^{7}Li(^{7}Li,d),^{7}Li(^{7}Li,^{12}B)   **1963Ca09,1969Th01,2005Cu06**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu	NP A968, 71 (2017)	1-Jan-2017

1963Ca09: ^{7}Li(^{7}Li,d), E= 3 MeV; measured limits on γ branching ratios for bound states.
1969Th01: E=5.1-6.3 MeV, measured $\sigma(E(\gamma),\theta(\gamma))$. Deduced lifetimes.
2005Cu06: E=58 MeV; measured E_d, deduced $\alpha+^8$Li and $t+^9$Be yields.

^{12}B Levels

E(level)	$T_{1/2}$[#]	Comments
0[†]		
0.95×10^3[†]	204 fs 26	
1.67×10^3[†]		
2.63×10^3[†]	<33 fs	E(level): Unresolved.
2.72×10^3[†]		E(level): Unresolved.
11.67×10^3[‡]		E(level): Decays 100% via $\alpha+^8$Li.
13.44×10^3[‡]		E(level): Decays 100% via $\alpha+^8$Li.
14.1×10^3[‡]		E(level): Decays ≥94.4% via $\alpha+^8$Li.
		E(level): Decays <5.1% via $t+^9$Be.
15.87×10^3?[‡]		E(level): Decays (0.4±0.2)% via $t+^9$Be.
15.9×10^3[‡]		E(level): Decays (99.6±4.2)% via $\alpha+^8$Li.

[†] From (1963Ca09).
[‡] From (2005Cu06).
[#] From (1969Th01).

γ(^{12}B)

E_i(level)	E_γ	I_γ	E_f
0.95×10^3	0.95×10^3	100	0
1.67×10^3	1.67×10^3	>98	0
2.63×10^3	2.63×10^3	<10	0
2.72×10^3	2.72×10^3	>80	0

^{7}Li(^{7}Li,d),^{7}Li(^{7}Li,^{12}B)   1963Ca09,1969Th01,2005Cu06

Level Scheme

Intensities: % photon branching from each level

$^{12}_{5}$B$_7$

^{7}Li(^{7}Li,d),^{7}Li(^{7}Li,^{12}B)   1963Ca09,1969Th01,2005Cu06