

$^9\text{Be}(^{17}\text{C},\text{X})$  2001Ma08

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, G. C. Sheu	ENSDF	01-May-2017

2001Ma08,2001Ma21:  $E(^{17}\text{C}) \approx 62$  MeV/nucleon,  $^9\text{Be}$  target surrounded by 11 NaI detectors;  $\sigma_{1n} = 115$  mb *14*. Measured parallel momentum distribution widths corresponding to population of different  $^{16}\text{C}$  states by analyzing coincidences with  $\gamma$  rays. Deduced (22 11)% of 1n-removal events populate  $^{16}\text{C}_{\text{g.s.}}(J^\pi = 0^+)$  via  $l=2$ , (52 8)% populate  $^{16}\text{C}^*(1.77 \text{ MeV}; J^\pi = 2^+)$  via  $l=0$  ((14 6)% and  $l=2$  ((38 8)% and (29 5)% populate states near  $^{16}\text{C}^*(4.1 \text{ MeV}; J^\pi \approx 2, 3^{(+)}, 4^+)$  via  $l=0$  ((2 2)% and  $l=2$  ((27 5)%). Their analysis of the  $^{17}\text{C}_{\text{g.s.}}$   $J^\pi$  value, based on  $l=2$  feeding of  $^{16}\text{C}_{\text{g.s.}}$  with no  $l=0$  component, indicates  $J^\pi(^{17}\text{C}) = 3/2^+$ .

 $^{17}\text{C}$  Levels

E(level)	$J^\pi$
0	$3/2^+$