

${}^4\text{He}(\text{d,d})$ 2002Ti10

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

- 1964Se07: ${}^4\text{He}(\text{d,d})$ E=2.9-11.5 MeV measured $\sigma(\text{E},\theta)$, deduced σ , phase shifts, polarization tensor. ${}^6\text{Li}$ deduced levels, J, π , reduced $\Gamma(\lambda)$.
- 1967Yo01: ${}^4\text{He}(\text{d,d})$ E=2.8-6.7 MeV, measured tensor polarization $\text{T}_{20}(\text{E,THETA})$, $\text{T}_{21}(\text{E,THETA})$, $\text{T}_{22}(\text{E,THETA})$.
- 1968Ma03: ${}^4\text{He}(\text{d,d})$ E=3-14 MeV, measured $\sigma(\theta)$, phase shift analysis. ${}^6\text{Li}$ deduced levels, J, π .
- 1970Ke17: ${}^4\text{He}(\text{pol d,d})$ E=3-11 MeV, measured vector analyzing power $i\text{T}_{11}(\text{THETA})$, deduced phase shifts. ${}^6\text{Li}$ deduced resonances.
- 1973Ch35: ${}^4\text{He}(\text{pol d,d})$ E=11.5-17 MeV, measured vector analyzing power $i\text{T}_{11}(\text{E,THETA})$.
- 1974Wi13: ${}^4\text{He}(\text{d,d})$ E=29.8, 32.3, 34.8, 37.3, 39.8 MeV, measured $\sigma(\text{E},\theta)$.
- 1977Ha34: ${}^4\text{He}(\text{pol d,d})$ E=6.04-7.05 MeV, measured $\sigma(\theta)$, $A(\theta)$, deduced phase shifts. ${}^6\text{Li}$ deduced resonance parameters.
- 1979Ba30: ${}^4\text{He}(\text{d,d})$ E=870-1430 keV, measured $\sigma(\theta)$. ${}^6\text{Li}$ resonances deduced parameters. Phase shift analysis.
- 1980St01: ${}^4\text{He}(\text{d,d})$ E=17-45 MeV, measured $\sigma(\theta)$, tensor analyzing power.
- 1983Je03: ${}^4\text{He}(\text{pol d,d})$ E=8-13 MeV, measured $\sigma(\theta,\text{E})$, $i\text{T}_{11}(\text{E,THETA})$, $\text{T}_{20}(\text{E,THETA})$, $\text{T}_{21}(\text{E,THETA})$, $\text{T}_{22}(\text{E,THETA})$. ${}^6\text{Li}$ deduced levels, J, π , L, Γ .

 ${}^6\text{Li}$ Levels

E(level)	J^π	$\text{T}_{1/2}$	Comments
2186 2	3^+	20.0 keV 28	T=0 E(level): average of 2187 keV 3 and 2185 keV 3 In 2002Ti10 table 6.12.
4.36×10^3 4	2^+	1.32 MeV 4	$\Gamma_d/\Gamma=0.967$ T=0
5.3×10^3 ? 1	1^+	1.9 MeV 1	E(level): the resonance energy corresponds to the 2^+ level At 5.3 MeV, however the J^π corresponds to the 1^+ level At 5.65 MeV (2002Ti10).
5.65×10^3 5		1.9 MeV 1	$\Gamma_d/\Gamma=0.74$ T=0
14.3×10^3 ? 13	3^+	26.7 MeV 10	$\Gamma_d/\Gamma=0.34$ T=0
15.8×10^3 ? 11	3^+	17.8 MeV 8	$\Gamma_d/\Gamma=0.76$ T=0
$23. \times 10^3$ 2	4^+	12 MeV 2	$\Gamma_d/\Gamma=0.15$
24×10^3 5	3^-	16 MeV 3	$\Gamma_d/\Gamma=0.30$
27×10^3	2^-	22 MeV 7	$\Gamma_d/\Gamma=0.43$