

${}^9\text{Be}({}^{12}\text{Be},\gamma{}^{11}\text{Be})$ 2000Na23,2011Pe13

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu		NP A880, 88 (2012)	1-Jan-2011

2000Na23: ${}^9\text{Be}({}^{12}\text{Be},{}^{11}\text{BeX})$, $E=78$ MeV/nucleon; measured $\sigma(E,\theta)$, longitudinal momentum distribution, γ spectrum. ${}^{11}\text{Be}$ levels deduced spectroscopic factors.

2011Pe13: ${}^9\text{Be}({}^{12}\text{Be},{}^{11}\text{Be})$, $E=90$ MeV/nucleon. Detected ${}^{10}\text{Be}+N$ and analysed neutron unbound levels.

 ${}^{11}\text{Be}$ Levels

E(level)	J^π [†]	$T_{1/2}$	S	Comments
0			0.42 6	
320			0.37 6	
1778	$5/2^+$			
2690	$3/2^-$			
3949 2	$3/2^-$	<40 keV		E(level): Decays via $S(n)=80$ keV 2 neutron emission to ${}^{10}\text{Be}^*(3869)$. This implies $E_x=3949$ keV 2. (2009Ha01) measured the neutron decay branching ratio for this state and found it decays evenly to ${}^{10}\text{Be}^*(0, 3869)$; the g.s. decay energy is outside the acceptance of the present measurement.

[†] From (2005Hi03, 2009Ha01).

 $\gamma({}^{11}\text{Be})$

E_γ	$E_i(\text{level})$	E_f
320	320	0

 ${}^9\text{Be}({}^{12}\text{Be},\gamma{}^{11}\text{Be})$ 2000Na23,2011Pe13Level Scheme