

NEUTRON SCATTERING ON LITHIUM ISOTOPIES AT ENERGIES BETWEEN  
7 AND 10 MeV

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Neutron scattering has been investigated on the isotopes 7-Li (at 7 and 10 MeV) and 6-Li (at 8 MeV) [1] at 8 angles.

7-Li

The  $n_0$  and  $n_1$  groups couldn't be resolved, the  $n_2$  neutron group has been measured at 10 MeV bombarding energy only. The results from the  $(n_0+n_1)$  group are in good agreement with the data from HOGUE et al. [2], but the  $n_2$  data differ in the forward angle region. The present data are corrected against disturbing neutron peaks from the neutron source due to  $(d,n)$  reaction on carbon and oxygen contaminations. In ref. [2] such corrections are not denoted.

6-Li

The  $n_0$  and  $n_1$  groups are resolved, the cross sections are in good agreement with interpolated values from HOGUE et al. [2]. Furthermore, the neutron continuum for neutron energies above 2 MeV has been determined. The integrated cross section including the inelastic scattering of  $\sigma_{\text{cont.}}=(435\pm 17)\text{mb}$  is in the same order as the value  $\sigma_{\text{cont.}}=(394\pm 46)\text{mb}$  from COOKSON et al. [3] at 10 MeV bombarding energy.

- [1] H. FÖRTSCH et al., YAD. KONST. (in russian), in print
- [2] H.H. HOGUE et al., Nucl.Sci.Eng. 69(1979) 22
- [3] J.A. COOKSON et al., Nucl. Phys. A91(1967) 273