 ± 5</td>
<td></td>
<td>≤ 7 ± 4</td>
<td>n</td>
<td>15, 17, 19, 22, 29, 31</td>
</tr>
<tr>
<td>7.877 ± 9</td>
<td>≥ 4</td>
<td>100 ± 15</td>
<td>n</td>
<td>17, 19, 22, 31</td>
</tr>
<tr>
<td>8.048 ± 9</td>
<td></td>
<td>85 ± 15</td>
<td>n</td>
<td>17, 19, 31</td>
</tr>
<tr>
<td>8.182 ± 9</td>
<td></td>
<td>28 ± 8</td>
<td>15, 17, 31</td>
<td></td>
</tr>
<tr>
<td>8.282 ± 8</td>
<td></td>
<td>24 ± 8</td>
<td>17, 31</td>
<td></td>
</tr>
<tr>
<td>8.365 ± 8</td>
<td>≥ 1</td>
<td>18 ± 8</td>
<td>n</td>
<td>17, 19, 31</td>
</tr>
<tr>
<td>8.49 ± 30</td>
<td>≥ 1</td>
<td>≤ 50</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>8.72</td>
<td>≥ 1</td>
<td>40</td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>8.819 ± 15</td>
<td></td>
<td>≤ 50</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>9.035 ± 15</td>
<td></td>
<td>≤ 50</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>9.16 ± 30</td>
<td>≥ 2</td>
<td>100</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>9.34 ± 30</td>
<td></td>
<td>≤ 50</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>9.459 ± 15</td>
<td>≥ 2</td>
<td>100</td>
<td>n</td>
<td>19, 29, 31</td>
</tr>
<tr>
<td>9.760 ± 10</td>
<td>$T = 1$</td>
<td>15 ± 8</td>
<td>15, 31</td>
<td></td>
</tr>
<tr>
<td>9.813 ± 10</td>
<td>$T = 1$</td>
<td></td>
<td>15, 31</td>
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</tr>
<tr>
<td>9.928 ± 7</td>
<td>$0^+; T = 2$</td>
<td>&lt; 12</td>
<td>15, 30</td>
<td></td>
</tr>
<tr>
<td>10.055 ± 15</td>
<td>≥ 3</td>
<td>30</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>10.27</td>
<td>≥ 2</td>
<td>165</td>
<td>n</td>
<td>19, 31</td>
</tr>
<tr>
<td>10.71</td>
<td>≥ 2</td>
<td>120</td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>11.49</td>
<td>≥ 3</td>
<td></td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>11.62</td>
<td>≥ 3</td>
<td>220</td>
<td>n, d</td>
<td>9, 19</td>
</tr>
<tr>
<td>11.701 ± 7</td>
<td>$1^-, 2^+; T = 2$</td>
<td>&lt; 12</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>(11.92)</td>
<td></td>
<td></td>
<td>n, d</td>
<td>9</td>
</tr>
<tr>
<td>(12.09)</td>
<td></td>
<td></td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>12.26</td>
<td></td>
<td>290</td>
<td>n, p, d</td>
<td>9, 10</td>
</tr>
<tr>
<td>(12.46)</td>
<td></td>
<td></td>
<td>n</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 16.3 from (1977AJ02): Energy levels of $^{16}$N (continued)

<table>
<thead>
<tr>
<th>$E_x$ (MeV ± keV)</th>
<th>$J^\pi; T$</th>
<th>$\tau$ or $\Gamma_{c.m.}$ (keV)</th>
<th>Decay</th>
<th>Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.61</td>
<td></td>
<td>180</td>
<td>n, p, d</td>
<td>9, 10</td>
</tr>
<tr>
<td>12.88</td>
<td></td>
<td>155</td>
<td>n, p, d</td>
<td>9, 10, 19</td>
</tr>
<tr>
<td>(12.97)</td>
<td></td>
<td>175</td>
<td>n, d</td>
<td>9</td>
</tr>
<tr>
<td>13.12</td>
<td></td>
<td></td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>13.83</td>
<td></td>
<td></td>
<td>n</td>
<td>19</td>
</tr>
<tr>
<td>14.41 ± 50</td>
<td>(3)$^+$</td>
<td>180</td>
<td>d</td>
<td>11</td>
</tr>
</tbody>
</table>

$^a$ The previously reported $\tau_m$ needs, in the opinion of the reviewer, to be remeasured: see (1971AJ02) for the previously reported value.