^{31}P(^{6}Li,d) 1979Es05

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, John Cameron and Balraj Singh	NDS 112,2715 (2011)	20-Oct-2011

1979Es05: E(^{6}Li)=36 MeV 150-400 nA beam from the MP tandem accelerator of the University of Rochester.Target: an Cd_3P_2 target of about 100 μg/cm^2 on a 10 μg/cm^2 carbon foil by sputtering with an argon beam using the "Sputterbell". Detector: Kodak NTB-50 nuclear emulsion plates for deuterons, FWHM=50 keV. Measured $\sigma(E_d,\theta)$. Deduced levels, J^π, L, spectroscopic factors for levels of 0, 1220, 1760 and 3160 KeV from DWBA analysis. Also deduced levels for other nuclei.

Target ^{31}P $J^\pi=1/2^+$.

^{35}Cl Levels

Spectroscopic factor S: $g*S=\sigma(\theta)^{exp}/\sigma(\theta)^{DWBA}$, where $g=(2J_f+1)/(2J_i+1)$(1979Es05).

E(level)	L†	S
0	2	1.00
1220	0	1.49
1760	2	0.24
3160	3	0.52

† From the comparison of the DWBA prediction of the angular distribution with the experimental data.