^{9}Be(^{26}F,X) 2009St20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 127, 69(2015)	1-Apr-2015

^{22}N was produced from fragmentation of ^{48}Ca primary beam with a Be target followed by separation using A1900 fragment separator and secondary beam of ^{26}F, 85 MeV/nucleon fragmentation. Measured neutrons (from the decay of excited states in ^{22}N) in coincidence with ^{21}N nuclei using the Modular Neutron Array (MoNA) at the NSCL, Michigan State University. Comparison with shell-model calculations. Monte Carlo simulations of the neutron spectrum.

^{22}N Levels

E(level)	J^{π}	$T_{1/2}$	Comments
1.93×10^{3} *22*	3^{-}	<60 keV	E(level): unbound state, E(n)(c.m.)=650 *50*. S(n)(^{22}N)=1280 *210* (2012Wa38). E(level),J^{π}: first 3^{-} state from shell-model predictions (2009St20).