

$^9\text{Be}(^{29}\text{Ne},\text{N}26\text{F})$ 2012Ch12

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 112,1875 (2011)	30-Nov-2010

^{29}Ne beam, $E=62$ MeV/nucleon, was produced by fragmentation of ^{48}Ca beam, $E=140$ MeV/nucleon, on a Be target at NSCL facility. Fragments were separated by a1900 Fragment separator and identified by time-of-flight and energy loss information. Detected charged fragments, neutrons and γ -rays in coin mode. The γ -rays were detected using a Caesium Iodide detector array. The charged fragments were deflected by a Sweeper magnet and passed through a pair of cathode readout drift chambers, ionization chamber, and plastic scintillators. Neutrons were detected in Modular Neutron array. Identified a neutron-unbound state at 2.50 MeV in ^{27}F . The unbound states in ^{27}F was deduced from the measured relative energy spectrum for 26f+n coincidences. No γ -ray events were recorded in the Caesium Iodide detector array in the coincidence mode.

 ^{27}F Levels

E(level)	J^π	Γ_0	Comments
0.0 2.50×10^3	(5/2 ⁺) 22	5.0 ms 10 keV	J^π, Γ_0 : From Adopted Levels. E(level): resonance energy=380 keV 60 from fit of energy spectrum for 26f+n coincidence spectrum with Maxwellian distribution and L=2 Breit-Wigner resonance. Comparisons with shell-model calculations.