Table 7.2 from (1979AJ01): Energy levels of $^7$Li

<table>
<thead>
<tr>
<th>$E_x$ (MeV ± keV)</th>
<th>$J^\pi; T$</th>
<th>$\tau_m$ or $\Gamma_{c.m.}$ (keV)</th>
<th>Decay</th>
<th>Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>g.s.</td>
<td>$\frac{3}{2}^-$; $\frac{1}{2}$</td>
<td></td>
<td>stable</td>
<td>1, 6, 12, 13, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 39, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59</td>
</tr>
<tr>
<td>0.477611 ± 0.012</td>
<td>$\frac{1}{2}^-$; $\frac{1}{2}$</td>
<td>$\tau_m = 105 \pm 5$ fsec $^a$</td>
<td>$\gamma$</td>
<td>1, 6, 12, 13, 17, 19, 20, 21, 22, 24, 28, 31, 33, 34, 35, 36, 39, 41, 45, 46, 48, 50, 52, 53, 54, 55, 56, 57, 58</td>
</tr>
<tr>
<td>4.630 ± 9</td>
<td>$\frac{7}{2}^-$; $\frac{1}{2}$</td>
<td>$\Gamma = 93 \pm 8$ keV</td>
<td>t, $\alpha$</td>
<td>3, 12, 13, 19, 20, 21, 22, 24, 35, 36, 41, 45, 54</td>
</tr>
<tr>
<td>6.68 ± 50</td>
<td>$\frac{5}{2}^-$; $\frac{1}{2}$</td>
<td>$875^{+200}_{-100}$</td>
<td>t, $\alpha$</td>
<td>3, 12, 19, 20, 21, 35, 45</td>
</tr>
<tr>
<td>7.456 ± 1.5</td>
<td>$\frac{5}{2}^-$; $\frac{1}{2}$</td>
<td>89 ± 7</td>
<td>n, t, $\alpha$</td>
<td>2, 3, 7, 11, 12, 13, 19, 21, 24, 33, 36, 45</td>
</tr>
<tr>
<td>(9.5)</td>
<td>($\frac{3}{2}^+$); $\frac{1}{2}$</td>
<td>($\approx 3700$)</td>
<td>n</td>
<td>7</td>
</tr>
<tr>
<td>9.67 ± 100</td>
<td>$\frac{7}{2}^-$; $\frac{1}{2}$</td>
<td>$\approx 400$</td>
<td>n, t, $\alpha$</td>
<td>2, 3, 7, 13, 21, 36</td>
</tr>
<tr>
<td>9.85</td>
<td>$\frac{3}{2}^-$; $\frac{1}{2}$</td>
<td>$\approx 1200$</td>
<td>n, $\alpha$</td>
<td>7, 11</td>
</tr>
<tr>
<td>11.24 ± 30</td>
<td>$\frac{3}{2}^-$; $\frac{1}{2}$</td>
<td>$260 \pm 35$</td>
<td>n, p</td>
<td>7, 8, 19, 35</td>
</tr>
<tr>
<td>17</td>
<td>broad</td>
<td></td>
<td>$\gamma$, n</td>
<td>7, 18</td>
</tr>
</tbody>
</table>

$^a$ See Table 7.4 in (1966LA04) and (1966PA11, 1967CA02, 1975GE1D).