^{7}Li(^{3}He,n),(^{3}He,nγ) 1988Aj01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu, J. L. Godwin, et al.	NP A745 155 (2004)	31-Mar-2004

1965Di03: ^{7}Li(^{3}He,n) E=5.2-12.5 MeV, measured σ(E$_N$,θ), Q, Γ-level. ^{9}B deduced levels, isobaric spin.
1965Gr08: ^{7}Li(^{3}He,nγ) E=4.6-10 MeV, measured σ(E,E$_\gamma$). ^{9}B deduced level.
1966Di04: ^{7}Li(^{3}He,N$_0$) E=1.5-5.5 MeV, measured σ(E,θ).
1970Gu08: ^{7}Li(^{3}He,n) E=2.3-3.2 MeV, measured σ(E$_N$,θ), σ(E,E$_N$,θ). ^{9}B deduced levels, J, π.
1971Ad01: ^{7}Li(^{3}He,nγ) E=10 MeV, measured σ(E$_P$,E$_\gamma$,θ(P)), σ(E$_N$, E$_\gamma$). ^{9}B levels deduced Γ-level, γ-branching.
1976Mc10: ^{7}Li(^{3}He,n) E=8.25, 11 MeV, measured np-, pn-coin. ^{9}B deduced Γ_p/Γ.
1978Di08: ^{7}Li(^{3}He,nγ) E=13 MeV, measured pγ-, nγ-coin. ^{9}B levels deduced γ-branching, Γ.
1986Ab10: ^{7}Li(^{3}He,n) E=5-13 MeV, analyzed σ(E).

^{9}B Levels

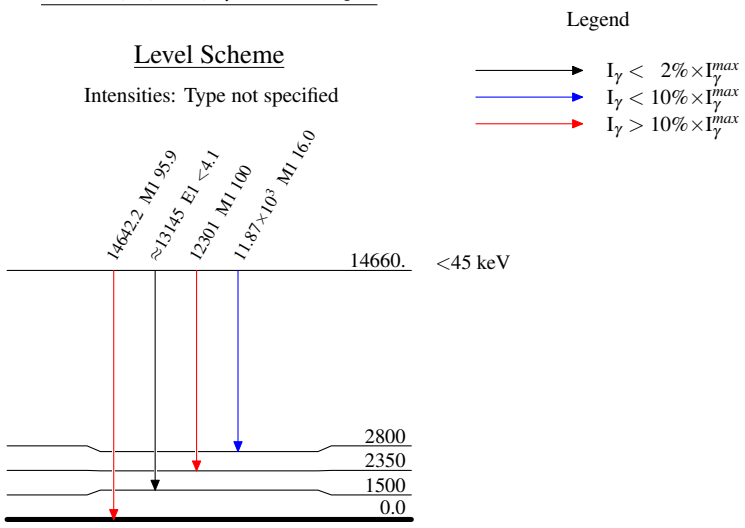
E(level)	$T_{1/2}$	Comments
0.0		
1500		from ^{7}Li(^{3}He,N γ). A peak corresponding to E$_x$=1.6 is observed In the ^{7}Li(^{3}He,n) resonance spectra; however, this is attributed to 2-step decay via ^{9}Be(11.82) (1970Gu08).
2.35×10^3		
2.8×10^3		
4.8×10^3 *1*	1.0 MeV *2*	E(level): Γ: from (1970Gu08).
7.0×10^3?		E(level): from (1963Du12).
12.06×10^3 *6*	0.8 MeV *2*	E(level): from (1965Di03). Γ: from (1965Di03).
14.01×10^3 *7*	0.39 MeV *11*	E(level): from (1965Di03). Γ: from (1965Di03).
14660. *5*	<45 keV	T=3/2 E(level): from E=14670 keV *15* (1965Di03) and E=14659 keV *5* (1967Ba59). Γ: from (1965Di03).
16024 *25*	180 keV *16*	E(level): from (1965Di03). Γ: from (1965Di03).
17.19×10^3		E(level): from (1965Di03).
17.63×10^3		E(level): from (1965Di03).

γ(^{9}B)

E$_\gamma$[†]	I$_\gamma$	E$_i$(level)	E$_f$	Mult.	Comments
11.87×10^3 *16*	16.0 *93*	14660.	2.8×10^3	M1	Γ_γ=1.17 eV *70*; B(M1)(W.u.)=0.033 *20* branching ratios from (1978Di08).
12301 *11*	100 *11*	14660.	2.35×10^3	M1	Γ_γ=7.3 eV *11*; B(M1)(W.u.)=0.186 *28*
≈13145	<4.1	14660.	1500	E1	Γ_γ<0.3 eV; B(E1)(W.u.)<4.5×10^{-4}
14642.2 *25*	95.9 *88*	14660.	0.0	M1	Γ_γ=6.97 eV *42*; B(M1)(W.u.)=0.105 *6*

[†] From level energy difference; recoil correction applied.

^{7}Li(^{3}He,n),(^{3}He,nγ) 1988Aj01



$^{9}_{5}B_{4}$