

${}^7\text{Li}({}^7\text{Li}, {}^8\text{B})$  **1984A108**

<u>Type</u>	<u>Author</u>	<u>History</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	J. E. Purcell, C. G. Sheu		ENSDF	23-March-2017

The nucleus  ${}^6\text{H}$  is first reported in this reaction ([1984A108](#)); see ([2012Th01](#)). At  $E({}^7\text{Li})=82$  MeV from Kurchatov Institute cyclotron, the spectrum of the outgoing  ${}^8\text{B}$  was measured at  $\theta_{\text{lab}}=10^\circ$ ; the cross section was about 60 nb/sr. The energy of the  ${}^6\text{H}$  was deduced and the mass defect of the resonant state, which is assumed to be the  ${}^6\text{H}$  ground state, was found to be 41.9 MeV [4](#), from which it follows that  ${}^6\text{H}$  is unstable against the decay  ${}^6\text{H}\rightarrow{}^3\text{H}+3\text{n}$  by 2.7 MeV [4](#), and the width is  $\Gamma=1.8$  MeV [5](#), which gives for the  ${}^6\text{H}$  lifetime a value  $3.7\times 10^{-22}$  s ([1984A108,2012Th01](#)).

 ${}^6\text{H}$  Levels

<u>E(level)</u>	<u><math>\Gamma</math></u>	<u><math>E_{\text{res}}({}^3\text{H}+3\text{n})(\text{MeV})</math></u>
0	1.8 MeV <a href="#">5</a>	2.7 <a href="#">4</a>