

${}^6\text{Li}({}^{12}\text{C}, {}^{12}\text{C})$ **2002Ti10,1996Ke09**

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

- 1973Sc26:** ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ E=34, 36 MeV, measured $\sigma(\theta)$.
1974Bi04: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ E=36.4, 40.0 MeV, measured $\sigma(\theta)$.
1980Fu06: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ E=20-36 MeV, measured $\sigma(E({}^6\text{Li}), \theta)$.
1985Cu04: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ E=34 MeV, measured $\sigma(\theta)$. ${}^6\text{Li}$ deduced elastic to inelastic breakup ratio.
1988Ka09: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ E=123.5, 168.6 MeV, measured $\sigma(\theta)$.
1989Gi01: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li})$ E=158 MeV, measured ${}^6\text{Li}$ spectra. ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}')$ E=156 MeV, measured $\sigma(\theta)$, $\sigma(\theta({}^6\text{Li}), E({}^6\text{Li}))$.
1990Tr02: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li})$ E=20, 50 MeV, measured $\sigma(\theta)$. ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}')$ E=50 MeV, measured $\sigma(\theta)$.
1994Re15: ${}^{12}\text{C}(\text{pol } {}^6\text{Li}, {}^6\text{Li}), (\text{pol } {}^6\text{Li}, {}^6\text{Li}')$ E=30 MeV, measured $\sigma(\theta)$, ${}^6\text{Li}$, ${}^{12}\text{C}$ levels deduced deformation lengths.
1995Ca26: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li}), ({}^6\text{Li}, {}^6\text{Li}')$ $E_{\text{c.m.}}=2\text{-}16$ MeV, measured $\sigma(\theta, E)$. ${}^6\text{Li}$ levels deduced deformation lengths.
1995Ke10: ${}^{12}\text{C}(\text{pol } {}^6\text{Li}, {}^6\text{Li})$ E=30, 50 MeV, measured $\sigma(\theta)$.
1996Ga29: ${}^{12}\text{C}(\text{pol } {}^6\text{Li}, {}^6\text{Li}), (\text{pol } {}^6\text{Li}, {}^6\text{Li}')$ E=30 MeV, measured $\sigma(\theta)$.
1996Ke09: ${}^{12}\text{C}(\text{pol } {}^6\text{Li}, {}^6\text{Li}), (\text{pol } {}^6\text{Li}, {}^6\text{Li}')$ E=30, 50 MeV, measured $iT_{11}(\text{THETA})$, $T_{20}(\text{THETA})$, $T_{21}(\text{THETA})$, $T_{22}(\text{THETA})$, $\sigma(\theta)$, ${}^6\text{Li}({}^{12}\text{C}, {}^{12}\text{C})$ E=100 MeV, measured $\sigma(\theta)$, ${}^6\text{Li}$, ${}^{12}\text{C}$ levels deduced deformation length parameters.
2000Sc11: ${}^{12}\text{C}({}^6\text{Li}, {}^6\text{Li})$ E=600 MeV, measured elastic and breakup $\sigma(\theta)$.

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

E(level)	J^π
0	1^+
2.186×10^3	3^+
4.31×10^3	(2^+)
5.65×10^3	