

$^7\text{Li}(\text{n},\text{n})$ 2004Ti06

Type	Author	History	Citation	Literature Cutoff Date
Update	J. H. Kelley, J. L. Godwin, C. G. Sheu		ENSDF	31-Mar-2004

- 1966St09: ^7Li (pol. n,N) E=4.4 MeV, measured polarization (θ).
 1968Ho03: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=3.35 MeV, 4.83 MeV, 5.74 MeV, 7.5 MeV, measured $\sigma(E_{N'}, \theta)$.
 1974Hy01: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=14.1 MeV, measured $\sigma(E_{N'}, \theta)$.
 1977Bi12: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=9.1 MeV, measured σ .
 1979Ho11: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=7-14 MeV, measured $\sigma(\theta)$, integral σ .
 1979Kn01: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=4-7.5 MeV, measured $\sigma(\theta)$.
 1981Ch36: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=14.7 MeV, measured $\sigma(\theta)$. Deduced optical model parameters.
 1981Kn03: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E<8 MeV. ^8Li deduced levels, J, reduced widths, π . R-matrix analysis.
 1982Al16: $^7\text{Li}(\text{n},\text{n})$ E=2-80 keV. ^7Li (pol. n,N) E=0.002-100 keV, measured $\sigma(E)$, transmission vs. E. Deduced spin dependence.
 1983Da22: $^7\text{Li}(\text{n},\text{n})$ E=7-15 MeV, measured $\sigma(\theta)$.
 1983Ko17: $^7\text{Li}(\text{n},\text{n})$ E=0.00051, 1.26, 5.19 eV, measured transmission, σ .
 1984Sh01: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=14.7 MeV, measured $\sigma(\theta)$.
 1985Ch37: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=5.4, 6, 14.2 MeV, measured $\sigma(\theta)$, $\sigma(\theta_1, \theta_2)$. Deduced reaction σ .
 1986Ch24: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=14.2 MeV, measured $\sigma(\theta)$.
 1986HaZR: $^7\text{Li}(\text{n},\text{n}')$ E=8, 24 MeV, measured $\sigma(\theta)$.
 1987Kn04: $^7\text{Li}(\text{n},\text{n})$ E<8 MeV, calculated $\sigma(\theta)$ vs. E. ^8Li deduced levels, J, π , reduced widths. Shell model.
 1987Sc08: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=6.82-9.80 MeV, measured $\sigma(\theta)$. $^7\text{Li}(\text{n},\text{n})$ E=6-14 MeV. Deduced $\sigma(E)$.
 1988Ch09: $^7\text{Li}(\text{n},\text{n}), ^7\text{Li}(\text{n},\text{n}')$ E=11, 13 MeV, measured $\sigma(E_N)$, $\sigma(\theta)$. Deduced σ .
 1996Ch33: $^7\text{Li}(\text{n},\text{n})$ E≤200 MeV, analyzed reaction, total $\sigma(E)$. $^7\text{Li}(\text{n},\text{n})$ E=24 MeV, analyzed $\sigma(\theta)$.

 ^8Li Levels

E(level)	J^π	T _{1/2}	Comments
2255	3^+		E(level): from $E_{\text{res}}=254$ keV.
5.4×10^3			Γ : broad.
6.1×10^3 I		≈1.0 MeV	
6.5×10^3		<80 keV	
7.1×10^3 I		0.4 MeV	