

$^6\text{Li}(\text{p},\text{p}),(\text{p},2\text{p}),(\text{p},\text{p}\alpha)$ **2002Ti10,1995Sk01,1989Ha18**

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Hu, Tilley, Kelley, Godwin et al.	NP A708, 3 (2002)	23-Aug-2001

1963Ha53: $^6\text{Li}(\text{p},\text{p})$ E=2.4-12 MeV, measured $\sigma(\theta)$. ^7Be deduced levels.

1963Mc09: $^6\text{Li}(\text{p},\text{p})$ E=0.45-2.9 MeV, measured $\sigma(\theta)$. ^7Be deduced levels.

1967Ha08: $^6\text{Li}(\text{p},\text{p}')$ E=4.26-9.40 MeV, measured $\sigma(E,\theta)$. ^7Be deduced levels, J, π , L, T level- Γ , S.

1968Va02: $^6\text{Li}(\text{p},\text{pd}),(\text{p},\text{p}\alpha),(\text{p},\text{d}\alpha)$, E=9,10 MeV, measured $\sigma(E_p, E_d, E_\alpha, \theta_d, \theta_\alpha)$.

1969Pe22: $^6\text{Li}(\text{pol p},\text{p})$ E=1.2-3.2 MeV, measured proton polarization, deduced phase shifts for E=0.5-5.6 MeV.

1977NeZX: $^6\text{Li}(\text{p},\text{p}),(\text{p},\text{p}')$ E=14 MeV, measured σ . ^7Be deduced resonance.

1983Vd03: $^6\text{Li}(\text{p},2\text{p})$ E=47-70 MeV, measured $\sigma(\theta_1, \theta_2)$ vs relative, summed proton energies.

1989Ha18: $^6\text{Li}(\text{pol p},\text{p})$ E=1.6-10 MeV, measured $\sigma(E,\theta)$, A(E, θ). $^6\text{Li}(\text{pol p},\text{p}')$ E=5.9 MeV, measured $\sigma(\theta)$, A(θ). ^7Be deduced resonances. γ , $\gamma(P)$, J, π .

1995Sk01: $^6\text{Li}(\text{pol p},\text{p})$ E=0.4-2.2 MeV, measured analyzing power A_Y, $\sigma(\theta)$. ^7Be deduced resonance parameters Γ , Γ_p , J, π .

 ^7Be Levels

E(level)	J $^\pi$	T _{1/2}	Comments
7.2×10 ³ 1	5/2 ⁻	0.40 MeV 5	$\Gamma_p=0.19$ MeV 5
9.29×10 ³ 31		1.93 MeV 96	$\Gamma_p=0.47$ MeV 33
9.81×10 ³ 12		2.21 MeV 29	$\Gamma_p=1.65$ MeV 25
			Γ : 1988Aj01 adopted $\Gamma \approx 1.8$ MeV based on (p,p'); 2002Ti10 has continued to accept $\Gamma \approx 1.8$ MeV rather than accept those presented here which are from $^6\text{Li}+\text{P}$ phase shift analysis.
10.00×10 ³ 17		1.68 MeV 58	$\Gamma_p=0.42$ MeV 14
≈11.×10 ³	3/2 ⁻		
12.4×10 ³ 13		5.0 MeV 32	$\Gamma_p=1.8$ MeV 10