¹H(¹⁷Ne,P) **2011As04**

History

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Full Evaluation J. H. Kelley, G. C. Sheu ENSDF 16-Jan-2018

The excitation function of $^{17}\text{Ne+p}$ scattering was measured in the range of $E_{c.m.}\approx0.8$ to 3.6 MeV. The beam of 4 MeV/nucleon ^{17}Ne ions, from the GANIL/SPIRAL facility, impinged on a polypropylene (C_3H_6) target assembly. The target assembly consisted of a fixed $50~\mu\text{g/cm}^2$ C_3H_6 foil followed by a rotating (1000 rpm) C_3H_6 foil which stopped the beam and carried away the beams undesired decay radiation. The scattered protons were detected at $\theta_{lab}{=}5^\circ$ to 20° with a annular position sensitive ΔE -E telescope. The excitation function is deduced using thick target inverse kinematics techniques, and ^{18}Na states are deduced. No clear evidence is observed for participation of ^{17}Ne excited states.

¹⁷Ne Levels

 $\frac{\text{E(level)}}{0} \quad \frac{\text{J}^{\pi}}{1/2^{-}}$