

${}^7\text{Li(d,n)}$ [2004Ti06](#)

Type	Author	History	Citation	Literature Cutoff Date
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[1957SI01](#): ${}^7\text{Li(d,n)}$ $E \approx 1$ -6 MeV, measured neutron yields. ${}^8\text{Be}$ deduced states energies.
[1966Mi09](#): ${}^7\text{Li(d,n)}$ $E=0.8, 1.0$ MeV, measured $\sigma(\theta_\alpha, \alpha)$, $\sigma(\theta_n)$, $\sigma(E_{\alpha_1}, E_{\alpha_2}, \theta_{\alpha_1}, \theta_{\alpha_2})$.
[1967Je01](#): ${}^7\text{Li(d,n)}2\alpha$ $E=180$ keV, measured $\sigma(E_\alpha, \theta_{n,\alpha})$.
[1969Ho11](#): ${}^7\text{Li(d,n)}2\alpha$ $E=0.98, 1.2, 1.4, 1.6$ MeV, measured $\sigma(E, E_{\alpha,\theta,\phi})$. ${}^8\text{Be}$ level deduced Γ -level.
[1970Sa20](#): ${}^7\text{Li(d,n)}$ $E=500$ keV, measured $\sigma(\theta)$. ${}^8\text{Be}$ level deduced J, π .
[1971Ro05](#): ${}^7\text{Li(d,n)}$ $E=3.72, 4.76$ MeV, measured $\sigma(E_n)$. ${}^8\text{Be}$ resonance deduced Γ -level.
[1972Se09](#): ${}^7\text{Li(d,n)}$ $E=0.2$ -1.02 MeV, analyzed polarization effects, resonant matrix elements.
[1973Ka32](#): ${}^7\text{Li(d,n)}$ analyzed α - α -coin, reaction data. ${}^8\text{Be}$ analyzed levels.
[1980Ma48](#): ${}^7\text{Li(d,n)}$ $E=13.2$ MeV, measured $\sigma(E_n)$. ${}^8\text{Be}$ levels deduced neutron branching.
[1980Ya11](#): ${}^7\text{Li(d,n)}$ $E=400, 680, 1020$ keV, measured $\sigma(E_n)$. Deduced reaction mechanism. ${}^8\text{Be}$ levels deduced neutron branching.
[1983Da32](#): ${}^7\text{Li(d,n)}$ $E=0.19$ MeV, measured $\sigma(\theta)$. Deduced back angle anomaly.
[1995Ar25](#): ${}^7\text{Li(d,}2\alpha)$ $E=19.7$ MeV, measured (θ_1, θ_2) . ${}^8\text{Be}$ deduced level energy, Γ .
[2001Ho23](#): ${}^7\text{Li(d,n)}$ $E=24$ -111 keV, measured σ , S-factor.

 ${}^8\text{Be Levels}$

E(level)	$T_{1/2}$	Comments
0.		
3.10×10^3 7	1744 keV 62	E(level): weighted average of 3.1 MeV 1 and 3.10 MeV 9. Γ : Weighted average of $\Gamma=1750$ keV 100 and 1740 keV 80.
11.3×10^3 2	3.7 MeV 2	E(level): a state with $E=11.40$ MeV 5 is reported in (1969Ho11) and $E=11.3$ MeV 2 is reported in (1995Ar25). Γ : A state with $\Gamma=2.8$ MeV 2 is reported in (1969Ho11) and $\Gamma=3.7$ MeV 2 is reported in (1995Ar25).
16.6×10^3		$\hat{I}_p=1$.
16.9×10^3		
17.6×10^3		$\hat{I}_p=1$.
18.2×10^3		$\hat{I}_p=1$.
18.9×10^3		
19.1×10^3		
19.2×10^3		
20.1×10^3	0.88 MeV 16	Γ : Average of 0.85 MeV 25 (1991Ar18) and 0.90 MeV 20 (1992Da22).
20.2×10^3	0.71 MeV 16	Γ : Average of 0.75 MeV 25 (1991Ar18) and 0.70 MeV 20 (1992Da22).