

${}^7\text{Li}(\alpha,\alpha'),(\alpha,\alpha')$ **2002Ti10**

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

1969Ma13: ${}^7\text{Li}(\alpha,\alpha'),(\alpha,\alpha')$ E=29.4 MeV, measured $\sigma(E_{\alpha'},\theta)$, ${}^7\text{Li}$ levels deduced deformation parameters.

1970La14: ${}^7\text{Li}(\alpha,t\alpha)$ E=50 MeV, measured $\sigma(E_t,\theta_t)$, $\sigma(E_t,E_{\alpha},\theta_t,\theta(\alpha))$. ${}^7\text{Li}$ deduced levels.

1973Ke13: ${}^7\text{Li}(\alpha,\alpha'),(\alpha,\alpha')$ E=8.6-12.5 MeV, 17.0-22.5 MeV, measured $\sigma(E,E_{\alpha'},\theta)$. Triton-exchange analyzed.

1985Di08: ${}^7\text{Li}(\alpha,\alpha')$ E=35.3 MeV, measured $\sigma(E_{\alpha})$, $\sigma(\theta)$. ${}^7\text{Li}$ levels deduced deformation, isoscalar $B(\lambda)$. Collective coupled-channels analysis.

1987Bu27: ${}^7\text{Li}(\alpha,\alpha')$ E=50.5 MeV, measured σ .

1989Dm02: ${}^7\text{Li}(\alpha,\alpha't)$ E=80 MeV, measured correlation angles. ${}^7\text{Li}$ level deduced M-substate density matrix.

1991Ko41: ${}^7\text{Li}(\alpha,\alpha')$ E=27.2 MeV, measured target polarization tensor vs. θ . Deduced reaction mechanism.

1996Bu06: ${}^7\text{Li}(\alpha,\alpha'),(\alpha,\alpha')$ E=50.5 MeV, measured $\sigma(\theta)$, ${}^7\text{Li}$ deduced α d-, α t- cluster spectroscopic factors.

 ${}^7\text{Li}$ Levels

E(level)

0

0.48×10^3

4.63×10^3

6.68×10^3

7.46×10^3

9.67×10^3