

$^{10}\text{B}(^7\text{Li},\alpha)$ 

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

**1963Mi02:**  $^{10}\text{B}(^7\text{Li},\alpha)$ , deduced  $^{13}\text{C}$  level properties.

**1965Ca05:**  $^{10}\text{B}(^7\text{Li},\alpha)$   $E \approx 5$  MeV; differential cross sections were measured at 15 angles,  $\theta_{\text{lab}}=0^\circ \sim 150^\circ$ .  $^{13}\text{C}$  states were observed. Analyzed  $\sigma$  vs.  $(2J+1)$  dependence.

**1966Mc05:**  $^{10}\text{B}(^7\text{Li},\alpha)$   $E=5.20$  MeV; measured cross section.  $^{13}\text{C}$  states have been observed. Analyzed  $\sigma$  vs.  $(2J+1)$  dependence.

**1977Ko27:**  $^{10}\text{B}(^7\text{Li},\alpha)$   $E=24$  MeV; measured  $\sigma(\theta)$ ; deduced total absolute  $\sigma$ , reaction mechanism. Unresolved high-energy  $^{13}\text{C}$  states up to 30 MeV; a detailed analysis of the angular distributions is not performed.

 $^{13}\text{C}$  Levels

E(level) <sup>†</sup>	$^{13}\text{C}$ total cross sections (mb) <sup>†</sup>	Comments
0 <sup>‡</sup>	0.37	
3090 <sup>‡</sup>	0.20	
3680 <sup>‡</sup>		E(level): Unresolved with 3850. $^{13}\text{C}$ total cross sections (mb): $\sigma=1.42$ mb for $^{13}\text{C}^*(3680+3850)$ .
3850 <sup>‡</sup>		E(level): Unresolved with 3680. $^{13}\text{C}$ total cross sections (mb): $\sigma=1.42$ mb for $^{13}\text{C}^*(3680+3850)$ .
6860 <sup>‡</sup>	1.19	
7500		E(level): Unresolved with 7550, 7690. $^{13}\text{C}$ total cross sections (mb): $\sigma=2.86$ mb for $^{13}\text{C}^*(7500+7550+7690)$ .
7550		E(level): Unresolved with 7500, 7690. $^{13}\text{C}$ total cross sections (mb): $\sigma=2.86$ mb for $^{13}\text{C}^*(7500+7550+7690)$ .
7690		E(level): Reported ( <b>1966Mc05</b> : $\Delta E \approx 50$ keV). E(level): Unresolved with 7500, 7550. $^{13}\text{C}$ total cross sections (mb): $\sigma=2.86$ mb for $^{13}\text{C}^*(7500+7550+7690)$ .
9500		
9900		
10460		
11000		E(level): Unresolved with 11080.
11080		E(level): Unresolved with 11000.
11950		E(level): Unresolved with 12190, 12440.
12190		E(level): Unresolved with 11950, 12440.
12440		E(level): Unresolved with 11950, 12190.
13570		
16080		

<sup>†</sup> Values listed in (**1966Mc05**:  $\Delta E \approx 50$  keV), except where noted.

<sup>‡</sup> From (**1965Ca05**).