

${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$  2003Bo38

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

1997Vo06:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; analyzed data.

1998Bo38:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; measured particle spectra.  ${}^{11}\text{Be}$  deduced molecular rotational band.

1999Bo26:  ${}^{11}\text{Be}$  deduced molecular rotational band.

2002Bo16:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; measured excitation energy spectra.  ${}^{11}\text{Be}$  deduced level energies, possible J,  $\pi$ , rotational band features.

2003Bo24:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; measured excitation energy spectra.  ${}^{11}\text{Be}$  deduced levels, possible J,  $\pi$ , configurations, rotational bands.

2003Bo38:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; measured particle spectra,  $\sigma(E, \theta)$ .  ${}^{11}\text{Be}$  deduced levels, possible J,  $\pi$ .

2003Bo50:  ${}^9\text{Be}({}^{13}\text{C}, {}^{11}\text{C})$ , E=379 MeV; measured particle spectra.  ${}^{11}\text{Be}$  deduced rotational bands.

Based on level spacing it is suggested that the K=3/2 molecular rotational band is based on  ${}^{11}\text{Be}^*(3960, 5250, 6720, 8820, 10800, 13800, 18600, 21600, 25000)$  (see for example, 2003Bo38).

$J^\pi$  from level spacing systematics for a molecular rotational band.

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

E(level)	E(level)	$J^\pi$	E(level)	$J^\pi$	E(level)	$J^\pi$
0	3960	(3/2 <sup>-</sup> )	8820	(9/2 <sup>-</sup> )	13600	(13/2 <sup>-</sup> )
320	5250	(5/2 <sup>-</sup> )	9.3×10 <sup>3</sup> ?		18600	(15/2 <sup>-</sup> )
1780	6000		10800	(11/2 <sup>-</sup> )	21500	(17/2 <sup>-</sup> )
2690	6720	(7/2 <sup>-</sup> )	11800		25000	(19/2 <sup>-</sup> )