

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

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

- 1965GI03: ${}^7\text{Li}(\text{p,p}), {}^7\text{Li}(\text{p,p}')$ E=2.5-12 MeV, measured $\sigma(E, \theta)$. ${}^8\text{Be}$ deduced levels, J, π , Γ -level.
 1969Ki04: ${}^7\text{Li}(\text{p,p}_0), (\text{p,p}_1)$ E=2.7-10.6 MeV, measured $\sigma(E, \theta)$, polarization analyzing power (E, θ).
 1969Le08: ${}^7\text{Li}(\text{p,p})$ E=1.36 MeV, measured σ .
 1972Pr03: ${}^7\text{Li}(\text{p,p}_1)$ E=2.0-6.0 MeV, measured $\sigma(E)$.
 1973Br13: ${}^7\text{Li}(\text{pol. p,p})$ E=0.67 to 2.45 MeV, measured A(θ, E). Deduced phase shifts for E=0.4 to 2.45 MeV. Deduced channel spin mixing. ${}^8\text{Be}$ deduced levels, J, π . Deduced nature of threshold state. Deduced two 3^+ states are coupled.
 1976Hi04: ${}^7\text{Li}(\text{p,p}), (\text{p,p}')$ E=11.65-11.75 MeV, measured $\sigma(E, \theta)$. ${}^8\text{Be}$ deduced resonance parameters.
 1979Ar10: ${}^7\text{Li}(\text{p,p})$ E<2 MeV, calculated phase shifts. ${}^8\text{Be}$ deduced resonance, R-matrix analysis.
 1982Pe06: ${}^7\text{Li}(\text{p,p}), (\text{p,p}')$ E=24.4 MeV, measured $\sigma(E_{p'})$, $\sigma(\theta)$. E=24-50 MeV, analyzed data.
 1985Ki07: ${}^7\text{Li}(\text{p,p}'\gamma)$ E=2.4-4.2 MeV, measured thick target relative γ yields, E_γ , I_γ .
 1988Bo37: ${}^7\text{Li}(\text{p,p}'\gamma)$ E \approx 2.7-3.8 MeV, measured $\sigma(\theta)$ vs. E.
 1988Gu10: ${}^7\text{Li}(\text{p,p})$ $E_{\text{c.m.}} \approx 1.2$ -2.4 MeV, measured $\sigma(\theta)$ vs. E. ${}^8\text{Be}$ deduced resonance parameters.
 1994Mi21: ${}^7\text{Li}(\text{p,p}'\gamma)$ E=2.5-3.5 MeV, measured γ yield vs. E. Deduced β , Li elemental.
 1999Sa16: ${}^7\text{Li}(\text{p,p}')$ E=1.0-4.1 MeV, measured E_γ , I_γ , thick target γ -ray yields.
 2001Zh38: ${}^7\text{Li}(\text{p,p}), (\text{p,p}')$ E=0.143-1.0 GeV. Analyzed $\sigma(\theta)$.
 2004Ya12: ${}^7\text{Li}(\text{p,p}')$ E=300 MeV, measured particle spectra, $\sigma(E, \theta)$.

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

E(level)	J^π	$T_{1/2}$	Comments
17640	1^+	10.7 keV	$\theta_p^2=0.064$.
18155	1^+	147 keV	$\Gamma_{p'} \approx 6$ keV.
18.90×10^3	2^-	48 keV <i>I8</i>	
19.05×10^3	3^+	≈ 350 keV	
19.22×10^3	3^+		
19.4×10^3	1^-	≈ 656 keV	
20.9×10^3	4^-	1.58 MeV <i>I8</i>	
22.2×10^3			Γ =broad, possible doublet.