

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

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

- 1969Cl06:  ${}^7\text{Li(p,n)}$  E=30,50 MeV, measured  $\sigma(\theta)$ . Deduced isospin-dependent effective interaction.
- 1970Ro07:  ${}^7\text{Li(p,n)}$  E=0.9-1.9 MeV, measured  $\sigma(E)$ .  ${}^7\text{Li(p,n)}$  deduced thresholds.
- 1972Az01:  ${}^7\text{Li(p,n)}$  E=17.8 MeV, measured  $\sigma(E_N, \theta)$ .
- 1972El19:  ${}^7\text{Li(p,n)}$  E=2.2-5.5 MeV, measured  $\sigma(E, E_N, \theta)$ .
- 1972Pr03:  ${}^7\text{Li(p, N}_1)$  E=2.37-6.0 MeV, measured  $\sigma(E)$ .
- 1973Ro35:  ${}^7\text{Li(pol. p, N)}$  E=2.05-3.00 MeV, measured analyzing power  $A(\theta)$ .
- 1974Bu16:  ${}^7\text{Li(p,n)}$  E<3.8 MeV, measured  $\sigma(E, E_N, \theta)$ .
- 1974Sh06:  ${}^7\text{Li(p,n)}$ , measured Q.
- 1975Mc18:  ${}^7\text{Li(p,n)}$  E =15,20,30 MeV, measured  $\sigma$ .
- 1976Po06:  ${}^7\text{Li(p,n)}$  E=4.2-26 MeV, measured  $\sigma(E, \theta)$  to  ${}^7\text{Be}$  ground state, first excited state;  $\theta=3.5^\circ-159^\circ$ .
- 1977Ri07:  ${}^7\text{Li(p,n)}$  E=800 MeV, measured  $\sigma$ .
- 1977Sc37:  ${}^7\text{Li(p,n)}$  E=25-45 MeV, measured  $\sigma(E, E_N)$ .
- 1979Ba68:  ${}^7\text{Li(p,n)}$  E=1 GeV, measured  $\sigma(E_N, \theta)$ . Deduced dependency of quasielastic neutron production on mass.
- 1980Au02:  ${}^7\text{Li(p,n)}$  E=25,35,45 MeV, measured  $\sigma(E_N)$ . Deduced Gamow-Teller analog transition effective interaction.
- 1980Go07:  ${}^7\text{Li(p,n)}$  E=120 MeV, measured  $\sigma(\theta=0^\circ)$ .
- 1982Ta03:  ${}^7\text{Li(p,n)}$  E=60-200 MeV, measured  $\sigma(\theta=0^\circ)$ . Deduced isovector effective interaction strength ratio.
- 1982Wa02:  ${}^7\text{Li(p,n)}$  E=60-200 MeV, measured total reaction  $\sigma$  vs. E. Activation technique.
- 1984Ta07:  ${}^7\text{Li(pol. p, N)}$  E=160 MeV, measured transverse spin transfer coefficient  $D(NN)$  ( $\theta=0^\circ$ ), polarized neutrons.
- 1986JeZZ:  ${}^7\text{Li(pol. p, N)}$  E=55-72 MeV, measured polarization transfer,  $\theta=0^\circ$ .
- 1989Ra09:  ${}^7\text{Li(p,n)}$  E=492 MeV, measured  $\sigma(\theta, E)$ . Deduced unit  $\sigma$ (ratio).
- 1989Wa15:  ${}^7\text{Li(p,n)}$  E=200-400 MeV, measured  $\sigma(\theta)$ .
- 1990Ra08:  ${}^7\text{Li(p,n)}$ ,  ${}^7\text{Li(pol. p, N)}$  E=60-200 MeV, measured  $\sigma(\theta)$ .
- 1990Ta11:  ${}^7\text{Li(p,n)}$  E=80-795 MeV, measured  $\sigma(\theta)$ .
- 1994Ra23:  ${}^7\text{Li(pol. p, N)}$  E=186 MeV, measured  $\sigma(\theta, E_N)$ ,  $\sigma(\theta)$ , spin observable vs.  $\theta$ . Deduced quasifree excitation role In giant resonance region.
- 1994Sa43:  ${}^7\text{Li(pol. p, N)}$  E=300,400 MeV, measured  $\sigma(\theta)$  vs. Energy transfer, neutron energy spectra, polarization transfer coefficients vs.  $\theta$ .
- 1994Wa22:  ${}^7\text{Li(p,n)}$ ,  ${}^7\text{Li(pol. p, N)}$  E=186 MeV, measured  $\sigma(\theta, E_N)$ , polarization transfer coefficient, analyzing power vs.  $\theta$ .
- 1995Ya12:  ${}^7\text{Li(p,n)}$  E=186 MeV, measured  $\sigma(\theta, E_N)$ . Deduced quasifree reaction contribution In giant resonance region,  $\Delta L=1$  transitions energy spectra.
- 1999Bu10:  ${}^7\text{Li(p,n)}$  E<2000 keV. Analyzed data.
- 2000Jo17:  ${}^7\text{Li(p,n)}$  E=35 MeV, measured  $\sigma(\theta)$ . Deduced isovector optical potential parameters.
- 2001Go25:  ${}^7\text{Li(p,n)}$  E=120,160 MeV. Analyzed neutron spectra. Deduced Gamow-Teller matrix elements.
- 2003Ko40:  ${}^7\text{Li(p,n)}$  E $\approx$ 1.9 MeV, measured neutron yields.

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

E(level)	$J^\pi$	$T_{1/2}$	L	Comments
$18.9 \times 10^3$	$2^-$	50 keV	20	
$19.2 \times 10^3$	$3^+$		1	T=1 T: tentative $\Gamma_p \approx \Gamma_n$ .
$19.5 \times 10^3$	$1^-$			
$20.1 \times 10^3?$				
$20.2 \times 10^3?$				
$21.5 \times 10^3$	$3^{(+)}$	1.1 MeV		