⁴⁰Ca(n,d),(n,np) 1968Mi02,1968Ka05

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1968Mi02 (also 1967An07): (n,d) E=14.4 MeV neutron beam was produced via 3 H(d,n) reaction with deuteron beam from the Cockcroft-Walton 200-keV accelerator at the Institute "Ruder Boskovic". Target was an 8 mg/cm² foil of natural calcium on a gold backing. Charged particles were detected with a combination of three gas (CO₂) proportional counters and a CsI(Tl) scintillator. Measured $\sigma(\theta)$, θ =0°-90°. Deduced levels, L, spectroscopic factors from DWBA analysis.

1968Ka05: (n,np) E=14.1 MeV. Measured $\sigma(E_p,\theta)$ of proton groups.

³⁹K Levels

E(level) L S Comments

0 2 5.6 L,S: from 1968Mi02.
2800 E(level): unresolved multiplet: 2530+2820+3020 (1968Mi02).